



TENNECO OIL COMPANY • P. O. BOX 1031 • 1800 WILCO BUILDING • MIDLAND, TEXAS 79701

July 14, 1970

W-1 - 345

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

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

Re: Tenneco Oil Company
Mesa Queen Unit Waterflood,
Lea County, New Mexico

Gentlemen:

Tenneco Oil Company requests administrative authorization to expand the captioned flood by placing Well No. 25 on injection. Injection will be down 2-inch tubing under a packer into the Queen Sand formation.

The proposed injection intervals are within the vertical limits of the field as defined by the Commission field rules. Fresh water, purchased from the Double Eagle Corporation, will be injected in this well at an estimated rate of not more than 500 barrels per day.

To support this request, the following are attached.

- (1) A plat showing the outline of the Mesa Queen Unit with all existing injection wells shown as well as the proposed Well No. 25.
- (2) A log of Unit Well No. 25 with completion intervals shown.
- (3) A diagrammatic sketch of the proposed injection well showing all pertinent information.

The original authorization of this flood was under Order No. R-3444 dated July 3, 1968.

Yours very truly,

F. J. McDonald

F. J. McDonald
District Production Superintendent

LMW/yt

Attachments

cc: (See attached list)

New Mexico Oil Conservation Commission
July 14, 1970
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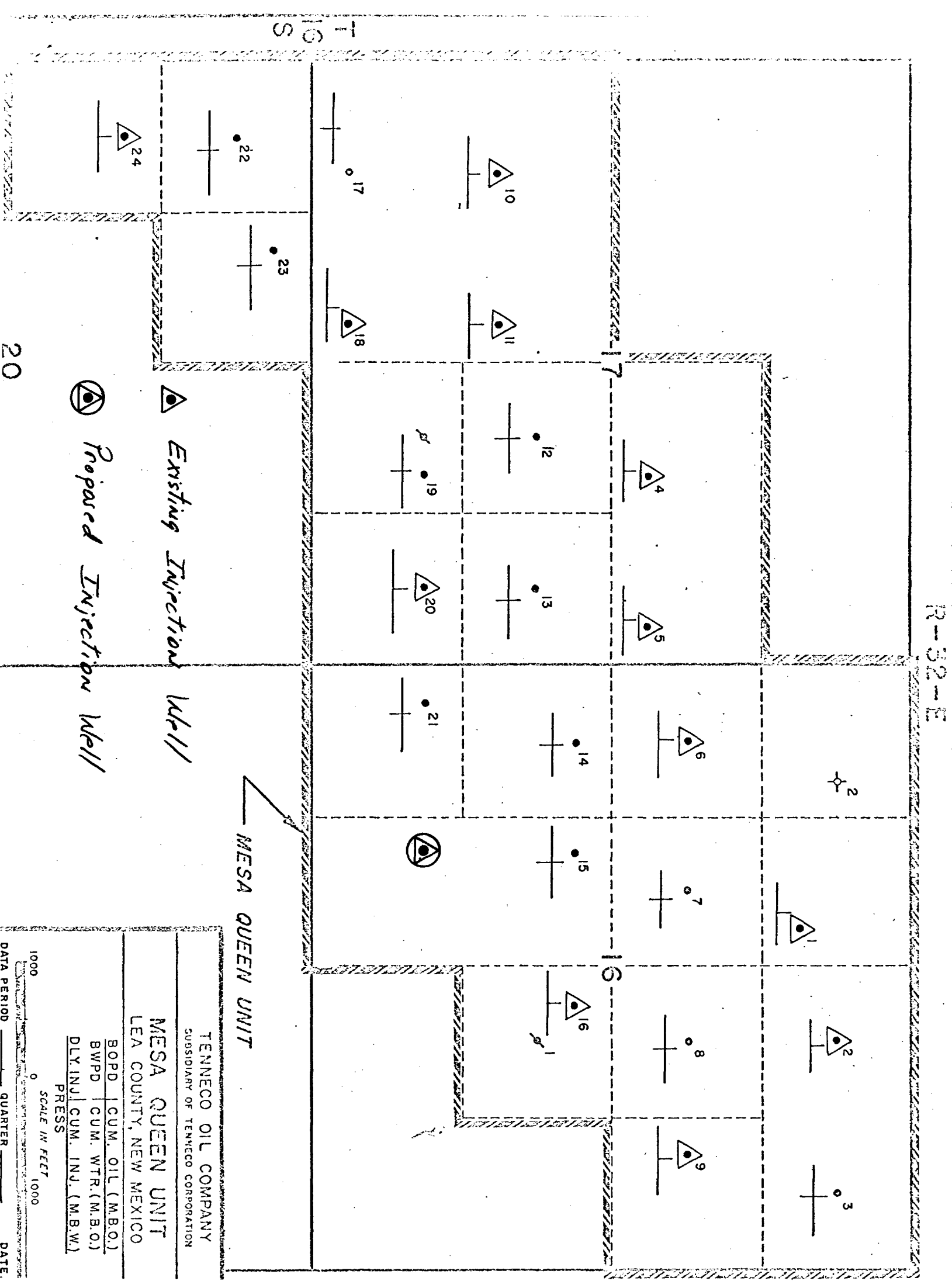
State Engineers Office
Capitol Building
Santa Fe, New Mexico 87501

