R26E

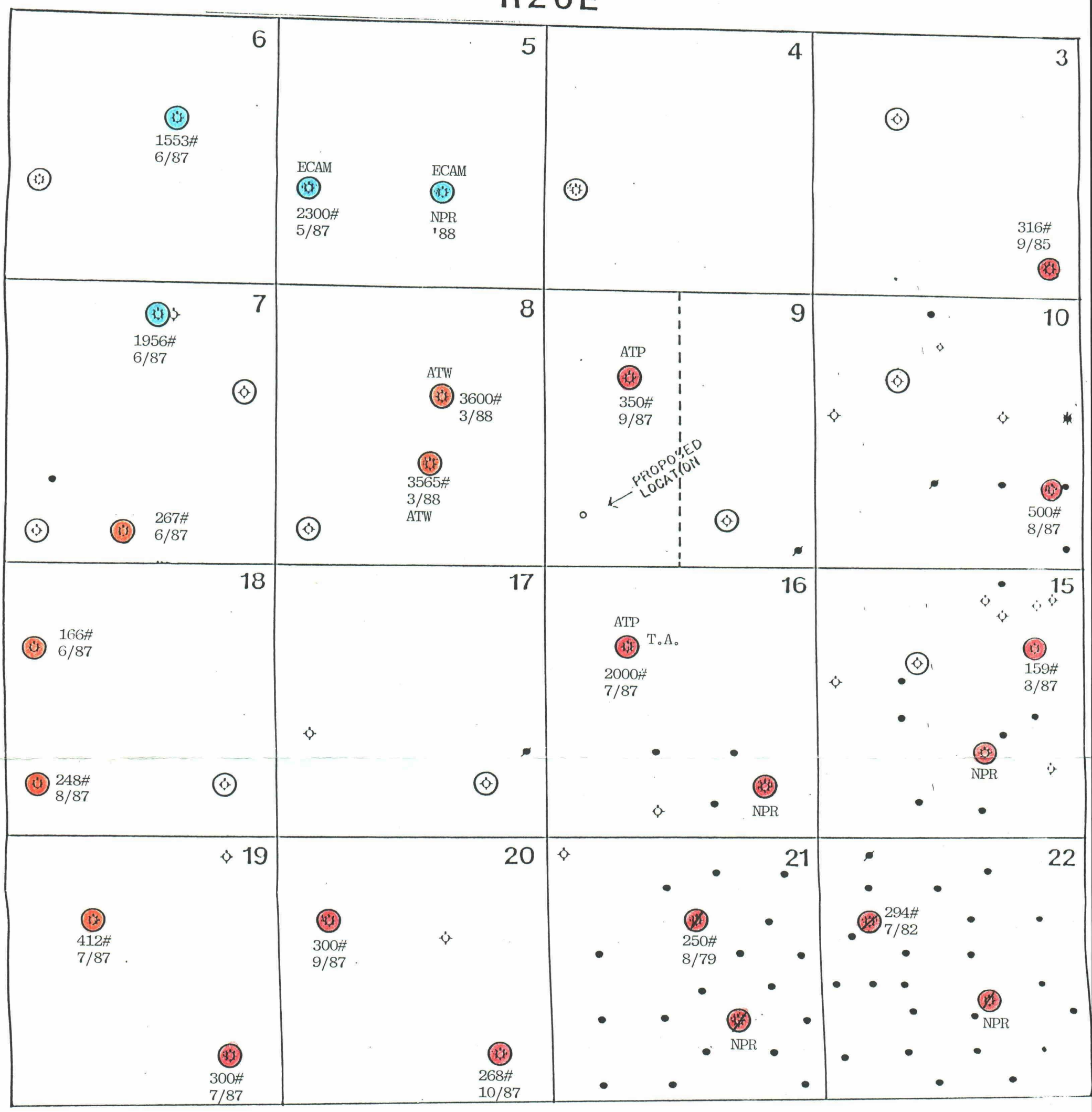
6	5	4	3
P_o = 2279 7/78	P_o = 2743 3/88		P_o = 3468 8/75
7	8	9	10
P_o = 1965 8/79	P_o = 3600 3/88	P_o = 3577 11/80	
P_o = 1542 11/74	P_o = 3565 3/88	PROPOSED LOCATION	P_o = 1447 11/74
18	17	16	15
P_o = 2741 8/73		P_o = 3568 3/82	P_o = 2912 12/66
P_o = 2933 3/73		P_o = 4291 7/64	P_o = 2105 7/70
19	20	21	22
P_o = 3680 5/71	P_o = 1920 5/70	P_o = 3650 11/60	P_o = 3448 8/61
P_o = 1368 7/70	P_o = 3581 10/60	P_o = 3607 4/61	P_o = 3376 12/59

