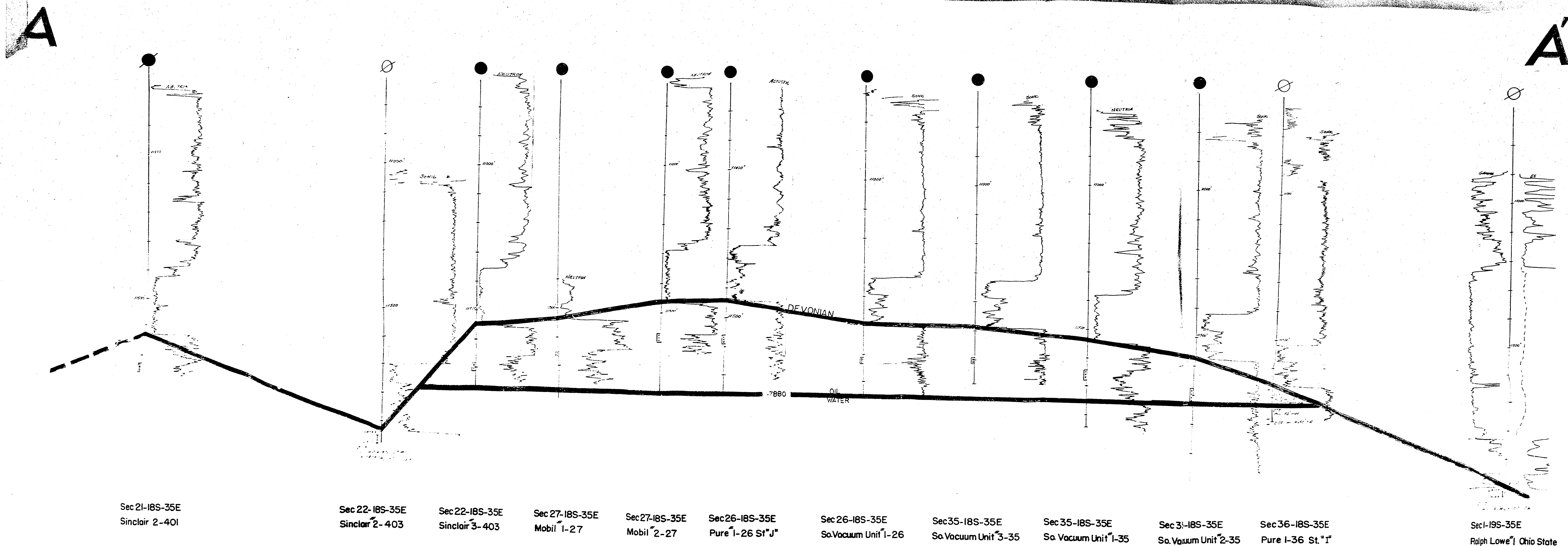


Case No.