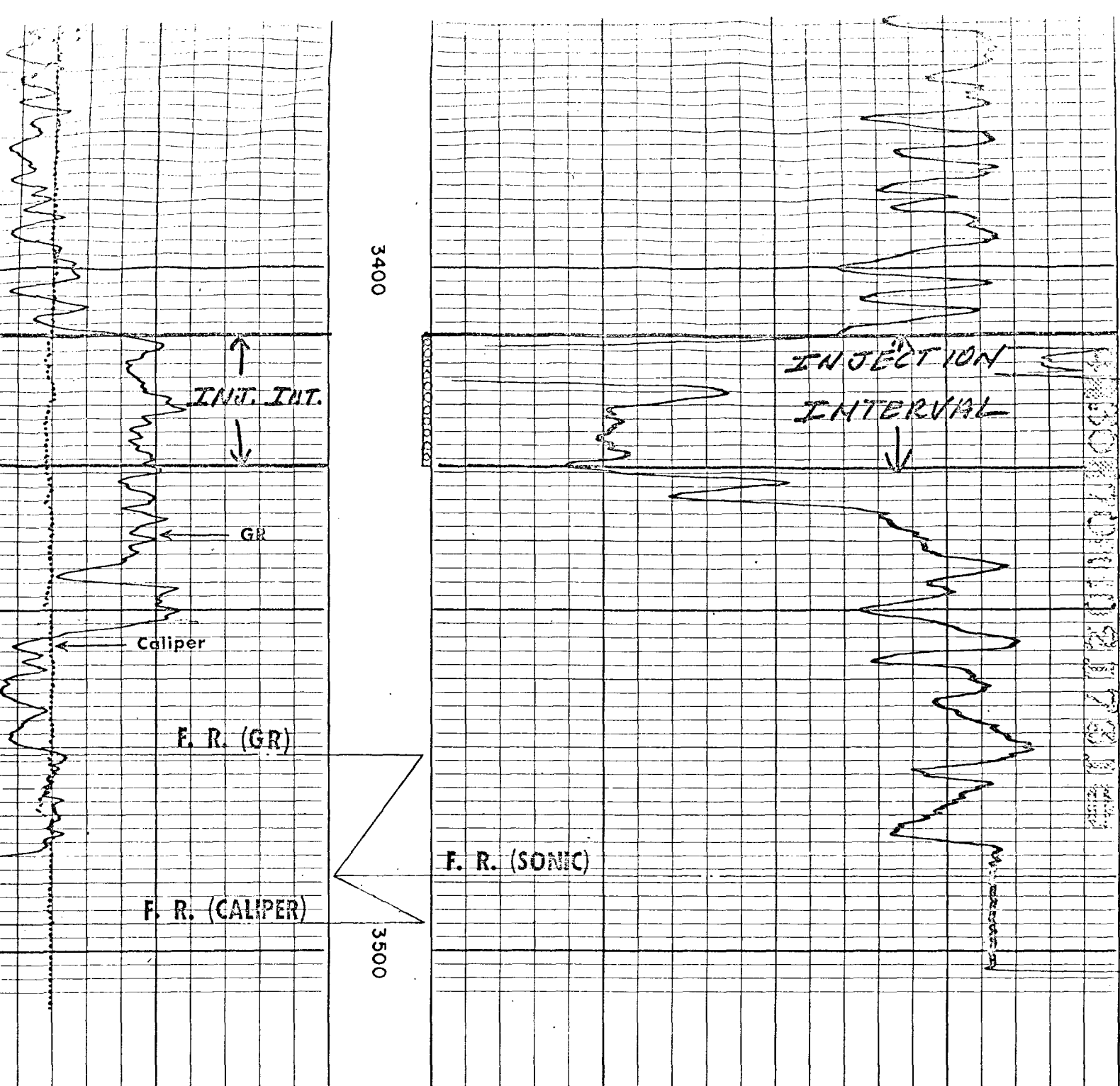
R. A. Dean (offset operator)
823 Midland Tower
Midland, Texas 79701

