

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. 1st Street, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
Revised March 17, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RECEIVED Submit to appropriate District Office
MAR - 1 2004 State Lease - 6 Copies
Fee Lease - 5 Copies

OCD-ARTESIA ☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Marathon Oil Company P.O. Box 3128, Houston, Tx. 77253		² OGRID Number ³ API Number 30- 30-015-27235
⁴ Property Code 6408	⁵ Property Name INDIAN HILLS ST COMM	⁶ Well No. 4

⁷ Surface Location									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
E	36	20S	24E		1880'	North	660'	WEST	ELDY

⁸ Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County

⁹ Proposed Pool 1 Indian Hills St Comm	¹⁰ Proposed Pool 2
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¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3634'
¹⁶ Multiple	¹⁷ Proposed Depth 9600'	¹⁸ Formation Morrow	¹⁹ Contractor Key Energy	²⁰ Spud Date ASAP

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
20"	16"	55	40'	redi-mix	surface
12.25"	9.625"	32.3	1220'	1100	surface
8.75"	7"	23 & 26	7999'	1100	+/- 1000'
6.125"	4.5"	10.5#	9600'	175	7300'

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.

Describe the blowout prevention program, if any. Use additional sheets if necessary.

MARATHON OIL COMPANY INTENDS TO Squeeze off Dagger Draw ; Upper Penn Assoc. perms from 7516' to 7746' with approx. 150 sks. of cement.
Will then drill a 6.125" hole to 9600'. Set a 4.5" liner from 9600'+/- to 7300'+/-, cement in place with 175 sks. of premium cement.
Well then will be completed in the Morrow.
All BOPE shall be installed and tested according to OCD rules #109 & #114.
7 1/16" 3M Dual Ram, annular.
Well site H2S plan attached. Complete H2S contingency Plan on File at OCD's Artesia Office.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: **Mike Mick**

Printed name: **Mike Mick**

Title: **Sr. Adv. Eng. Tech.**

Date: **2-19-04**

Phone: **713-296-3254**

OIL CONSERVATION DIVISION

Approved by: **John Delaney**

Title: **SUPERVISOR, DISTRICT II**

Approval Date: **MAR 03 2004**

Expiration Date: **MAR 03 2005**

Conditions of Approval:

Attached ☐

MARATHON OIL COMPANY

H2S DRILLING OPERATIONS PLAN

• HYDROGEN SULFIDE TRAINING

All contractors and subcontractors employed by Marathon Oil Company will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

- 1. The hazards and characteristics of hydrogen sulfide (H₂S)**
- 2. Safety precautions**
- 3. Operations of safety equipment and life support systems**

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

- 1. The effect of H₂S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.**
- 2. Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.**
- 3. The contents and requirements of the contingency plan when such plan is required.**

All personnel will be required to carry documentation of the above training on their person.

II. H₂S EQUIPMENT AND SYSTEMS

1. Safety Equipment

The following safety equipment will be on location.

A. Wind direction indicators.

B. Automatic H₂S detection alarm equipment (both audio and visual).

C. Clearly visible warning signs. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.

D. Protective breathing equipment will be located in the dog house and at briefing areas.

2. WELL CONTROL SYSTEMS

A. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. pipe rams to accommodate all pipe sizes**
- b. blind rams**
- c. choke manifold**
- d. closing unit**

Auxiliary equipment added as appropriate includes:

- a. annular preventor**
- b. rotating head**
- c. mud- gas separator**
- d. flare line and means of ignition _____ e. remote operated choke**