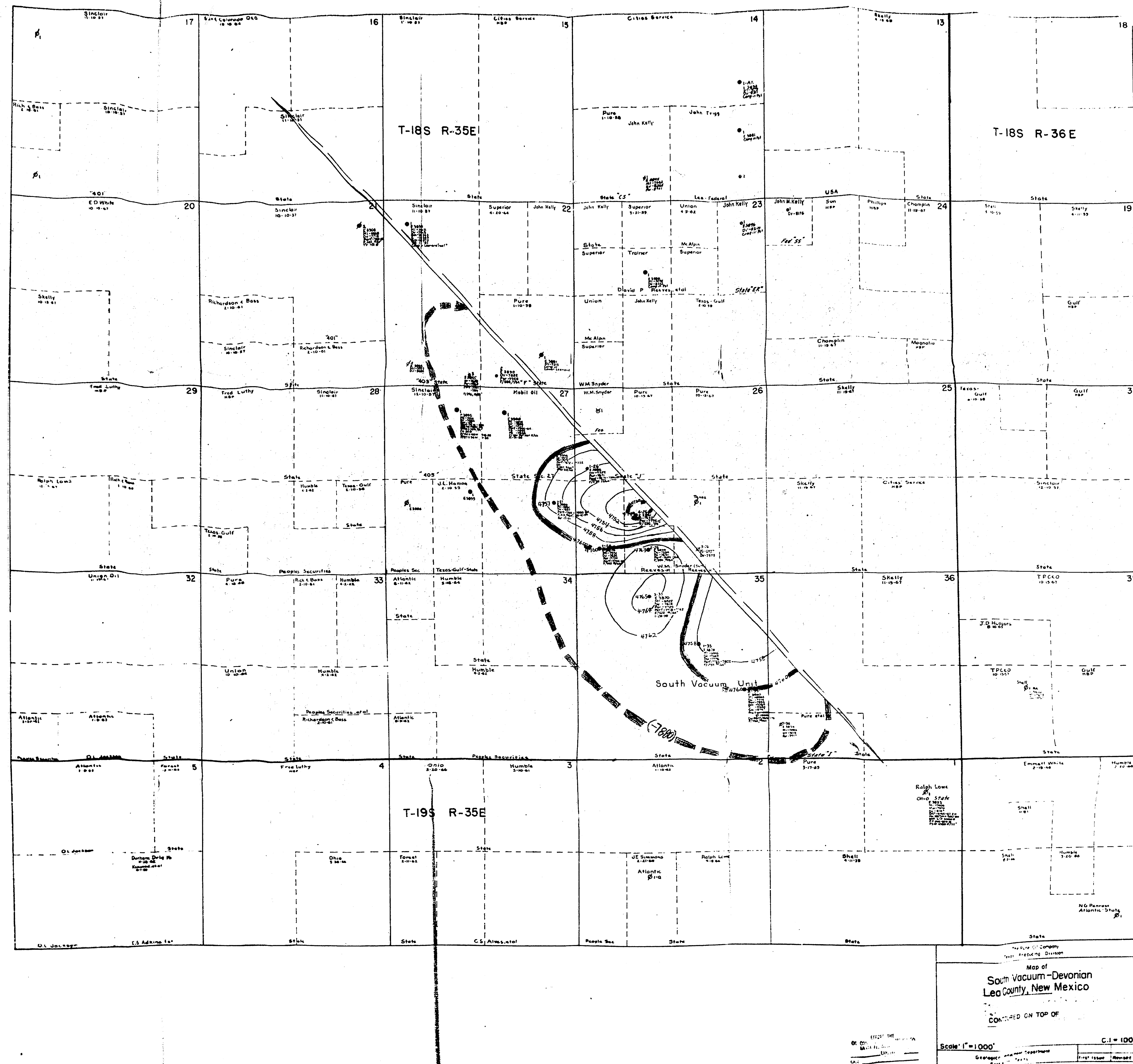
1634

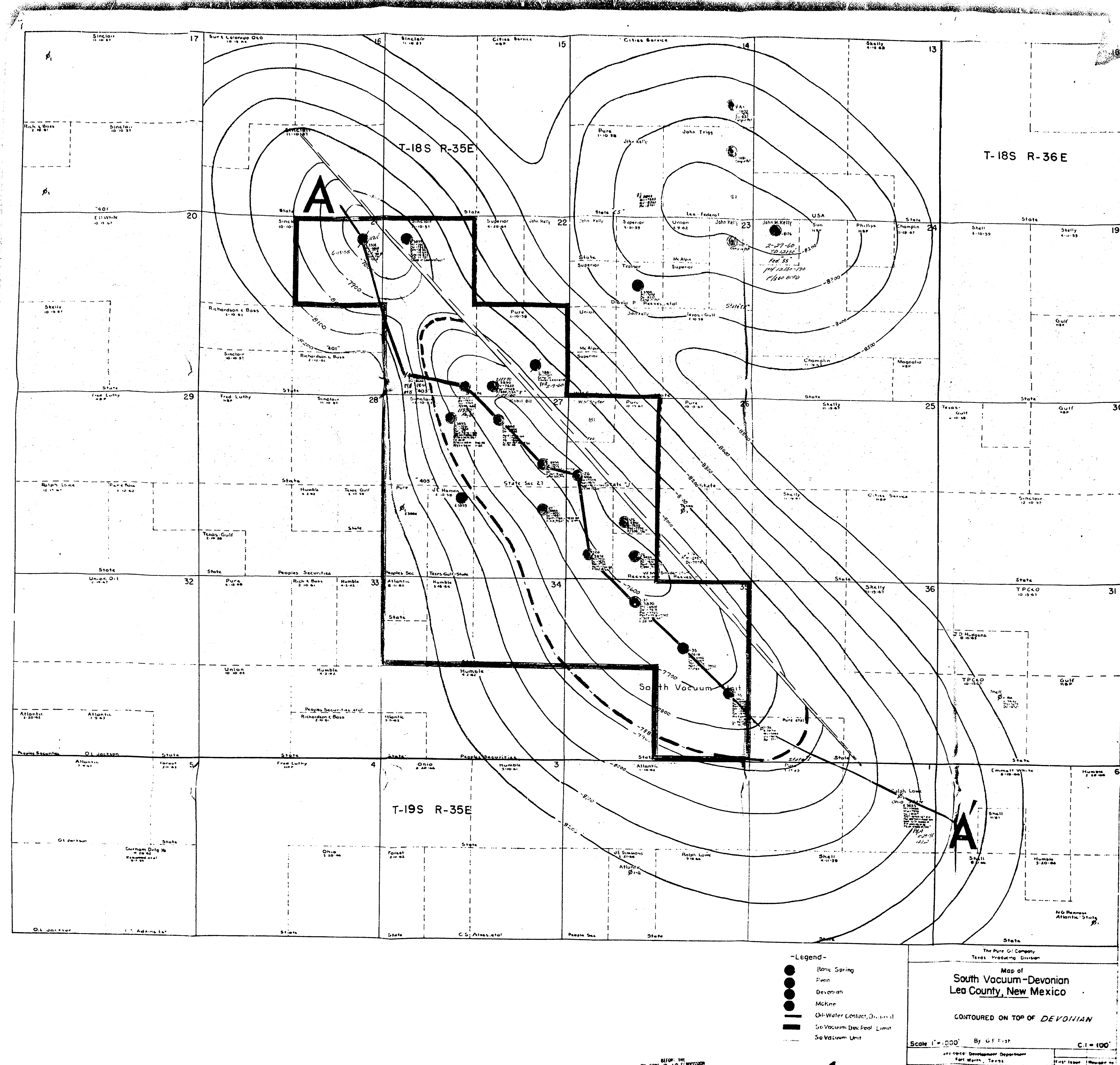
Large Exhibits

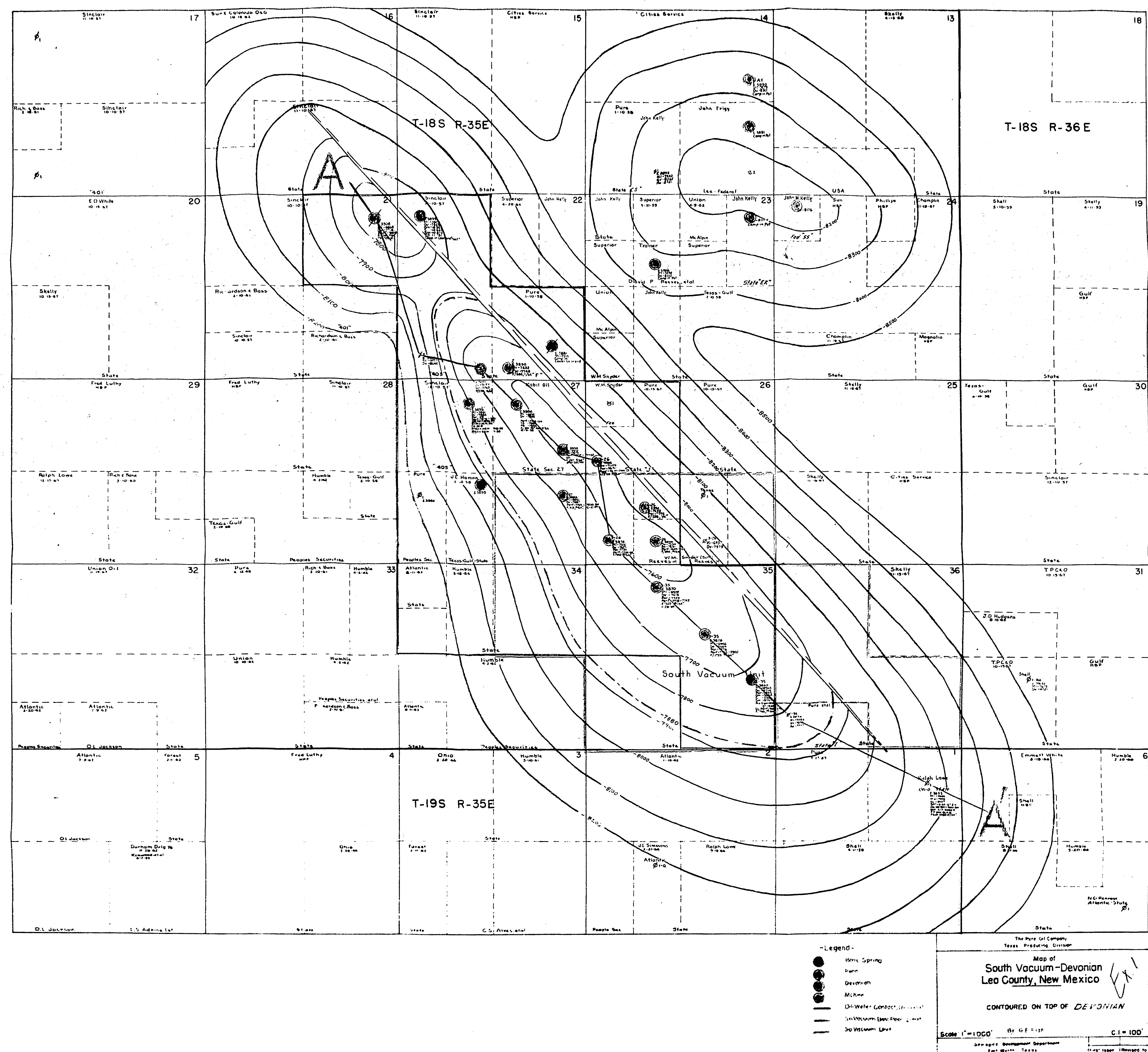


2.

