

# MACK ENERGY CORPORATION

NSL 8/18/98

Post Office Box 960  
Artesia, New Mexico 88211-0960  
(505) 748-1288 / FAX (505) 746-2362



July 23, 1998

Oil Conservation Division  
Attn: Mike Stogner  
2040 South Pacheco  
Santa Fe, NM 87505

Dear Mr. Stogner:

Mack Energy Corporation respectfully requests an administrative approval without notice and hearing of the following unorthodox well location.

Because of our desire to drill this well in a timely manner, we also request your approval be expedited. The well location and legal description is as follows:

McIntyre A Federal #11  
1615 FSL & 1065 FEL  
Sec. 20, T17S, R30E  
Eddy County, New Mexico

The well will be completed in the Paddock formation in the Loco Hills Paddock Pool.

Attached to this application are the following exhibits.

- A.) Well location and acreage dedication plat (form C-102) filed with the Artesia office of the Oil Conservation Division (Exhibit A).
- B.) A plat showing the proposed unorthodox locations, the respective proration units, and the offsetting proration units (Exhibit B).
- C.) A map showing the reason for the unorthodox location, the original location would have fallen to close to an existing trailer house. (Exhibit C).

Please note that Mack Energy Corporation is the operator of the offsetting proration units in which we are encroaching upon in the Paddock formation of the Loco Hills Paddock Pool, therefore no other operators are to be notified.

*Oil Conservation Division*

*July 23, 1998*

*Page 2*

*Thank you for your assistance in this matter. If you have any questions, please feel free to call.*

*Sincerely,*

*MACK ENERGY CORPORATION*

*Matt J. Brewer*

*Matt J. Brewer  
Geological Engineer*

*/mb*

*Enclosures*

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 86211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-29903	Pool Code 96718	Pool Name Loco Hills Paddock	Well Number JUL 29 1998
Property Code 018384	Property Name McINTYRE A		Elevation 3633
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION		

Surface Location

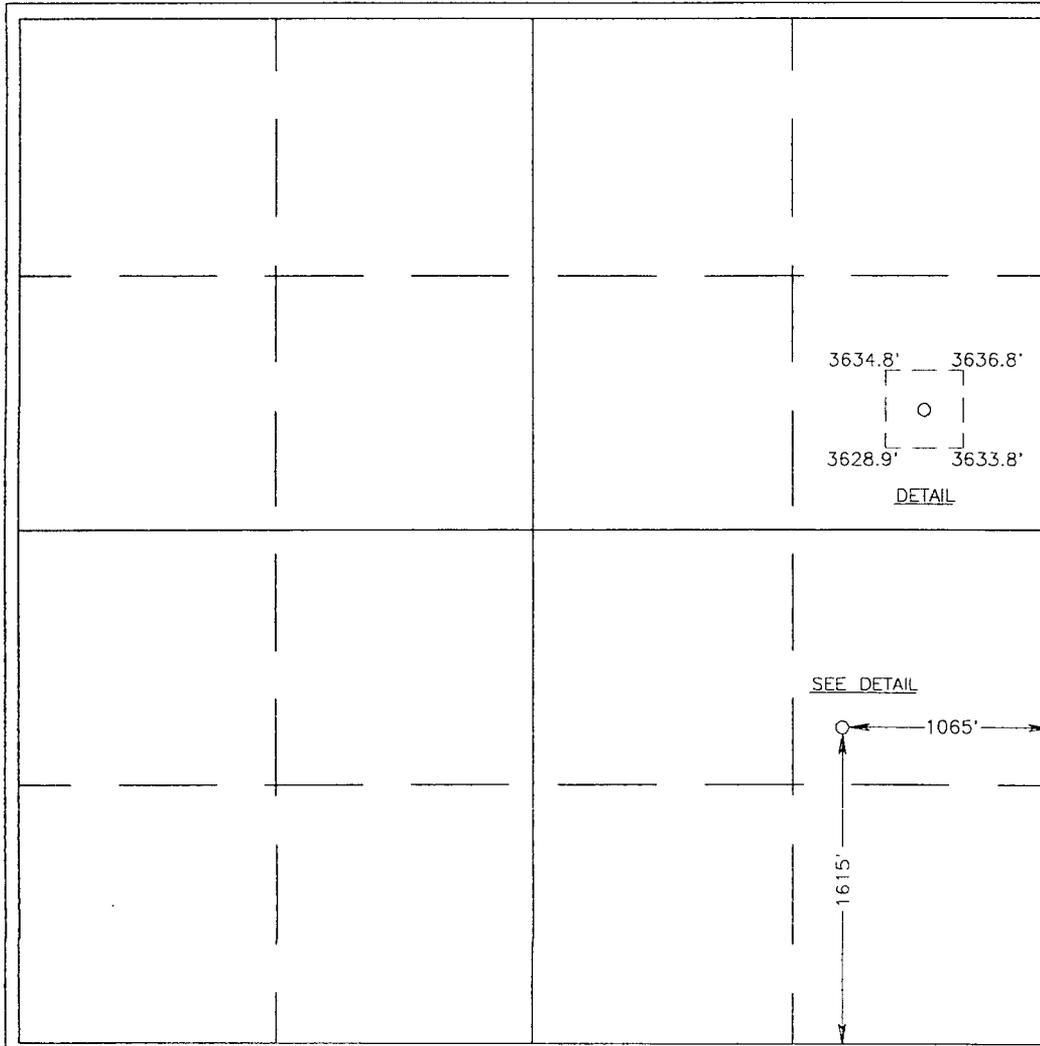
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	20	17 S	30 E		1615	SOUTH	1065	EAST	EDDY

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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



**OPERATOR CERTIFICATION**

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

Matt J. Brewer  
Signature

Matt J. Brewer  
Printed Name

Geological Engineer  
Title

7/23/98  
Date

---

**SURVEYOR CERTIFICATION**

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.

