



WESTERN DIVISION OFFICE • 1007 MIDLAND SAVINGS BUILDING - MIDLAND, TEXAS • PHONE (915) 682-7316
MAILING ADDRESS: P. O. DRAWER 1828 MIDLAND, TEXAS 79701

August 22, 1968

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

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29 AUG 20 1968

Dear Mr. Porter:

Administrative approval is hereby respectfully requested to convert the Pennzoil United, Inc. (formerly Pennzoil Company) - Phillips "C" State No. 1 Well to water injection service. This well is located in the NW/4 of the SW/4 of Section 27, T-17-S, R-33-E, Lea County, New Mexico. The well offsets the Pennzoil operated Phillips State and Federal Lease waterflood project to the east. This project was authorized by the Commission by Order No. R-3129 and the order provides for expansion of the project by approval of the Secretary-Director. Approval to convert this well to injection service has been obtained from the State of New Mexico Commissioner of Public Lands as evidenced by the attached letter.

The Phillips State "C" No. 1 Well is located on a one-well, 40-acre lease. The well is completed in the Grayburg formation. The well has been shut in for several months due to uneconomic production. The well has no remaining primary oil reserves and is therefore of no value except for secondary recovery purposes. Conversion of this well to injection will be a normal expansion of the injection pattern previously established and will increase the efficiency of the waterflood in this reservoir. Response to previous water injection has been achieved on the Phillips State Lease in Wells No. 1 and 5 and on the Phillips Federal Lease in Well No. 1. Injection of water into this well should result in increased recovery of secondary oil on the Phillips State Lease in Section 28. Ownership in the Phillips State Lease and the Phillips State "C" Lease as to both royalty interest and working interest is exactly the same. All interest owners in this well have agreed to the conversion of this well to injection service.

It is planned to inject water into the Gryaburg formation through plastic coated tubing set on a packer. The water to be injected will be fresh Ogallala water produced from source wells operated by Pennzoil. An injection rate of 200-300 barrels of water per day is anticipated for this well.

Mr. A. L. Porter, Jr.
Secretary-Director

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August 22, 1968

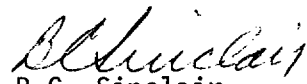
Attached to this request are the following:

1. Letter from Commissioner of Public Lands waiving any objection to this request.
2. Plat showing location of the lease and the proposed injection well, and other pertinent information.
3. Log of the proposed injection well.
4. Diagrammatic sketch of the proposed injection well.
5. Form C-116 showing production tests of wells affected by previous injection on offset leases.

Copies of this application are being sent to all offset operators. If additional information is needed, please advise.

Yours very truly,

PENNZOIL UNITED, INC.
Western Division

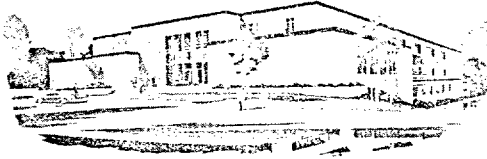

B.C. Sinclair
Petroleum Engineer

BCS:tb
Att.

State of New Mexico

AUG 8 1968

MIDLAND



Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



August 6, 1968

P. O. BOX 1148
SANTA FE, NEW MEXICO

Pennzoil United, Inc.
P. O. Drawer 1828
Midland, Texas 79701

Attn: Mr. B. C. Sinclair

Re: Pennzoil United, Inc.
Phillips State "C" Lse
Maljamar Field
Lea County, New Mexico

Gentlemen:

We have no objection to converting your Phillips State "C" No. 1 Well located in the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 27, T-17S, R-33E, Lease No. B-2229-0 to water injection service. We feel that your reasons are reasonable and that in the long run the State of New Mexico will profit from the production of more oil under secondary recovery methods.

If we can be of any further help, please let us know.

