

R 34 E

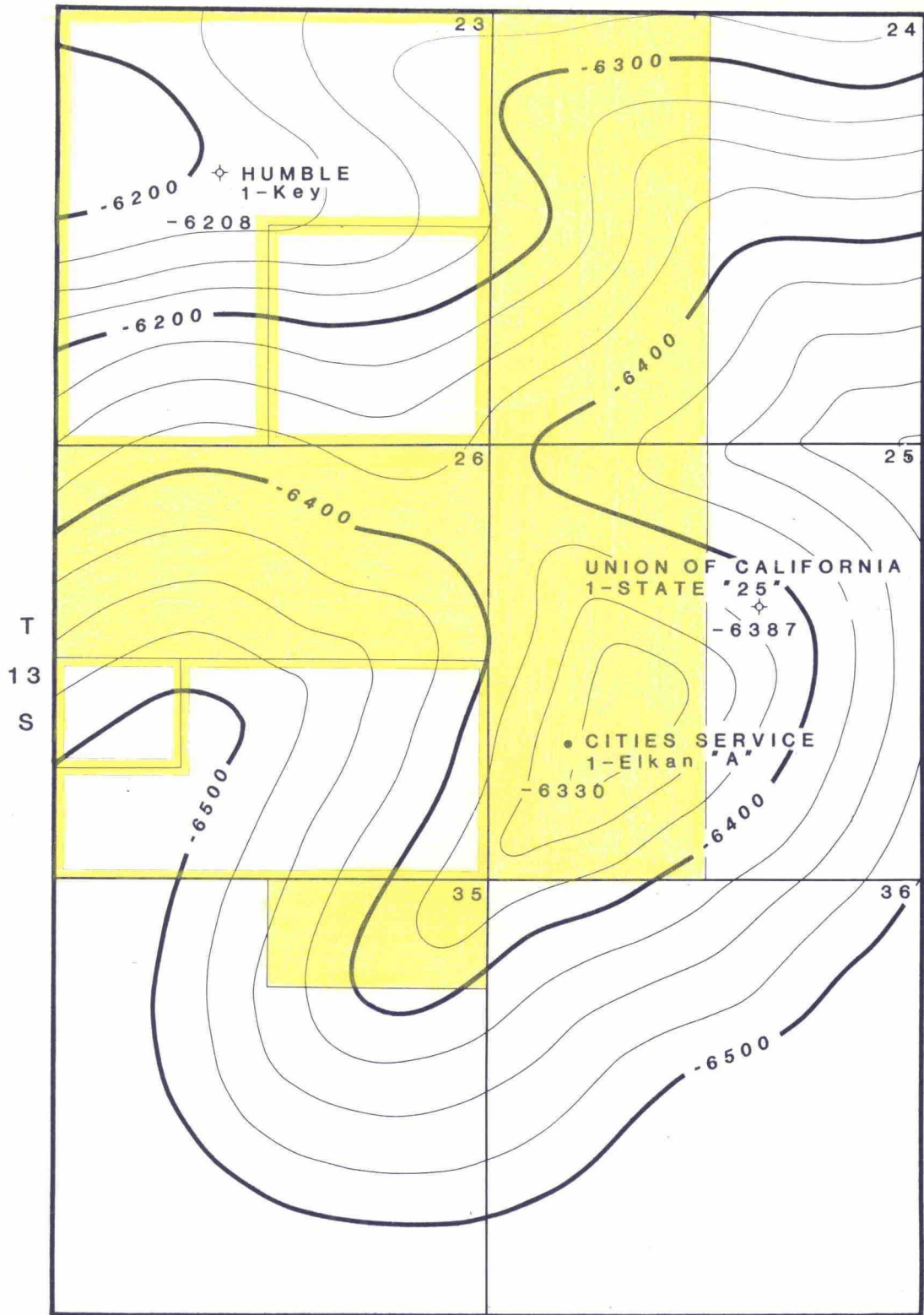


Exhibit 4
Case 8834



SHARON PROSPECT
 T-13-S, R-34-E
 LEA COUNTY, NEW MEXICO
 BOUGH "C" STRUCTURE
 C.I. : 25'