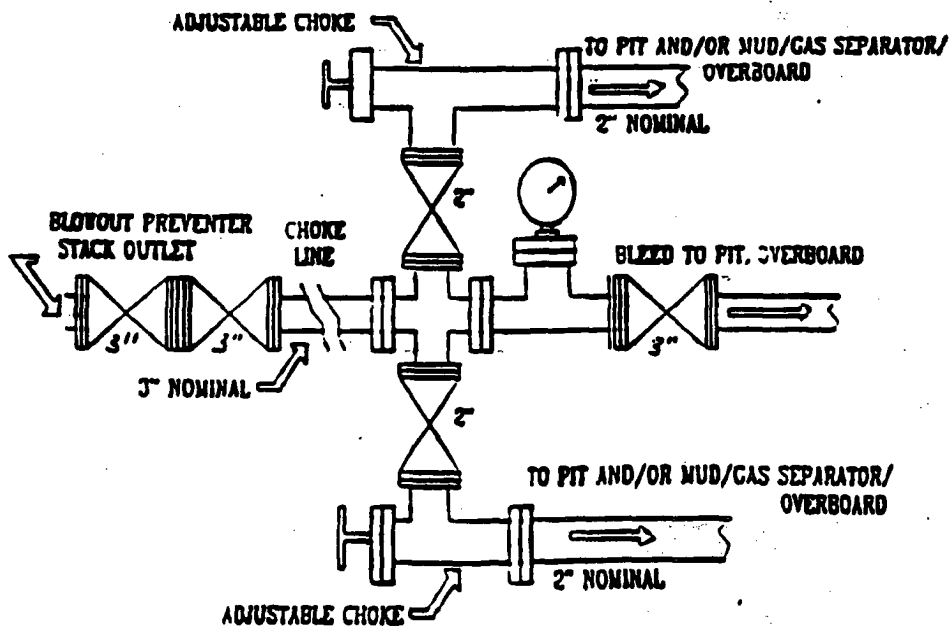
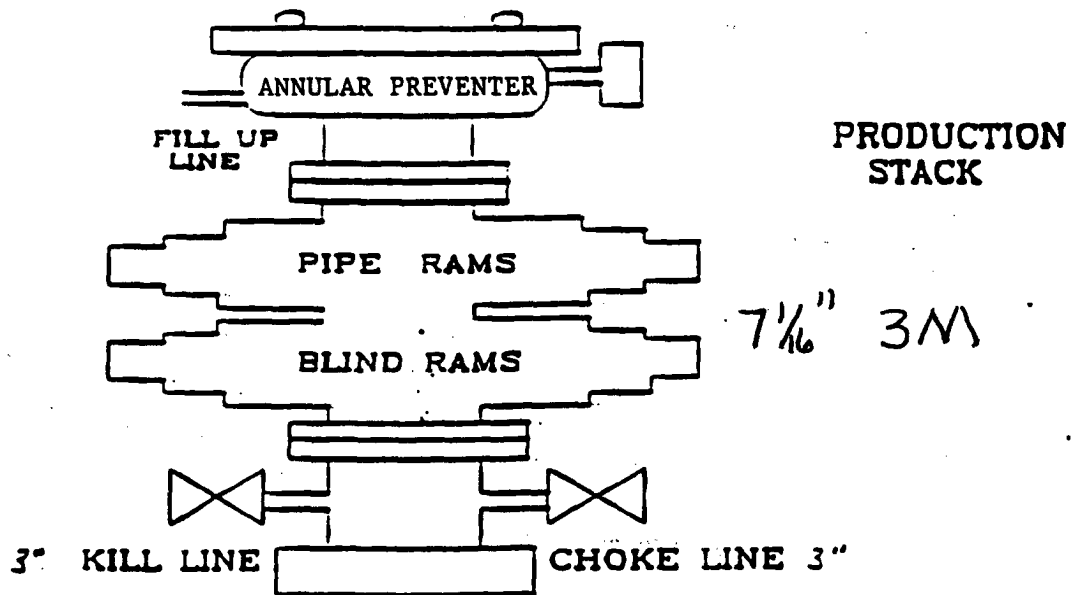
B. Communication

