

BEFORE THE INDUSTRIAL COMMISSION

OF THE STATE OF NORTH DAKOTA

CASE NO. 2945

ORDER NO. 3329

IN THE MATTER OF A HEARING CALLED ON A  
MOTION OF THE COMMISSION TO CONSIDER THE  
APPLICATION OF ENSTAR PETROLEUM, INC. FOR  
AN ORDER PERMITTING A SECOND WELL TO BE  
DRILLED ON A 320-ACRE SPACING UNIT IN THE  
DICKINSON FIELD DESCRIBED AS THE S/2 OF  
SECTION 13, T.140N., R.96W., STARK COUNTY,  
NORTH DAKOTA.

ORDER OF THE COMMISSION

BY THE COMMISSION:

Pursuant to legal notice this cause came on for hearing at 9:00 a.m.  
on the 27 day of September, 1983, in Bismarck, North Dakota, before an examiner  
appointed by the Industrial Commission of North Dakota, hereinafter referred to  
as the "Commission."

NOW, on this 18th day of October, 1983, the Commission, a quorum being  
present, having considered the testimony adduced and the exhibits received at  
said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the  
Commission has jurisdiction of this cause and the subject matter thereof.

(2) That applicant is the owner of an oil and gas leasehold estate in  
the S/2 of Section 13, T.140N., R.96W., Stark County, North Dakota.

(3) That said tract of land is within the boundaries of the Dickinson  
Field and forms a spacing unit in the Heath Pool.

(4) That there is only one producing well in said tract and is located  
in the SW SW of said Section 13.

(5) That evidence presented to the Commission indicates that in the  
S/2 of said Section 13, two wells are necessary to efficiently and effectively  
drain all the economically recoverable oil from the reservoir.

(6) That such evidence further indicates that a well drilled in the SE  
SE of said Section 13 would be economically feasible and would recover oil  
that might not otherwise be recovered.

(7) That in order to prevent waste and to protect correlative rights,  
this application should be granted.

IT IS THEREFORE ORDERED:

(1) That two wells in the Dickinson-Heath Pool in the S/2 of Section  
13, T.140N., R.96W., Stark County, North Dakota, are hereby authorized,  
and the second well shall be located not less than 660 feet from the  
boundary of the spacing unit, nor closer than 1980 feet to another well  
permitted to or producing from the pool.

(2) That this order shall remain in full force and effect until further order of the Commission.

Dated this 18th day of October, 1983.

INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

/s/ Allen I. Olson \_  
Allen I. Olson, Governor

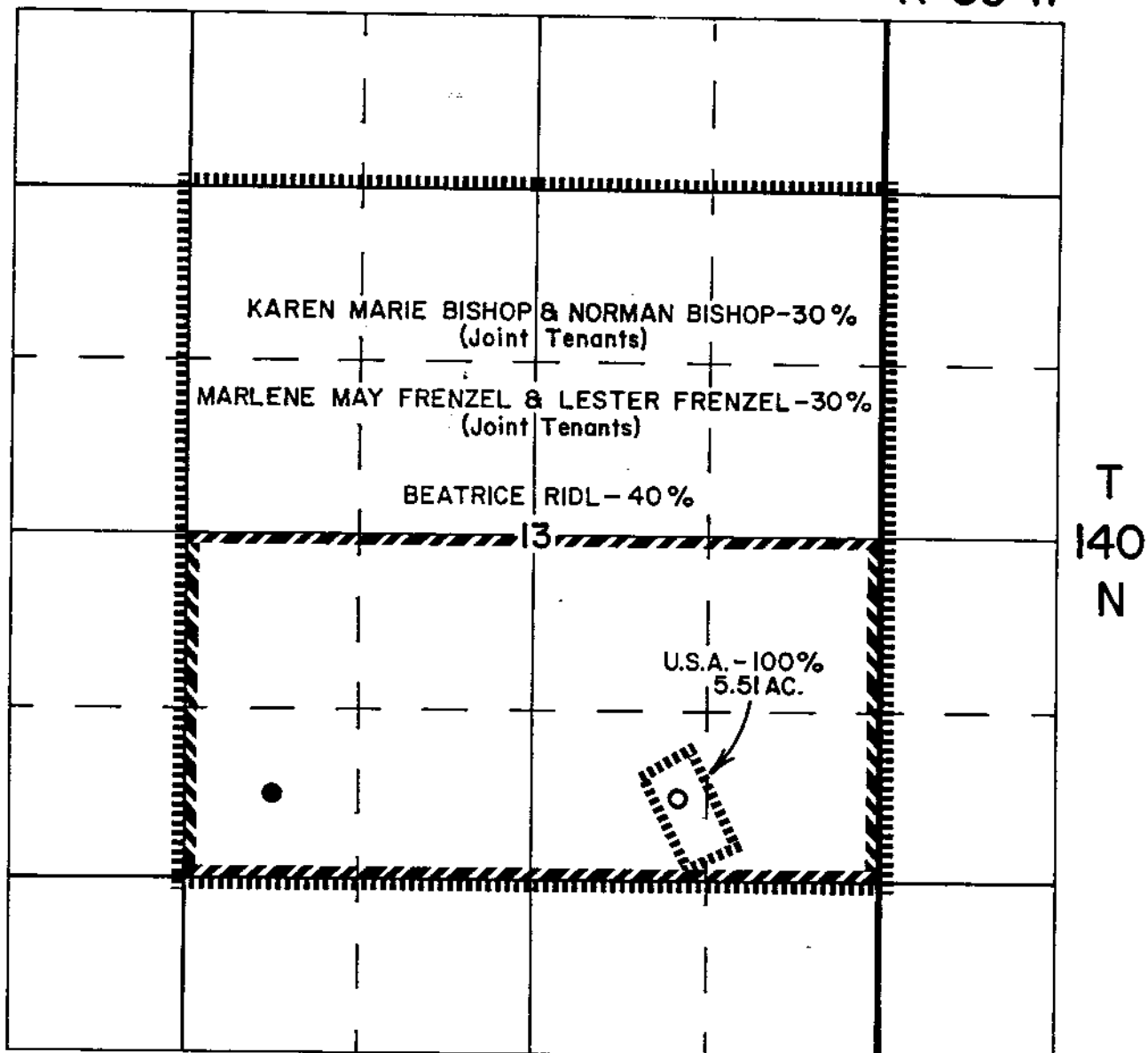
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Robert O. Wefald, Attorney General

