



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

April 20, 1982

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mesa Petroleum Co.
P.O. Box 2009
Amarillo, Texas 79189-2009
Exxon Company, USA
P.O. Box 1600
Midland, Texas 79702

Attention: ~~Melba Kripling~~ R.E. Mathis

Administrative Order NSP-¹⁴⁰³~~1305~~(L)

Gentlemen:

270.5

Reference is made to your application for a ~~296.5~~-acre non-standard proration unit consisting of the following acreage in the ~~Atoka-Morrow Pool and Burton Flat Field:~~ ~~Diamond~~

Diamond Mound Atoka-Morrow Gas Pool;
EDDY COUNTY, NEW MEXICO
TOWNSHIP 16 SOUTH, RANGE 28 EAST, NMPM
Section 4: Lots 3-6 and 11-14

to be It is my understanding that this unit is to be dedicated to your ~~Burton Flat~~ ^{Depos} Federal ~~Comm.~~ Well No. 2 located at an unorthodox location ~~1917~~ ¹⁹⁸⁵ feet from the North line and 660 feet from the West line of said Section 4.

By authority granted me under the provisions of Rule 104 D II, the above non-standard proration unit is hereby approved.

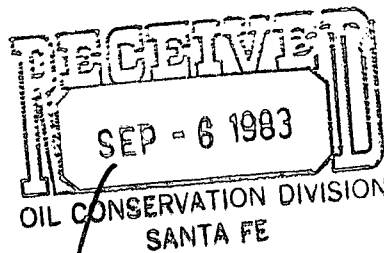
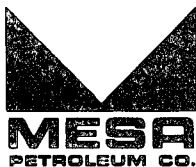
Sincerely,

JOE D. RAMEY,
Director

JDR/RLS/dr

cc: Oil Conservation Division - Artesia
Oil & Gas Engineering Committee - Hobbs
Minerals Management Service - Artesia

hereby approved under provisions of
Rule 104F.



September 1, 1983

Mr. R. L. Stamets
Energy and Minerals Department
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Stamets:

Subject: Unorthodox Location and Non-standard
Proration Unit in the Diamond Mound
Atoka-Morrow Gas Pool
Mesa Petroleum Co.
Depco Federal #2
990' FNL & 660' FWL
Sec. 4, T16S, R28E
Eddy County, New Mexico

Application is hereby made for administrative approval of a 270.5 acre non-standard proration unit due to variation in the legal subdivision of the U.S. Public Land Survey and for an unorthodox location due to geology.

Exhibit I is the One Mile Radius Land Map showing Mesa Petroleum Co., Tenneco, and Amoco Production as being offset operators to the Depco lease and Exhibits II and III are Designation of Operator naming Mesa Petroleum Co. as operator of subject well. Exhibit IV is a plat showing the survey anomaly. Exhibit V is a geological statement explaining the necessity for the non-standard location.

By copy of this letter, offset operators are notified by certified mail of this request.