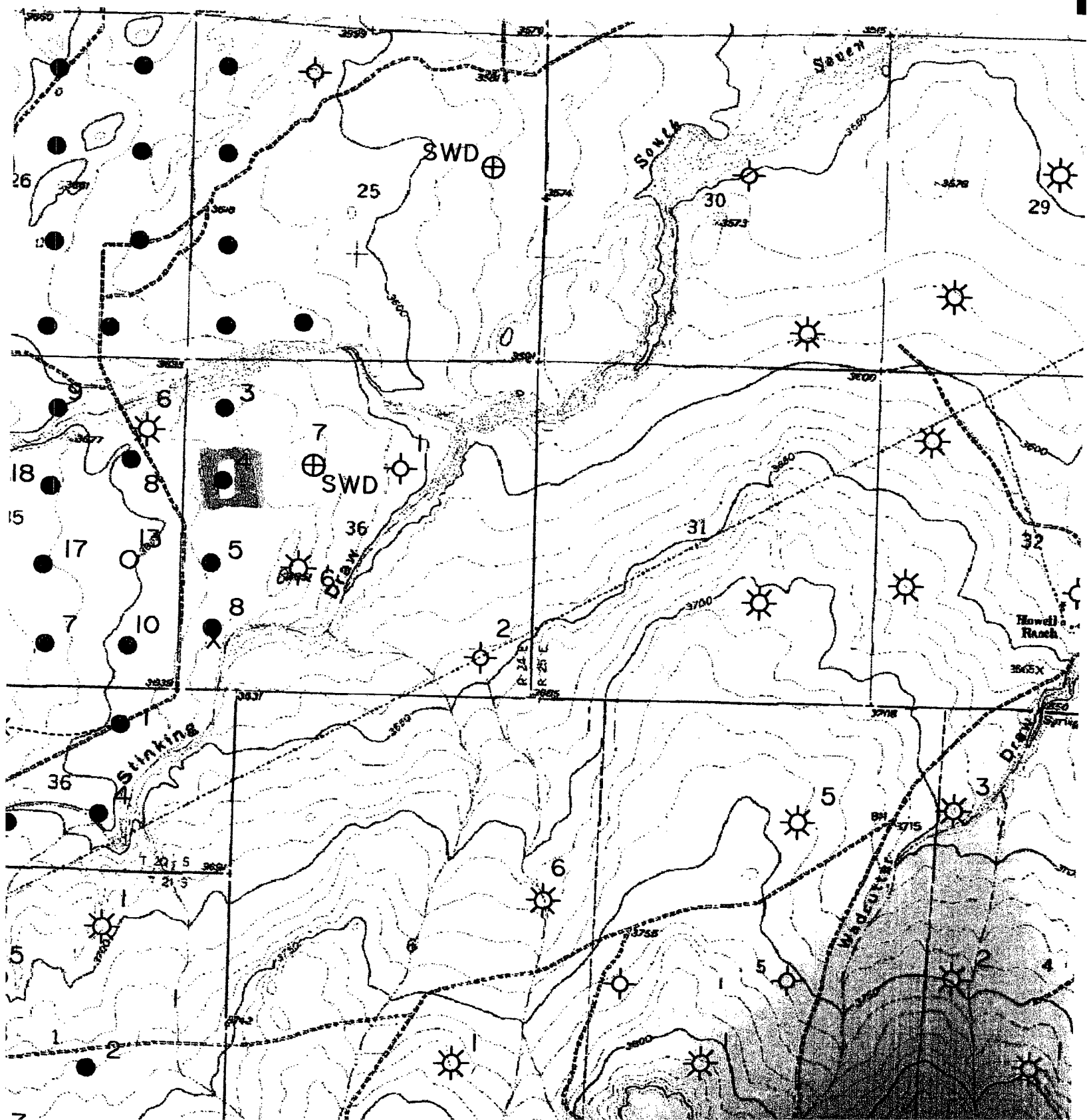
The rig contractor will be required to have two-way communication capability. Marathon Oil Company will have either land-line or mobile telephone capabilities.

C. Mud Program

The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers when appropriate will minimize hazards when penetrating H₂S bearing zones.