/s/ Kent Jones \_  
Kent Jones, Commissioner of Agriculture

R 96 W

R 95 W



INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

Date 7-27-83 Case No. 2945

Introduced by Enstar

Exhibit A

Identified by Carlson

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LEASE LINE

////

SPACING UNIT FOR BEATRICE  
RIDL 13-13 WELL

○

PROPOSED LOCATION

●

BEATRICE RIDL 13-13 WELL



ENSTAR Petroleum Inc.

1125 SEVENTEENTH STREET, SUITE 2040  
DENVER, COLORADO  
80202

EAST DICKINSON PROSPECT

STARK CO., N.D.

EXHIBIT "A"

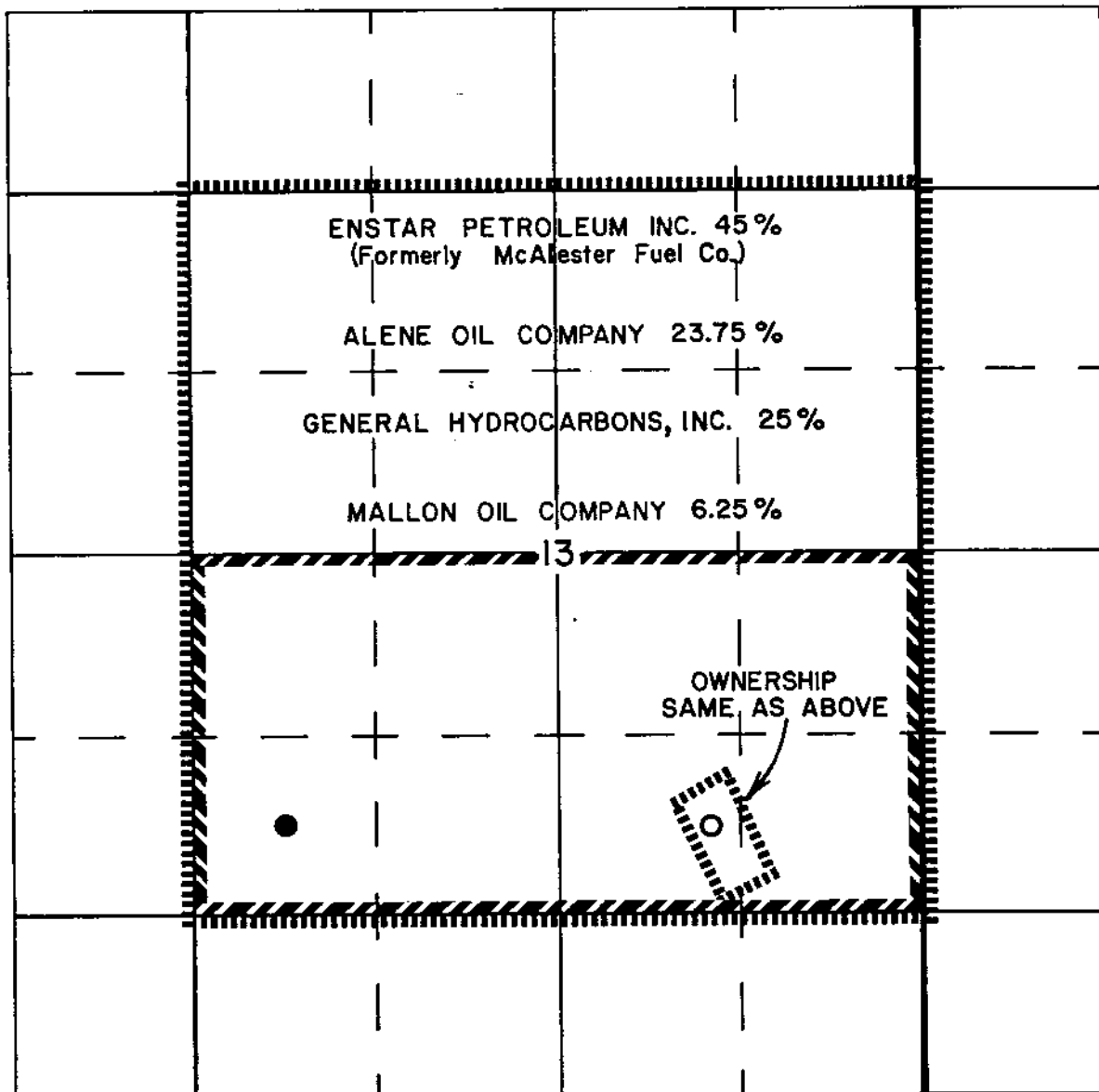
MINERAL OWNERSHIP

CASE NO. 2945

Geolog.	Geophy.	Produc.	Land R.C. 9/83
Gross Ac.	Net Ac.	Lease Record Check	
Scale 4" = 1 Mi.	File No.	Prospect ID	Prospect No.