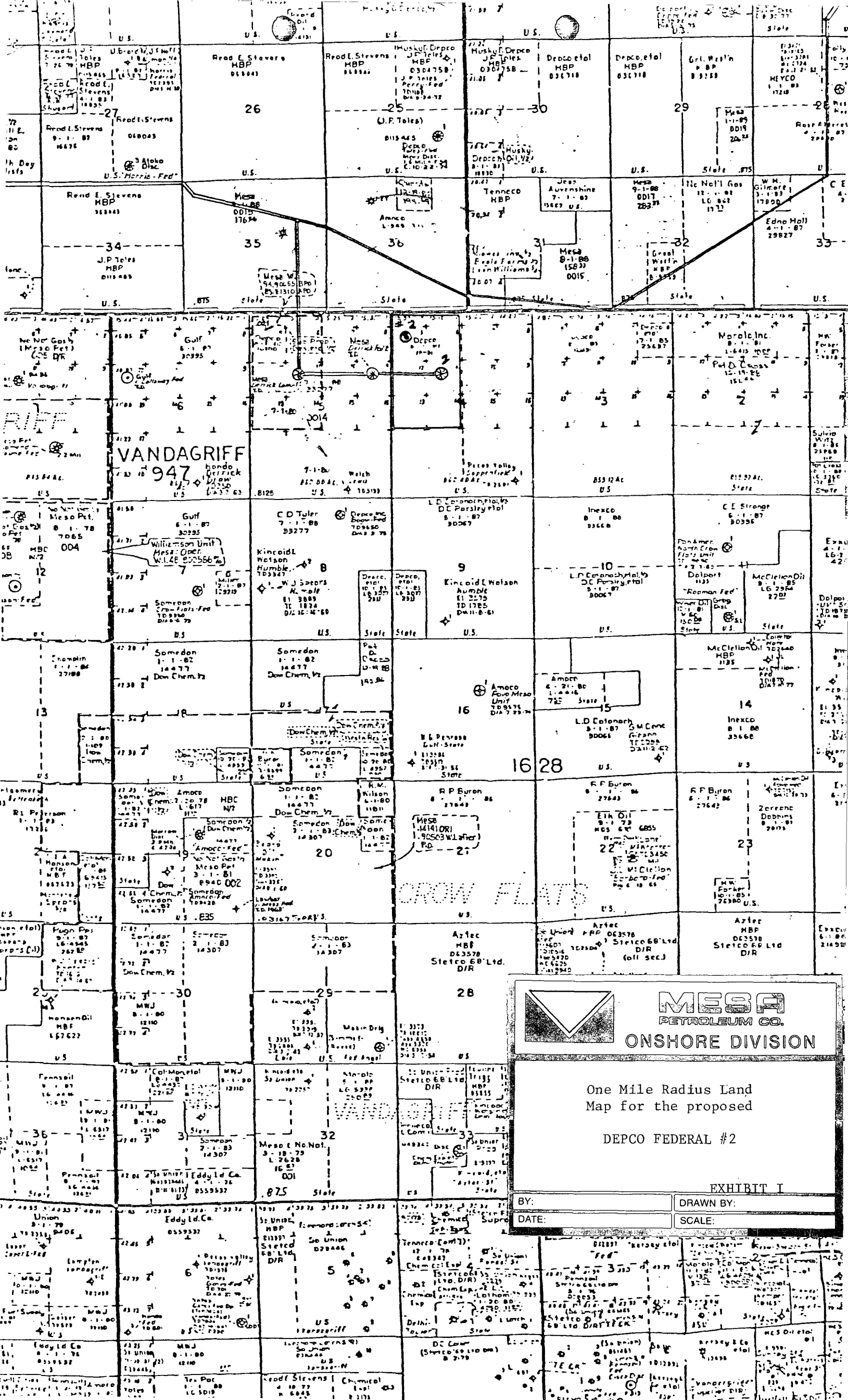
Yours truly,

R. E. Mathis
Regulatory Coordinator
Onshore Operations Division

Attachments

XC: NMOCD-A, BLM-R, Cen Rcds, Ops (File),
Midland, Roswell, Partners, Amoco, Tenneco

*NSP (L) 405
Lts 3-6 and
11-14
Rule 104 D II and
Rule 104 F
9-26-83*



DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

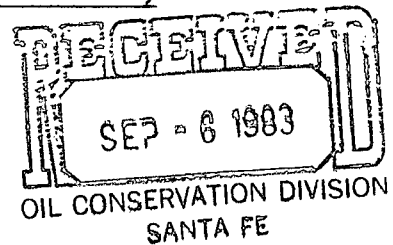
DISTRICT LAND OFFICE: Santa Fe, New Mexico
SERIAL NO.: NM-18831

and hereby designates

NAME: Mesa Petroleum Company
ADDRESS: Suite 1000 Vaughn Building
400 W Texas Avenue
Midland, Texas 79701

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 16 South, Range 28 East, NMPM
Sec 4: Lots 3-6, 11-14



It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

DEPCO, Inc.