NMOCC
Box 1980
Hobbs, New Mexico 88240

110

15 AUG 13

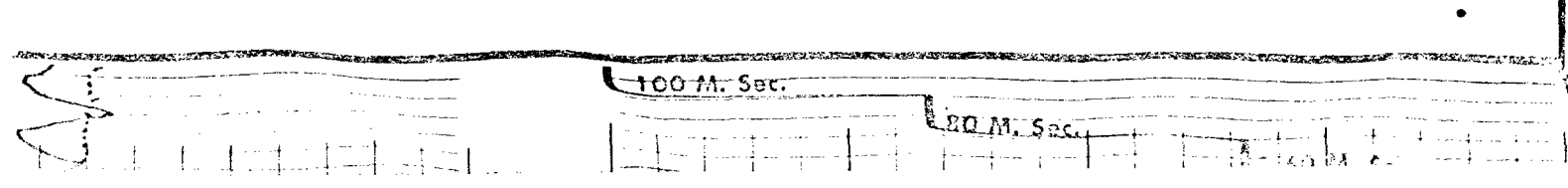




16			
CALIPER			
HOLE DIAM. IN INCHES			
100	100	70	40
200	200	130	100

GAMMA RAY		DEPTHS	INTERVAL TRANSIT TIME	
API UNITS			MICROSECONDS PER FOOT	

COMPANY	TENNECO OIL COMPANY	SCHL. FR	3496
WELL	MESA QUEEN UNIT #25	SCHL. TD	3498
FIELD	MESA QUEEN	DRLR TD	3500
COUNTY	LEA	STATE	NEW MEXICO
		Elev:	KB 4355.4
		DF	-
		GL	4345



SCHUMBERGER

BOREHOLE COMPENSATED
SONIC LOG - GAMMA RAY

COUNTY	LEA
FIELD or LOCATION	MESA QUEEN
WELL	MESA QUEEN
COMPANY TENNECO OIL CO.	
COMPANY	TENNECO OIL COMPANY
WELL	MESA QUEEN UNIT #25
FIELD	MESA QUEEN
COUNTY	LEA
STATE	NEW MEXICO
LOCATION	1650' FWL & 990' FSL
SEC.	16
TWP.	16-S
RGE.	32-E
Other Services:	NONE