JULY 10, 1998  
Date Surveyed

DMCC  
Signature

RONALD E. EDSON  
Professional Surveyor

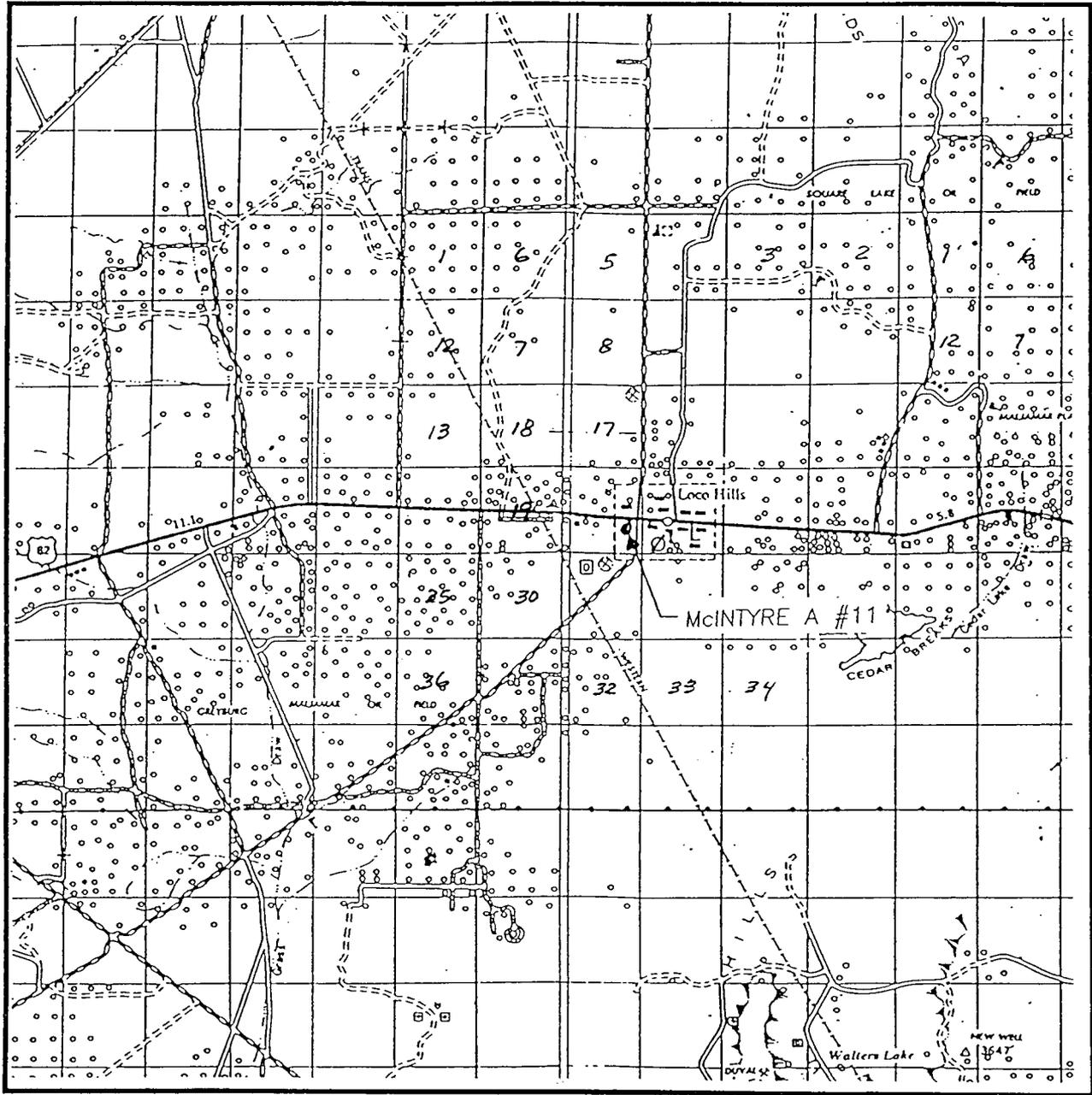
7-20-98  
Date

98-11-10  
Registration No.