By:

C. D. Crump
(Signature of lessee)

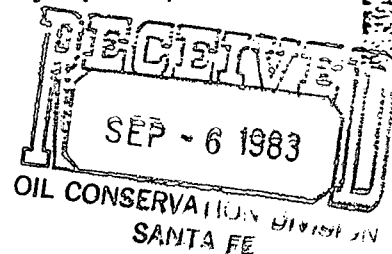
C. D. Crump, Vice President
1000 Petroleum Building, 110-16th St
Denver, Colorado 80202

February 15, 1980

(Date)

(Address)

DESIGNATION OF OPERATOR



The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Roswell, New Mexico

SERIAL NO.: NM-18831

and hereby designates

NAME: Mesa Petroleum Co.
ADDRESS: Suite 1000, Vaughn Building
Midland, Texas 79701

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Lots 3 thru 6, Lots 11 thru 14
Section 4-T16S-R28E, NMPM
Eddy County, New Mexico

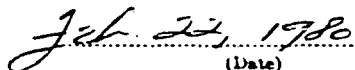
It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.


(Signature of lessee)
Jake L. Hamon

P. O. Box 663, Dallas, Texas 75221
(Address)


(Date)

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

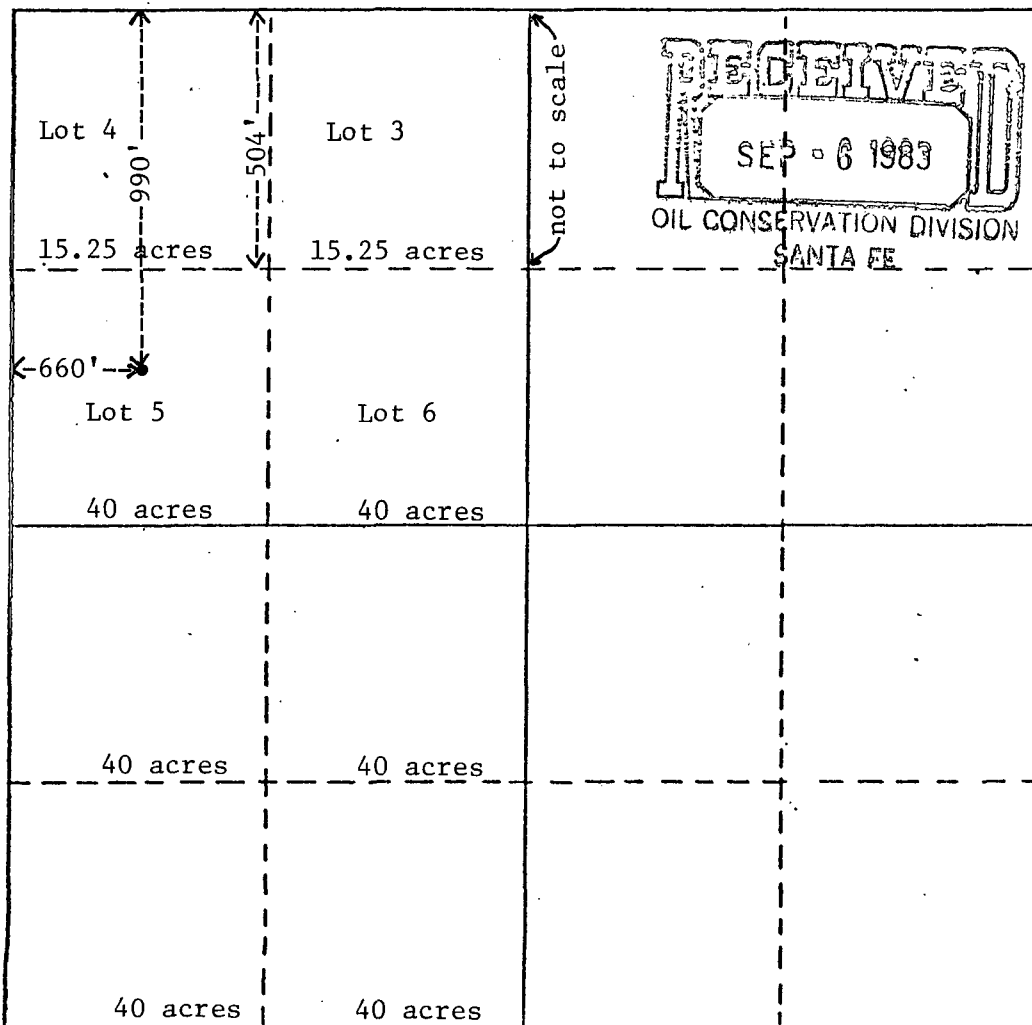
Operator Mesa Petroleum Co.			Lease Depco Federal		Well No. 2
Unit Letter D	Section 4	Township 16 South	Range 28 East	County Eddy	
Actual Footage Location of Well: 990 feet from the North line and 660 feet from the West line					
Ground Level Elev.	Producing Formation Morrow		Pool Diamond Mound Atoka-Morrow		Dedicated Acreage: 270.5 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

