

Case 4502

CountyPool

TOWNSHIP

Range

NMPM

The image displays two identical 36x6 grid sheets, one above the other. Each grid has columns numbered 1 to 6 from right to left and rows numbered 1 to 36 from top to bottom. In the top grid, a red rectangle is drawn, spanning from column 3 to column 4 and row 33 to row 34. The bottom grid shows a similar red rectangle spanning from column 4 to column 5 and row 33 to row 34. Additionally, a black rectangle is drawn in the bottom grid, spanning from column 3 to column 4 and row 31 to row 32.This image shows a single sheet of cream-colored paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

EAST MORTON WOLFCAMP FIELD
Lea County, New Mexico

VOLUMETRIC OIL RESERVE ESTIMATES

BASIC DATA:

Porosity	12 %
Net Pay	25
Water Saturation	44
Initial F.V.F.	1.24
Recovery Factor	16 %

CALCULATIONS:

$$\begin{aligned}\text{Ultimate Oil Recovery} &= \frac{7758(\phi)(1-S_w)(R.F.)}{Boi} \\ &= \frac{7758(.12)(1-.44)(.16)}{1.24} \\ &= 67.27 \text{ BBL/ACRE-FT.}\end{aligned}$$

For a Net Pay Thickness of 25'

$$\begin{aligned}\text{Ultimate Oil Recovery} &= (67.27 \text{ Bbl./Ac.-Ft.})(25') = 1681.75 \\ &= 1681.75 \text{ BBL/ACRE}\end{aligned}$$

BEFORE EXAMINER UTZ	
OIL COMPANY	DATE
<i>Santitas</i>	5
CASE NO.	4502

EAST MORTON WOLFCAMP FIELD
Lea County, New Mexico
Individual Well Data

	GULF-STATE #1	CARTER #1
Elev.	4015 K.B.	4024 K.B.
T. D.	10,546'	10,838'
P.B.T.D.	10,546'	10,774'
Casing	5½" @ 10,510' w/450 sx.	5½" @ 10,824' w/450 sx.
Prod. Interval	Open Hole 10,490-546'	10,540' - 10,544'*
Treatment	Natural	250 Gal. 15% Acid
Date	--	1-20-71
Init. Pote.	309 B.O. & 50 B.W. GOR=427:1 18/64"A.C. F.T.P.=310 P.S.I.G. Gravity-45.3°	389 B.O. & 74 B.W. GOR=23:1 18/64"A.C. F.T.P.=270 Gravity-42.2° API
1-71 Prod.	11,993	1922 B.O. & 869 B.W.
Cum. Prod. 2-1-71	36,928	1922

TOTAL FIELD CUMULATIVE 2-1-71: 37,850 Barrels Oil

* 10,574 - 578' - Rec. 823 B.W. & No. Oil

Squeezed Perfs w/100sx.

BEFORE EXAMINER UTZ
OIL CONSERVATION DIVISION
<u>Lamedon</u> L. 11/11/71 6
CASE NO. <u>4502</u>

EAST MORTON FIELD
LEA COUNTY, NEW MEXICO

Bottom Hole Pressure Data

<u>WELL</u>	<u>DATE</u>	<u>MEASURED BHP @ -6550 DATUM</u>	<u>CALCULATED RESERVOIR BHP</u>
Gulf State No. 1	9-16-70	4041 PSIG	4,073
	DST No. 2 Gauge @ 10,476'		
	2-13-71	4000 PSIG	4,039
Carter No. 1	2-11-71	3986 PSIG	4,041

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION

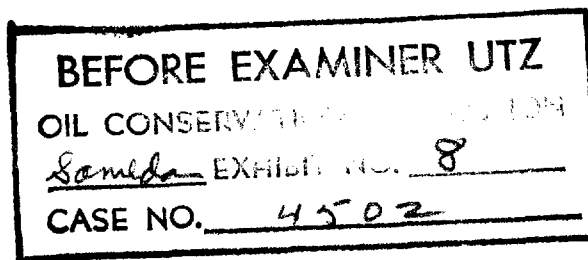
CASE NO. _____

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Snyder EXHIBIT NO. 7
CASE NO. 4502

EAST MORTON WOLFCAMP FIELD
LEA COUNTY, NEW MEXICO

Comparison of Reservoir Properties

	<u>MORTON FIELD</u>	<u>N. MORTON FIELD</u>	<u>E. MORTON FIELD</u>
Depth to Top of Pay	10,364'	10,435'	10,408'
Net Pay, Ft.	40'	12'	25'
Porosity, %	9.6	10.7	12
Water Saturation, %	21%	30%	44%
Permeability, Mo.	34	41.7	N.A.
Original Reservoir Pressure, PSIG	4,054' (-6290')	4,044' (-6400')	4,073' (-6550')
Saturation Pressure, PSIG	2,552	858	N.A.
Original Solution GOR SCF/STB	1,555	377	N.A.
Initial Formation Volume Factor, Bbl./Bbl.	1.899	1.236	N.A.
Stock Tank Oil Gravity, API @ 60° F.	45.1	44.8	44
Gas Specific Gravity	.976	0.78	N.A.
Reservoir Temperature, F.	154	157	157
Initial Reservoir Oil Viscosity, CP	0.253	0.709	N.A.