MEWBOURNE OIL COMPANY

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Mewbourne EXHIBIT NO. 10A
CASE NO. 9862

5 MILE PROSPECT
GIN #1
Section 9-T18S-R26E
Eddy County, New Mexico
Initial Bottom Hole Pressures
Date

R26E



ATW - Atoka Morrow, West
ATP - Atoka Penn
ECAM - Eagle Creek Atoka
NPR - No Pressure Reported

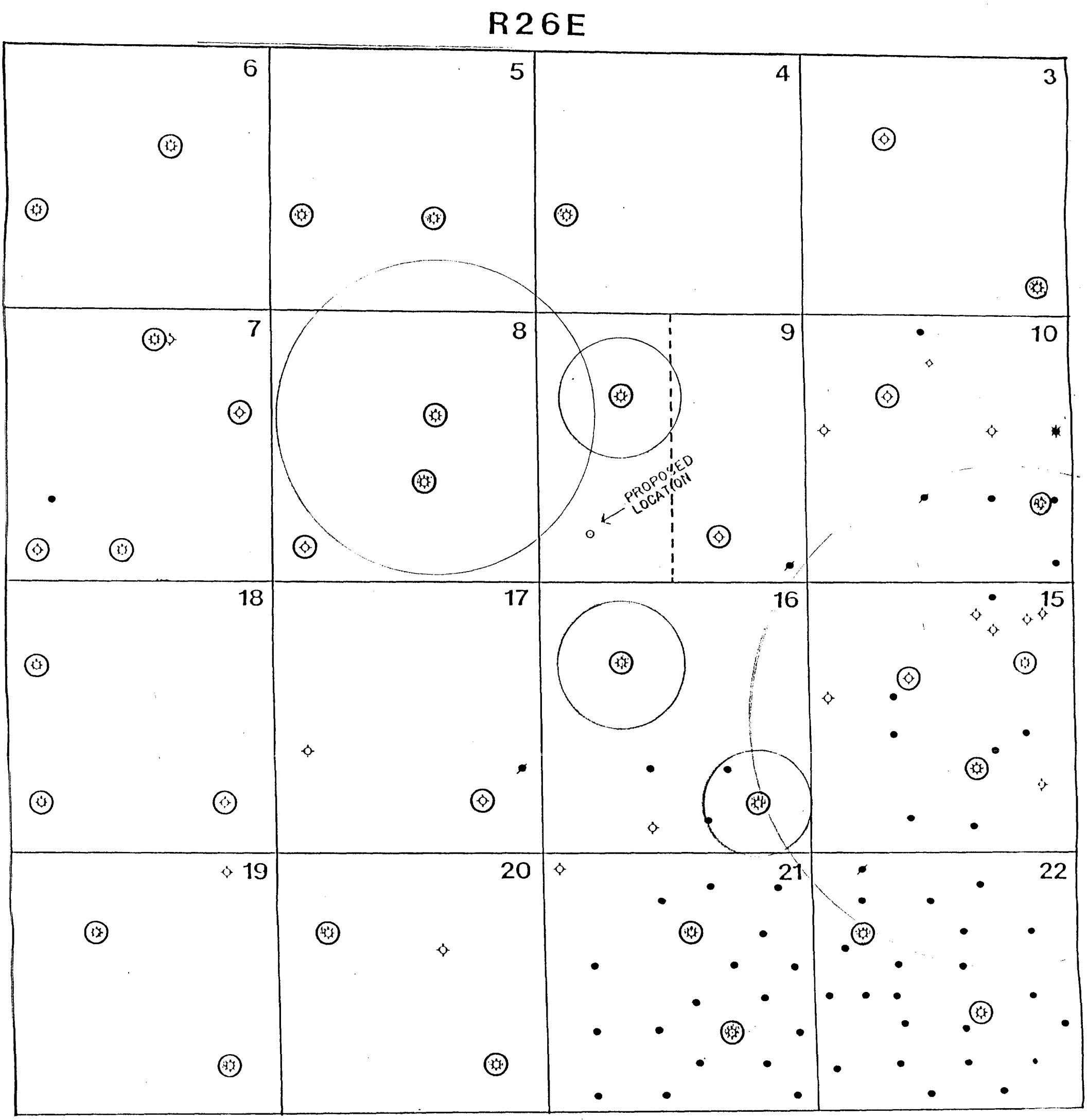
BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Mewbourne EXHIBIT NO. 10B
CASE NO. 9862