R. E. Mathis

Name
R. E. Mathis
Position
Regulatory Coordinator
Company
Mesa Petroleum Co.

Date
9-1-83

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

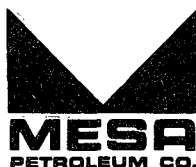
EXHIBIT IV

Date Surveyed

Registered Professional Engineer
and/or Land Surveyor

Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600



Geologic Conditions Requiring Unorthodox Location

Mesa, Depco Federal #2
990' FNL, 660' FWL,
Section 4, T16S, R28E
Eddy County, New Mexico

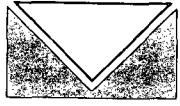
Mesa proposes to drill at this unorthodox location because only at this location or farther northwest in Section 4 can we expect Morrow sandstones that are sufficiently thick and structurally high to be economic.

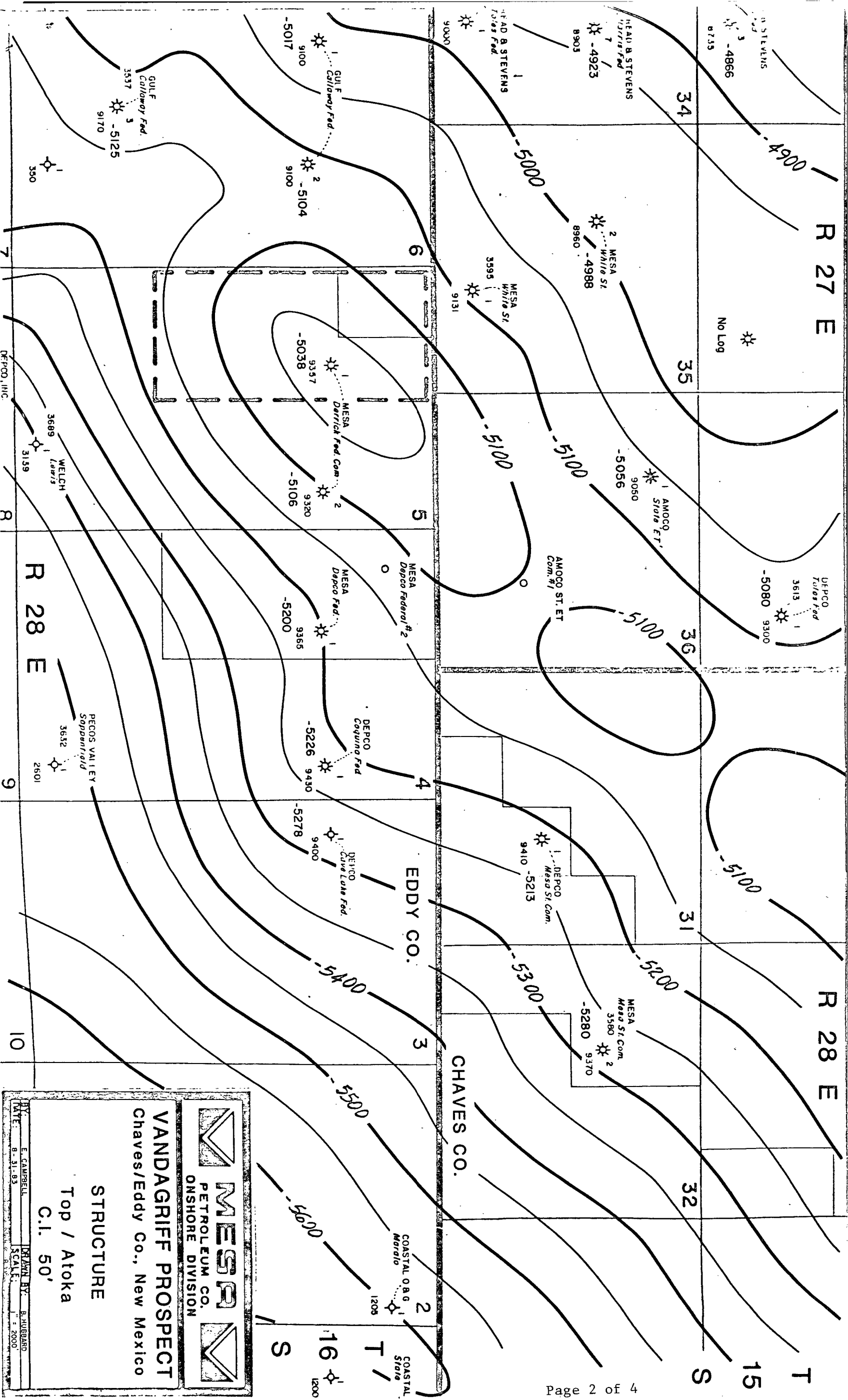
Mesa drilled the Depco Federal #1 at a location 2160' FNL, 1980' FWL, Section 4, T16S, R28E. This well penetrated an Atoka-Morrow section that had very little productive sandstone. This well is uneconomic.

