

Form 3160-3  
(July 1989)  
(formerly 9-331C)

NEW OIL CONS. COMMISSION

Drawer DD

UNITED STATES

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

CONTACT READING  
OFFICE FOR ORDER  
OF COPIES REQUIRED  
(Other instructions on  
reverse side)

BLM Roswell District  
Modified Form No.  
NM060-3160-2

Dec 24 10 15 AM '92

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1. TYPE OF WORK

AREA DRILL ☒ DEEPEN ☐ PLUG BACK ☐

## 2. TYPE OF WELL

OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

## 3. NAME OF OPERATOR

Mack Energy Corporation

## 3a. Area Code & Phone No.

(505) 748-1288

## 4. ADDRESS OF OPERATOR

P.O. Box 1359, Artesia, NM 88211-1359

## 5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface  
2160 FNL and 1650 FEL

## 6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

ELEVATIONS (Show whether DF, RT, GB, etc.)

## 16. NO. OF ACRES IN LEASE

425.94

## 19. PROPOSED DEPTH

4600'

## 17. NO. OF ACRES ASSIGNED TO THIS WELL

40

## 20. ROTARY OR CABLE TOOLS

SSS

## 22. APPROX. DATE WORK WILL START\*

2/1/93

## PROPOSED CASING AND CEMENTING PROGRAM

CASE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
7 1/2	13 3/8	545#	K-55	LT&C	125'	Sufficient to circ.
2 1/4	8 5/8	24#	J-55	LT&C	800'	Sufficient to circ.
7 7/8	5 1/2	17#	J-55	LT&C	4600'	Sufficient to circ. (He back @ min.)

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

## Cementing Program

Surface Use & Operating Plan

Exhibit #1 & 1A - Blowout Preventor Equip

Exhibit #2 - Location & Elevation Plat

Exhibit #3 - Planned Access Road

Exhibit #4 - One-mile Radius Map

Exhibit #5 - Production Facilities Layout

Exhibit #6 - Location Layout

Page 10-1

1-20-92

NEW LOG - API

FACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 program, if any.

Crisa D. Carter

TITLE Production Clerk

DATE 12/23/92

Space for Federal or State office use)

APPROVAL DATE

BY

TITLE

DATE 1-26-93

IN OF APPROVAL, IF ANY:

IL SUBJECT TO

REQUIREMENTS AND

STIPULATIONS

\*See Instructions On Reverse Side

Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

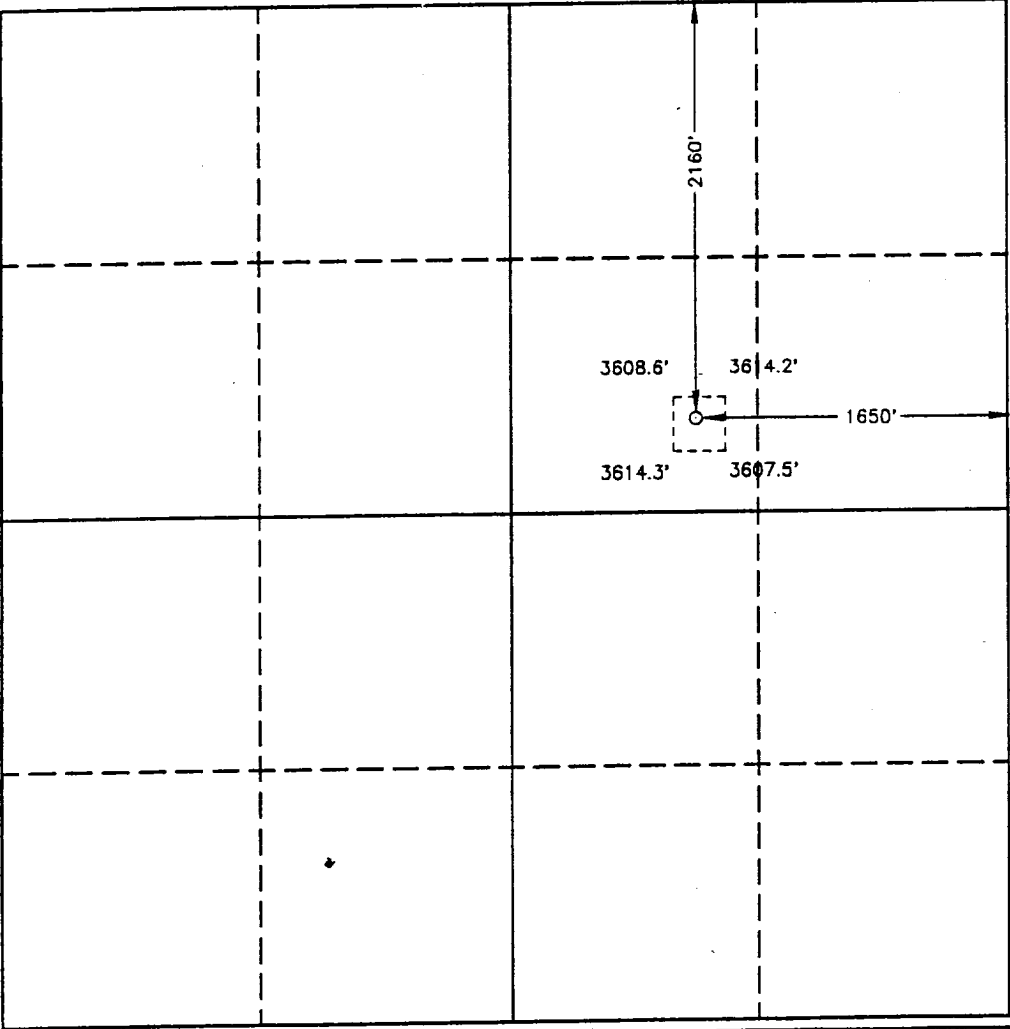
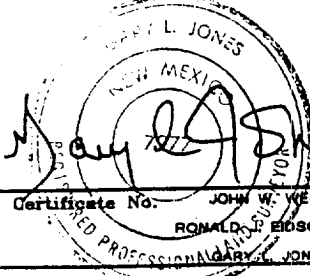
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Artec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>MACK ENERGY CORPORATION</b>		Lease <b>FOLK FEDERAL</b>		Well No. <b>3</b>
Unit Letter <b>G</b>	Section <b>17</b>	Township <b>17 SOUTH</b>	Range <b>29 EAST</b> NMPM	County <b>EDDY</b>
Actual Footage Location of Well: <b>2160</b> feet from the <b>NORTH</b> line and <b>1650</b> feet from the <b>EAST</b> line				
Ground Level Elev. <b>3611.9'</b>	Producing Formation <b>San Andres</b>	Pool <b>Grayburg-Jackson</b>	Dedicated Acreage: <b>40</b> Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. <b>(SJS)</b></p> <p>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).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary. _____)</p> <p>No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>				
			<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.	
			Signature <i>Crissa D. Carter</i> Printed Name <b>Crissa D. Carter</b> Position <b>Production Clerk</b> Company <b>Mack Energy Corp.</b> Date <b>12/21/92</b>	
			<b>SURVEYOR CERTIFICATION</b>  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 <b>DECEMBER 8, 1992</b> Signature & Seal of Professional Surveyor  Certificate No. <b>JOHN W. WEST, 676</b> <b>RONALD P. EDSON, 3239</b> <b>GARY L. JONES, 7977</b> <b>92-11-1920</b>	