MOC

MEWBOURNE OIL COMPANY

5 MILE PROSPECT
GIN #1
Section 9-T18S-R26E
Eddy County, New Mexico

Current or Last Reported Pressures
Date



MEWBOURNE OIL COMPANY

FIVE MILE PROSPECT

Ultimate Drainage for Area Wells

(Assumes Radial Drainage)

VOLUMETRIC CALCULATIONS

FIVE MILE PROSPECT

Dayton Com. #1
Sec. 16-18S-26E
Atoka Penn

Well Data and Assumptions:

Average Porosity:	8%
Average Water Saturation:	35%
Average Reservoir Height:	10 ft.
P_o = 3500 psi	
Bg_o = 215	
P_a = 200 psi	
Bg_a = 12	
Cumulative Production as of 1/89:	258 MMCF
10% Exponential Decline	
Expected Ultimate Cum.:	513 MMCF

$$G = (43.56)(\emptyset)(1-Sw)(Bg_o-Bg_a)(A)(h)$$

$$(A)(h) = \frac{513,000}{(43.56)(.08)(.65)(203)} = 1116 \text{ ac. ft.}$$

A = 112 acres ultimately drained.

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
EXHIBIT NO. 12
CASE NO. 9862

VOLUMETRIC CALCULATIONS

FIVE MILE PROSPECT

Marathon State Com. #1
Sec. 16-18S-26E
Atoka Penn

Well Data and Assumptions:

Average Porosity:	8%
Average Water Saturation:	35%
Average Reservoir Height:	10 ft.
P_o = 3500 psi	
Bg_o = 215	
P_a = 200 psi	
Bg_a = 12	
Cumulative Production as of 3/89:	389 MMCF
Expected Ultimate Cum.:	389 MMCF

$$G = (43.56)(\emptyset)(1-Sw)(Bg_o-Bg_a)(A)(h)$$

$$(A)(h) = \frac{389{,}000}{(43.56)(.08)(.65)(203)} = 846 \text{ ac. ft.}$$

A = 85 acres ultimately drained.

VOLUMETRIC CALCULATIONS

FIVE MILE PROSPECT

Chumbley XS Com. #1
Sec. 8-18S-26E
Atoka Morrow, West

Well Data and Assumptions:

Average Porosity:	10%
Average Water Saturation:	35%
Average Reservoir Height:	8 ft.
P_o = 3600 psi	
Bg_o = 220	
P_a = 200 psi	
Bg_a = 12	
Cumulative Production as of 5/89:	1266 MMCF and 500 BC
30% Decline for 1 year and 10% Decline thereafter	
Expected Ultimate Cum.:	3400 MMCF

$$G = (43.56)(\emptyset)(1-Sw)(Bg_o-Bg_a)(A)(h)$$

$$(A)(h) = \frac{3,400,000}{(43.56)(.10)(.65)(208)} = 5773 \text{ ac. ft.}$$

A = 722 acres ultimately drained.

VOLUMETRIC CALCULATIONS

FIVE MILE PROSPECT

Spencer Com #1
Sec. 9-18S-26E
Atoka Penn

Well Data and Assumptions:

Average Porosity:	8%
Average Water Saturation:	35%
Average Reservoir Height:	5 ft.
P_o =	3570 psi
Bg_o =	218
P_a =	200 psi
Bg_a =	12
Cumulative Production as of 1/90:	230 MMCF
Expected Ultimate Cum:	230 MMCF

$$G = (43.56)(\emptyset)(1-Sw)(Bg_o-Bg_a)(A)(h)$$

$$(A)(h) = \frac{230{,}000}{(43.56)(.08)(.65)(206)} = 493 \text{ ac. ft.}$$

A = 99 acres ultimately drained

VOLUMETRIC CALCULATIONS

FIVE MILE PROSPECT

C. R. Martin #1 and Paul Terry Com. #1
Sec. 15-18S-26E
Atoka Penn

Well Data and Assumptions:

Average Porosity:	10%
Average Water Saturation:	35%
Average Reservoir Height:	20 ft.
P_o = 3000 psi	
Bg_o = 200	
P_a = 200 psi	
Bg_a = 12	
Cumulative Production as of 3/89:	19,251 MMCF
10% Exponential Decline	
Expected Ultimate Cum.:	19,750 MMCF

$$G = (43.56)(\emptyset)(1-Sw)(Bg_o-Bg_a)(A)(h)$$

$$(A)(h) = \frac{1,975,000}{(43.56)(.10)(.65)(188)} = 37,103 \text{ ac. ft.}$$

A = 1844 acres ultimately drained.

1989 TOP ALLOWABLE IN ATOKA PENN

FIVE MILE PROSPECT

DATE	TOP ALLOWABLE
1/89	12,673
2/89	6,450
3/89	4,191
4/89	6,013
5/89	7,136
6/89	8,152
7/89	5,430
8/89	9,384
9/89	9,850
10/89	10,189
11/89	7,440
12/89	7,087

1989 Average Top Allowable - 7,833 MCF

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Newbourne EXHIBIT NO. 13
CASE NO. 9862

PROJECTED PRODUCTION AND DRAINAGE

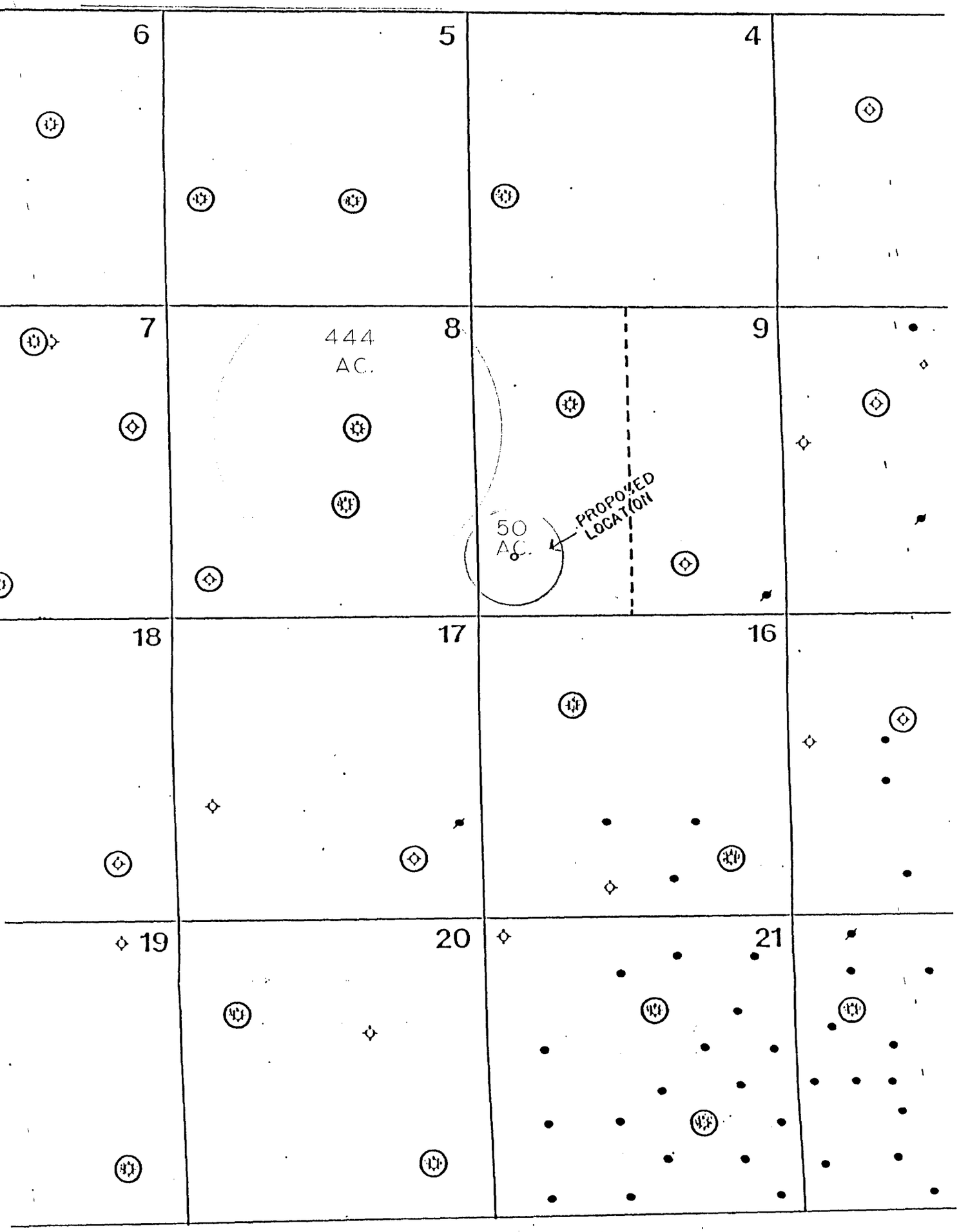
FIVE MILE PROSPECT

	DATE	MMCF	ACRES
Chumbley #1	6/90	1406	298
	1/93	2090	444
	1/94	2270	482
	1/96	2620	556
Gin #1	6/90	1st Production	0
	1/93	235	50
	1/94	329	70
	1/96	517	110

Gin #1 production assumes an average allowable of 7833 MCF/Mo.

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Newbourne EXHIBIT NO. 14
CASE NO. 9862

