

NORTH HOBBS RESERVOIR SIMULATION MODEL
FOR SAN ANDRES ZONES II & III
IN VICINITY OF GETTY GRIMES NO. 2

Single Layer - Constant Thickness

Dimensions

3500' - North-South
6000' - East-West
70' - Thick

No.Cells

9 Cells	-	North-South
15 Cells	-	East-West

Reservoir Properties

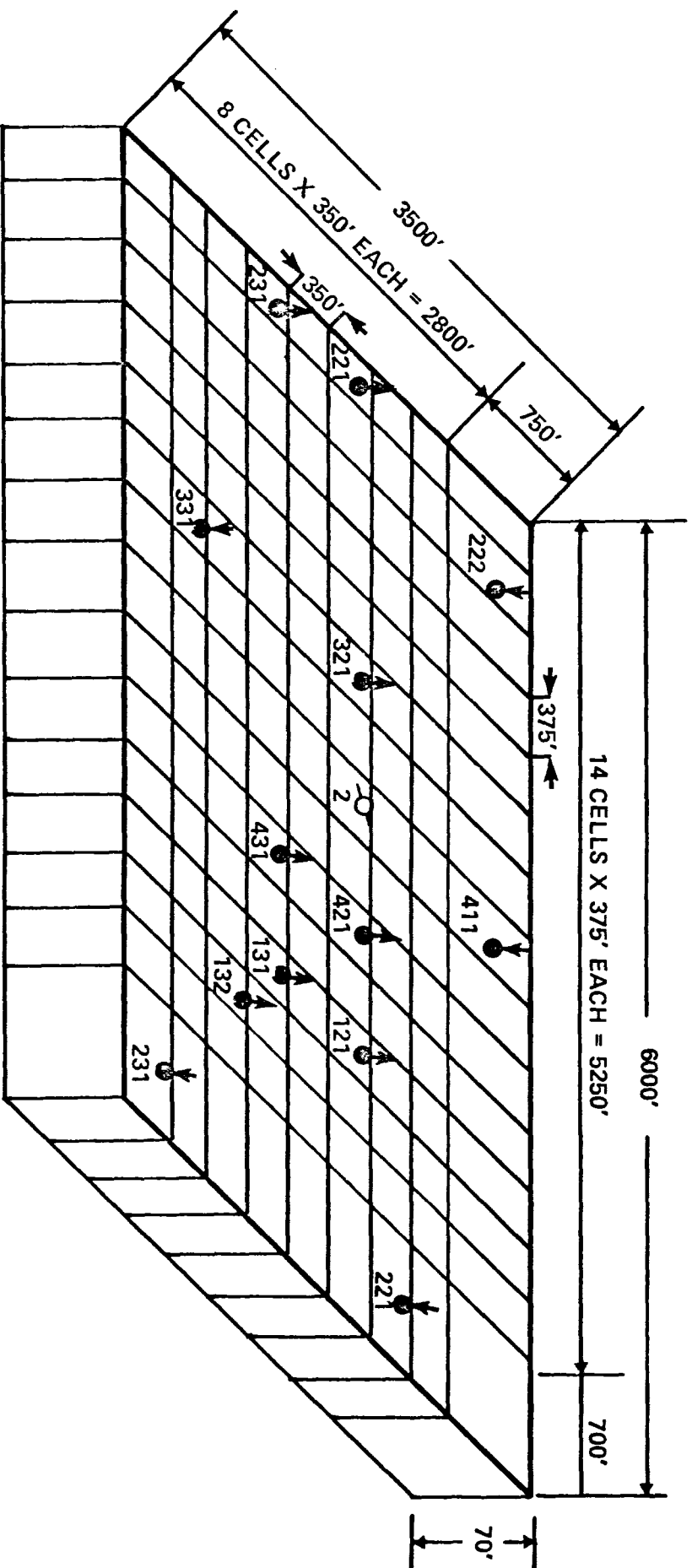
Porosity	-	14%
Permeability	-	10 md.
Saturations (initial)		
	Oil	- 78%
	Water	- 22%
	Gas	- -0-
GOC	Not Included in Model	
WOC	Not Included in Model	