# MACK ENERGY CORPORATION

Post Office Box 1359  
Artesia, New Mexico 88211-1359  
(505) 748-1288

## DRILLING PROGRAM

Attached to Form 3160-3  
Mack Energy Corporation  
Folk Federal #3  
2160' FNL & 1650' FEL  
SW/4 NE/4, SEC 17 T17S R29E  
EDDY CO., N.M.

1. Geologic Name of Surface Formation:

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface
Top of Salt	300'
Base of Salt	800'
Yates	1250'
Queen	1800'
Grayburg	2350'
San Andres	2600'
Glorietta	3800'

3. Estimated Depths of Anticipated Fresh Water, Oil and Gas:

Water Sand	150'	Fresh Water
Grayburg	2350'	Oil/Gas
San Andres	2600'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. The surface fresh water sand will be protected by setting 13-3/8" csg to 125' and circulating cement back to surface. <sup>salt</sup> Potash will be protected by setting 8-5/8" csg to 800' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by cementing 5 1/2" production csg which will be run at TD.

FOLK FEDERAL NO.3  
DRILLING PROGRAM  
PAGE 2

4. Casing Program:

Hole Size	Interval	OD Csg	Weight, Grade, Jt, Cond., Type
17-1/2"	0-125	13-3/8	54.5#, K-55, ST&C, NEW, R-3
12-1/4"	0-800	8-5/8	24# <del>32</del> #, K-55, ST&C, NEW, R-3
7-7/8"	0-TD	5-1/2"	17#, J-55, ST&C, NEW, R-3

532

Cement Program:

13-3/8" Surface Casing: Cement to Surface with Class C w/2% CaCl<sub>2</sub>.

8 5/8" Intermediate Casing: Cement to Surface with Class C w/2% CaCl<sub>2</sub>.

5 1/2" Production Casing: Cement Casing with Class C w/6# Salt & 2/10 of 1% CFR-3 per sack. We will run a hole caliper and run sufficient cement to Circulate to Surface.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3000 psi WP) preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. The BOP will be nipped up on the 13-3/8" surface csg and used continuously untill TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before Drilling out of intermediate casing, the ram type BOP and accessory equipment will be tested to 3000 psi. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to hte BOP equipment will include a kelly cock and floor safety valve and choke lines and choke manifold with 3000 psi WF rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-300'	Fresh wtr	8.5	28	N.C
300-800'	Brine	10	30	N.C
800-4600'	Brine	10	28	N.C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe stabbing valve with proper drill pipe connections will be on the rig floor at all times.