R26E



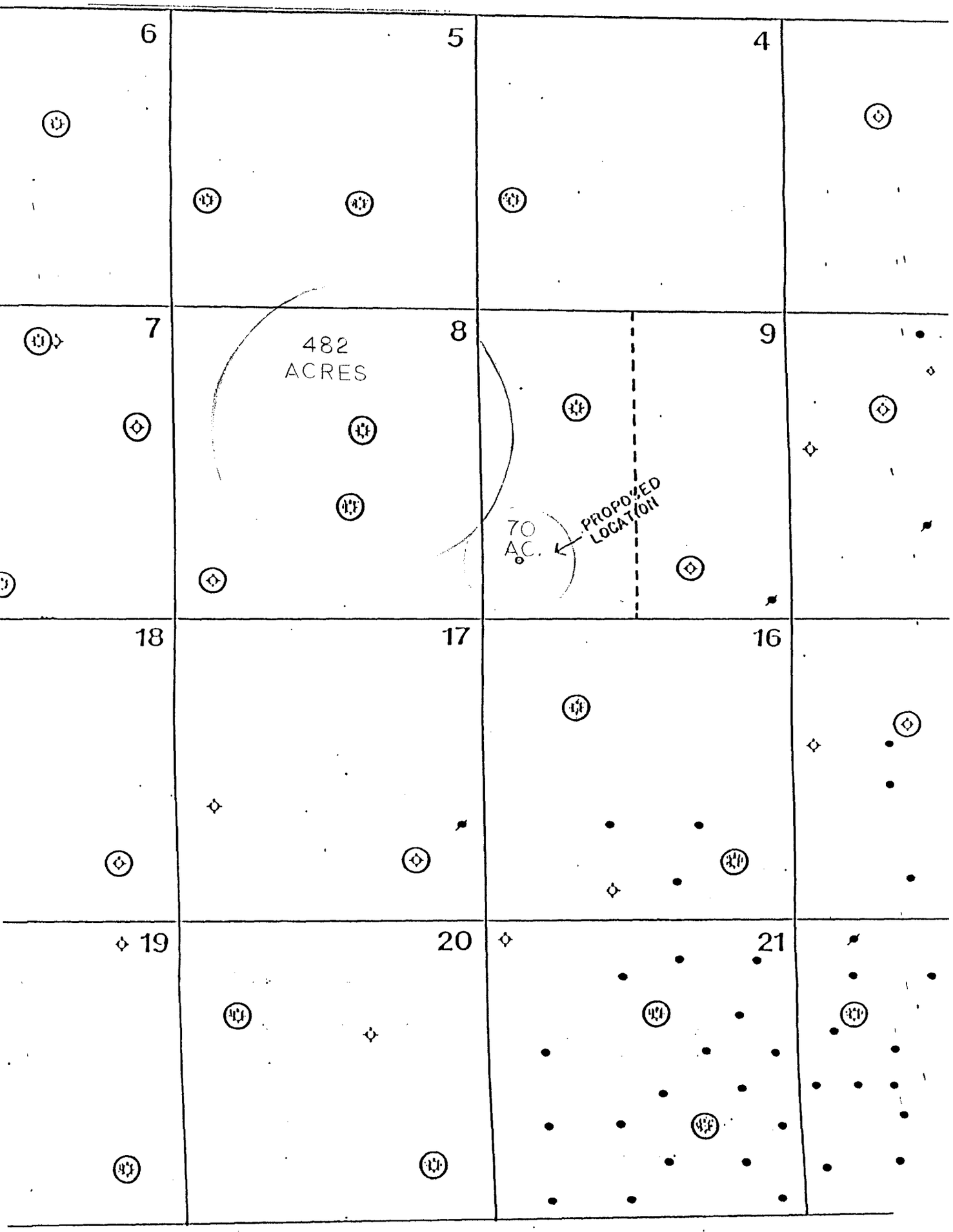
MEWBOURNE OIL COMPANY

A

FIVE MILE PROSPECT

Drainage Interference
From Offset
1/93

R26E

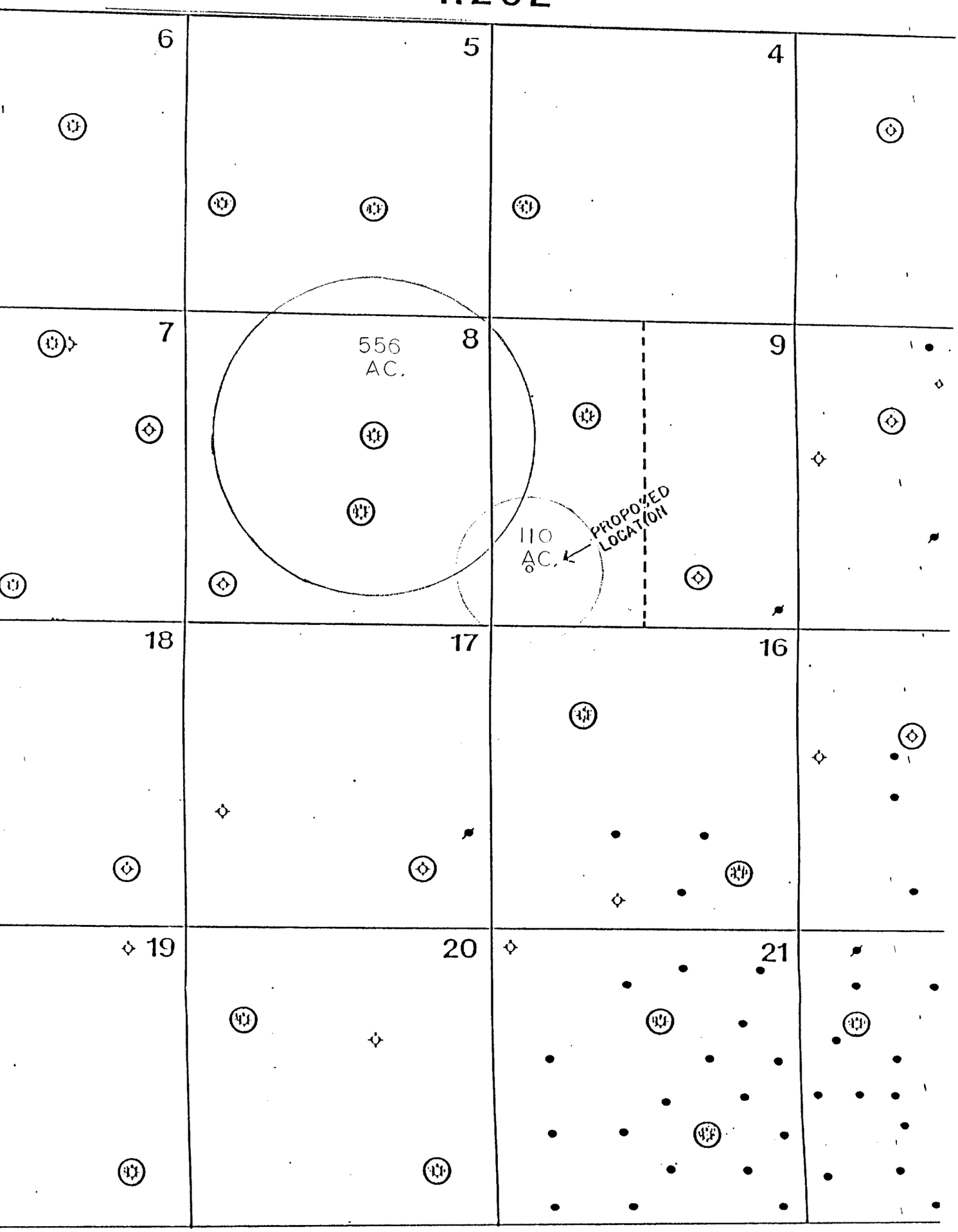