III. WELL SITE DIAGRAM





LEASE ROAD
ENTRANCE

150'

WIND
SOCK

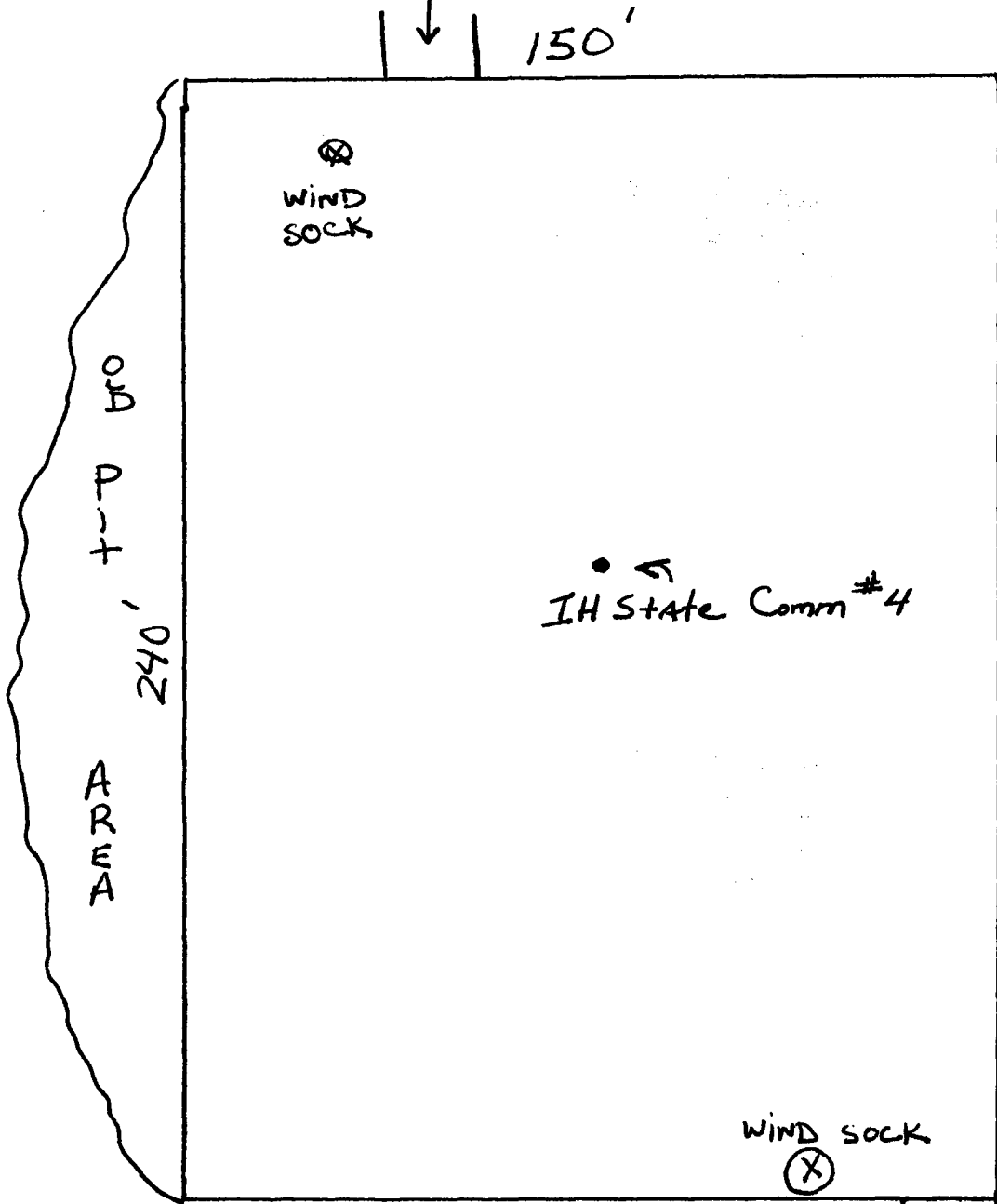
IH State Comm #4

WIND SOCK

LEASE ROAD
ENTRANCE

Prevailing
Wind Direction

NOT to scale



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Form C-102
Revised March 17, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-27235	² Pool Code 078960	³ Pool Name I.B. Morrow Gas
⁴ Property Code 6408	⁵ Property Name INDIAN HILLS STATE COM	⁶ Well Number 4
⁷ OGRID No. 014021	⁸ Operator Name Marathon Oil Company	⁹ Elevation GL: 3634