R 96 W

R 95 W



INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

Date 9-27-83 Case No. 2945

Introduced by Enstar

Exhibit B

Identified by Carlson

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LEASE LINE

////

SPACING UNIT FOR BEATRICE  
RIDL 13-13 WELL

○

PROPOSED LOCATION

●

BEATRICE RIDL 13-13 WELL



ENSTAR Petroleum Inc.

1125 SEVENTEENTH STREET, SUITE 2040  
DENVER, COLORADO  
80202

EAST DICKINSON PROSPECT  
STARK CO., N.D.

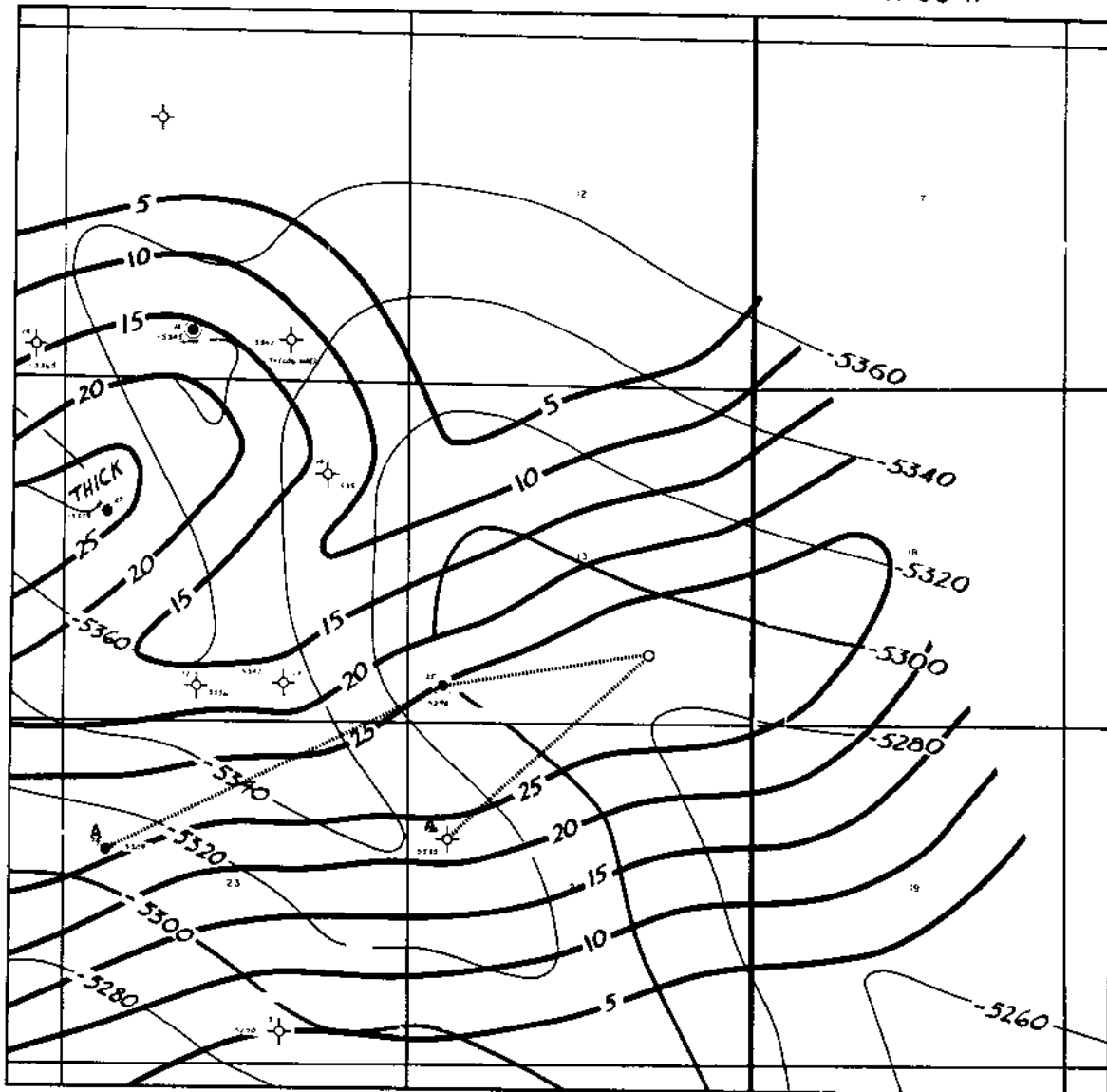
EXHIBIT "B"

LEASEHOLD OWNERSHIP  
CASE NO. 2945

Geolog.	Geophy.	Produc.	Land R.C. 9/83
Grass Ac.	Net Ac.	Lease Record Check	
Scale 4" = 1 Mi.	File No.	Prospect ID	Prospect No.