MEWBOURNE OIL COMPANY

B

FIVE MILE PROSPECT

Drainage Interference
From Offset
1/94

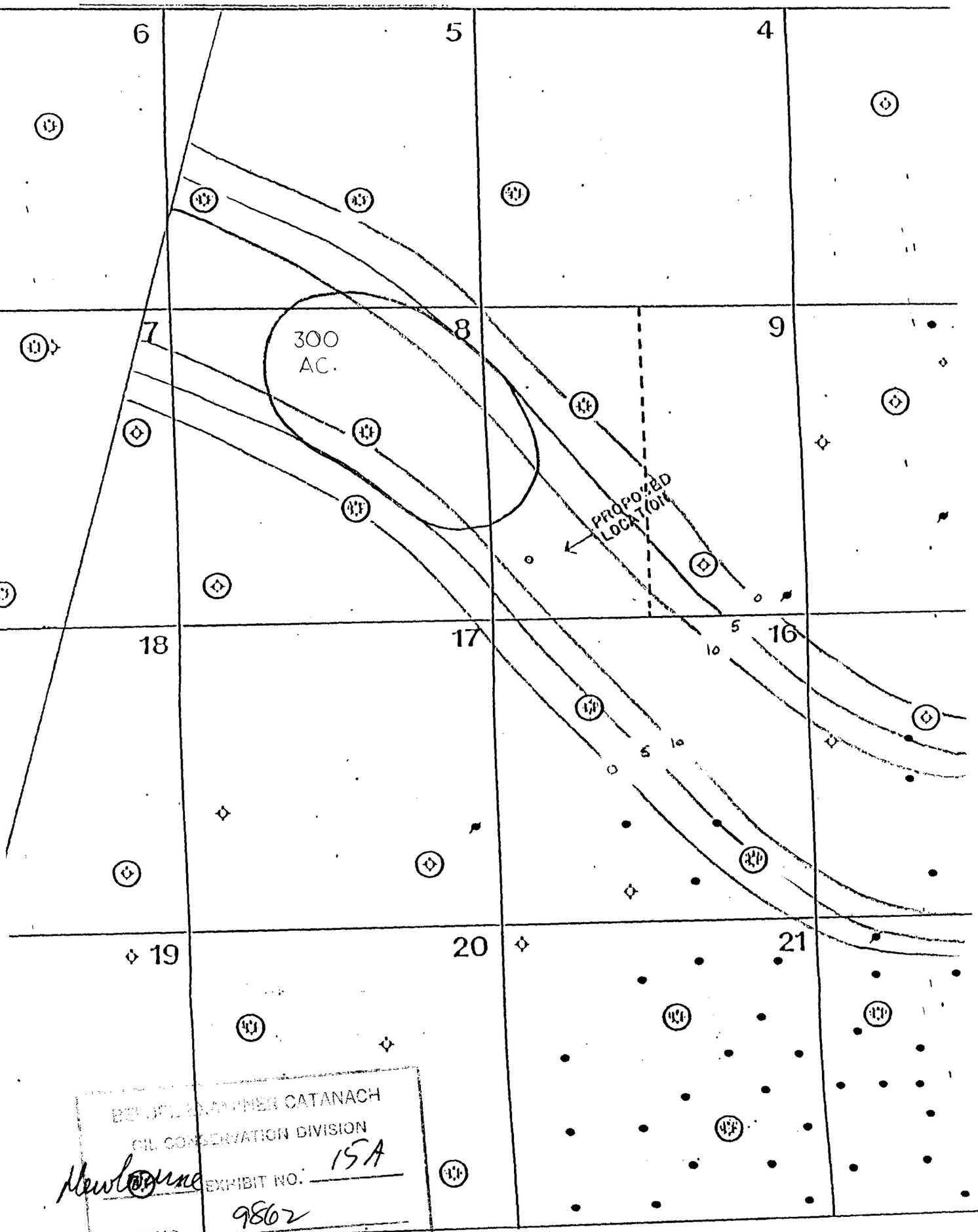


MEWBOURNE OIL COMPANY