Initial Fluids In Place

OOIP	-	22,000,000 STB
Dissolved Gas	-	14,212 MMCF
Free Gas	-	-0-
OWIP	-	8,126,200 STB

Reservoir Pressures (Average)

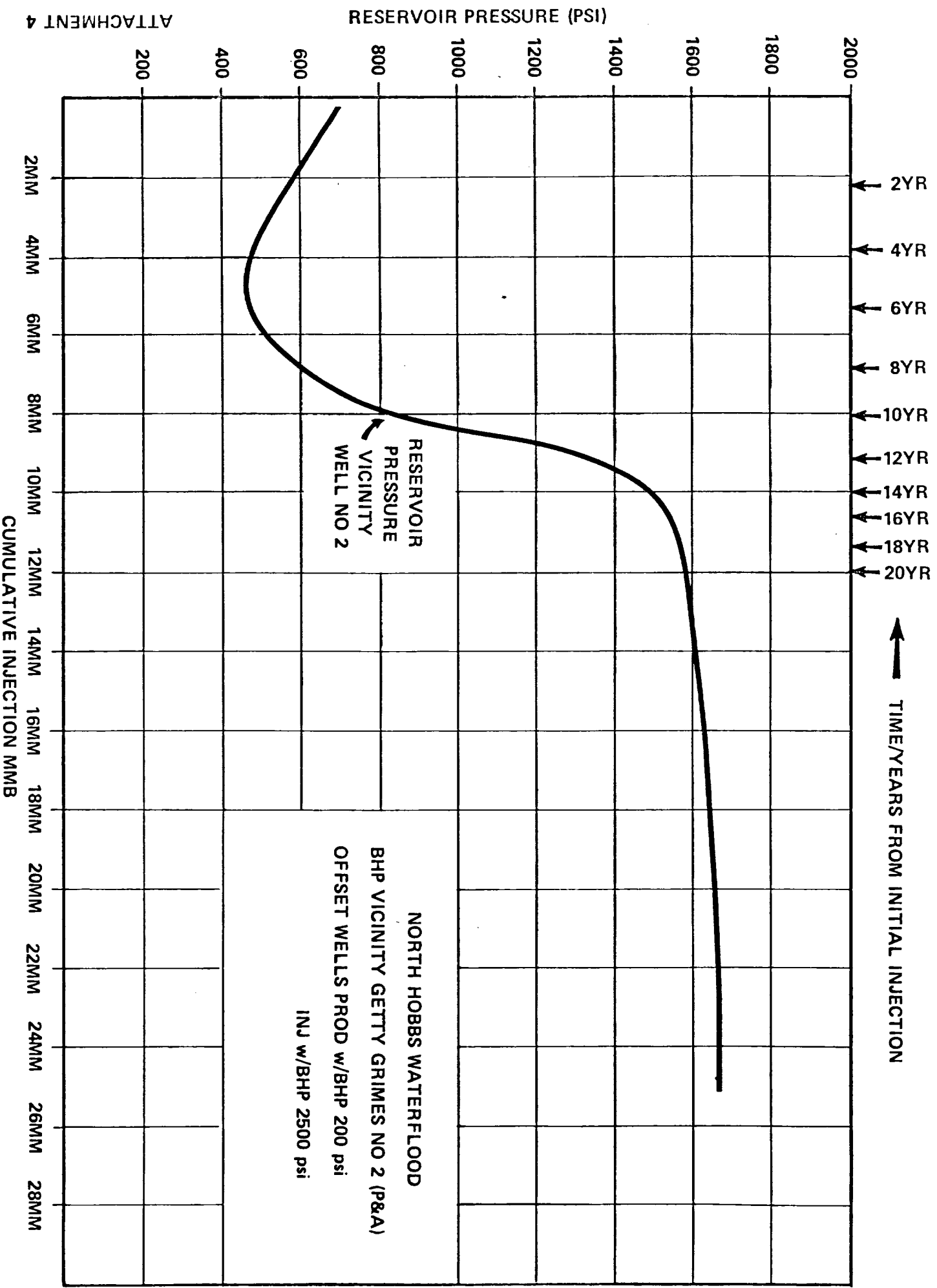
At Start Primary	-	1550 PSI
At Start Waterflood	-	710 psi