R 96 W

R 95 W

T  
140  
NT  
140  
NINDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTADate 9-27-83 Case No. 25945Introduced by FosterExhibit SIdentified by Altschult

- A-B PRODUCTION
- B PRODUCTION

R 96 W

R 95 W

ENSTAR Petroleum, Inc.		
ROCKY MOUNTAIN REGION 1120 FIFTEENTH STREET - SUITE 304B, DENVER, COLORADO 80202		
<b>EAST DICKINSON</b> STARK CO., NORTH DAKOTA		
<b>EXHIBIT C</b> STRUCTURE TOP TYLER PAY		
ISOPACH A+B SS, TYLER FM.		
Scale: 1" = 1000'	File No. F-8-4	By & Date K.S. 9-83

CASE NO. 25945

# STRUCTURAL-STRATIGRAPHIC CROSS-SECTION

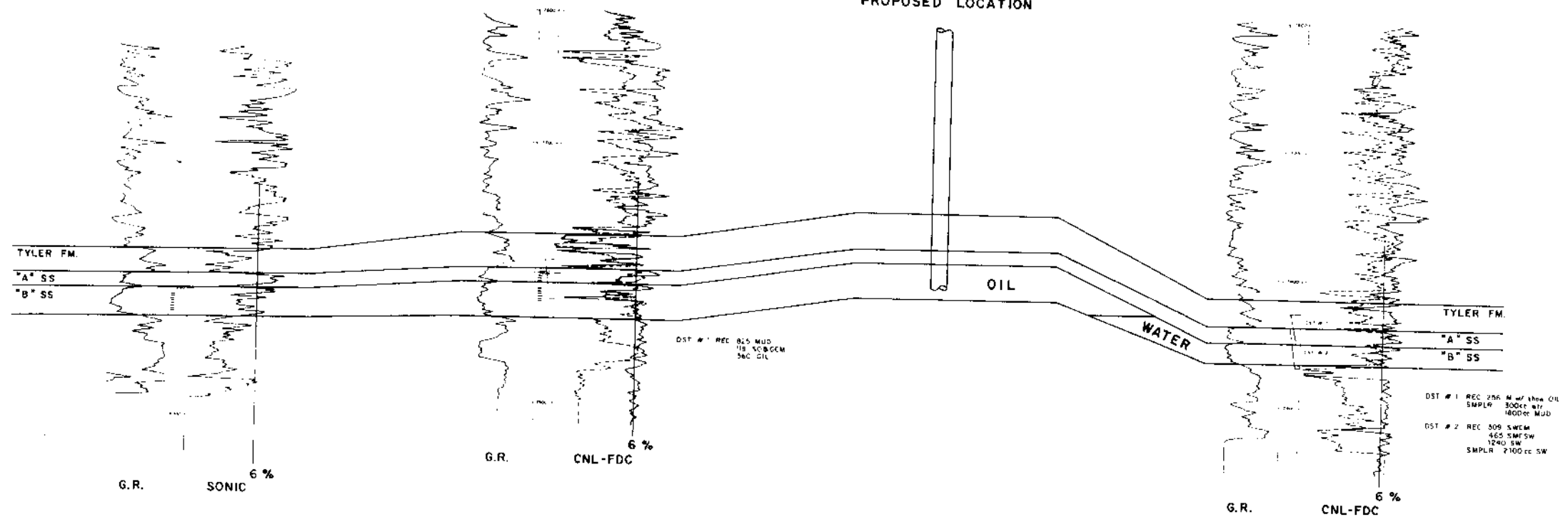
A

A'