C

FIVE MILE PROSPECT

Drainage Interference
From Offset
1/96



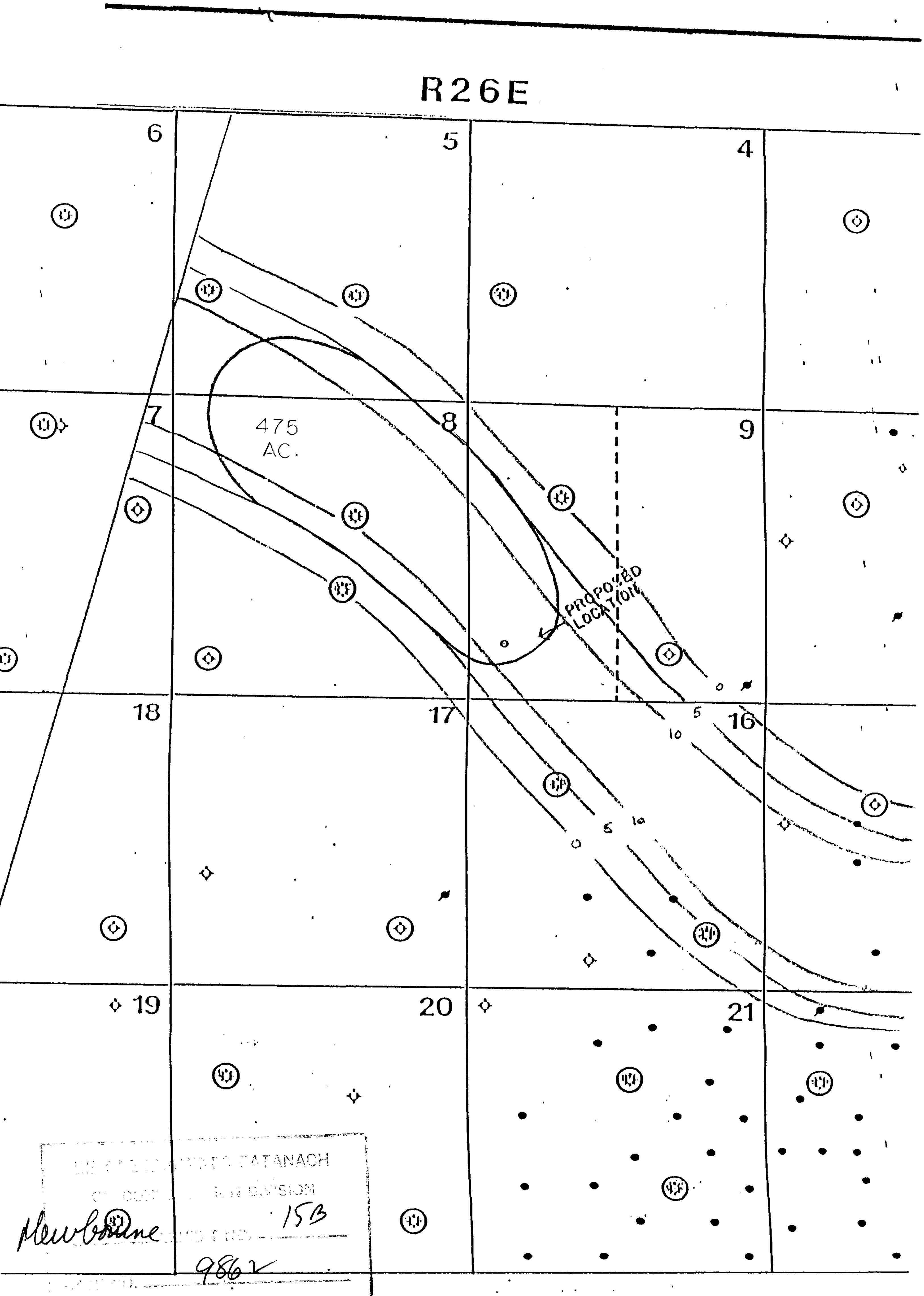
BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Mewbourne EXHIBIT NO. 15A
CASE NO. 9862

MOC MEWBOURNE OIL COMPANY

A

FIVE MILE PROSPECT

300 Acre Drainage



MEWBOURNE OIL COMPANY

B

FIVE MILE PROSPECT

475 Acre Drainage