8. Logging, Testing and Coring Program:

- (A) The electric logging program will consist of GR-Dual Laterolog, Spectral Density Dual Spaced Neutron CSNG Log from TD to Base Salt.
- (B) No Drillstem test is anticipated.
- (C) No conventional coring is anticipated.
- (D) Further testing procedures will be determined after the 5 1/2' production casing has been cemented at TD based on drill shows and log evaluation,

9. Abnormal Conditions, Pressures, Temperatures,  
& Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 110 degrees and estimated maximum bottom hole pressure is 2300 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered while drilling of these well in this area. No major loss circulation zones have been reported in offsetting wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is Febuary 1, 1993. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

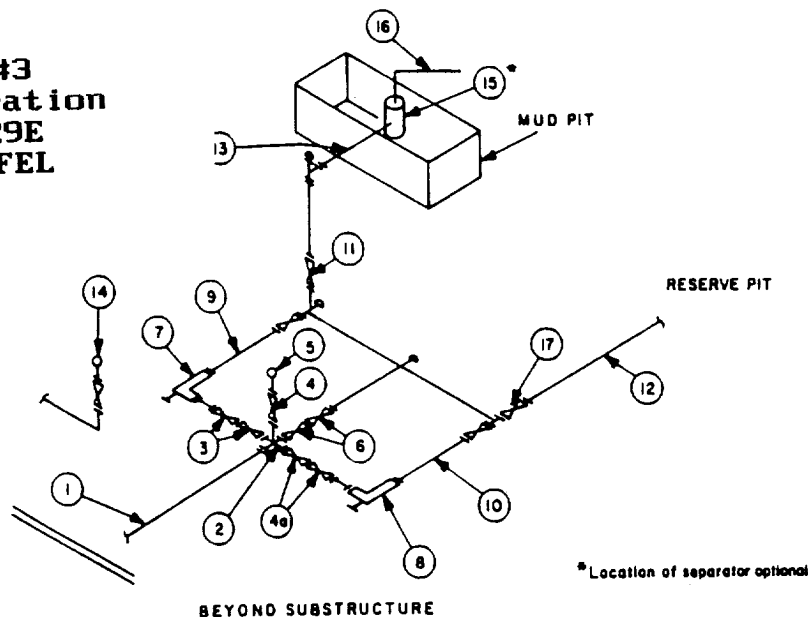
Attachment to Exhibit #1  
NOTES REGARDING THE BLOWOUT PREVENTERS  
Folk Federal No. 3  
Eddy County, New Mexico

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.
4. All fittings to flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 3000 psi W.P. minimum.
6. All choke and fill lines to be securely anchored, expecially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on kelly.
9. Extension wrenches and hand wheels to be properly installed.
10. Blow out preventer control to located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

**MINIMUM CHOKE MANIFOLD**  
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

**EXHIBIT #1-A**  
**FOLK FEDERAL #3**  
**Mack Energy Corporation**  
**SEC 17 T17S R29E**  
**2160 FNL 1650 FEL**



MINIMUM REQUIREMENTS									
No.		3,000 MWP			5,000 MWP			10,000 MWP	
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL
1	Line from drilling spool		3"	3,000		3"	5,000		3"
2	Cross 3"x3"x3"x2"			3,000			5,000		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
6	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	Line		2"	3,000		2"	5,000		3"
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"
13	Lines		3"	1,000		3"	1,000		3"
14	Remote reading compound standpipe pressure gauge			3,000			5,000		10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'
16	Line		4"	1,000		4"	1,000		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 bends or 90° bends using bull plugged tees.



# MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

## STACK REQUIREMENTS

No.	Item	Min. I.D.	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		
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"	

### CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

### MEC TO FURNISH:

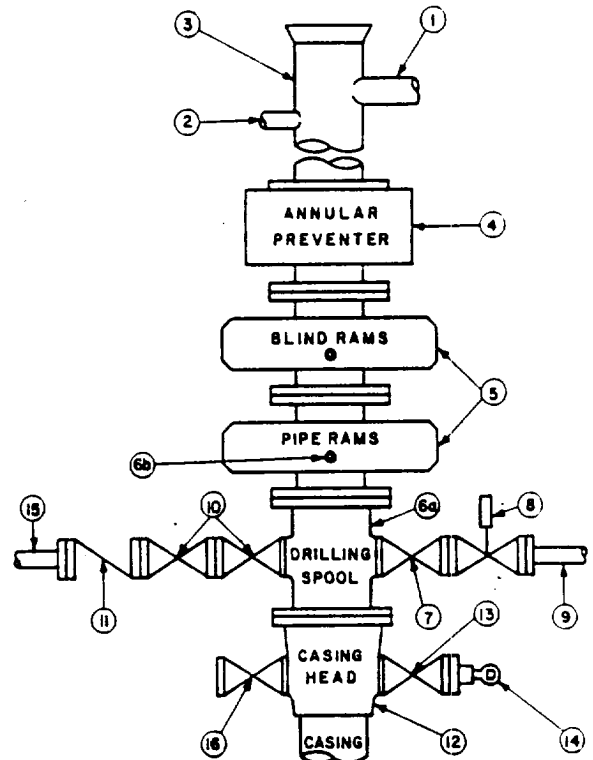
1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