Certificate No. RONALD E. EDSON 3239  
GARY EDSON 12641  
GARY EDSON 12185



# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1615' FSL & 1065' FEL

ELEVATION 3633

OPERATOR MACK ENERGY CORPORATION

LEASE McINTYRE A

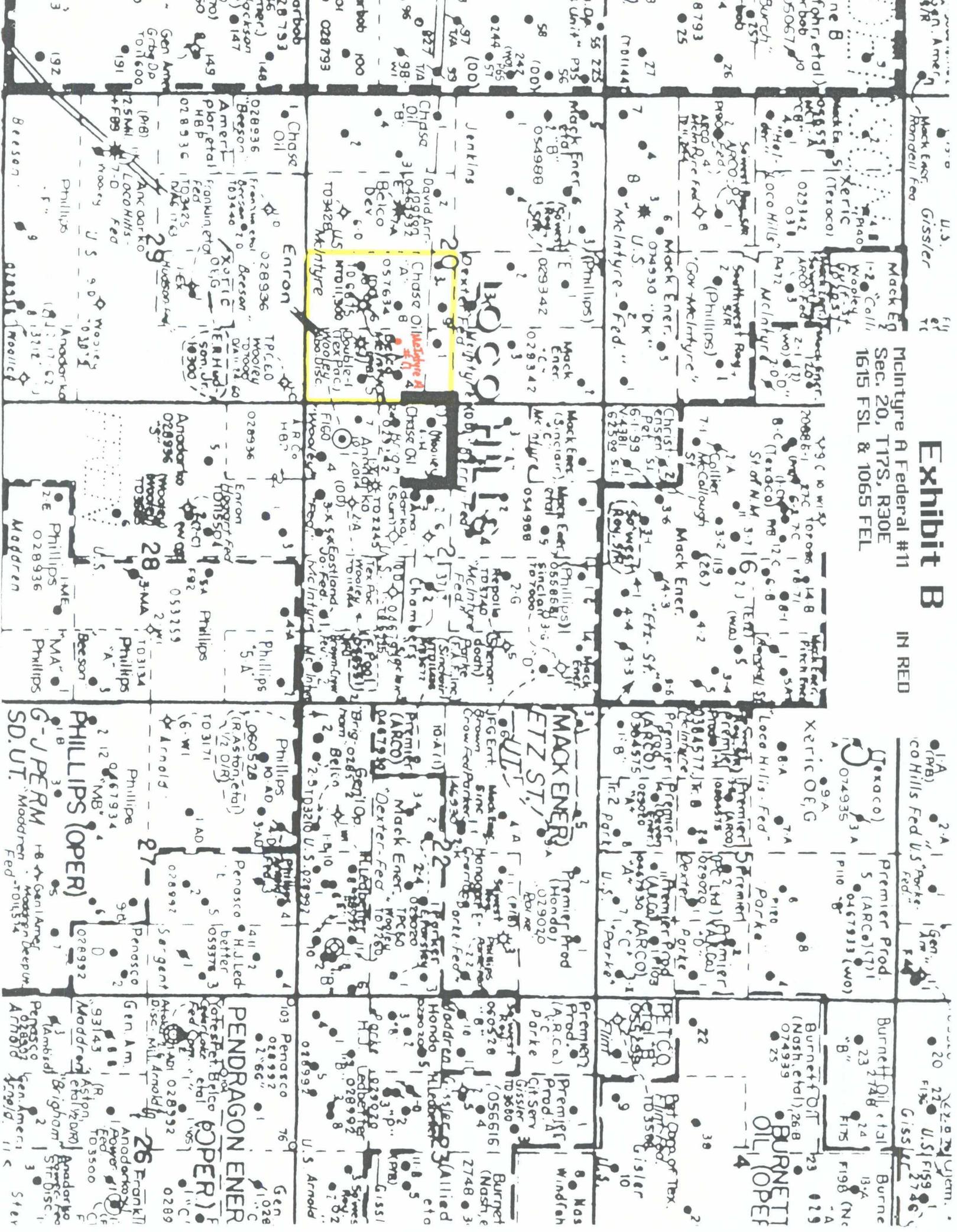
**JOHN WEST ENGINEERING  
HOBBS, NEW MEXICO**

**(505) 393-3117**

# Exhibit B

IN RED

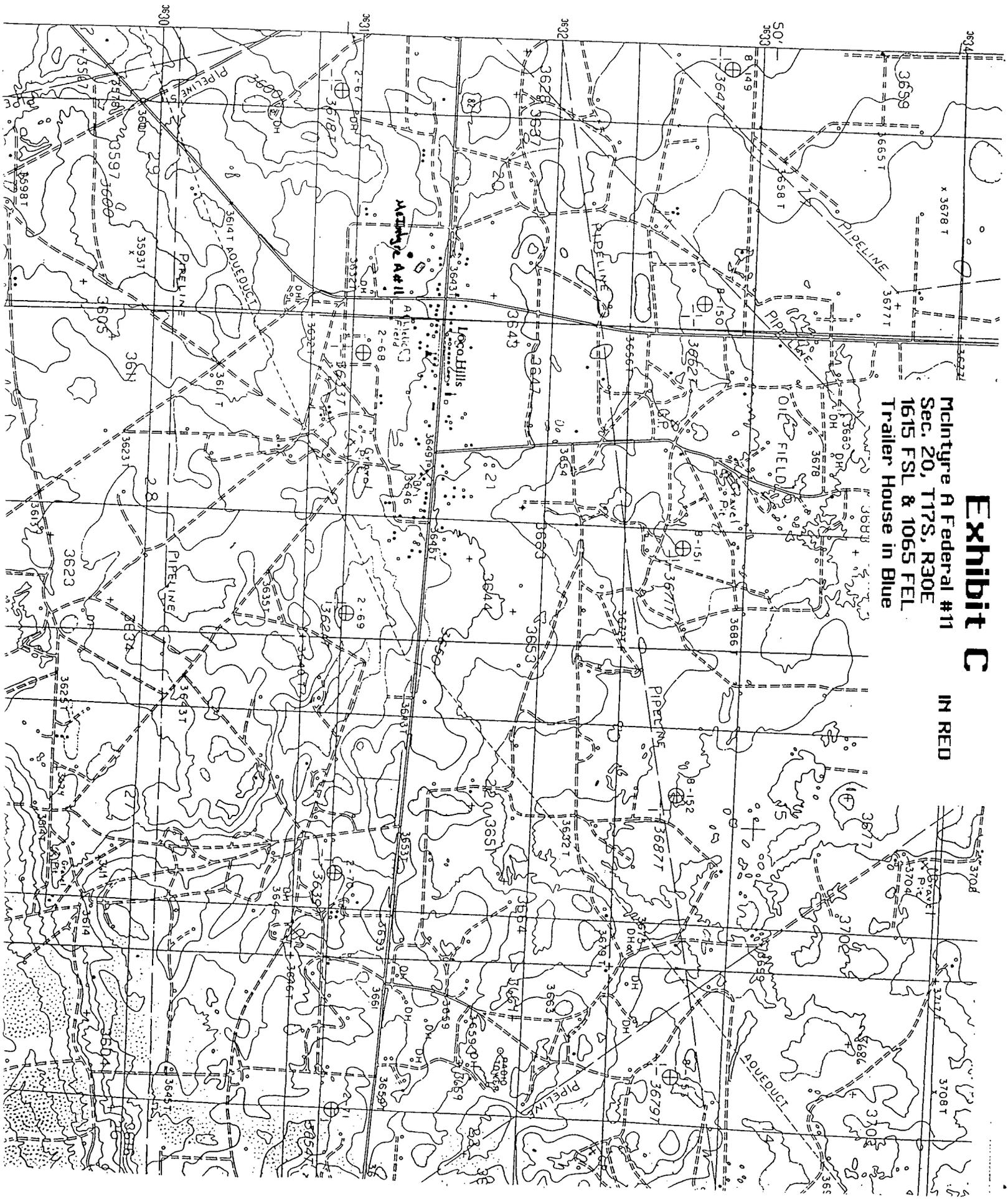
McIntyre A Federal #11  
Sec. 20, T1PS, R30E  
1615 FSL & 1065 FEL



# Exhibit C

IN RED

McIntyre A Federal #11  
Sec. 20, T17S, R30E  
1615 FSL & 1065 FEL  
Trailer House in Blue



Sec : 20 Twp : 17S Rng : 30E Section Type : NORMAL

D 40.00  Federal owned  A A	C 40.00  Federal owned  A A	B 40.00  Federal owned  A A	A 40.00  Federal owned  A
E 40.00  Federal owned  A A A	F 40.00  Federal owned  A A	G 40.00  Federal owned  A A A A	H 40.00  Federal owned  A A A

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06  
PF07 BKWD      PF08 FWD          PF09 PRINT      PF10 SDIV      PF11              PF12

Sec : 20 Twp : 17S Rng : 30E Section Type : NORMAL

19 9.40	20 1.10	21 29.52	K 40.00	J 40.00	***	***	***
Federal owned			Federal owned	Federal owned	Federal owned		
A	A	A	A	A	A	A	A
M 40.00			N 40.00	O 40.00			P 40.00
Federal owned			Federal owned	Federal owned	Federal owned		
A	A			A	A	A	A

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06  
PF07 BKWD      PF08 FWD          PF09 PRINT      PF10 SDIV      PF11              PF12

Sec : 20 Twp : 17S Rng : 30E Section Type : NORMAL

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Federal owned			Federal owned		Federal owned		
A	A	A	A	A	A	A	A
M 40.00			N 40.00	O 40.00	P 40.00		
Federal owned			Federal owned		Federal owned		
A	A			A	A	A	A

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06  
PF07 BKWD      PF08 FWD          PF09 PRINT      PF10 SDIV      PF11              PF12



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

April 16, 1997

**Mack Energy Corporation**  
**P. O. Box 960**  
**Artesia, New Mexico 88211-0960**  
**Attention: Crissa D. Carter**

*Administrative Order NSL-3788*

Dear Ms. Carter:

Reference is made to your application dated March 21, 1997 for a non-standard oil well location for the existing McIntyre "A" Well No. 1 (API No. 30-015-04219), located approximately 2430 feet from the South line and 990 feet from the East line (Unit I) of Section 20, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.

The application has been duly filed under the provisions of Rule 104.F of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11,351 on January 18, 1996.

By the authority granted me under the provisions of Division General Rule 104.F(2), the above-described unorthodox oil well location is hereby approved.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay".