CROSS-SECTION
SOUTH VACUUM POOL
LEA CO. NEW MEXICO
SCALE: VERTICAL 1" = 100'
HORIZONTAL 1" = 500'
By G. E. FISH

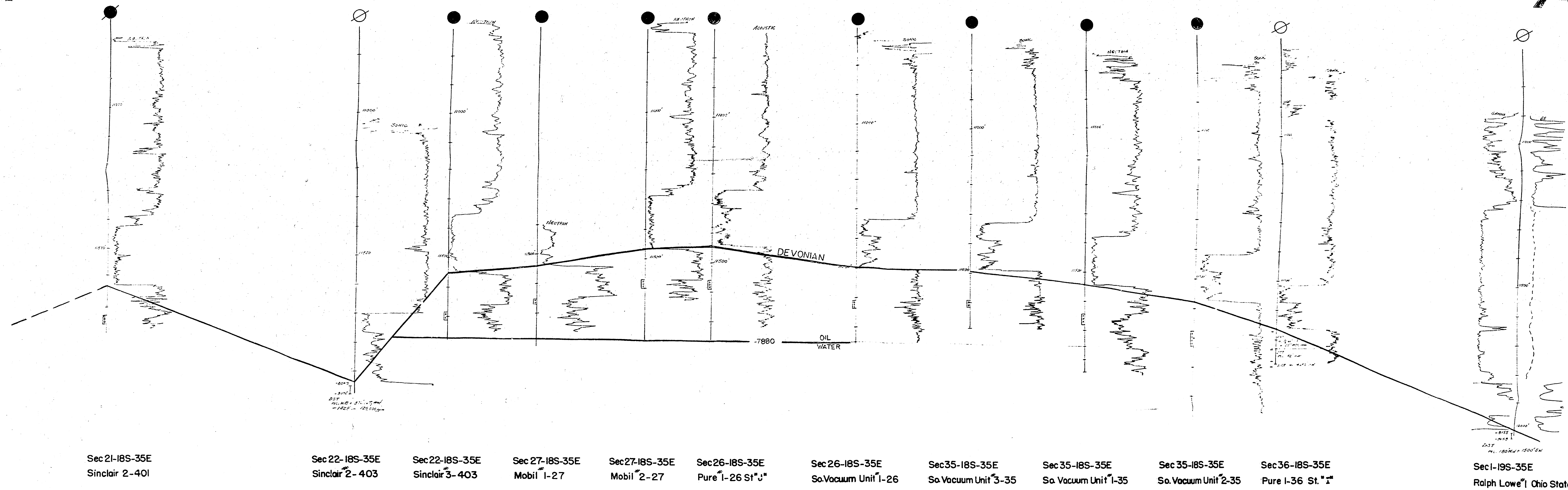






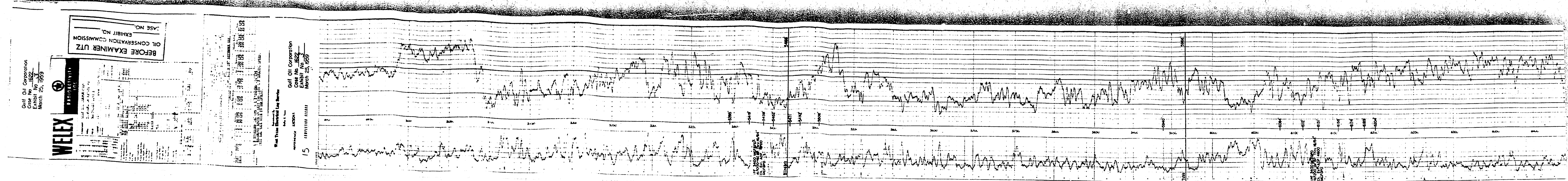
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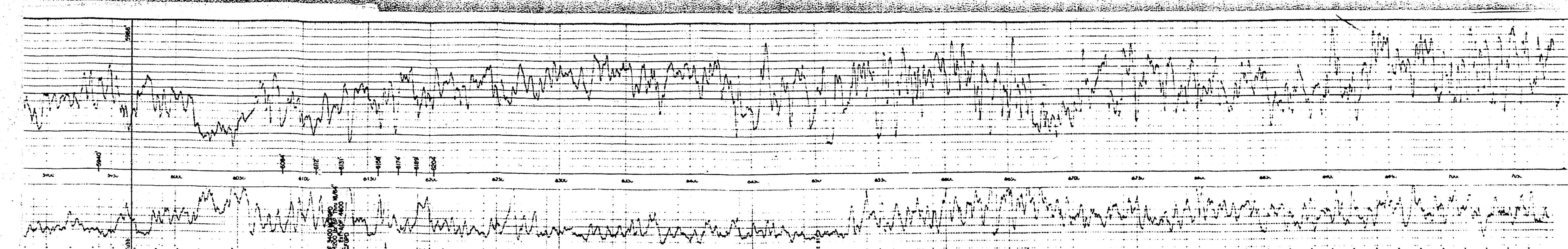
A'



2.

CROSS-SECTION
SOUTH VACUUM POOL
LEA CO. NEW MEXICO
SCALE: VERTICAL 1" = 100'
HORIZONTAL 1" = 500'
BY G. E. FISH

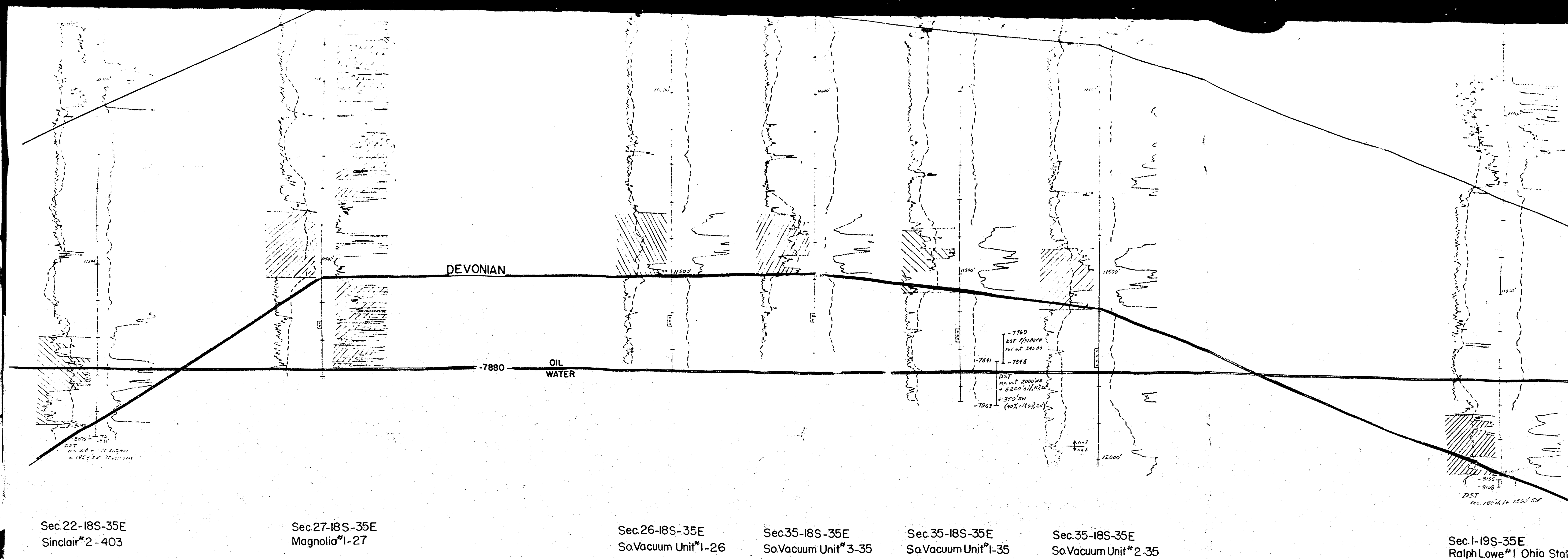




Case No.

1634

Large Exhibit



CROSS-SECTION
SOUTH VACUUM POOL
LEA CO. NEW MEXICO
SCALE: VERTICAL 1"=100'
HORIZONTAL 1"=500'
BY: G.E. FISH

SOUTH VACUUM-DEVONIAN POOL PRODUCTION HISTORY
LEA COUNTY, NEW MEXICO
(INCLUDING SINCLAIR LOT #2)