### GENERAL NOTES:

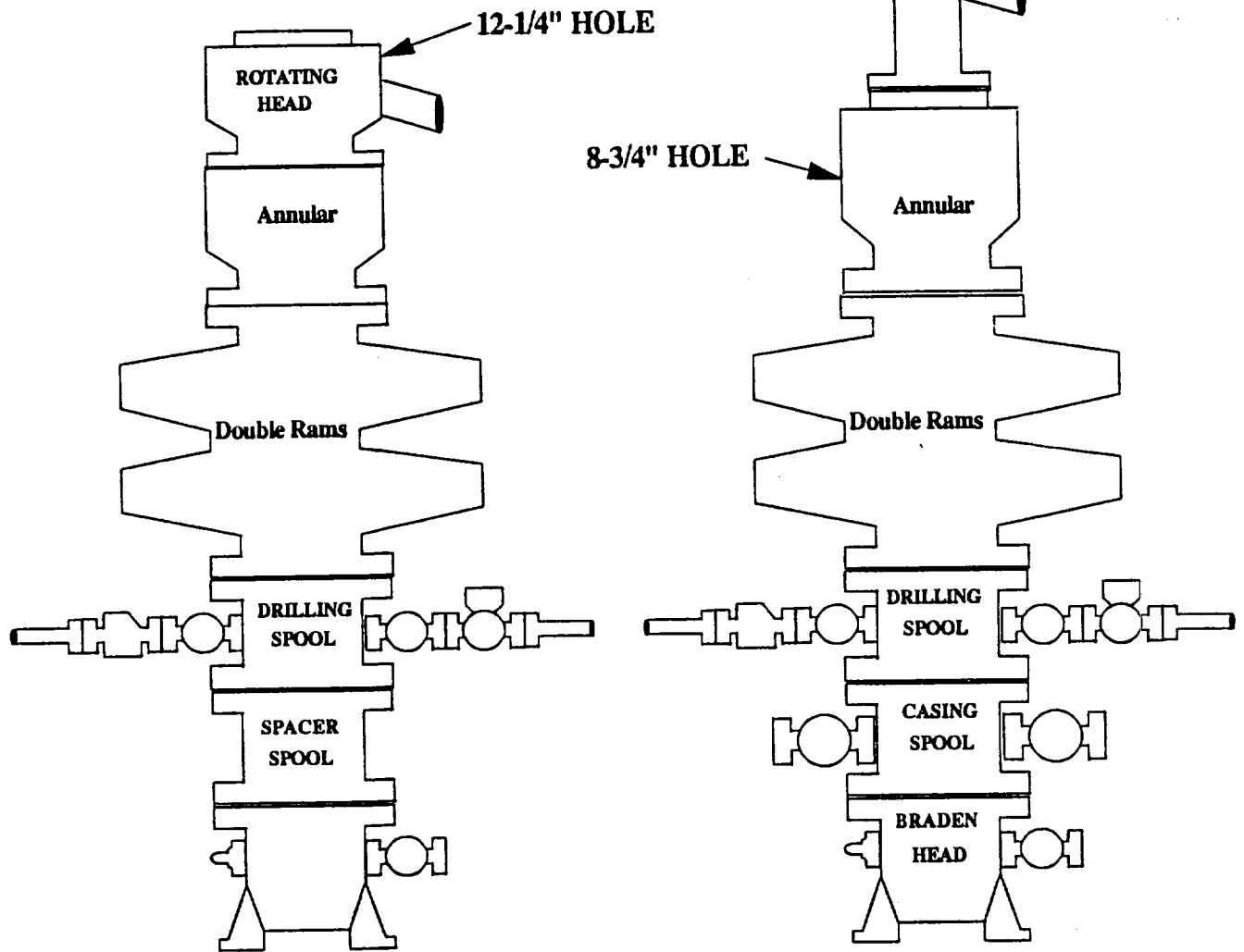
1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. 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.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