IP 673 BOPD  
49 BWPD  
SEC 23-T140N-R96W  
CONTINENTAL  
1 JILEK

IP 240 BOPD  
SEC 13-T140N-R96W  
M. F. C.  
13-13 RIDL

SEC 24 T140N-R 96 W  
M. F. C.  
24-5 ANTON

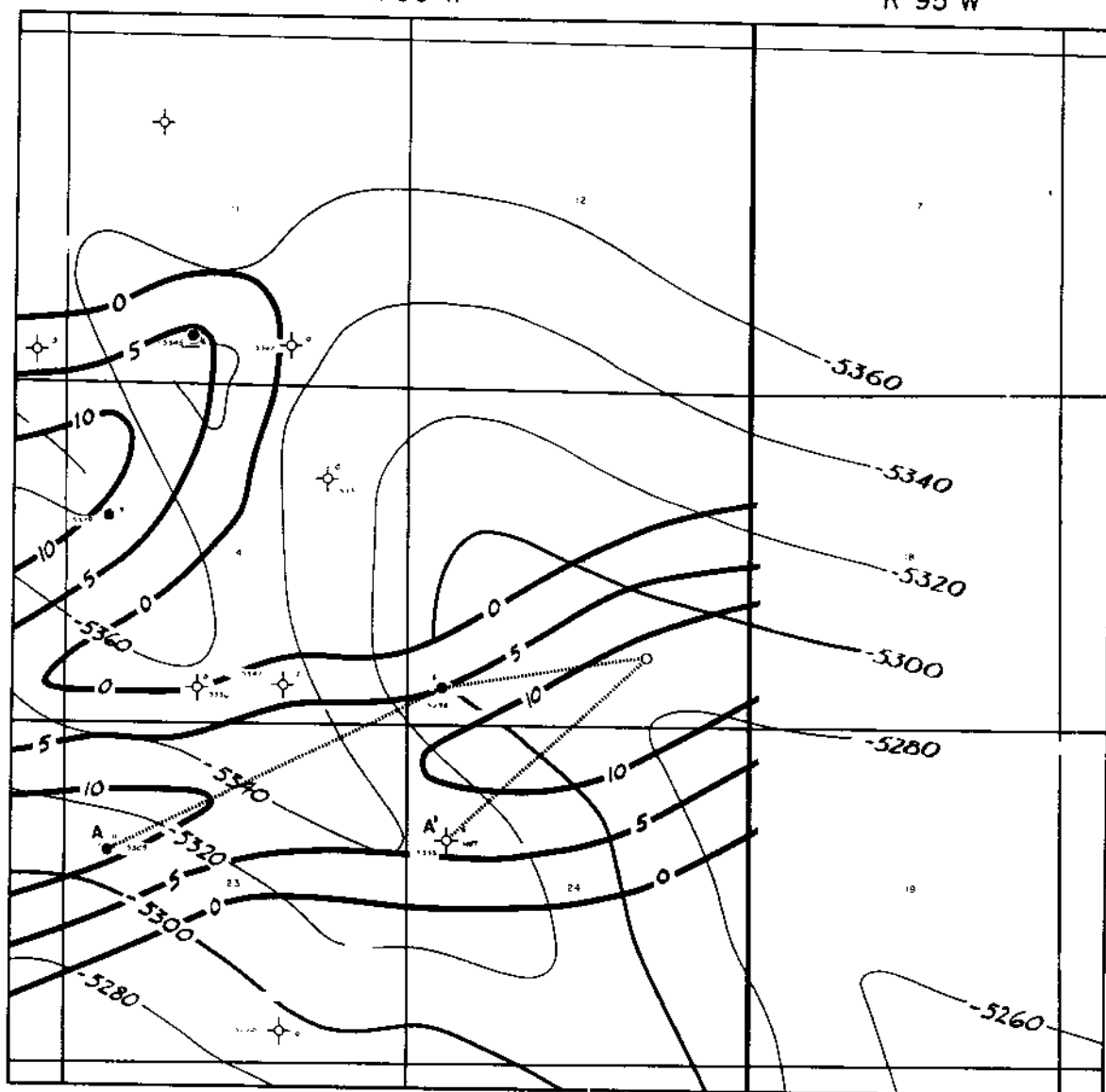


INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA  
Date 7-27-83 Case No. 2145  
Introduced by Enstar  
Exhibit D  
Identified by Altachmitt

<b>ENSTAR</b> ENSTAR Petroleum, Inc.		
ROCKY MOUNTAIN REGION 1113 SEVENTEENTH STREET - SUITE 200, DENVER, COLORADO 80202		
EAST DICKINSON STARK COUNTY, NORTH DAKOTA		
CROSS-SECTION A-A' EXHIBIT D		
CASE NO. 2145		
Scale: VERTICAL 1"=40'	File No. F-A-4	By & Date: K A 9-83

R 96 W

R 95 W

T  
140  
NT  
140  
N

R 96 W

R 95 W

INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTADate 11-27-83 Case No. 2345Introduced by EnstarSubsidiary EIdentified by Airchuck

- A+B PRODUCTION
- B PRODUCTION

<b>ENSTAR</b> ENSTAR Petroleum, Inc. ROCKY MOUNTAIN REGION 1128 SEVENTEENTH STREET - SUITE 400 - DENVER, COLORADO 80202		
<b>EAST DICKINSON</b> STARK CO., NORTH DAKOTA <b>EXHIBIT E</b> STRUCTURE TOP TYLER PAY ISOLITH NET TYLER PAY SS C 1-5		
Scale: 1" = 1000'	File No. F-8-4	By & Date K.A. 9-85

CASE NO. 2345

47 6840

K-E 30 YEARS BY MONTHS X 3 LOG CYCLES  
KEUFEL & ESSEN CO. INC.