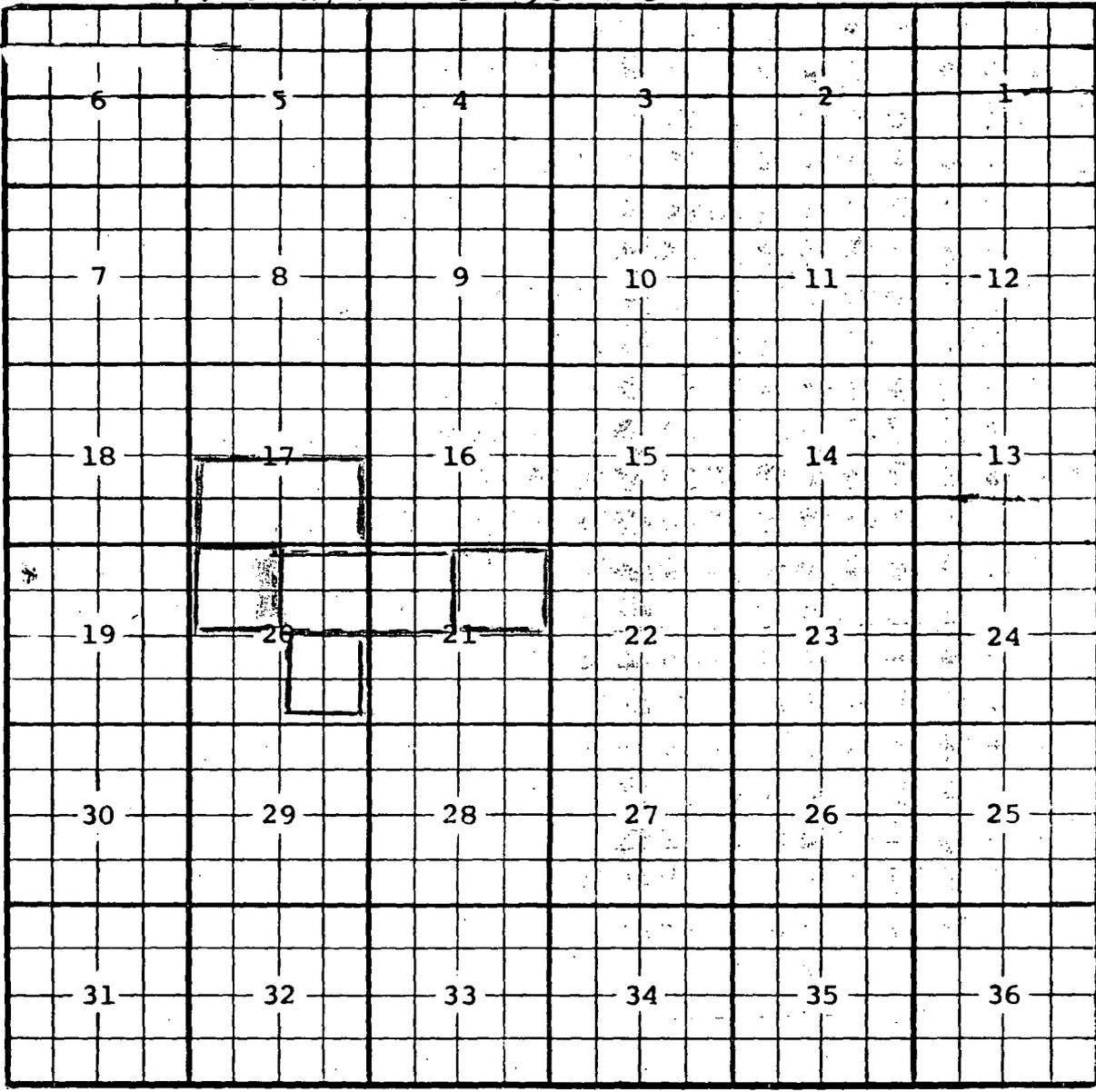
William J. LeMay  
Director

WJL/MES/kv

cc: Oil Conservation Division - Artesia  
U. S. Bureau of Land Management - Carlsbad

County Eddy Pool Loco Hills-Paddock

TOWNSHIP 17 South Range 30 East NMPM



Description: NW/4 Sec. 20 (R-10822, 6-17-97)

Ext: NE/4 Sec. 20, NW/4 Sec. 21 (R-10951, 2-4-98)

Ext: S/2 Sec. 17, SE/4 Sec. 20, NE/4 Sec. 21 (R-11003, 7-24-98)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL [X] DEEPEN [ ]
b. TYPE OF WELL OIL WELL [X] Gas Well [ ] OTHER [ ] SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR Mack Energy Corporation 13837

3. ADDRESS AND TELEPHONE NO P.O. Box 960, Artesia, NM 88211-0960 (505) 748-1288

4. LOCATION OF WELL (Report location clearly and in accordance with any state requirement.) At surface 1650 FSL 990 FEL LOT I At proposed prod. zone Mt, I 1650 FSL 990 FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* .25 miles North Loco Hills

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 330
16. NO. OF ACRES IN LEASE 80
17. NO. OF ACRES IN LEASE TO THIS WELL 40
18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT. 330
19. PROPOSED DEPTH 5500
20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3635 GR
22. APPROX. DATE WORK WILL START\* 4/31/97

Table with 5 columns: SIZE OF HOLE, GRADE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 12 1/4 K-55, 8 5/8 24 450 7 7/8 J-55, 5 1/2 17 5500 Suff to Circ

Mack Energy proposes to drill to a depth sufficient to test the Paddock and San Andres formation for oil. If productive, 5 1/2" casing will be cemented. If non-productive, the well will be plugged and abandoned in a manner consistent with federal regulation. Specific programs as per Onshore Oil and Gas Order #1 are outlined in the following attachments:

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Drilling Program

Surface Use & Operating Plan

Exhibit #1 & 1A - Blowout Preventer Equipment

Exhibit #2 - Location and Elevation Plat

Exhibit #3 - Planned Access Road

Exhibit #4 - One-Mile Radius Map

Exhibit #5 - Production Facilities Layout

Exhibit #6 - Location Layout

Exhibit #7 - H2S Drilling Operations Plan

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Production Clerk DATE 3/26/97

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY [Signature] TITLE Acting [Title] DATE 10-23-97

\*See Instructions On Reverse Side

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
D.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-015-29903</b>	Pool Code 29260	Pool Name Grayburg Paddock
Property Code 018384	Property Name McINTYRE A	Well Number 11
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION	Elevation 3635'

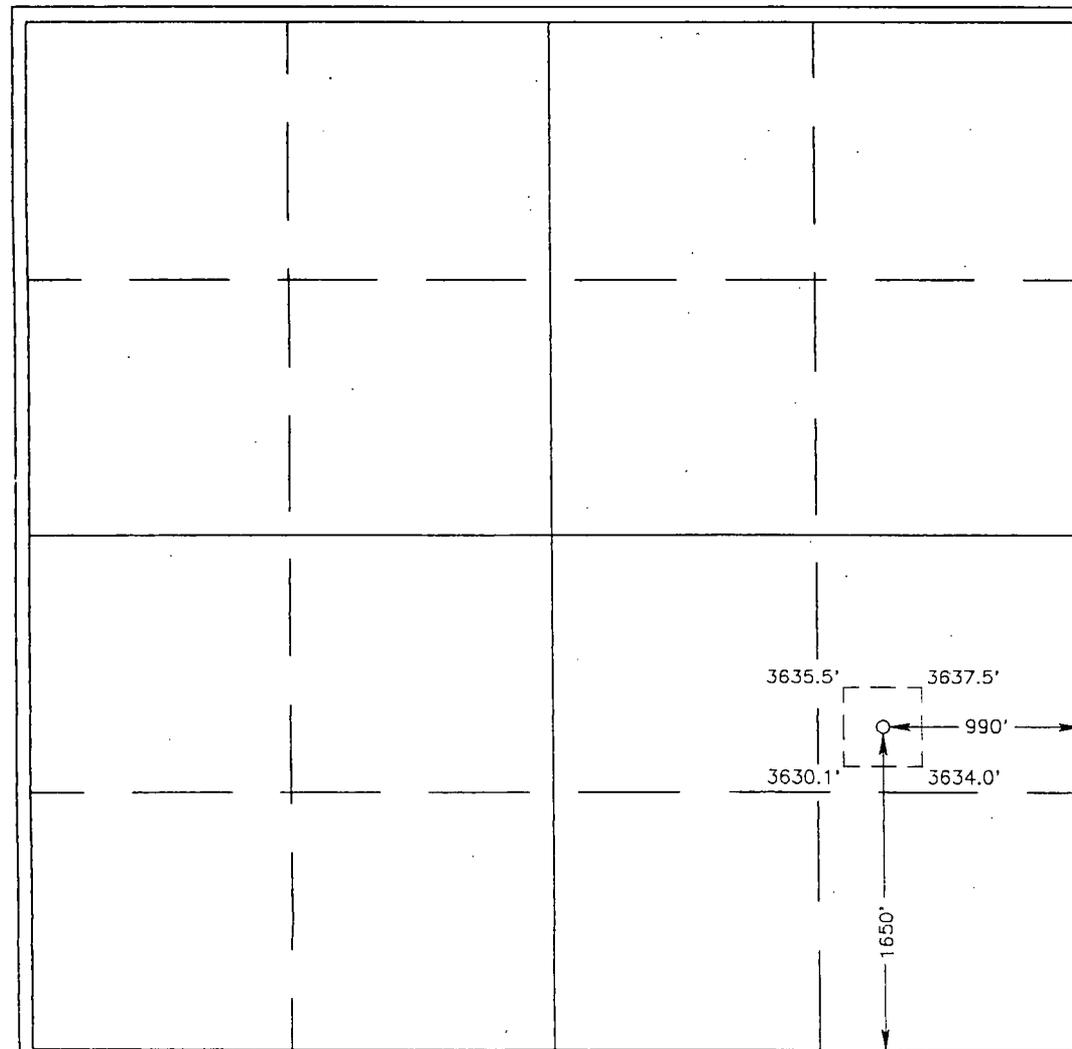
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	20	17 S	30 E		1650	SOUTH	990	EAST	EDDY

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
<b>40</b>									
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

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



**OPERATOR CERTIFICATION**

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

Crissa D. Carter  
Signature

Crissa D. Carter  
Printed Name

Production Clerk  
Title

3-26-97  
Date

---

**SURVEYOR CERTIFICATION**

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.