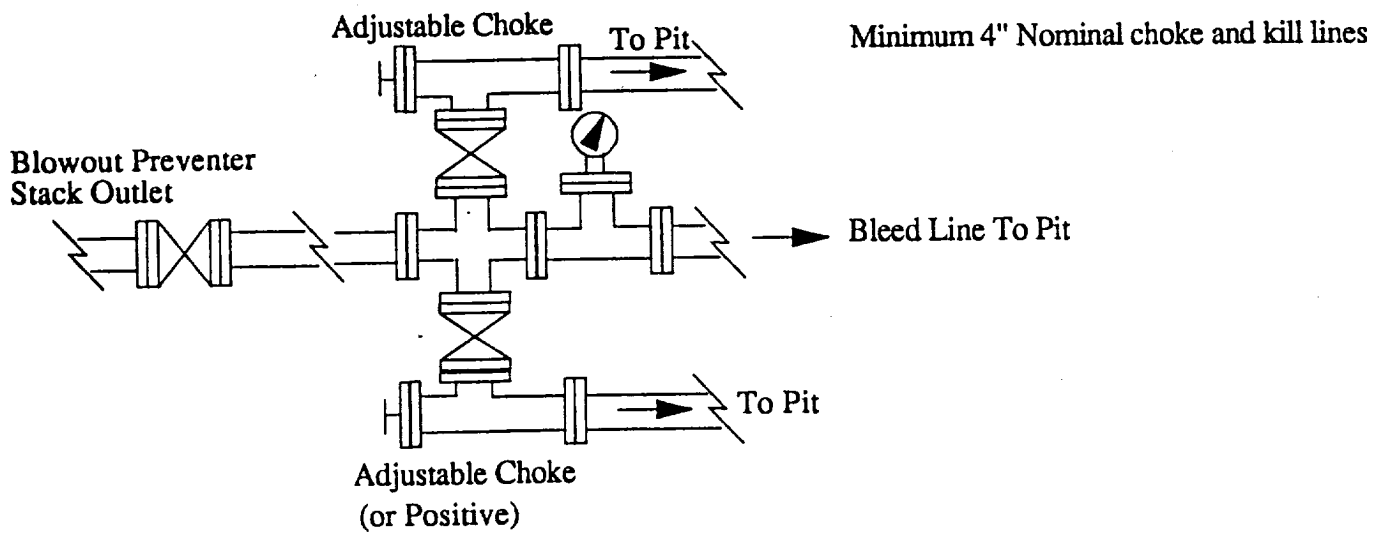
## EXHIBIT #1 FOLK FEDERAL #3 Mack Energy Corporation SEC 17 T17S R29E 2160 FNL 1650 FEL CONFIGURATION A



# BOPE SCHEMATIC



**Choke Manifold Requirement ( 3000 psi WP)**



## SURFACE USE AND OPERATING PLAN

Attached to Form 3160-3  
Mack Energy Corporation  
Folk Federal #3  
2160'FNL & 1650'FEL  
SW/4 NE/4, SEC 17 T17S R29E  
EDDY CO., N.M.

### 1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #2. It was staked by John West Engineering, Hobbs N.M.
- B. All roads to the location are shown in Exhibit #3. The existing roads are illustrated in purple and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.
- C. Directions to Location: Go east 17.62 miles from Artesia, New Mexico on Hwy 82. Turn North on County Road 211 and go 1.34 miles. Turn Right and go .41 miles and proceed 300' north to Folk Federal #3 Location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

### 2. Proposed Access Road:

Exhibit #3 shows the 800' of new access road to be constructed and is illustrated in orange. The road will be constructed as follows:

- A. The Maximum width of the running surface will be 25'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.

FOLK FEDERAL NO. 3  
SURFACE USE AND OPERATING PLAN  
PAGE 2

- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low water crossings, or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM approved caliche pit.
- F. The proposed access road as shown in Exhibit #3 has been centerline flagged by John West Engineering, Hobbs New Mexico.

3. Location of Existing Wells:

Exhibit #4 shows all existing wells within a one mile radius of this well. As shown on this plat there is 1 plug and abandon Grayburg well. Two producing grayburg wells. A list of these wells is shown on the attachment to Exhibit #4. There are no disposal, drilling, SI, injection or observation wells within a one mile radius.

4. Location of Existing and/or Proposed Facilities:

- A. Mack Energy Corporation operates one production facilities on this lease. It is as Follows:  
  
Folk Federal Tank Battery, Unit letter H (Grayburg Jackson)
- B. If the well is productive, contemplated facilities will be as follows:
  - (1) Grayburg Jackson Completion: a 2" steel flowline will be laid along the approved road ROW as shown in Exhibit #3 to the Folk Federal Tank Battery in Unit H. An additional 300 barrel steal oil tank and 6' x 20' heater treater will be installed to handle the additional production. The proposed facilities are shown in Exhibit #5A.
  - (2) The tank battery and facilities including all flowlines and piping will be installed according to API specifications.

- (3) Any additional caliche which is required for firewalls, etc. will be obtained from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.
- (4) It will be necessary to run electric power if this well is productive. Power will be run by CVE and they will send in a separate plan for power.

C. If the well is productive, rehabilitation plans are as follows:

- (1) The reserve pit will be back filled after the contents of the pit are dry (within 120 days after the well is completed).
- (2) Caliche from unused portions of the drill pad will be removed. Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #3. If a commercial fresh water source is nearby, pipeline may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and proposed new access road (approximately 2500 cubic yards) will be obtained from a BLM approved caliche pit or the reserve pit. All roads and pads will be constructed of 6" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

- B. Drilling fluids will be contained in a lined working pit. the reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit, approximately 200' X 50' X 10' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit & working pit will be lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water.
- C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending on the rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass) until pump to an approved disposal system; produced oil will be collected in steel tanks until sold.
- D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.
- E. Garbage and trash produced during drilling or completion operations will collected in a trash bin and hauled to a BLM approved land Fill. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.
- F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill and as weather permits, the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use. In the event of a dry hole only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite, or other facilities will be built as a result of the operation on this well.