Very truly yours,

GUYTON B. HAYS
Commissioner of Public Lands

By: *Ted Bilberry*
TED BILBERRY, Director
Oil and Gas Department

GBH:TB:cw

cc: Units Division

NEW MEXICO OIL CONSERVATION COMMISSION
GAS - OIL RATIO TESTS

C-1116
Revised 1-1-65

Operator		Pool		County											
Pennzoil United, Inc.		Grayburg - San Andres		Lea											
Address		TYPE OF TEST - (X)		Completion ☐ Scheduled ☐		Special ☒									
P. O. Drawer 1828 - Midland, Texas 79701															
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKES SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.		
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.	GAS M.C.F.
<u>BEFORE RESPONSE</u> Phillips Federal Phillips State Phillips State	1		33	17S	33E	7-16-68	P	-	8	24	5	37	9	1.2	135
	1		28	17S	33E	7-12-68	P	-	9	24	2	38	5	4.9	985
	5		28	17S	33E	7-8-68	P	-	2	24	1	38	2	5.1	2550
<u>AFTER RESPONSE</u> Phillips Federal Phillips State Phillips State	1		33	17S	33E	7-23-68	P	-	8	24	8	37	20	2.8	140
	1		28	17S	33E	8-10-68	P	-	9	24	5	38	11	12.1	1100
	5		28	17S	33E	8-12-68	P	-	2	24	2	38	9	24.1	2675

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

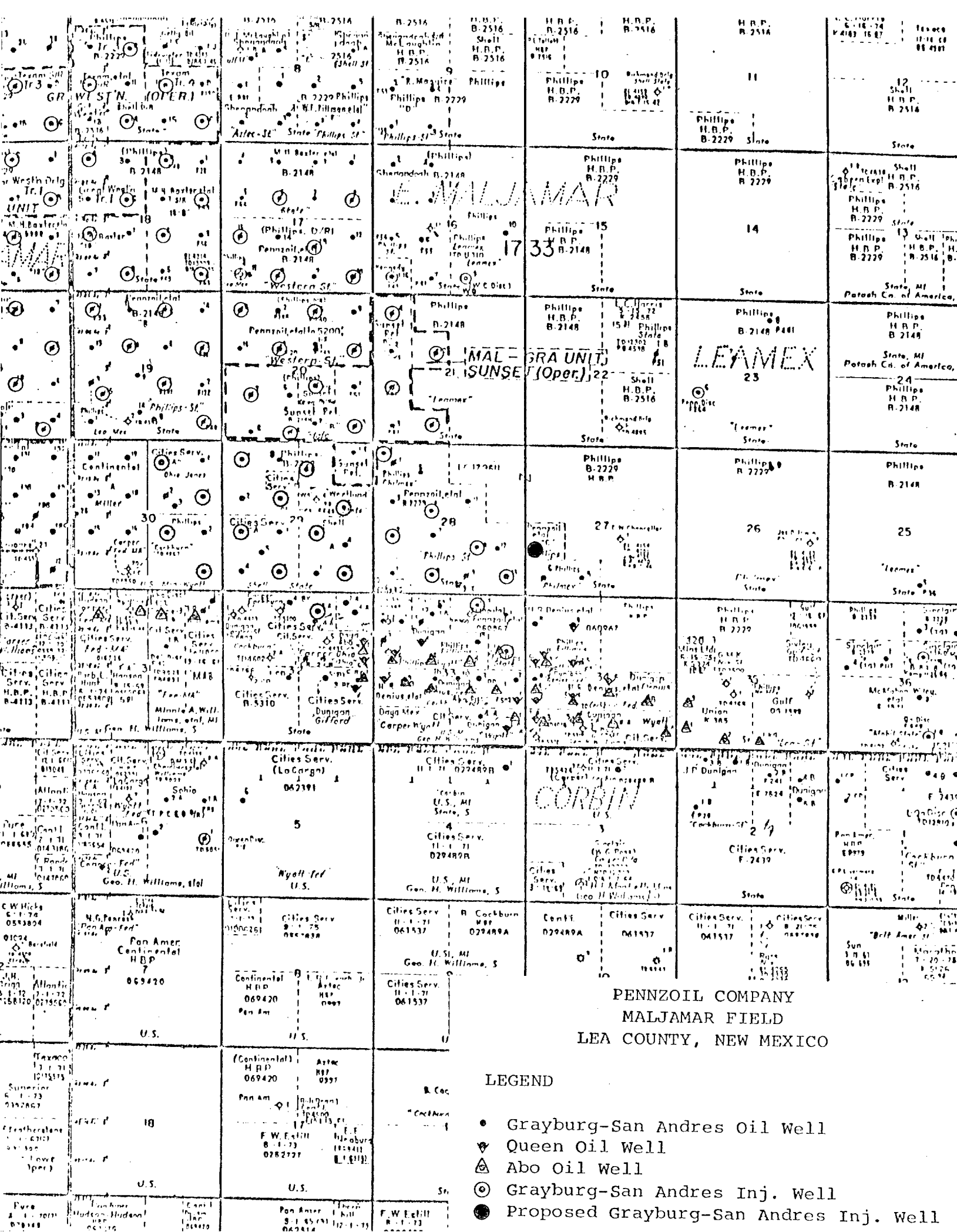
R. H. ...
(Signature)