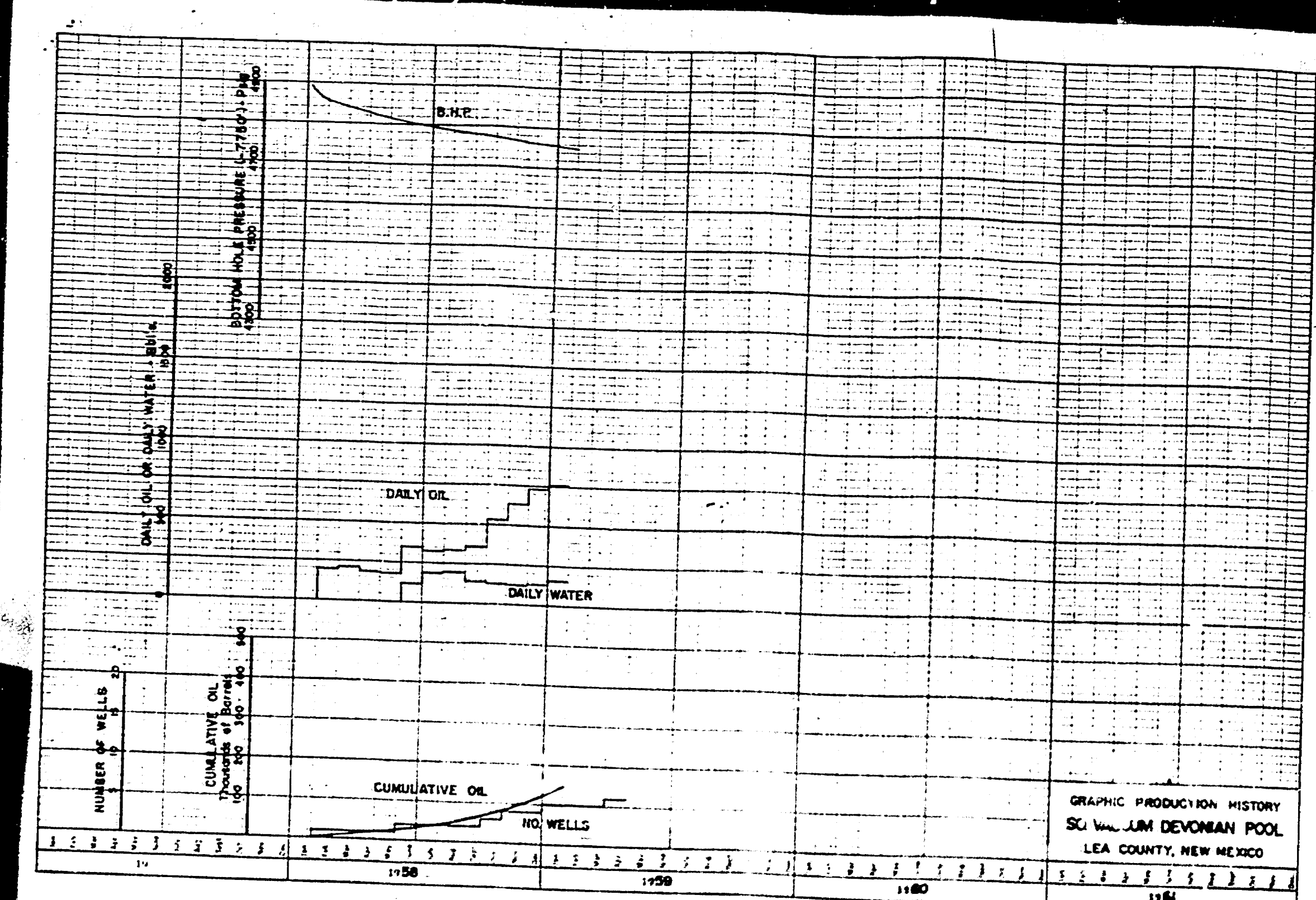
Year	Month	No. Wells	Oil-Bbls.	Water-Bbls.	Gas-MCF	OPR PSI	SEP-1-1950 PSI
1958	January	1	868	0	69	80	1895
	February	1	5,823	0	195		1895
	March	1	6,118	0	160		1895
	April	1	5,125	0	160		1895
	May	2	10,457	0	80		1895
	June	2	10,457	3,510	80		1895
	July	2	9,715	5,880	771		1895
	August	2	10,071	5,890	790		1895
	September	3	10,061	6,200	855		1895
	October	3	10,061	6,092	1,059		1895
	November	3	10,061	6,000	1,059		1895
	December	4	22,028	6,000	1,115		1895
	Total		122,062	31,202	9,525		1895
	Cumulative		122,062	31,202	9,525		1895
1959	January	5	22,865	6,266	1,859		1895
	February	5	21,177	2,617	1,859		1895
	March	5	28,077	3,113	2,743		1895
	April	5	29,153	3,000	2,339		1895

REVIEW THE
FILE
DATE 1/24/59

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INDIVIDUAL WELL BOTTOM HOLE PRESSURES - 7500' SUB-SEA
SOUTH VACUUM-DEVONIAN POOL
LEA COUNTY, NEW MEXICO

WELL	DATE	DEPTH	PRESSURE	TEMPERATURE
1-11-58	1/11/58	7500'	0	
2-1-58	1/1/58	852		
5-9-58	1/5/58	20,141		
6-15-58	1/5/58	4,275		
5-27-58	1/5/58	1825*	0	
7-23-58	1/5/58	33,815	1773	15,301
10-27-58	1/5/58	1758	5,283	
11-7-58	1/5/58	1810	1,057	
1-28-59	1/28/59	1795	734	
2-3-59	2/3/59	1783	1,704	
2-6-59	2/6/59	1775	1,622	
1-13-59	1/13/59	1792	235	



RESERVOIR DATA
SOUTH VACUUM (DEVONIAN) POOL
LEA COUNTY, NEW MEXICO

1. PHYSICAL PROPERTIES OF RESERVOIR ROCK
(Based on Core Analysis)
 - a. Average Porosity - 1.1%
 - b. Average Permeability - 225 Millidarcys
 - c. Average Interstitial Water Saturation - 22.5%
 - d. Net Thickness - 25 feet (Maximum)
2. LITHOLOGY
Gray dense to finely crystalline dolomite with pin-point to large vugs, inter-crystalline porosity, and fracturing.
3. STRUCTURAL FEATURES OF RESERVOIR
Northeast-southeast trending anticline bounded on the northeast flank by steep dip or possible faulting. No original gas cap. Oil-water contact 7500' Sub-sea.
4. CHARACTERISTICS OF RESERVOIR FLUIDS
 - a. Gravity of Stock Tank Oil - 10.0 API
 - b. Saturation Pressure - 182 PSIG
 - c. Formation Volume Factor - Barrels Reservoir Oil per Barrel Stock Tank Oil
At Original Pressure - 1.001
At Saturation Pressure - 1.008
 - d. Viscosity of Reservoir Oil - Centipoises
At Original Pressure - .001
At Saturation Pressure - .001
 - e. Dissolved Gas-Oil Ratio - Cubic Feet per Barrel Stock Tank Oil
At Saturation Pressure - 25

SOUTH VACUUM-DEVONIAN POOL PRODUCTION HISTORY
LEA COUNTY, NEW MEXICO
(INCLUDING SINCLAIR LOT #2)