9. Well Site Layout:

- A. The drill pad layout, with elevations staked by John West Engineering, is shown in Exhibit #6. Dimensions of the pad and pits are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on site inspection. Because the pad is almost level no major cuts will be required.
- B. Exhibit #6 shows the planned orientation of reserve pit, working pit and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).

10. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, if the well is to be abandoned, the caliche will be removed from the location and road and returned to the pit from which it was taken. The pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible.
- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side to prevent livestock from being entrapped. The fencing will remain in place until the pit area is cleaned up and leveled. No oil will be left on the surface of the fluid in the pit.

- D. Upon completion of proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from any area of the original drillsite not needed for production operations or facilities will be removed and used for construction of thicker pads or firewalls for the tank battery installation. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.
11. Surface Ownership:
- The wellsite and lease is located entirely on Federal surface.
12. Other Information:
- A. The area around the well site is grassland and the top soil is sandy. The vegetation is native scrub grasses with sagebrush.
  - B. There is no permanent or live water in the immediate area.
  - C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.
13. Lessee's and Operator's Representative:
- The Mack Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:
- Robert C. Chase  
Mack Energy Corporation  
P.O. Box 1359  
Artesia New Mexico 88210  
Phone 505/748-1288 (office)  
505/365-7331 (mobile)  
505/746-9570 (home)




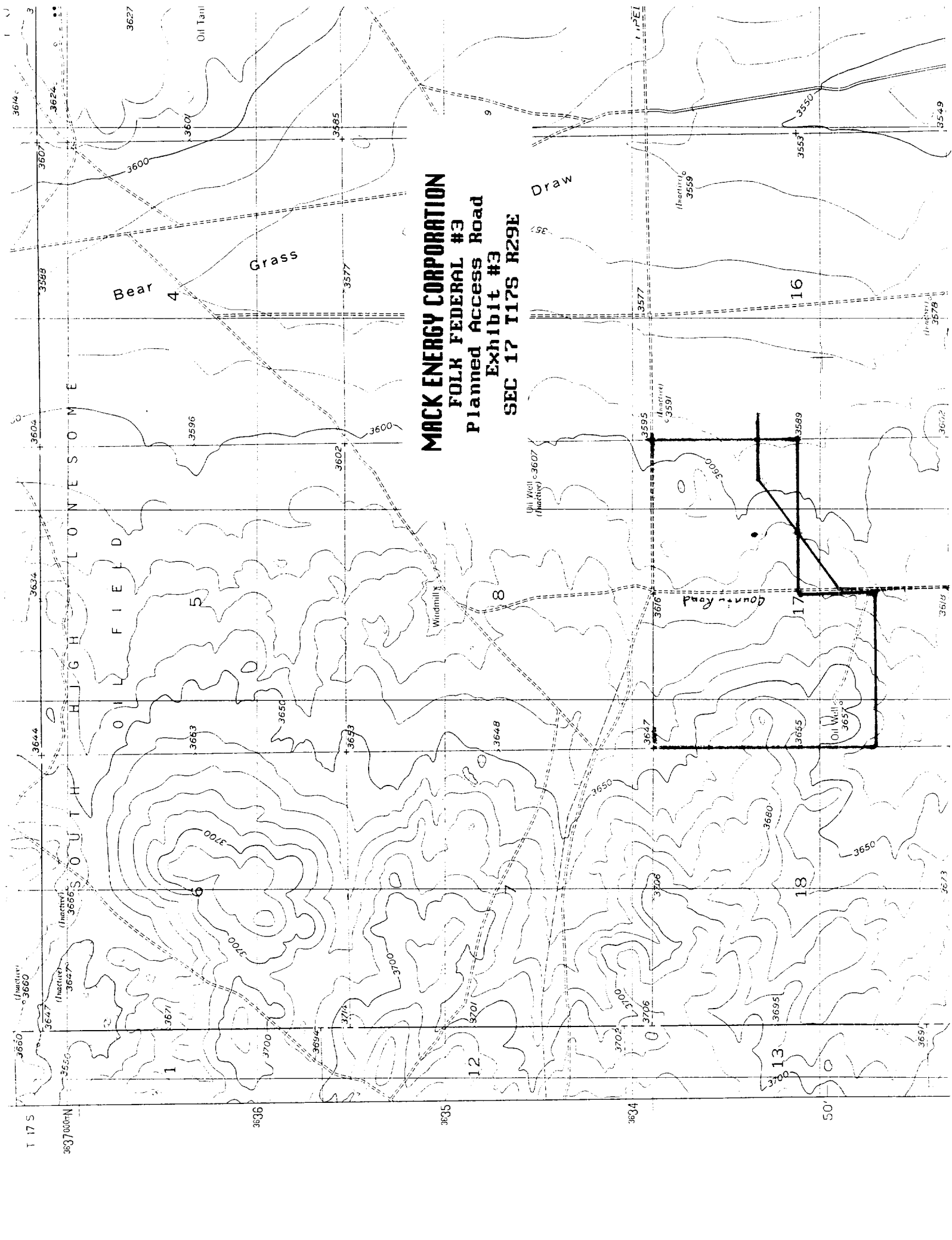
CERTIFICATION

I hereby certify that I, or person under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mack Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved. This statement is subject to the provisions of