EAST MORTON WOLFCAMP FIELD
LEA COUNTY, NEW MEXICO

Economics for Various Spacing Patterns

DATA

Net Oil Value After Production Taxes - \$3.20 per barrel

Net Interest After Royalty - 76.7%

Production Taxes - .07087

Lifting Costs - \$6,000 per year - Well flowing
\$9,600 per year - Well artificial lift

Well Investment - \$201,790 - Drill and Equip
10,000 - Artificial Lift Equipment
\$211,790

\$105,000 - Dry Hole Cost

ECONOMICS

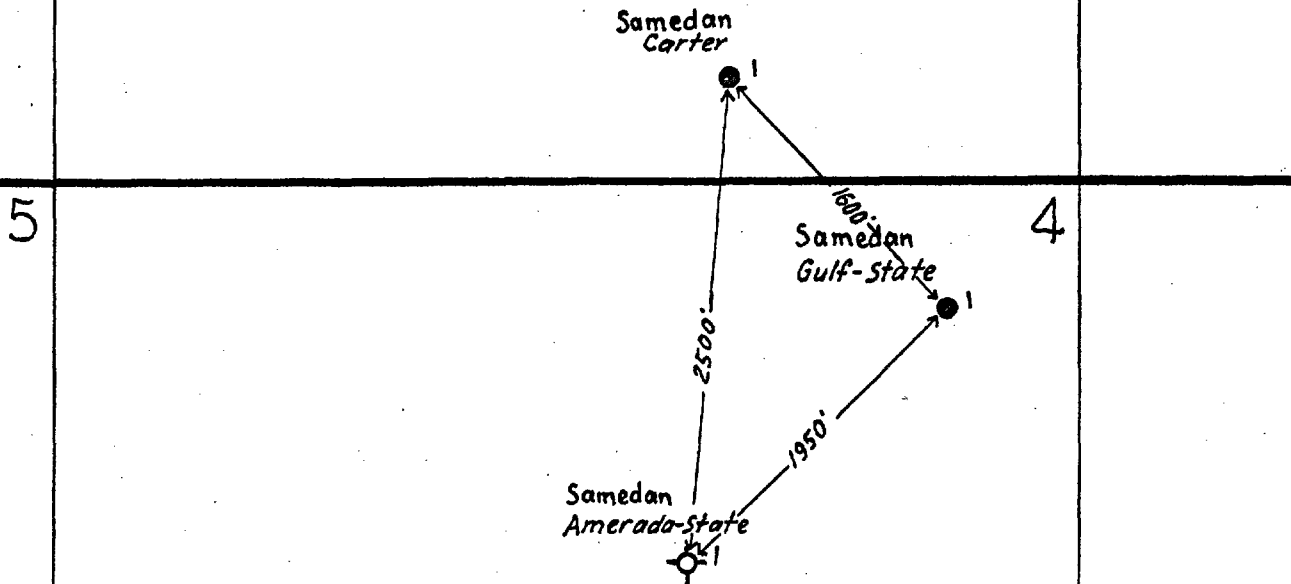
	<u>Present</u>	<u>WELL SPACING</u> <u>80 Acre</u>	<u>40 Acre</u>
1. Recoverable Oil (Barrels)	379,431	126,476	63,238
2. Net Oil Revenue (2.45)	\$929,606	\$309,866	\$154,933
3. Operating Costs	\$ 67,200	\$ 48,000	\$ 38,400
4. Net Operating Revenue, After Taxes and Royalty	\$862,406	\$305,066	\$116,533
5. Investment	\$211,790	\$211,790	\$211,790
6. Profit or Loss	\$650,616	\$ 93,276	(\$ 95,257)
7. Profit to Investment Ratio	3.07	0.44:1	(Loss)

BEFORE EXAMINER UTZ
OIL CONSERVATION
<u>Samuel</u> EXAMINER <u>9</u>
CASE NO. <u>4502</u>

R-35-E

T
14
S

T
15
S



LOCATION PLAT

SAMEDAN OIL CORPORATION
EAST MORTON-WOLFCAMP POOL
Lea County, New Mexico

scale 1" = 1000'

BEFORE EXAMINER UTZ

OIL CONSERVATION
Samedan EXHIBIT 10
CASE NO. 4502

BEFORE EXAMINER UTZ

OIL COMPANY

Samdan Oil Corp

CASE NO. 4502

20 X 20 TO THE INCH 47 1242
X 15 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

3970

3990

4010

4030

4050

09:00

2-9

19:00

05:00

2-10

15:00

01:00

2-11

11:00

21:00

2-12

05:00

BHP - PSIG

GULF STATE No. 1

CARTER No. 1

5 C Min

SAMEDAN OIL CORP
CARTER No. 1
GULF STATE No. 1
DRAW DOWN CURVE
FEBRUARY 9 to 12, 1971

76 psi