Year	Month	No. Wells	Oil-Bbls.	Water-Bbls.	Gas-MCF	OPR PSI	SEP-1-1950 PSI
1958	January	1	868	0	69	80	1895
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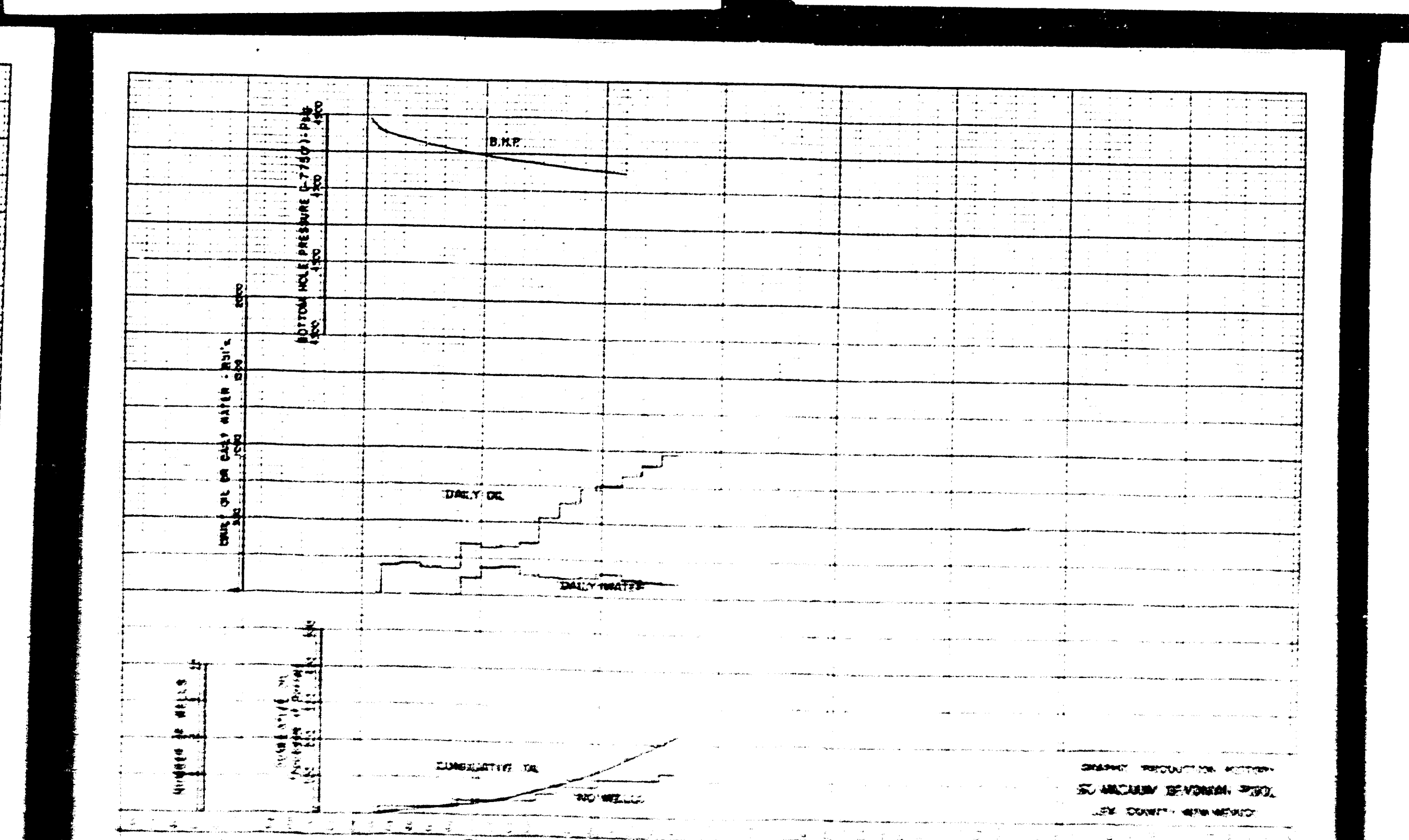
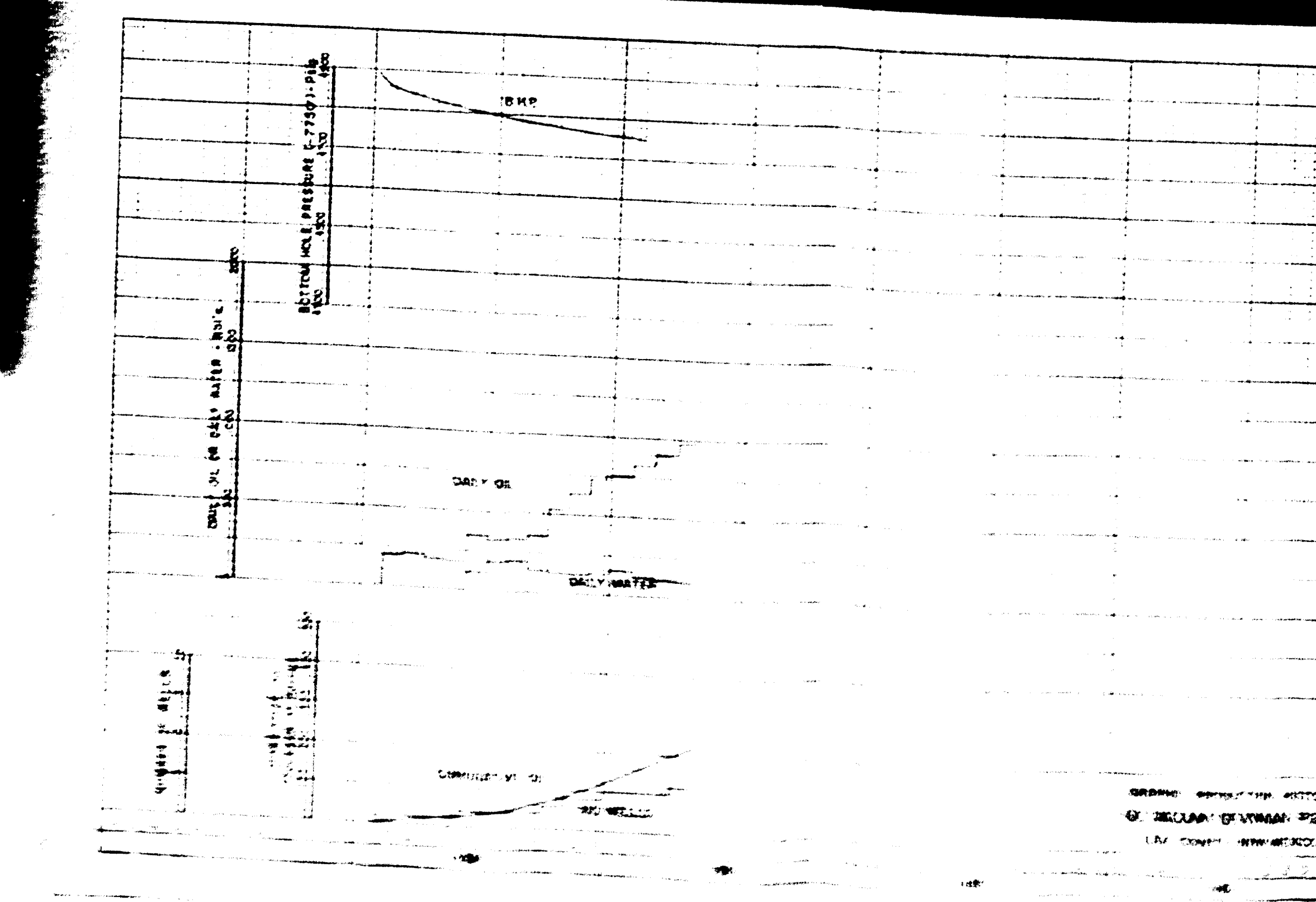
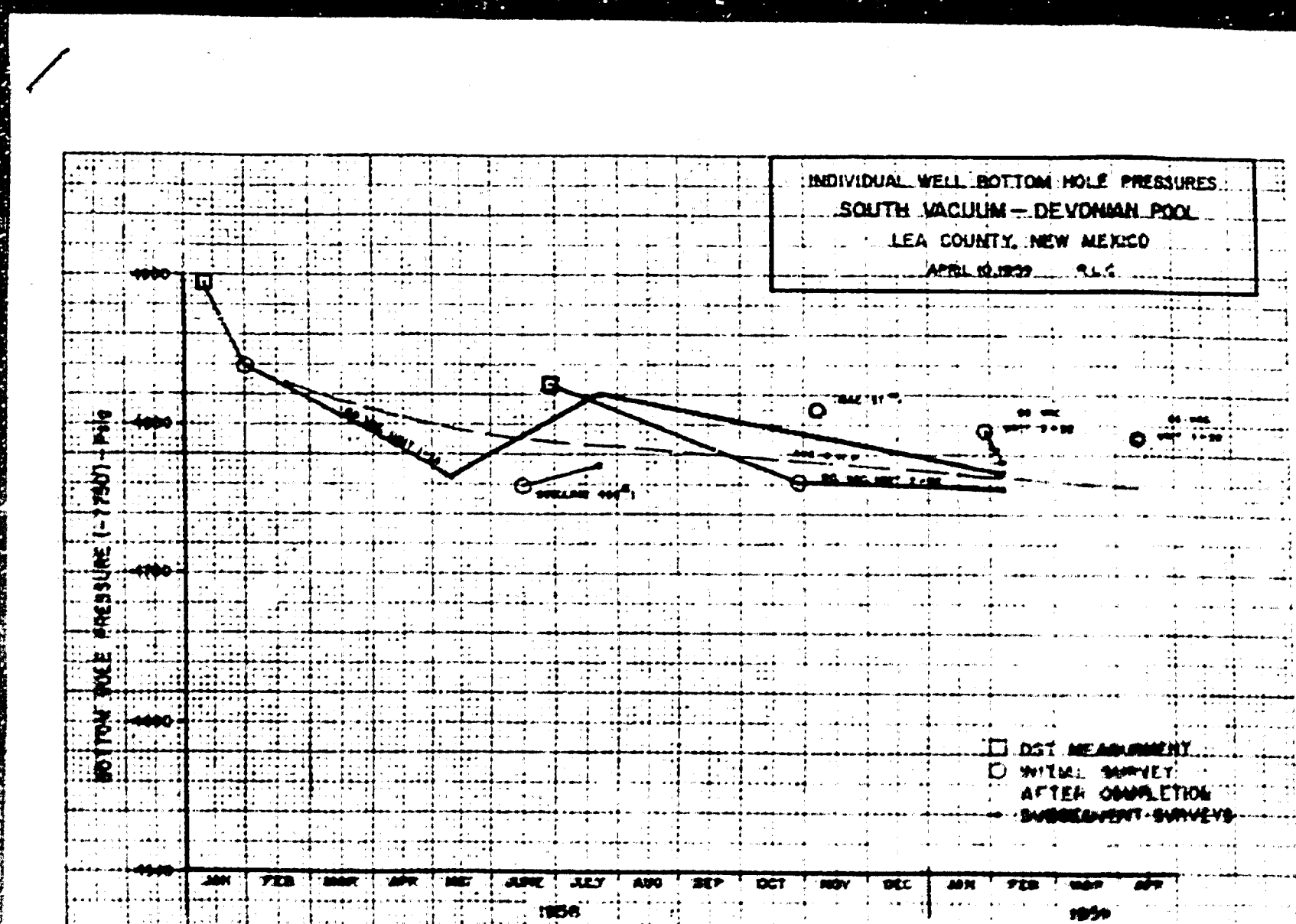
South Vacuum (Devonian) Pool
Reservoir Data
Page 2