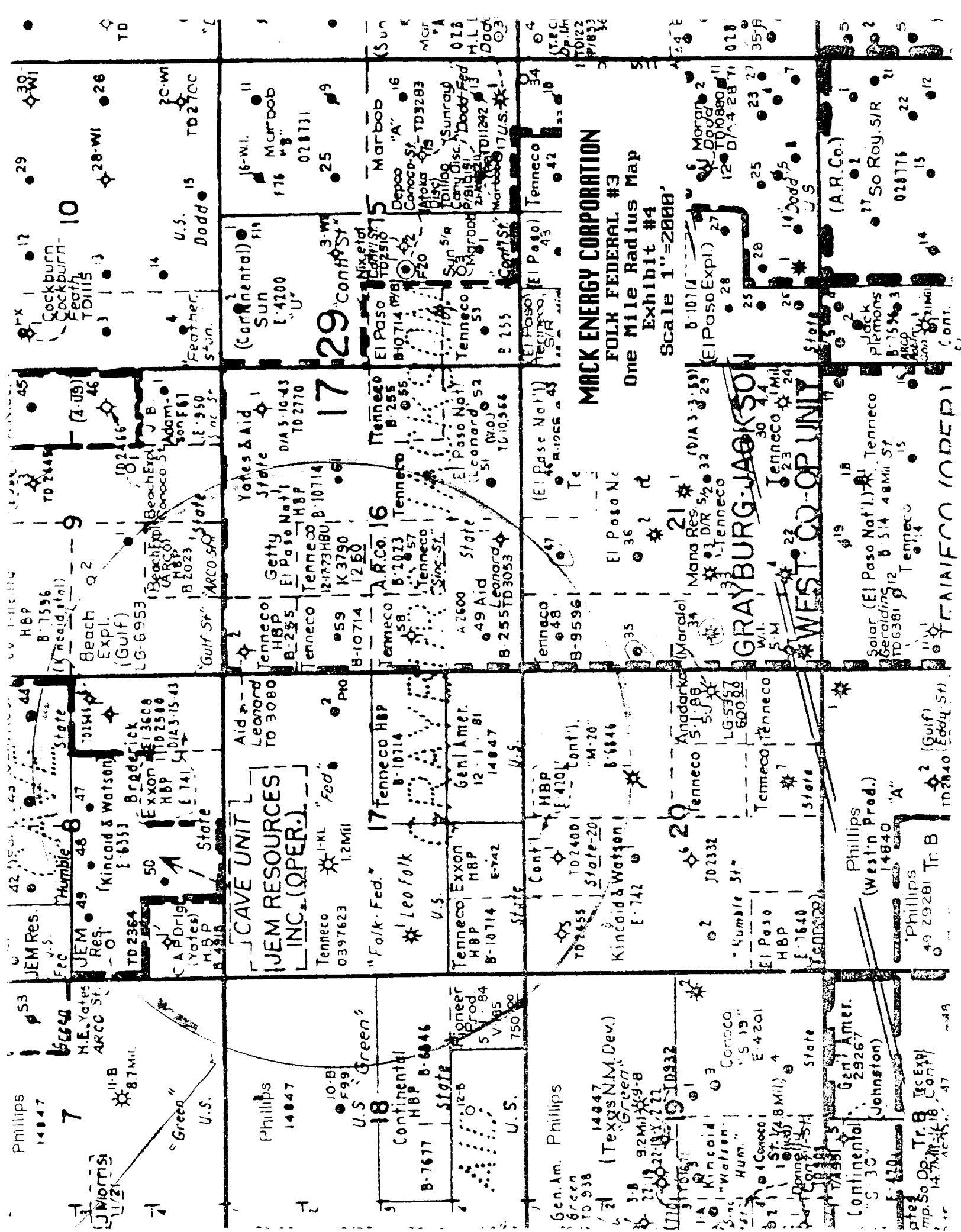
Date: 12-23-92

Signed: \_\_\_\_\_

  
Mack C. Chase  
President



**MACK ENERGY CORPORATION**  
**FOLK FEDERAL #3**  
**Planned Access Road**  
**Exhibit #3**  
**SEC 17 T17S R29E**

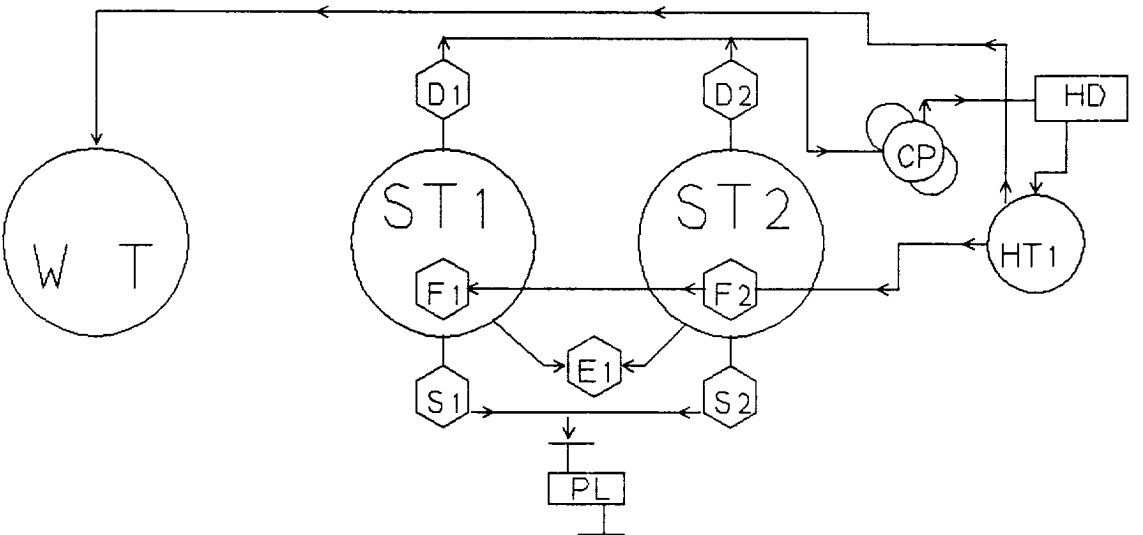


Attachment of Exhibit #4

STATUS OF WELLS WITHIN ONE MILE RADIUS  
Folk Federal #3  
Sec 17 T17S R29E  
Eddy County, New Mexico  
December 1992

Sec 8-T17S-R29E			
H.E. Yates	Arco St. #1	NW/4 SW/4	P&A
Captain Drlg.	Cap. Drlg #1	NW/4 SW/4	P&A
	Broderick #6	NW/4 SW/4	P&A
Arapaho Oil & Gas	Cave Unit #49	NW/4 SW/4	Grayburg Jackson
Arapaho Oil & Gas	Cave Unit #48	NE/4 SW/4	Grayburg Jackson
Arapaho Oil & Gas	Cave Unit #47	NW/4 SE/4	Grayburg Jackson
Arapaho Oil & Gas	Cave Unit #50	SE/4 SW/4	Grayburg Jackson
Arapaho Oil & Gas	Cave Unit #44	SE/4 NE/4	Grayburg Jackson
Arapaho Oil & Gas	Cave Unit #43	SW/4 NE/4	Grayburg Jackson
Sec. 9-T17S-R29E			
Beach Expl.	Arco St. #1	NW/4 SW/4	P&A