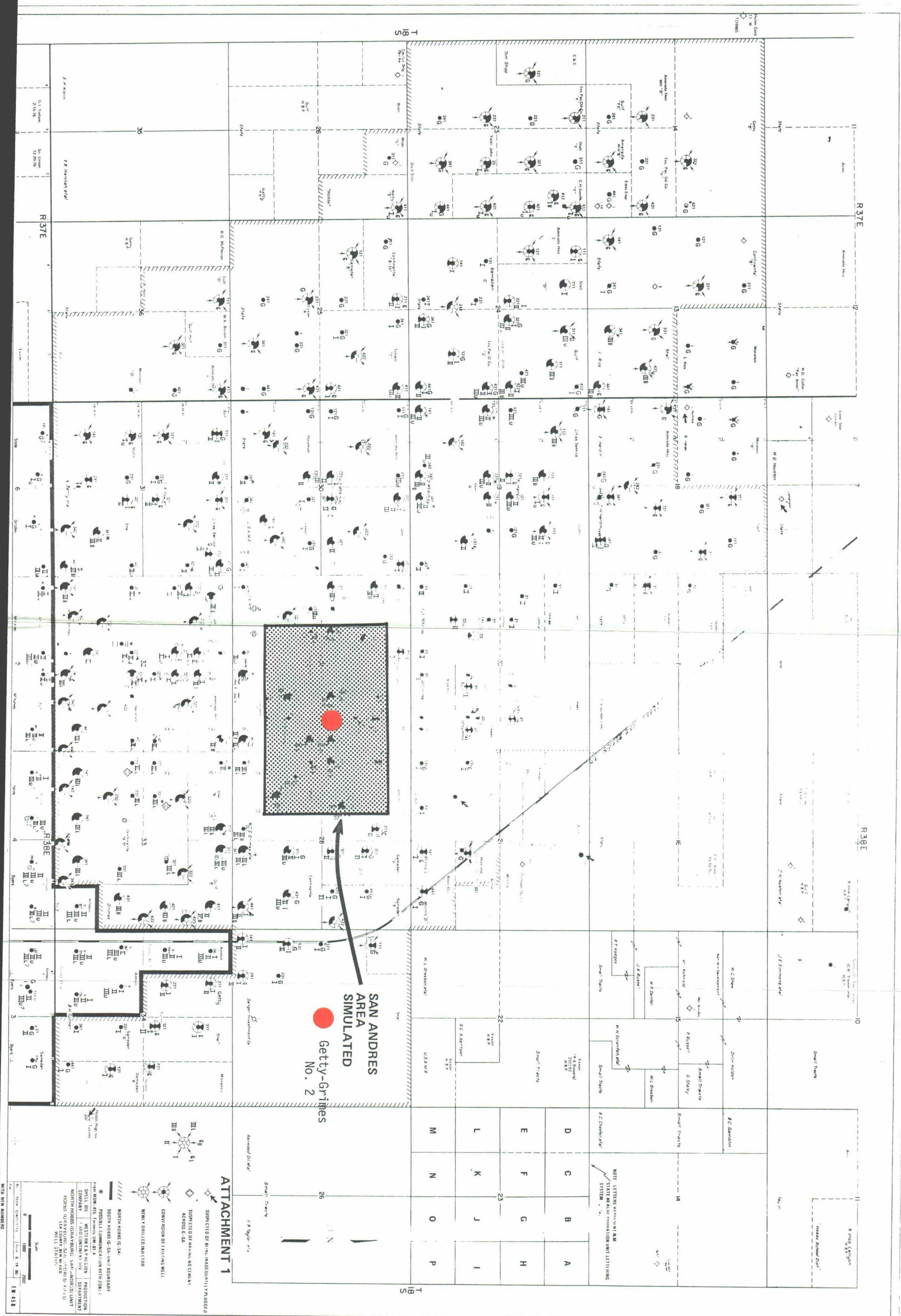


 INJECTION WELL
 PRODUCING WELL
 SHUT IN WELL (NO 2)