Petroleum Engineer

(Title)

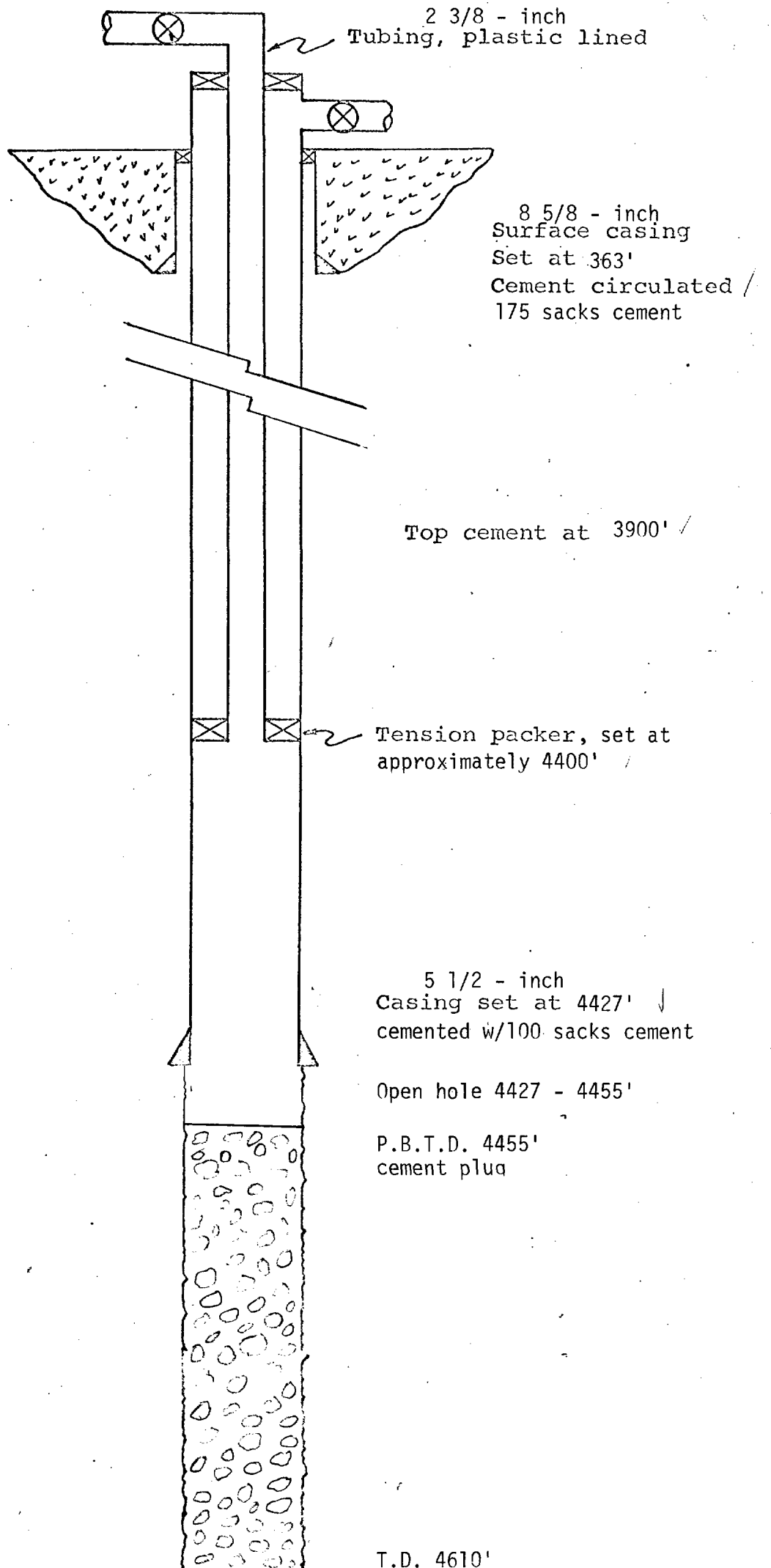
August 23, 1968

(Date)



PHILLIPS "C" STATE NO. 1 WELL

PENNZOIL COMPANY
WATER INJECTION WELL SCHEMATIC
MALJAMAR FIELD
LEA COUNTY, NEW MEXICO





Radioactivity Log

COMPANY: ZAPATA PETR. CORP.
WELL: PHILLIPS STATE C #1
FIELD: MALJAMAR
LOCATION: LEA
COUNTY: LEA
STATE: NEW MEXICO

COMPANY: ZAPATA PETR. CORP.

Box 2216, MIDLAND, TEXAS

WELL: PHILLIPS STATE C #1

FIELD: MALJAMAR

LOCATION: 330 FWL, 1650 FSL, SEC 27
T17.5 R33E

COUNTY: LEA STATE: N.M.

Well Location

330 FWL

1650 FSL

SEC 27

T17.5

R33E

GEOL

LOG ZERO R.T. + 1' = K.D.B.

ELEV 4179

DRLG. ZERO K.D.B.

ELEV 4179

PERM. DATUM GROUND LEVEL

ELEV 4166.8

TYPE OF LOG: GAMMA RAY NIN
RUN NO.: ONE NU10H
DATE: 2-18-58