— BOPM  
- - - BWPM

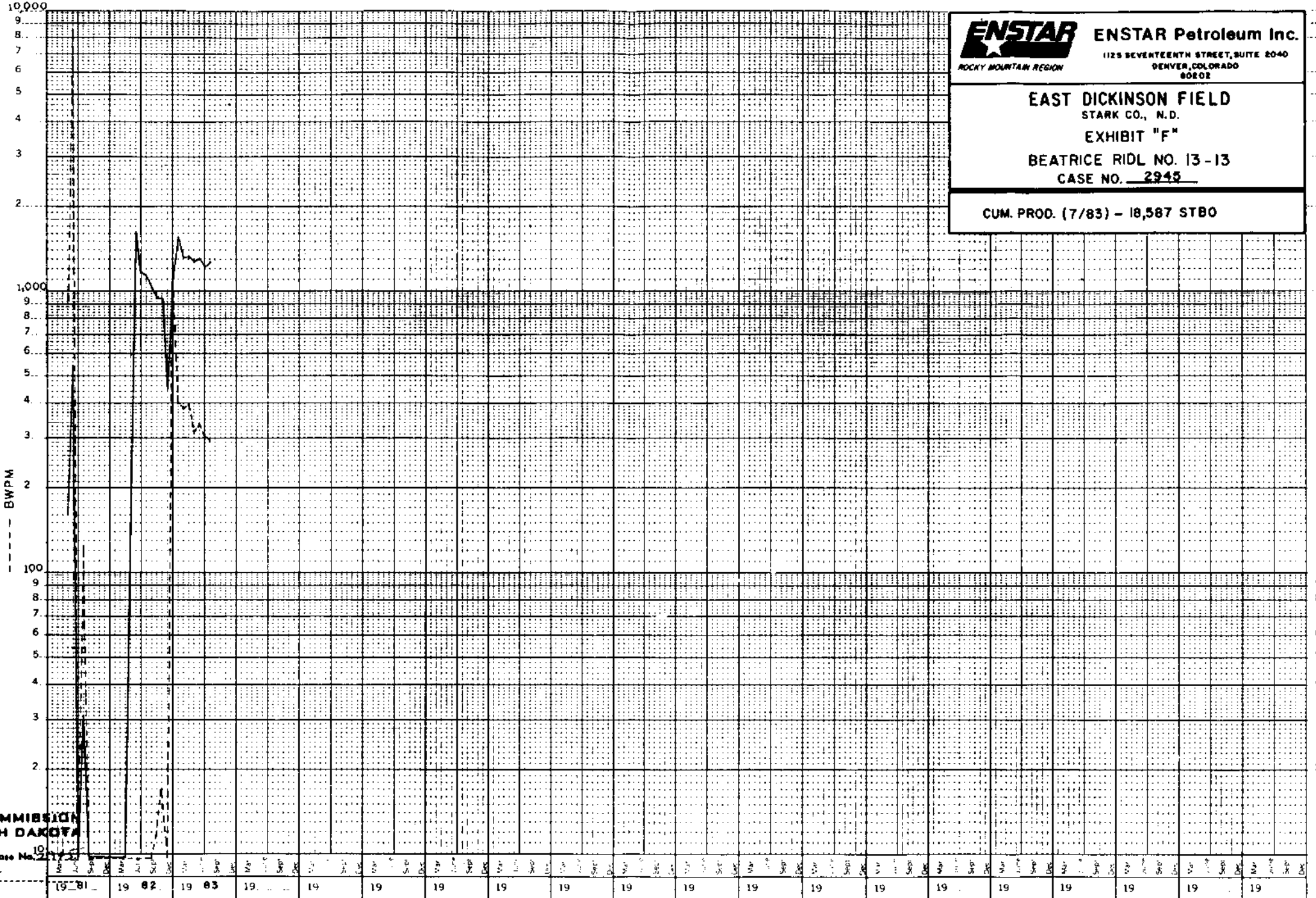
INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

Date 9-27-83 Case No. 19-1751

Introduced by Foster

Exhibit F

Sanitized by D. Hoober



ENSTAR Petroleum Inc.

1125 SEVENTEENTH STREET, SUITE 2040  
DENVER, COLORADO 80202

EAST DICKINSON FIELD

STARK CO., N.D.

EXHIBIT "F"

BEATRICE RIDL NO. 13-13

CASE NO. 2945

CUM. PROD. (7/83) - 18,587 STBO



<u>TRACT</u>	<u>WELL SPACING</u>	<u>ESTIMATED PRIMARY RESERVE/ WELL, STBO</u>	<u>ESTIMATED STBO/AC-FT</u>	<u>RECOVERY EFFICIENCY, % OOIP</u>	<u>DEPLETION @ RESERVE ESTIMATED, %</u>	<u>REMARKS</u>
<u>CONOCO, INC.</u>						
Dickinson Heath Sand Unit: T139N, T140N, R96W, R97W						Data obtained from Engineering Feasibility Study submitted to North Dakota Industrial Commission
160 Acre Tracts (16, 17, 19, 21, 31, 32, 33, 34, 35)	160	243,500	203.4	25.3	67.1	160 Acre Well Spacing Prior to Unitization.
320 Acre Tracts (2, 3, 9, 10, 11, 12, 13, 24, 27, 28, 37, 46, 47)	320	316,157	116.2	14.5	66.6	320 Acre Well Spacing Prior to Unitization.
<u>ENSTAR</u>						
East Dickinson Field Beatrice Ridl No. 13-13 Sec. 13, T140N, R96W	320	58,000	28.3	4.5	34.3	Based upon performamnce Curve (Exhibit "F") and Isopach Map (Exhibit "E")

INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA  
Date 9-27-83 Case No. 2945  
Introduced by Enstar  
Exhibit G  
Identified by D. Herges

<b>ENSTAR</b>		ENSTAR Petroleum Inc.	
ROCKY MOUNTAIN REGION		1125 SEVENTEENTH STREET, SUITE 2040 DENVER, COLORADO 80202	
EAST DICKINSON FIELD STARK CO. N.D. EXHIBIT "G" RECOVERY COMPARISON CASE NO. <u>2945</u>			
Geology	Geophy	Product	Land
Gross Ac	Net Ac	Lease Record Check	
Title	File No	Prospect ID	Prospect No