Isopach maps of the productive Morrow sandstones in the area show that the only place within Section 4 that an economic Atoka-Morrow well could be drilled is in the northwest corner of the Section, less than 1980 feet from the north line.

This is demonstrated on the attached maps and cross section. Economically productive sands penetrated in the Mesa Derrick Federal #2 and not present in the Mesa Depco Federal #1, trend to the northeast from the Derrick #2 and are thick at Mesa's proposed location. Furthermore, our proposed location is projected to be at a structural position sufficiently higher than the Mesa Depco Federal #1 to be above the gas-water contact of the E sandstone. No orthodox locations within the section will be sufficiently higher than the Mesa Depco Federal #1.

Edith Campbell
Edith Campbell
Exploitation Geologist

	MESA PETROLEUM CO. ONSHORE DIVISION
EXHIBIT V	
Page 1 of 4	
BY:	DRAWN BY:
DATE:	SCALE:



MESPA

PETROLEUM CO.
ONSHORE DIVISION

VANDAGRIFF PROSPECT

Chaves/Eddy Co., New Mexico

STRUCTURE

Top / Atoka

C.I. 50'

DATE: 8-31-83

DRAWN BY: B. HUBBARD

SCALE: 1" = 2000'

R 27 E

R 28 E

STEVENSON
8735

34

35

36

31

32

HEAD & STEVENS
8903

8903

6/0 2 MESA
WHITE ST.
8960

HEAD & STEVENS
7705 Fed.

0/0
9000

MESA
WHITE ST.
3595
9131

7/0

AMOCO
State ET.
9050

AMOCO ST. ET
Com. #1
26/8

DEPCO
Tulsa Fed.
3613
9300

DEPCO
Mesa St. Com.
9410 14/9

MESA
Mesa St. Com.
3580
19/10 9370

CHAVES CO.

EDDY CO.