NORTH HOBBS SIMULATION MODEL
 SAN ANDRES ZONES II & III
 IN VICINITY GETTY GRIMES NO 2

8/81





2U 00094.00

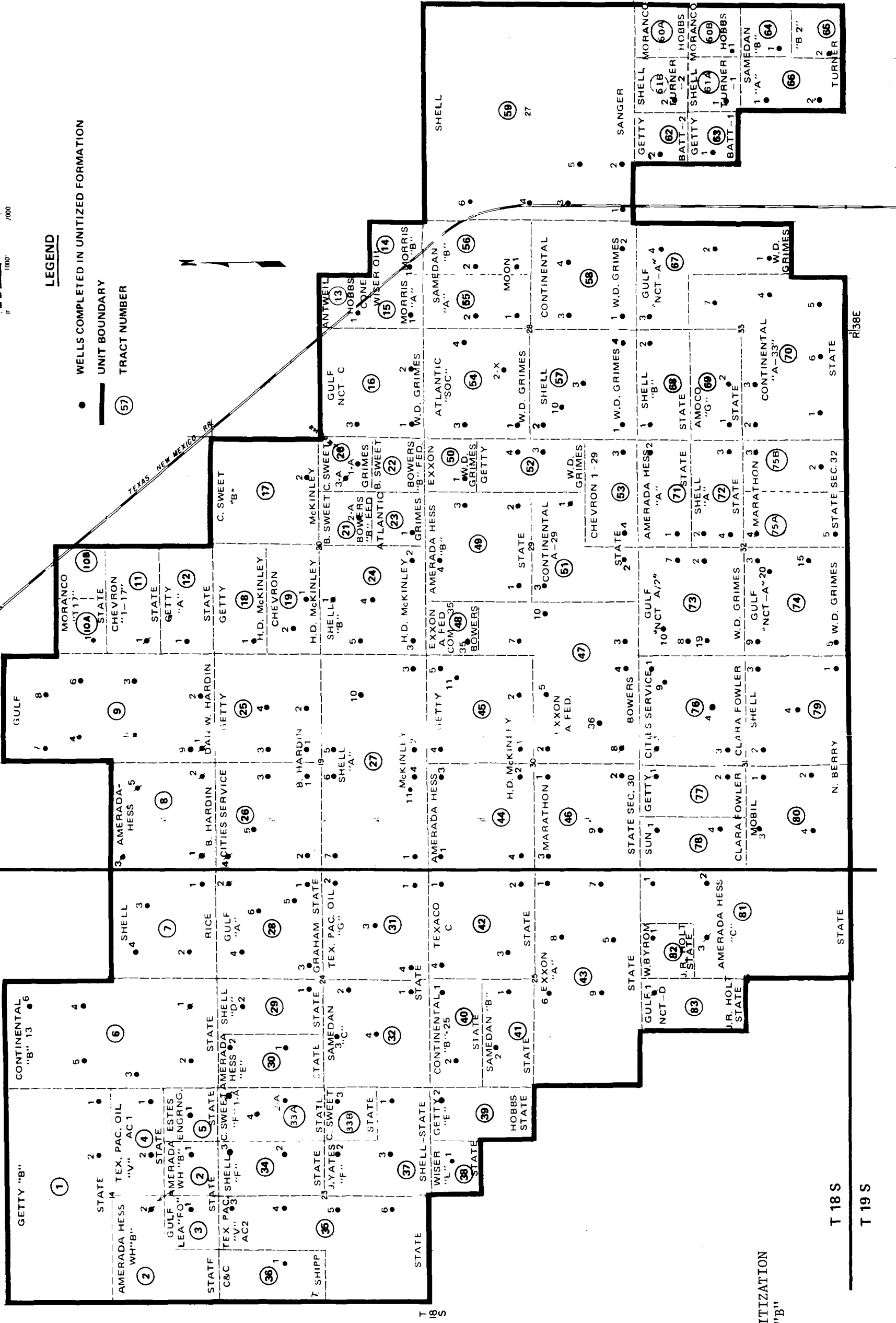
R 37 E R 38 E

NORTH HOBBS (GRAYBURG - SAN ANDRES) UNIT