# VOLUMETRIC ANALYSIS:

Porosity 12.7%  
 Water Saturation 30.0%  
 Formation Volume Factor 1.1  
 Primary Recovery Efficiency 18.4% (Dickinson Heath Sand Unit)  
 Location: Section 13-T140N-R96W  
 Est. Primary B. Ridl No. 13-13 58000 STBO (Performance Curve)

TRACT	Acre-Feet	001P STBO	Est. Primary Recovery @ 18.4%, STBO	Projected Primary Recovery STBO	Recovery Efficiency % 001P
SW/4	630	395,002	72,680	58,000	14.7
SE/4	1421	890,949	163,934		
Total	2051	1,285,951	236,614	58,000	4.5

Anticipated Recovery in SE/4

Based upon Recovery Efficiency of Beatrice Ridl No. 13-13 Well

$890,949 \text{ STBO} \times 14.7\% = 131,000 \text{ STBO}$


INDUSTRIAL COMMISSION  
 STATE OF NORTH DAKOTA

Date 7-27-83 Case No. 2945

Introduced by Enstar

Exhibit H

Identified by D'Hooge

		ENSTAR Petroleum Inc.	
		1128 SEVENTEENTH STREET, SUITE 2040 DENVER, COLORADO 80202	
<b>EAST DICKINSON FIELD</b> <b>STARK CO. N. D.</b> <b>EXHIBIT "H"</b> <b>VOLUMETRIC ANALYSIS</b> <b>CASE NO. 2945</b>			
Geology	Seal	Produce	Land
Gross Ac	Net Ac	Lease Record Check	
Block	File No	Prospect ID	Prospect No

# ECONOMIC ANALYSIS

RESERVES VS. NET PROFIT DISC at 15%

DRILL AND EQUIP TYLER PRODUCER

DRILL AND EQUIP COSTS:

TANGIBLE \$ 320,000

INTANGIBLE \$ 430,000

TOTAL \$ 750,000

BASE CRUDE PRICE: \$ 28/BBL

INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

Date 9-27-83 Case No. 2945

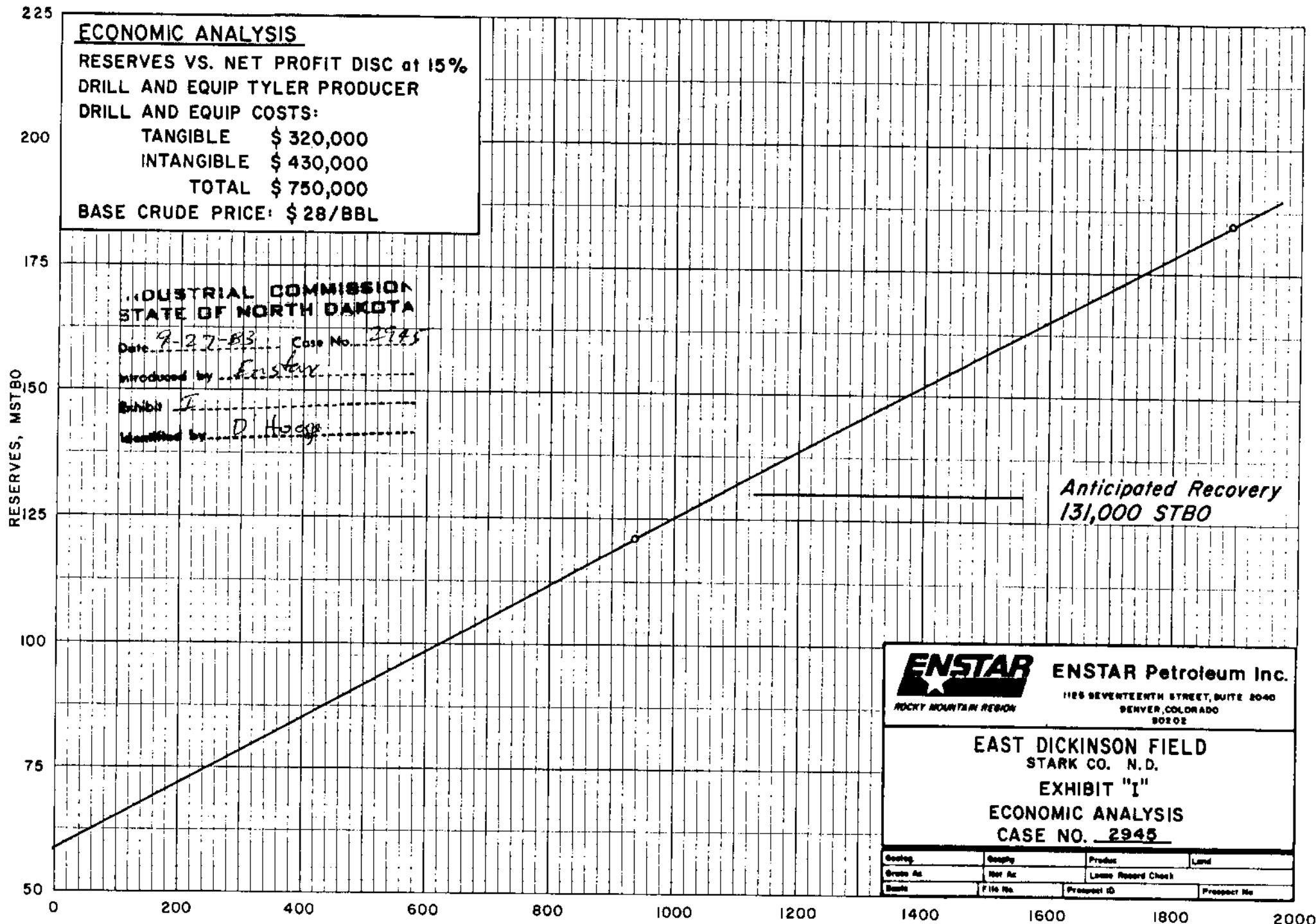
Introduced by Enstar

Exhibit I

Identified by D. H. Hoge

Anticipated Recovery  
131,000 STBO

<b>ENSTAR</b>		ENSTAR Petroleum Inc.	
ROCKY MOUNTAIN REGION		115 SEVENTEENTH STREET, SUITE 2040 DENVER, COLORADO 80202	
EAST DICKINSON FIELD STARK CO. N.D.			
EXHIBIT "I"			
ECONOMIC ANALYSIS			
CASE NO. <u>2945</u>			
Geology	Geophy	Product	Land
Gravel As	Net Ac	Lease Record Check	
Block	File No.	Prospect ID	Prospect No.



BEFORE THE INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA



IN THE MATTER OF THE APPLICATION )  
OF ENSTAR PETROLEUM, INC. FOR AN )  
ORDER PERMITTING A SECOND WELL TO)  
BE DRILLED ON A 320 ACRE SPACING )  
UNIT IN THE DICKINSON FIELD )  
DESCRIBED AS THE S½ OF SECTION )  
13, TOWNSHIP 140 NORTH, RANGE 96 )  
WEST, STARK COUNTY, NORTH DAKOTA )

APPLICATION

COMES NOW the applicant, Enstar Petroleum, Inc., and states  
as follows:

1.

Enstar Petroleum, Inc. is the owner of interests in the S½  
of Section 13, Township 140 North, Range 96 West, Stark County,  
North Dakota.

2.

That an oil and/or gas well known as the Beatrice Ridl 13-13  
located in the SW¼SW¼ of Section 13 is currently producing from  
the Tyler Formation.

3.

That the Tyler Formation has been spaced on a 320 acre  
spacing pattern for the Dickinson Field and the S½ of Section 13  
is the designated unit for the Beatrice Ridl 13-13.

4.

That the applicant is desirous of drilling a well in the SE¼  
of Section 13, Township 140 North, Range 96 West, and that said

1 additional well is necessary for effective and efficient drainage  
2 of the pool.

3 WHEREFORE the applicant requests that the Commission issue  
4 an order permitting the drilling of two wells per 320 acre unit  
5 in said section.

6 Dated this 1st day of September, 1983.

7 FLECK, MATHER, STRUTZ & MAYER, Ltd.  
8 Attorneys for Enstar Petroleum, Inc.  
9 600 Dakota Northwestern Building  
10 Post Office Box 2798  
11 Bismarck, North Dakota 58502

12 By

  
JANE FLECK ROMANOV


13 STATE OF NORTH DAKOTA )  
14 ) ss.  
15 COUNTY OF BURLEIGH )

16 Jane Fleck Romanov, being first duly sworn on oath, deposes  
17 and says that she is the attorney for the applicant herein named,  
18 that she has read the above and foregoing application, knows the  
19 contents thereof, and that the same is true to the best of this  
20 affiant's knowledge, information and belief.

  
JANE FLECK ROMANOV

21 Subscribed and sworn to before me this 1st day of September, 1983.

22 S E A L

  
23 Carol Solberg, Notary Public  
24 Burleigh County, North Dakota  
25 My Commission Expires: 6/25/87  
26

LAW OFFICES OF  
**FLECK, MATHER, STRUTZ & MAYER, LTD.**  
600 DAKOTA NORTHWESTERN BUILDING  
P. O. BOX 2798  
BISMARCK, NORTH DAKOTA 58502

ERNEST R. FLECK  
RUSSELL R. MATHER  
WILLIAM A. STRUTZ  
THOMAS A. MAYER  
WARREN H. ALBRECHT, JR.  
GARY R. WOLBERG  
PAUL W. SUMMERS  
JANE FLECK ROMANOV  
STEVEN A. STORSLEE  
BRIAN R. BJELLA  
JOHN W. MORRISON  
RANDALL J. BAKKE  
DANIEL L. HOVLAND

TELEPHONE  
(701) 223-6585  
TELECOPIER  
(701) 222-4853

September 1, 1983

Mrs. Karleen Fine  
Governor's Office  
State Capitol  
Bismarck, ND 58505

Dear Karleen:

In re Enstar Petroleum, Inc.

Enclosed is an application for Enstar Petroleum, Inc. which we request be placed on the docket for the September hearings of the Industrial Commission.

Very truly yours,



JANE FLECK ROMANOV

CS  
Enclosure

cc Mr. Jack Wilborn  
Mr. Wesley D. Norton