COASTAL O&G
Marid
1200

COASTAL
State
1200

GULF
Callaway Fed.
9100
0/0
2 4/0
9100

15/9
9357

MESA
Derrick Fed. Com.
22/14
9320

MESA
Depco Fed.
0/0
9365

DEPCO
Coquina Fed.
22/12
9430

DEPCO
Cave Lake Fed.
9/2
9400

GULF
Callaway Fed.
3537

9170

350

WELCH
3689
3139

PECOS VALLEY
Soppentfield
3632
2601

S

16

T

2

S

15

T



MESA
PETROLEUM CO.
ONSHORE DIVISION



VANDAGRIFF PROSPECT
Chaves/Eddy Co., New Mexico

ISOPACH

Porous Sand
'E' Sandstone

C.I. = 5'

1

MESA PETROLEUM CO.
#2 Derrick Federal
Eddy Co., New Mexico

ELEV. K.B. 3669'
T.D. 9320'
SPUD: 2-19-80
5-T16S-R28E
COMP: 4-23-80

2

MESA PETROLEUM CO.
#1 Depco Federal
Eddy Co., New Mexico

ELEV. K.B. 3639'
T.D. 9365'
SPUD: 4-16-80
4-T16S-R28E
COMP: 6-10-80

A

A'

ATOKA

DATUM

TOP/MORROW

B

C

D

E

F

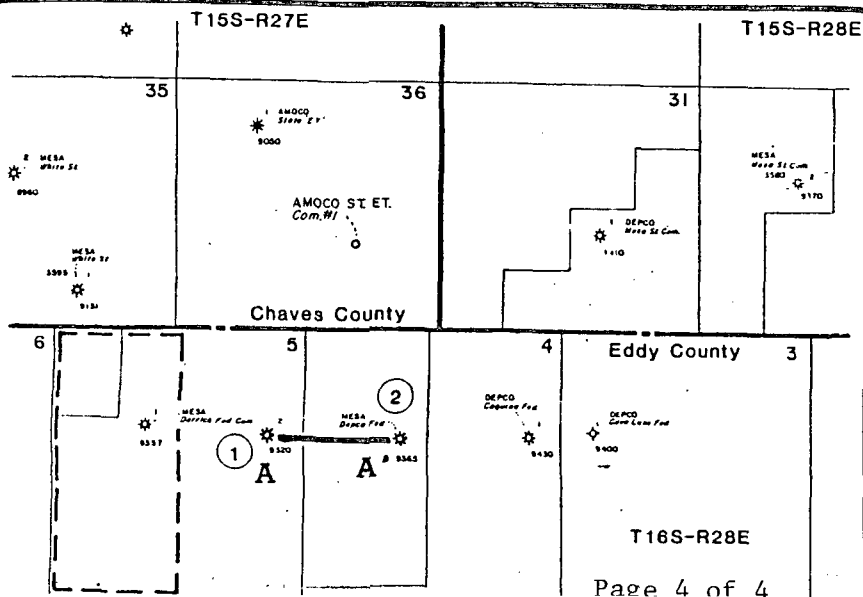
MORROW


CHESTER
SHALE

CHESTER
LIME

PERF: 8978'-80', 8984'-94',
9034'-44', 9062'-74' W/1SPF
IPCAOF: 10.461 MMCFGPD,
GOR 82,135
SIWHP: 2515#
SIBHP: 2528#

PERF: 9100'-04', 9190'-97' W/1SPF
IPCAOF: 3.177 MMCFGPD,
GOR 63,311
SIWHP: 3160#
SIBHP: 3173#
W/1SPF



**MESA**
PETROLEUM CO.
ONSHORE OPERATIONS DIVISION

VANDAGRIFF PROSPECT
Chaves/Eddy Co., New Mexico

**STRATIGRAPHIC
CROSS SECTION**

E. CAMPBELL DRAWN BY **B. HUBBARD**
9-1-83 SCALE



Amoco Production Company (USA)

Houston Region-West
501 WestLake Park Boulevard
Post Office Box 3092
Houston, Texas 77253

R. G. Smith
Regional Engineering
Manager-West

September 19, 1983

File: JCA-986.51NM-3280

Re: Application for Unorthodox Location
and Non-standard Proration Unit
Mesa Petroleum Company
Eddy County, New Mexico

*Revised
Application
coming from
put holders*

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
State Land Office Building
Old Santa Fe Trail
P.O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

Amoco Production Company is in receipt of the subject application dated September 1, 1983 addressed to the attention of Mr. R. L. Stamets. Said application requests administrative approval of a 270.5-acre non-standard proration unit and an unorthodox location at 990' FNL x 660' FWL of Section 4, T-16-S, R-28-E for Mesa's proposed Depco Federal Well No. 2. Amoco must object to the unorthodox location portion of this application because of the potential for uncompensated drainage from its adjacent lease.