Lea County, New Mexico



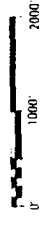
LEGEND

- WELLS COMPLETED IN UNITIZED FORMATION
- UNIT BOUNDARY
- TRACT NUMBER



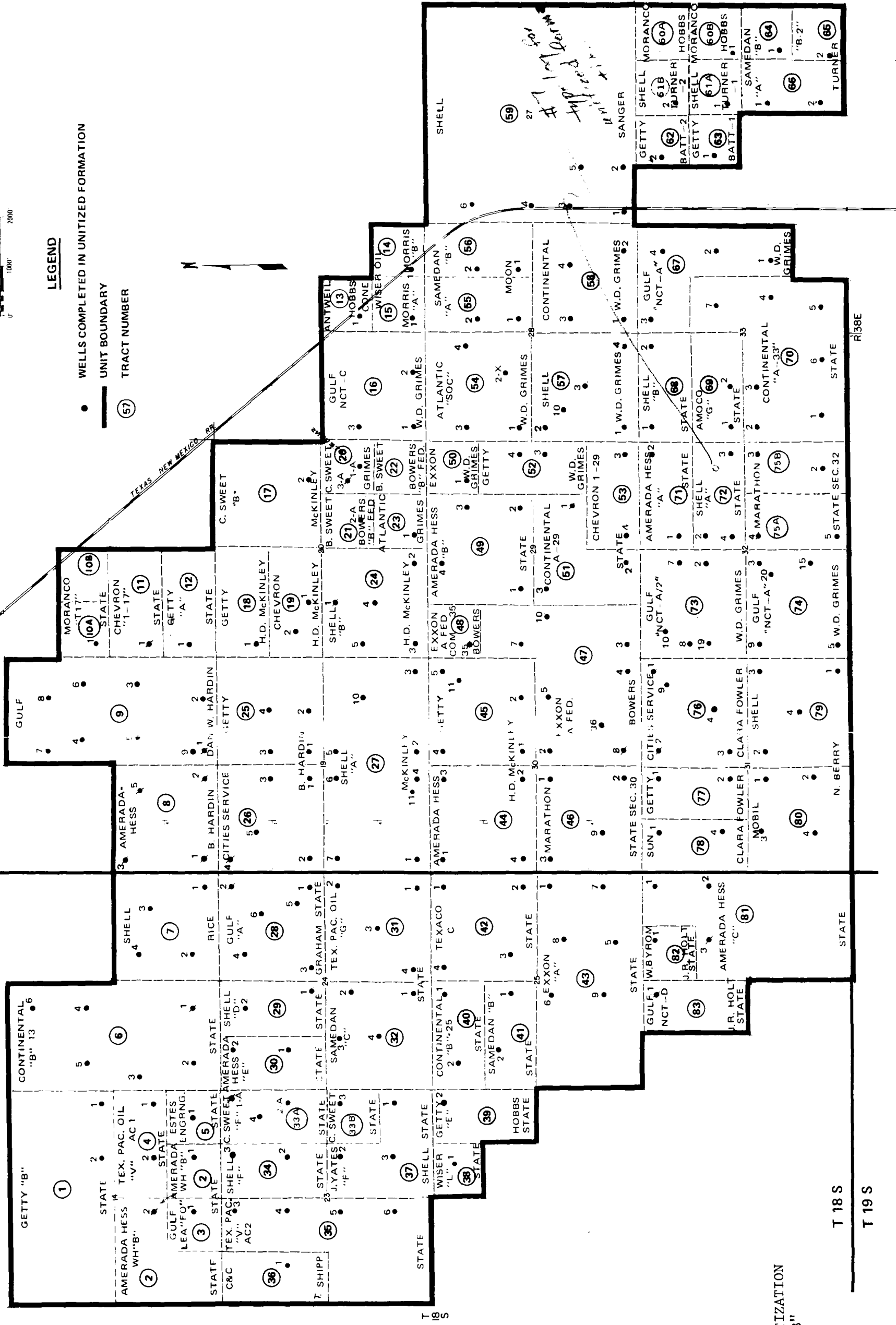
STATUTORY UNITIZATION
EXHIBIT "B"