5. RESERVOIR PRESSURES AND TEMPERATURE
 - a. Datum Depth - 7500' Sub-sea
 - b. Original Reservoir Pressure - 182 PSIG
(From drill stem test South Vacuum #1-35 on 1-11-58)
 - c. Estimated Average Reservoir Pressure 1-25-59 182 PSIG
 - d. Reservoir Temperature - 116.5 F
 - e. Productivity Index - Barrels per Day per PSI Pressure Drop - 1.4

PROCEDURE
SOUTH VACUUM UNIT INTERFERENCE TEST
SOUTH VACUUM-DEVONIAN POOL

1. Run 18 hour shut-in bottom hole pressure survey on all wells.
2. Open all wells on normal producing rate except for following:
 - a. South Vacuum Unit #2-35 - Leave shut-in.
 - b. South Vacuum Unit #1-35 - Produce at twice the normal allowable.
3. Record daily bottom hole pressure or #2-35 for several days.
4. Run static bottom hole pressure survey on all wells at monthly intervals for approximately three months. Run subsequent surveys at three month intervals for remainder of year.

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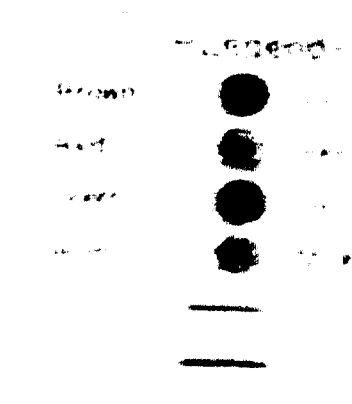
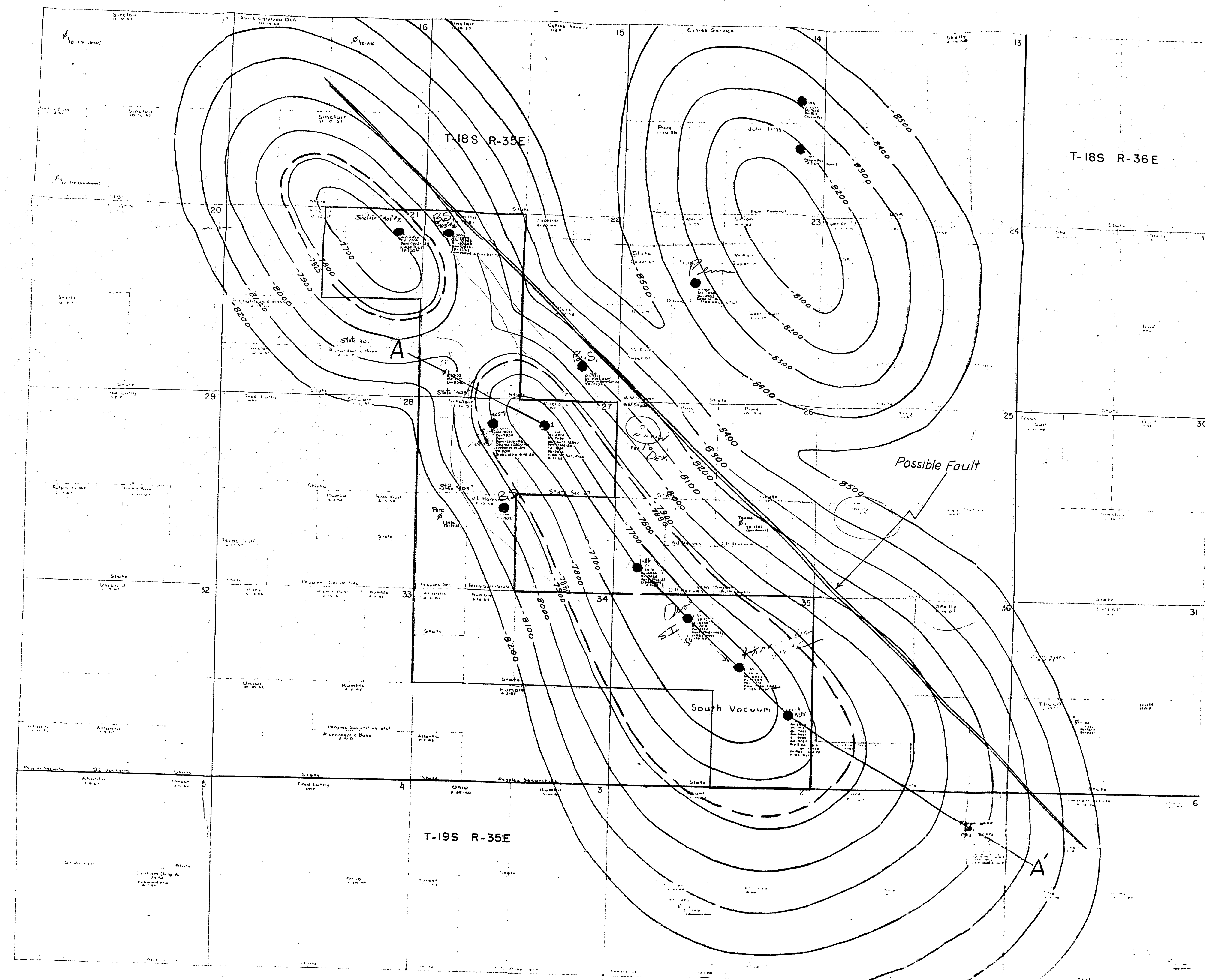