DECEMBER 30, 1996  
Date Surveyed

CDG  
Signature

RONALD J. EDSON  
Professional Surveyor

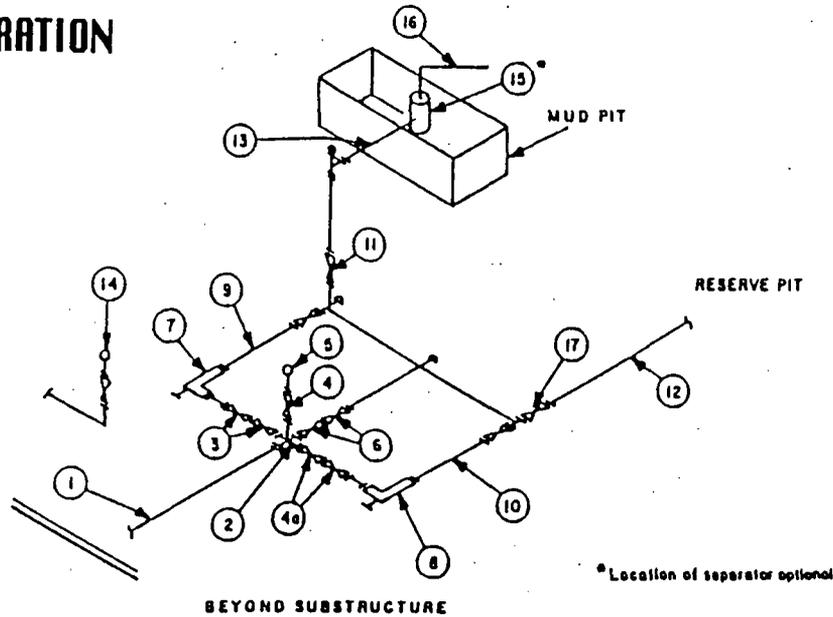
3-14-97  
Date

36-11-167  
Certificate No.

JOHN W. WEST 576  
RONALD J. EDSON 3239  
GARY EDSON 12641

**MINIMUM CHOKE MANIFOLD**  
 3,000, 5,000 and 10,000 PSI Working Pressure  
 2M will be used, or greater  
 3 MWP - 5 MWP - 10 MWP

**MACK ENERGY CORPORATION**  
 EXHIBIT #1-A



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000	3"		10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves (1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
8	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
18	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

**EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bands or 90° bands using bull plugged tees.

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

2,000 psi Working Pressure

2 MWP

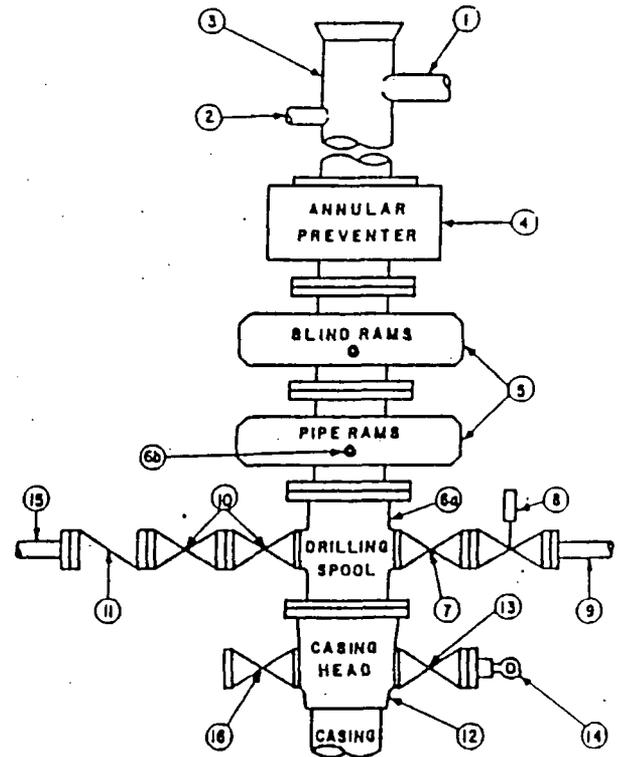
MACK ENERGY CORPORATION  
EXHIBIT #1-A

STACK REQUIREMENTS

No.	Item	Min. I.O.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		2" Chokes
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL			
16	Flanged valve	1-13/16"	

CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2,000 psi, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- BOP controls; to be located near drillers position.
- Kelly equipped with Kelly cock.
- Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- Plug type blowout preventer tester.
- Extra set pipe rams to fit drill pipe in use on location at all times.
- Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