¹⁰ Surface Location

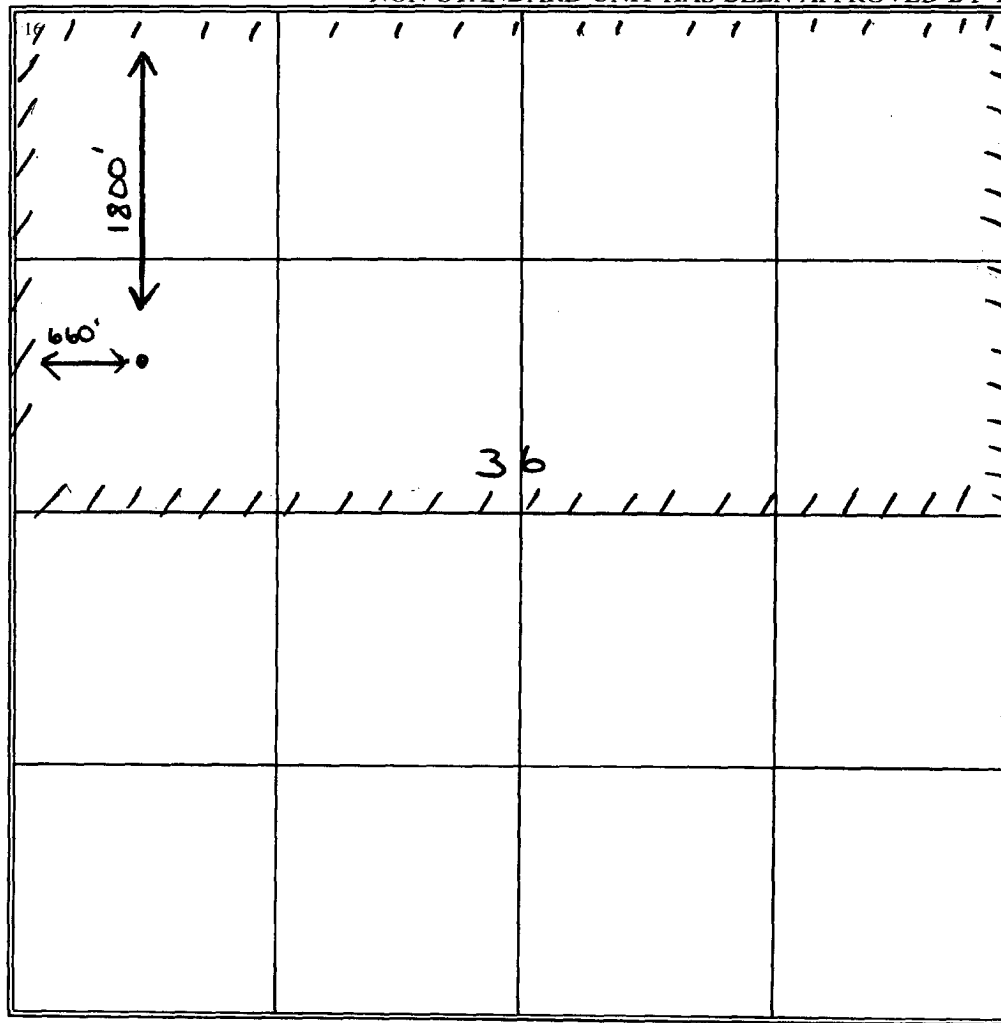
UL or lot no. E	Section 36	Township 20S	Range 24E	Lot. Idn	Feet from the 1880'	North/South line North	Feet from the 660	East/West line WEST	County EDDY
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 320 N/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>mtmick</i></p> <p>Signature Mike Mick</p> <p>Printed Name Sr. Adv. Engineer Technician</p> <p>Title 2-19-04</p> <p>Date</p> <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p>
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