SOUTH VACUUM UNIT - WELL DATA
LEA COUNTY, NEW MEXICO

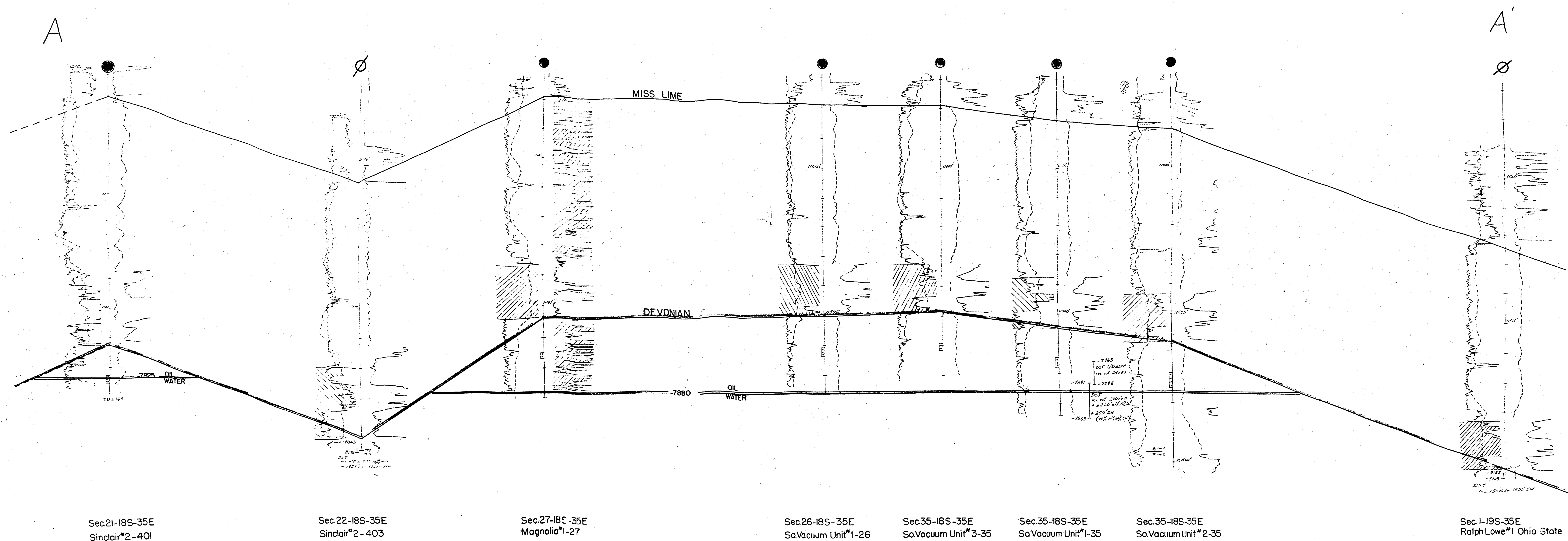
Well No.	Well No.	Well No.	Well No.
1-35	2-35	3-35	4-35
214	266	207	994
66	61	73	76
4.0	4.0	4.0	4.0
385	177	181	Not Covered
61	41	26	

SOUTH VACUUM UNIT - WELL DATA
LEA COUNTY, NEW MEXICO

Well No.	Well No.	Well No.	Well No.
1-35	2-35	3-35	4-35
214	266	207	994
66	61	73	76
4.0	4.0	4.0	4.0
385	177	181	Not Covered
61	41	26	