GEOL: S. FLY DRAFT: S. REDWINE
 1/2 MILE FEB., 1986

**ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO
PERTINENT INFORMATION**

Producing Formation:	Bough "C"
Producing Interval:	10,488' - 10,518' (34 shots)
Initial Potential:	Pumped 135 BOPD, 22 BWPD and 189 MCFD
Gravity of Oil:	39.8° API
Formation Net Feet of Pay:	26 Feet
Formation Porosity:	4.5%
Formation Water Saturation:	32%
Formation Volume Factor:	1.35 RB/STB
Formation Temperature:	170°F

ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO

RECOVERY CALCULATIONS

Estimated Recovery for Elkan "A" No. 1 = 83,180 STB

Volumetric Reserve Estimation-Bough "C" Formation:

<u>Area (Acres)</u>	<u>OOIP (STB)</u>	<u>Bough "C" Recovery (% OOIP)</u>
40	182,880	45.5
80	365,760	22.7
160	731,530	11.4

Assuming Primary Depletion Recovers 18% of OOIP, 80-acre Drainage is Most Suitable.

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02/28/55 34

ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO

RECOVERY CALCULATIONS

Estimated Recovery 40-acres/well = 71,000 STB
Estimated Recovery 80-acres/well = 82,000 STB
Estimated Recovery 160-acres/well = 85,000 STB

Volumetric Reserve Estimation-Bough "C" Formation:

<u>Area (Acres)</u>	<u>OOIP (STB)</u>	<u>Bough "C" Recovery (% OOIP)</u>
40	182,880	38.8
80	365,760	22.4
160	731,530	11.6

Assuming Primary Depletion Recovers 18% of OOIP, 80-acre Drainage is Most Suitable.

ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO
ECONOMIC CONSIDERATIONS

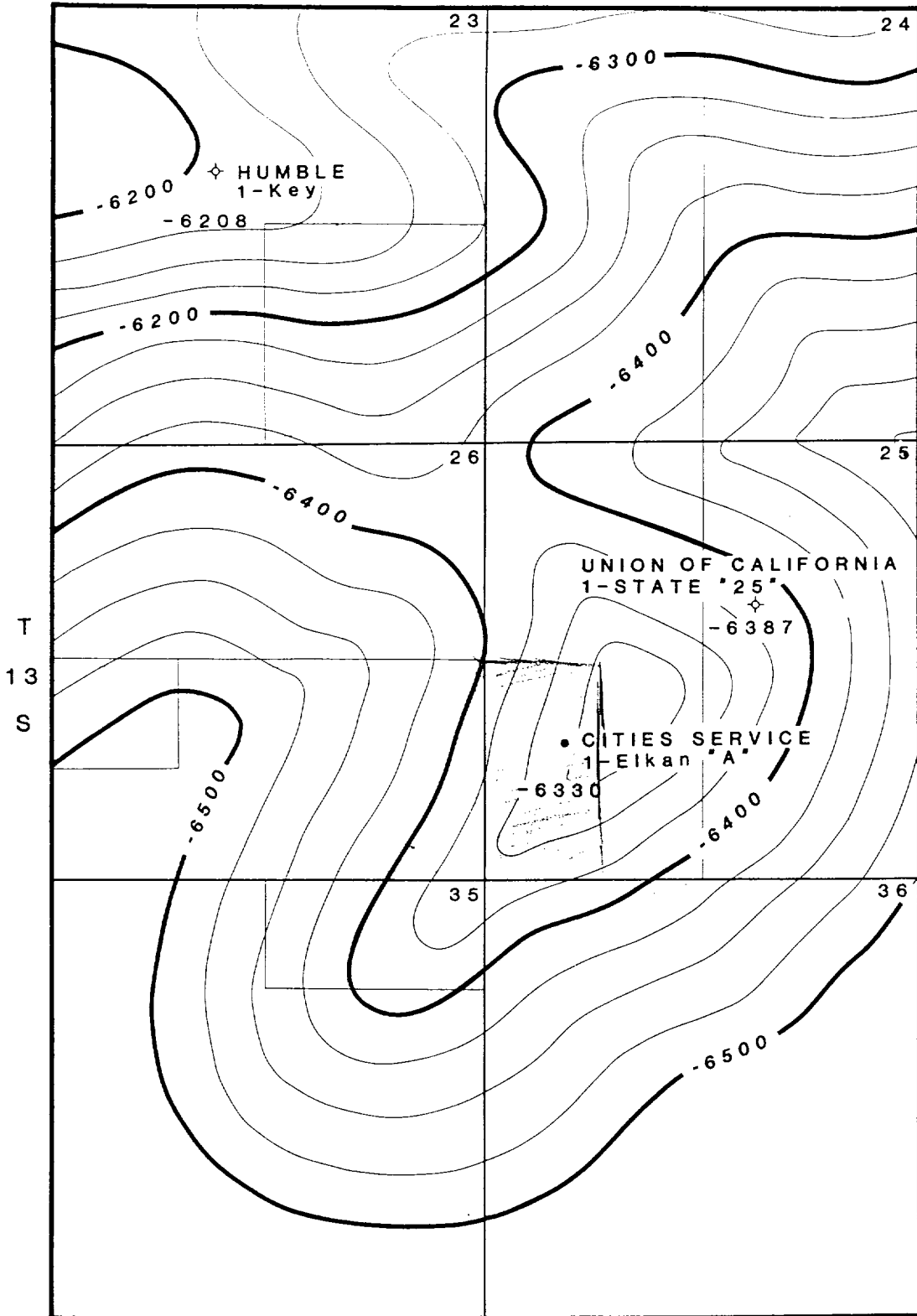
40-Acre Spacing

Lease Gross Reserves	71 MBO
Cash Produced from Operations	655 M\$
Capital Required	501 M\$
Net Cash Production	154 M\$
Disc. Net Cash Production	-67.1 M\$
DCF Return on Investment	12.2 %
Payout AFIT	130.8 %
Payout Period	3.8 Years

80-Acre Spacing

Lease Gross Reserves	82 MBO
Cash Produced from Operations	778 M\$
Capital Required	501 M\$
Net Cash Production	277 M\$
Disc. Net Cash Production	27.8 M\$
DCF Return on Investment	23.4 %
Payout AFIT	155.3 %
Payout Period	2.6 Years

R 34 E



BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

Cities EXHIBIT NO. 4

CASE NO. 8834



SHARON PROSPECT

T-13-S, R-34-E

LEA COUNTY, NEW MEXICO

BOUGH "C" STRUCTURE

C.I. : 25'

GEOL: S. FLY

DRAFT: S. REDWINE

FEB., 1986

1/2 MILE

ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO
PERTINENT INFORMATION

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BEFORE EXAMINER STATE OF NEW MEXICO OIL CONSERVATION DEPARTMENT	
<i>Cities</i>	EXHIBIT NO. <u>5</u>
CASE NO.	<u>8834</u>

ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO
RECOVERY CALCULATIONS

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Volumetric Reserve Estimation-Bough "C" Formation:

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40	182,880	45.5
80	365,760	22.7
160	731,530	11.4

Assuming Primary Depletion Recovers 18% of OOIP, 80-acre Drainage is Most Suitable.

BEFORE EXAMINER STOOBER OIL CONSERVATION DIVISION	
<i>Cities</i>	EXHIBIT NO. <i>6</i>
CASE NO. <u>8834</u>	

ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO

RECOVERY CALCULATIONS

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 Estimated Recovery 80-acres/well = 82,000 STB
 Estimated Recovery 160-acres/well = 85,000 STB

Volumetric Reserve Estimation—Bough "C" Formation:

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160	731,530	11.6

Assuming Primary Depletion Recovers 18% of OOIP, 80-acre Drainage is Most Suitable.

BEFORE EXAMINER SIGNATURE PUBLIC ACCOUNTING BOARD OF NEW MEXICO	
<i>C. Fies</i>	EXHIBIT NO. <u>7</u>
CASE NO. <u>8834</u>	

ELKAN "A" LEASE
LEA COUNTY, NEW MEXICO
ECONOMIC CONSIDERATIONS

40-Acre Spacing

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2.6 Years
BEFORE EXAMINER STOGNER OIL CONSERVATION DIVISION
<i>Cities</i> EXHIBIT NO. 8
CASE NO. 8834

COUNTY Lea POOL Alston Ranch - Upper Pennsylvanian

TOWNSHIP 13 South RANGE 34 East NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description: $\frac{W}{2} \frac{SW}{4}$ sec. 25 (A-8222, 5-13-86)

Ext: $\frac{NW}{4}$ and $\frac{E}{2} \frac{SW}{4}$ sec. 25 (A-8451, 6-3-87)