The well which is subject to this application is an immediate offset to the Amoco State "ET" lease and is targeted for completion in the same reservoir from which said lease produces. Therefore, in all likelihood, approval of the requested unorthodox location would result in confiscation of reserves from the Amoco lease.

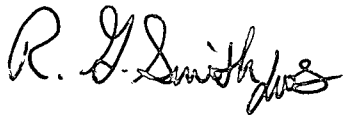
Amoco is willing to withdraw objection to authorization of an unorthodox location if the Applicant will move the proposed well to a site at least 1485' FNL of the section; still 495' north of the nearest orthodox location. According to the geological exhibits submitted in the subject application, this compromise location provides the Applicant with a site

File: JCA-986.51-NM-3280
September 19, 1983
Page 2

at which they would obtain a reservoir position (i.e., structural as well as net sand) essentially equivalent to the recently drilled Amoco State "ET" Com Well No. 1. However, if the Applicant is adamant about drilling at the requested location, Amoco must insist that administrative approval of the subject application be denied and the matter be set for hearing.

If you have any question concerning this matter, please contact Larry Sheppard (713/556-3941) in Amoco's Houston Region-West Proration Section.

Yours very truly,

A handwritten signature in cursive script, appearing to read "R. G. Smith".

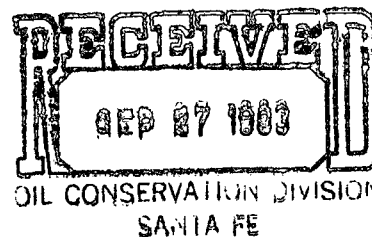
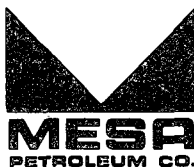
LWS/mes
885/Z

cc: Mesa Petroleum Company
P.O. Box 2009
Amarillo, TX 79189

Attention: Mr. R. E. Mathis

New Mexico Oil Conservation Division
P.O. Drawer DD
Artesia, NM 88210

Attention: Mr. L. A. Clements



September 22, 1983

Mr. R. L. Stamets
Energy and Minerals Department
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Stamets:

Subject: Unorthodox Location for
Mesa Petroleum Co.
Depco Federal #2
Eddy County, New Mexico

*NSP (L)
1403
lots 3-6 and
11-14 270.5 acre
Rule 104 D II NSP
and Rule 104 F
Waiver in
Immediate*

Mesa Petroleum Co. has been informed by copy of a letter addressed to your office dated 9-19-83 regarding subject application that Amoco Production Company (USA) is willing to withdraw objection to authorization of an unorthodox location if moved to a site at least 1485' FNL of the section.

Notice is hereby given that Mesa Petroleum Co. has amended its APD to apply for a well to be drilled 1485' FNL & 660' FWL, Sec. 4, T16S, R28E as shown by attached plat.

It is further requested that since Mesa Petroleum Co. et al and Amoco et al are the only affected parties under this application, an Administrative Order be issued immediately so that drilling may commence.

Yours truly,

R. E. Mathis
Regulatory Coordinator
Onshore Operations Division

Attachment

xc: NMOCD-Artesia
BLM-Roswell
Central Records
Operations File
Midland Office
Roswell Office
Amoco
Partners

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Superseded C-126
Effective 1-4-83