South Vacuum, New Mexico
Topographic Map



Sec. 21-18S-35E
Sinclair #2-401

Sec. 22-18S-35E
Sinclair #2-403

Sec. 27-18S-35E
Magnolia #1-27

Sec. 26-18S-35E
So. Vacuum Unit #1-26

Sec. 35-18S-35E
So. Vacuum Unit #3-35

Sec. 35-18S-35E
So. Vacuum Unit #1-35

Sec. 35-18S-35E
So. Vacuum Unit #2-35

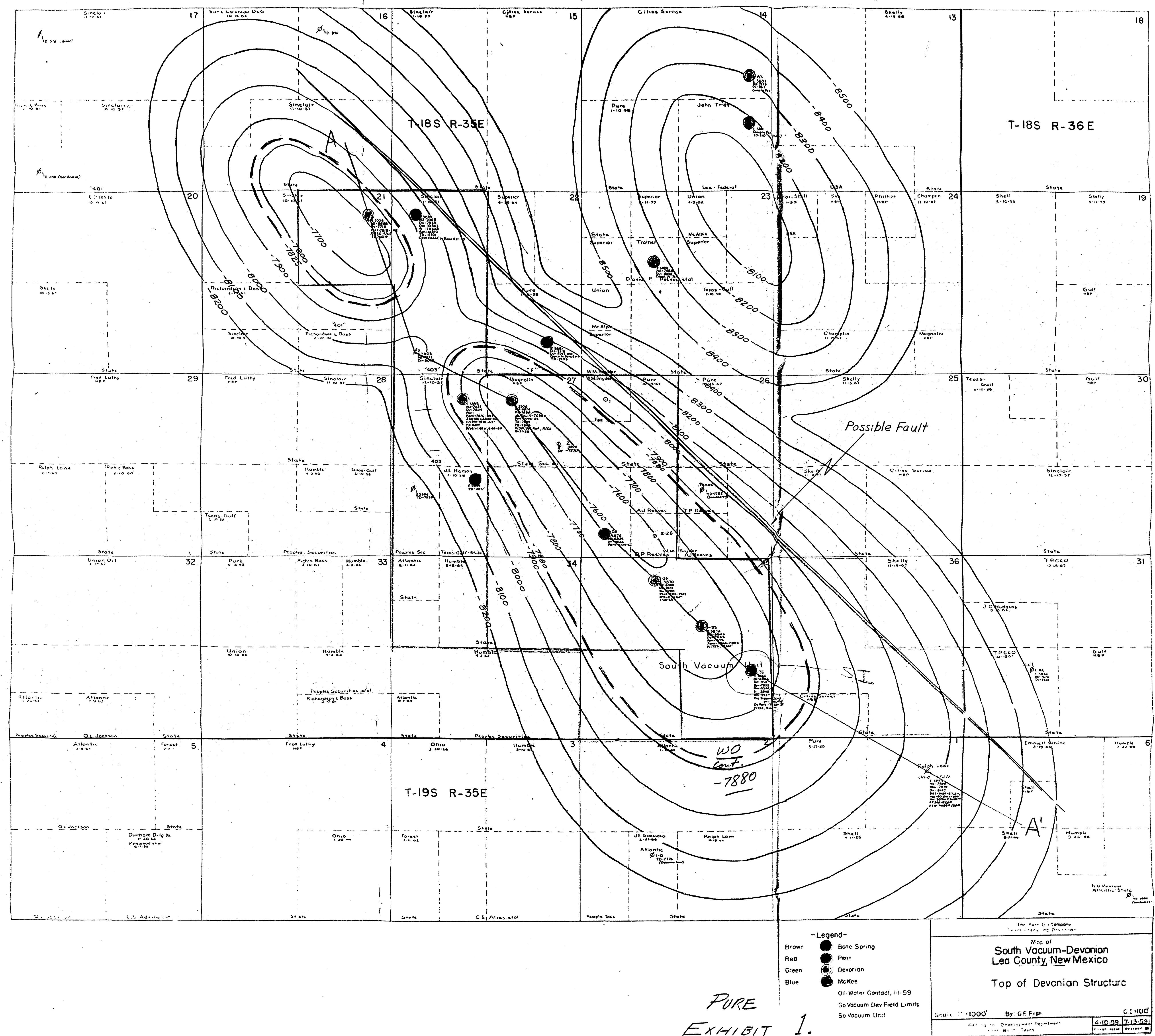
Sec. 1-19S-35E
Ralph Lowe #1 Ohio State

CROSS-SECTION
SOUTH VACUUM POOL
LEA CO. NEW MEXICO
SCALE: VERTICAL 1"=100'
HORIZONTAL 1"=500'
BY: G.E. FISH

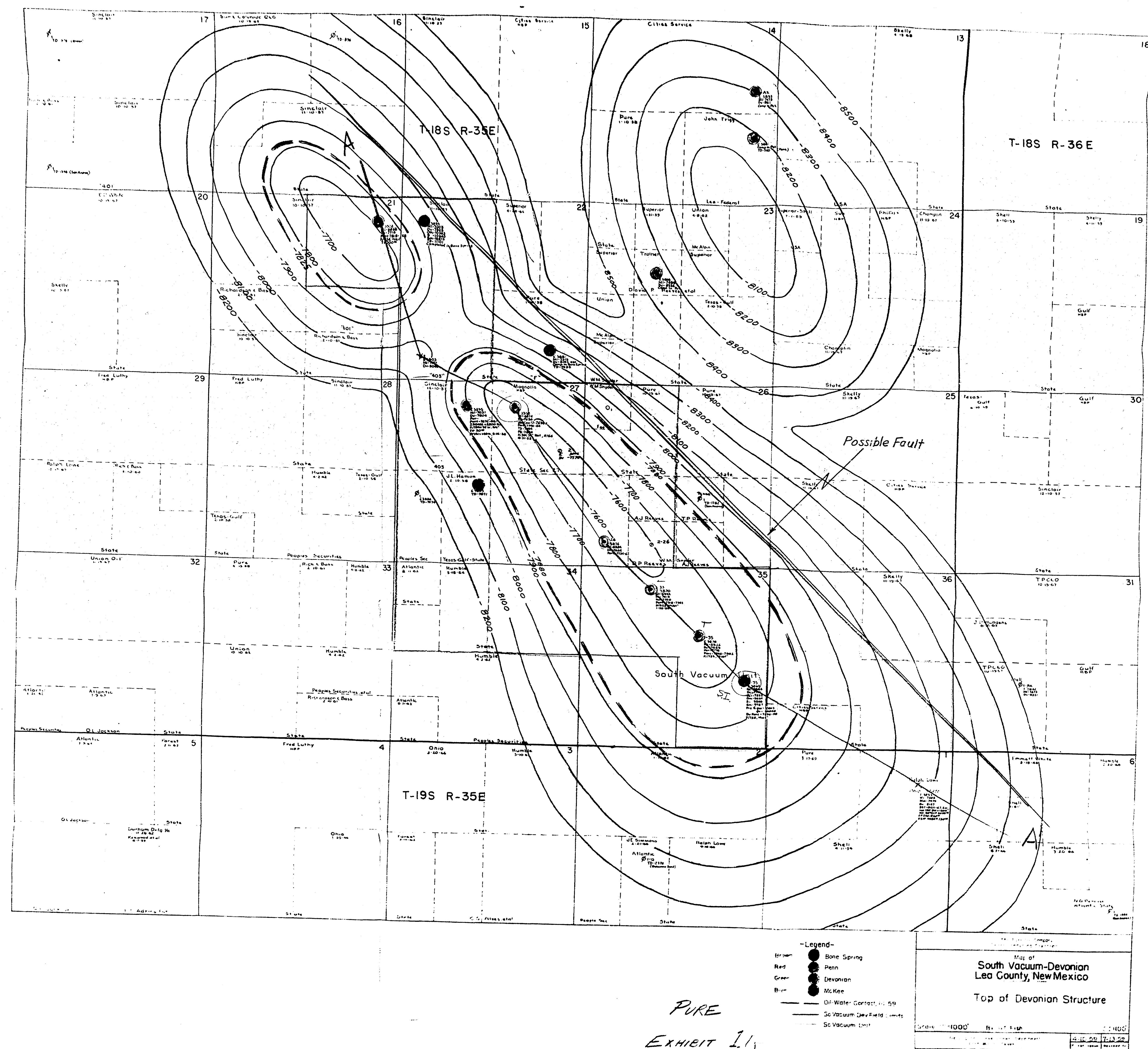
PURE

EX. 2

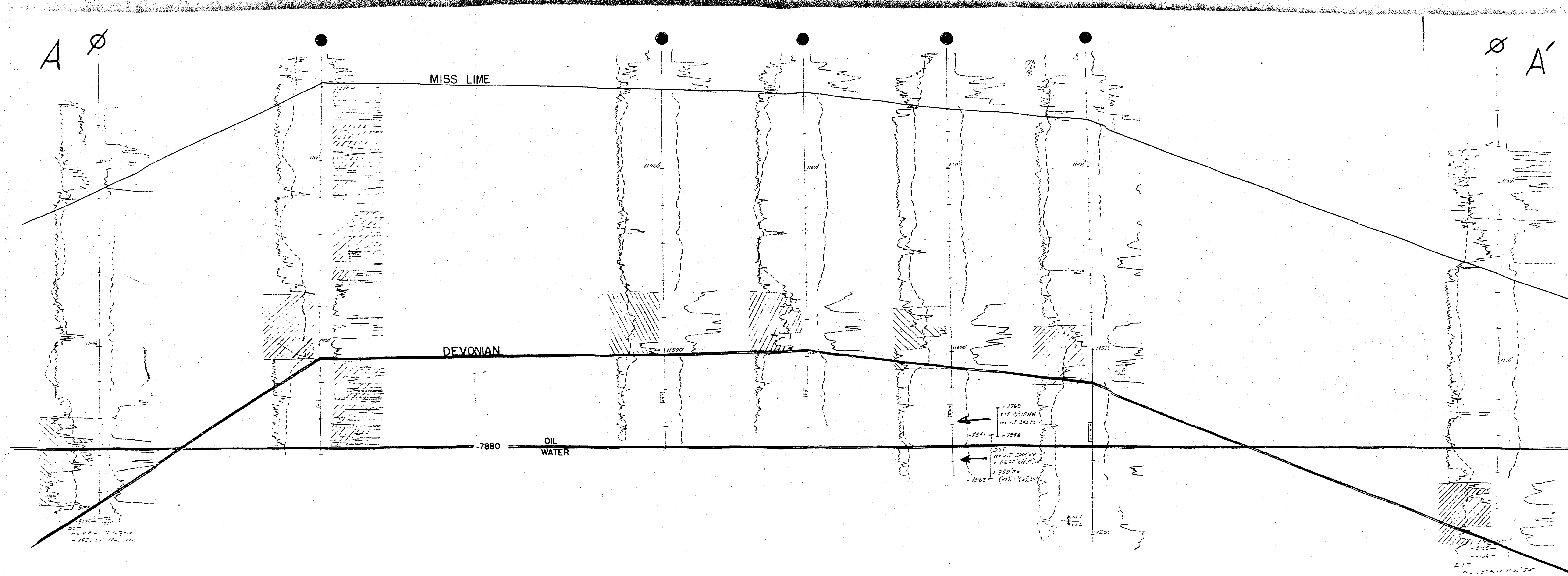
RECEIVED THE
SANTA FE, NEW MEXICO
JAN 10 1934



PURE
EXHIBIT 1.



PURE
EXHIBIT II,



Sec. 22-18S-35E
Sinclair #2 - 403

Sec. 27-18S-35E
Magnolia #1 - 27

Sec. 26-18S-35E
So. Vacuum Unit #1 - 26

Sec. 35-18S-35E
So. Vacuum Unit #3 - 35

Sec. 35-18S-35E
So. Vacuum Unit #1 - 35

Sec. 35-18S-35E
So. Vacuum Unit #2 - 35

Sec. 1-19S-35E
Ralph Lowe #1 Ohio State

Core
TRANSFER
E 255' 11" and
to 255'

Core
7220
7222
7228

Core
Avg. permeability = 1.71 md
to 0.2

CROSS-SECTION
SOUTH VACUUM POOL
LEA CO. NEW MEXICO
SCALE: VERTICAL 1"=100'
HORIZONTAL 1"=500'
BY: G.E. FISH

2
Case 16-34