TOTAL DEPTH (DRILLER): 4609
EFFECTIVE DEPTH (DRILLER): 4609
TOP OF LOGGED INTERVAL: 2500
BOTTOM OF LOGGED INTERVAL: 4386 4608
TYPE OF FLUID IN HOLE: WATER/OIL
FLUID LEVEL: FULL
MAXIMUM RECORDED TEMP.: —
SOURCE STRENGTH & TYPE: 510A3
SOURCE SPACING — IN.: 13.5
DETECTOR CLASS: SCINT.
DETECTOR TYPE: D461 D6N1
LENGTH OF MEAS. DEVICE — IN.: 4"
O.D. OF INSTRUMENT — IN.: 3.58
TIME CONSTANT — SECONDS: 2.0 0.9
LOGGING SPEED FT./MIN.: 30-60
STATISTICAL VARIATION — IN.: RECORDED
SENSITIVITY REFERENCE: 274-JIG D368
RECORDED BY: J. L. L. CRINKO REED
WITNESSED BY: BENSON

WELL RECORD

RUN	BIT SIZE	CASING	WT.—LB.	FROM WELL RECORD	FROM LOG
1	8 5/8			SURF TO 370	SURF TO 370
1	7 3/4	O.H.		370 TO 4609	370 TO 4609
				TO	TO
				TO	TO
				TO	TO

REMARKS OR OTHER DATA