All distances must be from the outer boundaries of the Section

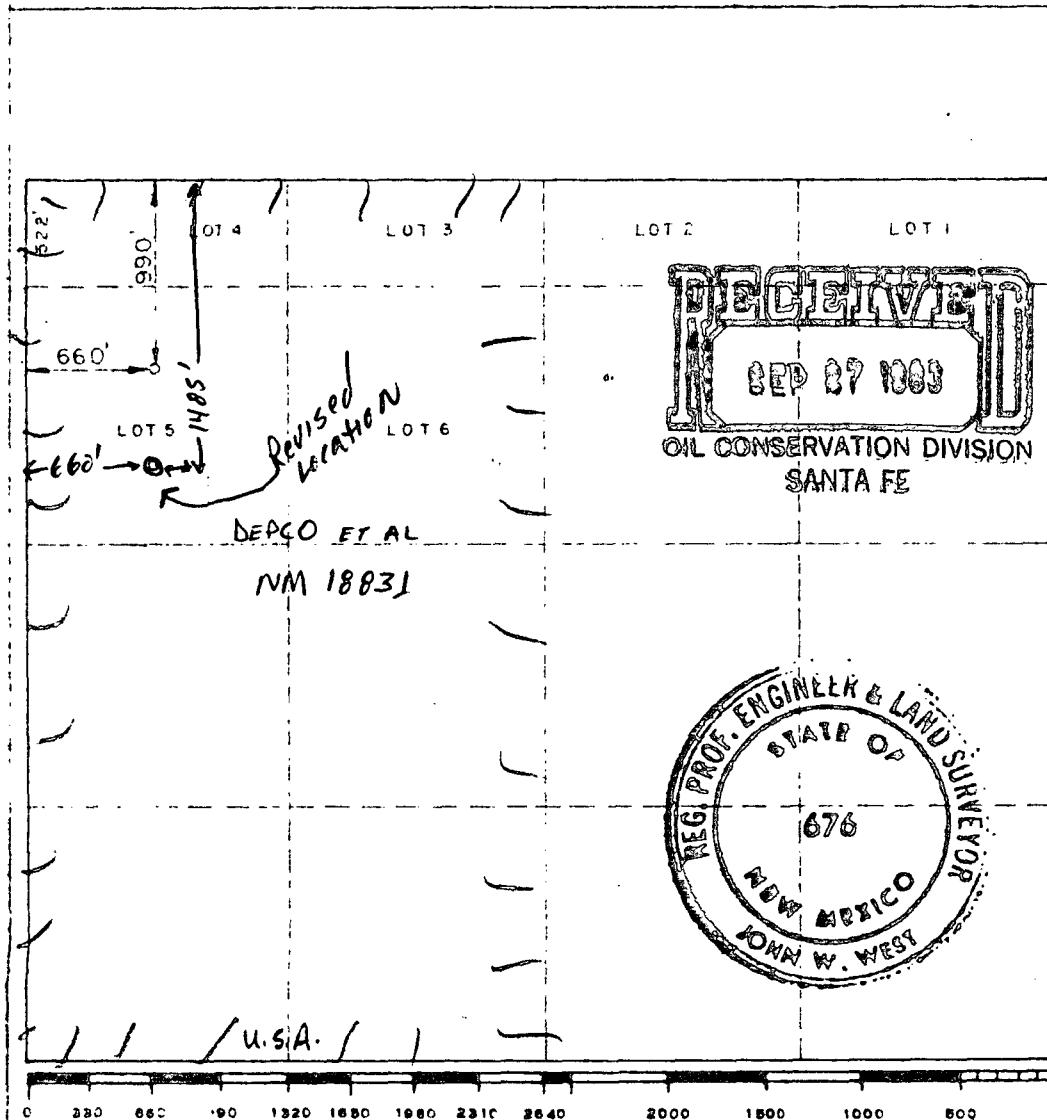
MESA PETROLEUM CO			DEPCO FEDERAL			Well No. 2		
Map Letter E	Section 4	Township 16 SOUTH	Range 28 EAST	County EDDY				
Actual Footage Location of Well:								
990 feet from the NORTH line and			660 feet from the WEST line					
Ground Level Elev. 3653.0	Producing Formation Morrow		Pool Diamond Mound Atoka-Morrow			Dedicated Acreage: 270.5 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
P. E. Mathis
Position
Regulatory Coordinator
Company
Mesa Petroleum Co
Date
9-21-83

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
9/1/83

Registered Professional Engineer:
and/or Land Surveyor

John W. West
Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6868
Ronald J. Eidson 3239