Sec. 16-T17S-R29E			
Tenneco Oil Co.	leonard Aid 2	NW/4 NW/4	P&A
Marbob Energy Corp.	GJ West 61	SW/4 NE/4	P&A
Tenneco Oil Co.	GJ West 1	SE/4 SW/4	P&A
Mack Energy Corp.	GJ West #59	SW/4 NW/4	Grayburg Jackson
Mack Energy Corp.	GJ West #57	NE/4 SW/4	Grayburg Jackson
Mack Energy Corp.	GJ West #58	NW/4 SW/4	Grayburg Jackson
Mack Energy Corp.	GJ West #49	SW/4 SW/4	Grayburg Jackson
Sec. 17-T17S-R29E			
Tenneco Oil Co.	Folk Fed 1	NW/4 SW/4	P&A
Fina Oil & Gas	Fed. #1-KL	SE/4 NW/4	MORROW
Sec. 20-T17S-R29E			
Continetal Oil	Cont'l #1	NW/4 SW/4	P&A
Kincaid & Watson	Humble St. #5	NW/4 SW/4	P&A
Sec. 21-T17S-R29E			
Mack Energy Corp.	GJ West #48	NW/4 NW/4	Grayburg Jackson

# EXHIBIT #5



FOLK FED. #2  
 WELL BORE

MACK ENERGY
PROPOSED PRODUCTION FACILITY
EDDY COUNTY N.M.

EXISTING ROAD ENTRY

EXISTING ROAD ENTRY

LEGEND  
1 INCH = 56 FEET

EXHIBIT #6  
SKETCH OF PROPOSED WELL PAD  
FOLK FEDERAL NO 3  
SW/4 NE/4 SEC 17 T17S R29E  
EDDY COUNTY, NEW MEXICO