NORTH HOBBS (GRAYBURG - SAN ANDRES) UNIT
Lea County, New Mexico



LEGEND

- WELLS COMPLETED IN UNITIZED FORMATION
- UNIT BOUNDARY
- TRACT NUMBER 57



STATUTORY UNITIZATION
EXHIBIT "B"

T 18 S

T 19 S

TYPE LOG
NORTH HOBBS (G-SA) UNIT

HOLE COMPENSATED
C LOG - GAMMA RAY

COUNTY	LEA	COMPANY	SHELL OIL COMPANY
FIELD or WELL	HOBBS BLINERY SHELL STATE "A"	WELL	STATE "A" 7
COMPANY SHELL OIL COMPANY		FIELD	HOBBS
		COUNTY	LEA STATE NEW MEXICO
LOCATION	930' FNL & 650' FWL	Other Services:	PM, SHP, DIL
Sec. 32 Twp. 18-S Rge. 38-E			
Permanent Datum:	G.L., Elev. 3637	Elev.: K.B. 3647	
Log Measured From	K.B., 10 Ft. Above Perm. Datum	D.F. 3646	
Drilling Measured From	K.B.	G.L. 3637	
Date	7-9-69		
Run No.	ONE		
Depth - Driller	7020		
Depth - Logger	7028		
Strm. Log Interval	7027		
Top Log Interval	0		
Casing - Driller	650' @ 3790	@	@
Casing - Logger	3793		
Bit Size	7 7/8		
Type Fluid in Hole	FRESH GEL		
Dens. Visc.	8.8 142		
pH Fluid Loss	8 19.4 ml		
Source of Sample	PIT		
R ₁ @ Meas. Temp.	1.44 @ 81 °F	@	@
R ₂ @ Meas. Temp.	1.20 @ 80 °F	@	@
R ₃ @ Meas. Temp.	1.78 @ 80 °F	@	@
Source R ₁ R ₂ R ₃	1 1 1	@	@
R ₁ @ BHT	1.15 @ 114 °F	@	@
Time Since Circ.	15 HOURS		
Max. Rec. Temp.	114 °F		
Equip. Location	3720 HOBBS		
Recorded By	BECK KADDER		
Witnessed By	HILLER		

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

Changes in Mud Type or Additional Samples		Scale Changes	
Date Sample No.	Type Log	Scale Up Hole	Scale Down Hole
Depth - Driller	Depth		
Type Fluid in Hole			
Dens. Visc.			
ph Fluid Loss			
Source of Sample			
R ₁ @ Meas. Temp.			
R ₂ @ Meas. Temp.			
R ₃ @ Meas. Temp.			
Source R ₁ R ₂ R ₃			
R ₁ @ BHT			
R ₂ @ BHT			
R ₃ @ BHT			
C.D. SEC. S.O. 100-5-21E-4			
CART No. SLS-A-35			
Equip. Used: PANEL No. SLP-A-49			
SONDE No. SLS-2-22			
CALIBRATION: BACKGND. SOURCE GALV. INCR. SENS. TAP TIME RECORDING			
CPS CPS DIVISIONS (FOR CAL.) SPEED (FT./MIN.)			
GAMMA RAY: 458 82.5 800 400 2/1 30/50/80			
Velocity (feet per second) 1,000,000			
Interval Transit Time (microseconds per foot)			

GAMMA RAY
API UNITS

INTERVAL TRANSIT TIME
MICROSECONDS PER FOOT