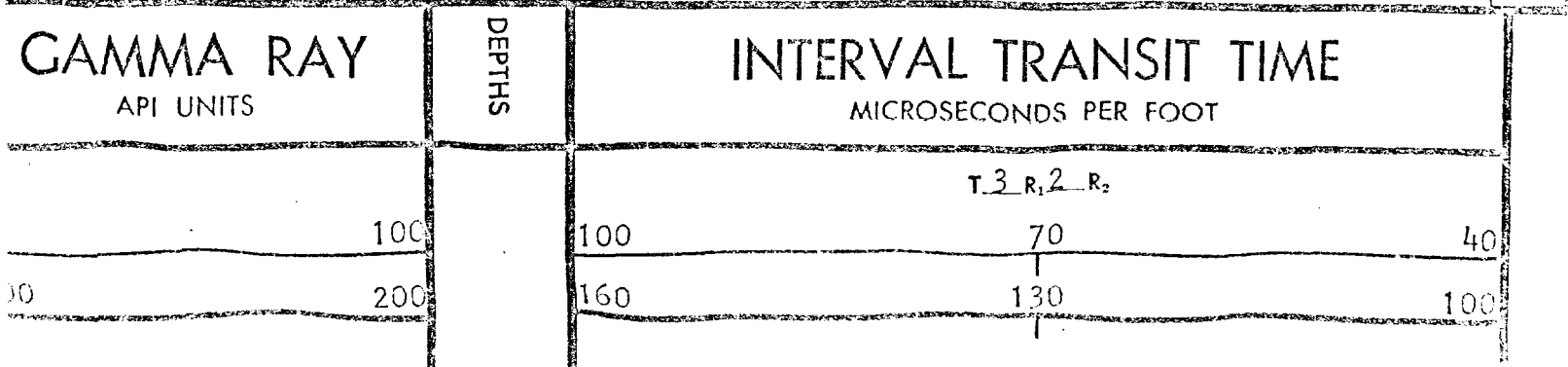
Permanent Datum:	G.L. 4345	Elev. 4345
Log Measured From	K.B. 10.4 Ft. Above Perm. Datum	Elev. K.B. 4355.4
Drilling Measured From	K.B.	D.F. 4345
		G.L. 4345
Date	4-28-70	
Run No.	ONE	
Depth—Driller	3500	
Depth—Logger	3498	
Bitm. Log Interval	3496	
Top Log Interval	0	
Casing—Driller	8 5/8 @ 385	@
Casing—Logger	386	@
Bit Size	7 7/8	
Type Fluid in Hole	SALT	
Dens.	10.4	34
pH	6	12.6ml
Source of Sample	PIT	
R _m @ Meas. Temp.	.052 @ 74°F	@ °F
R _{ml} @ Meas. Temp.	.046 @ 74°F	@ °F
R _{mc} @ Meas. Temp.	- @ - °F	@ °F
Source: R _{mf}	M	
R _{mf}	.042 @ 94°F	@ °F
BHT	2 HOURS	@ °F
Time since Circ.	2 HOURS	@ °F
Max. Rec. Temp.	94	@ °F

The well name, location and borehole reference data were furnished by the customer.

KS.	
es in Mud Type or Additional Samples	
Sample No.	Type Log
—Driller	Depth
Fluid in Hole	Scale Up Hole
Visc.	Scale Down Hole
Fluid Loss	
Source of Sample	
Meas. Temp.	Run No.
Meas. Temp.	Tool Type
Meas. Temp.	Pad Type
R _{mf}	Tool Pos.
R _{mc}	Other
BHT	
BHT	
BHT	
YES	S.O.:
Used:	CART. No.
	PANEL No.
	SONDE No.
	SPRING & CALIPER
	SLH-C-96
	SLP-C-291
	SLS-H-525

BACKGND.	SOURCE	GALV. INCR.	SENS. TAP	SENS. TAP	TIME	RECORDING
CPS.	CPS.	DIVISIONS	(FOR CAL.)	(RECORD)	CONST.	SPEED (FT./MIN.)
50	400	82.5	800	400	1	45/60.

Velocity (feet per second) = $\frac{1,000,000}{\text{Interval Transit Time (microseconds per foot)}}$



8 5/8" CSG. AT 385' W/225 SX. CIRCULATED

PRESSURE GAUGE ON ANNULUS

ANNULUS FILLED WITH
TREATED PACKER FLUID

2 3/8" EUE J-55 4.7# TUBING

TOP CEMENT AT 2390'

TENSION PACKER AT 3383'

PERFS. 3410-29

4 1/2" 10.5# J-55 CSG. AT 3498 W/200 SX.



TENNECO OIL COMPANY
SUBSIDIARY OF TENNECO CORPORATION

MESA QUEEN UNIT
LEA COUNTY, NEW MEXICO

PROPOSED INJECTION WELL
NO. 25