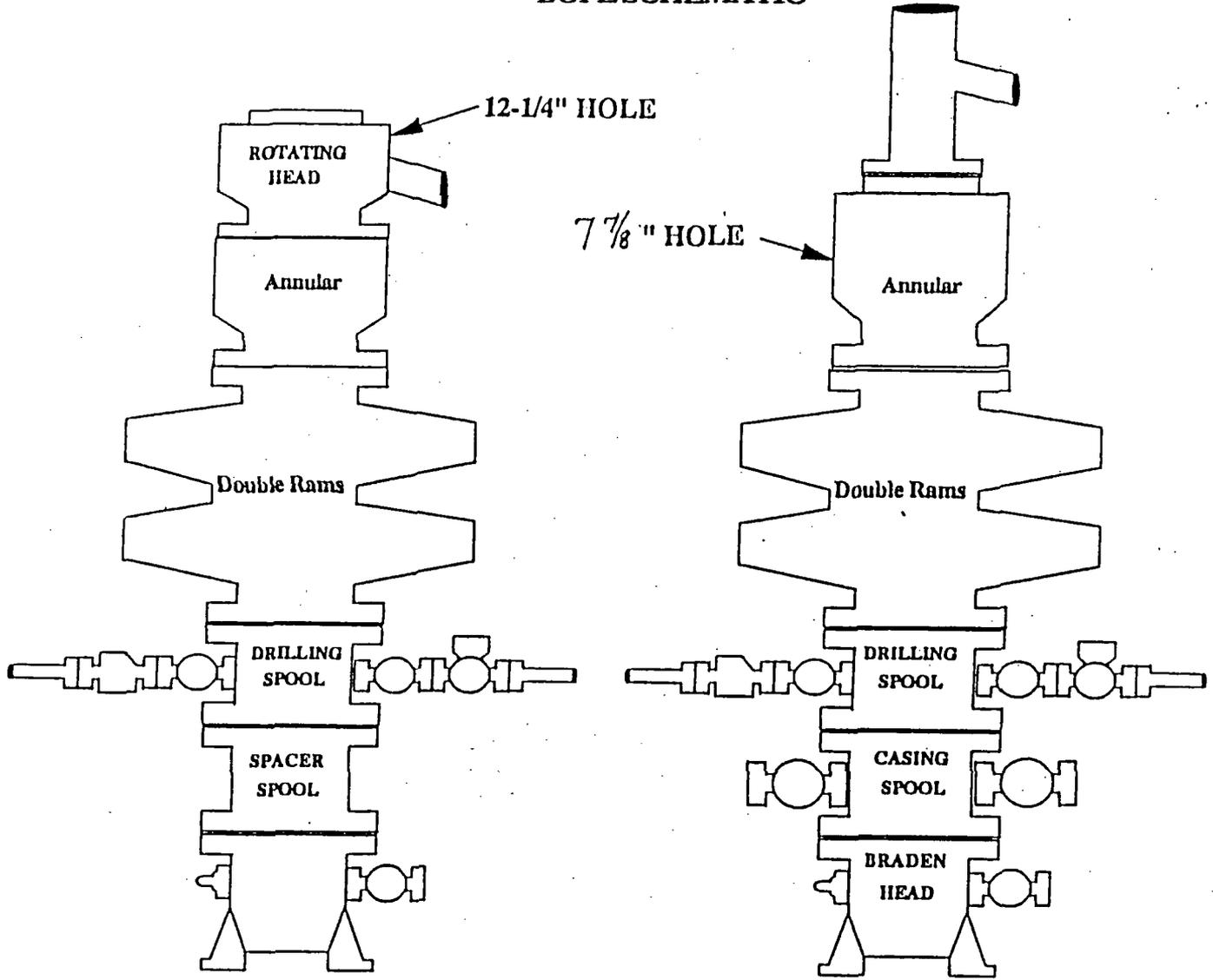
- Bradenhead or casinghead and side valves.
- Wear bushing, if required.

GENERAL NOTES:

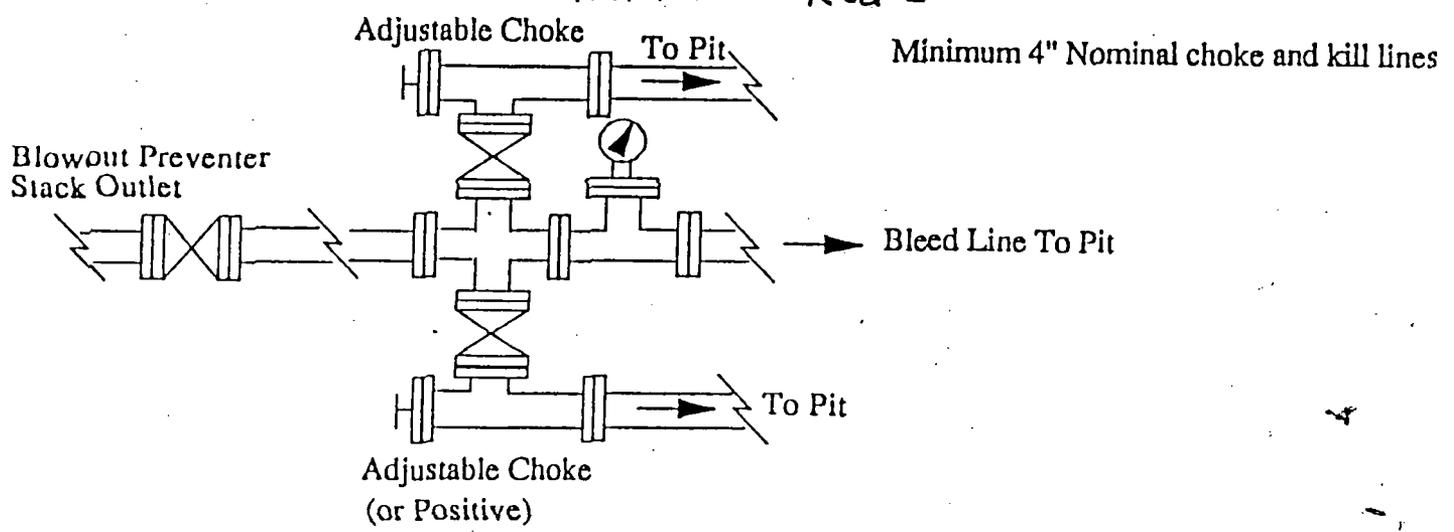
- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chokes. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- Choke lines must be suitably anchored.

- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (2,000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- Do not use kill line for routine fill-up operations.

BOPE SCHEMATIC



Choke Manifold Requirement (2,000 psi WP)  
 NO ANNULAR REQ'D



Minimum 4" Nominal choke and kill lines

**MACK ENERGY CORPORATION**  
 EXHIBIT #1-A