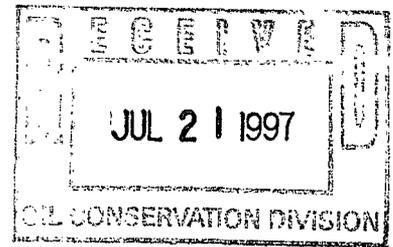


NSL

8/11/97

MACK ENERGY CORPORATION

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



July 18, 1997

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 pursuant to Order R-7808 of the New Mexico Oil Conservation Division.

The well location and legal description is as follows:

Jenkins B Federal #7
1650 FNL & 1090 FWL
Sec. 20-T17S-R30E
Eddy County, New Mexico

~~30-015-29755~~
30-015
29451

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 location, 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 under the existing power lines (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 required to be notified.

*Oil Conservation Division
July 18, 1997
Page 2*

Thank you for your assistance in this matter. If you have any questions, please feel free to call me at (505)748-1288.

Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Matt J. Brewer".

*Matt J. Brewer
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 88211-0719

OIL CONSERVATION DIVISION
P.O. Box 2088

Santa Fe, New Mexico 87504-2088

AMENDED REPORT

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
		28509	Grayburg Jackson 7RVS-QN-GB-SA
Property Code	Property Name		Well Number
006125	JENKINS B Federal		7
OGRID No.	Operator Name		Elevation
013837	MACK ENERGY CORPORATION		3629

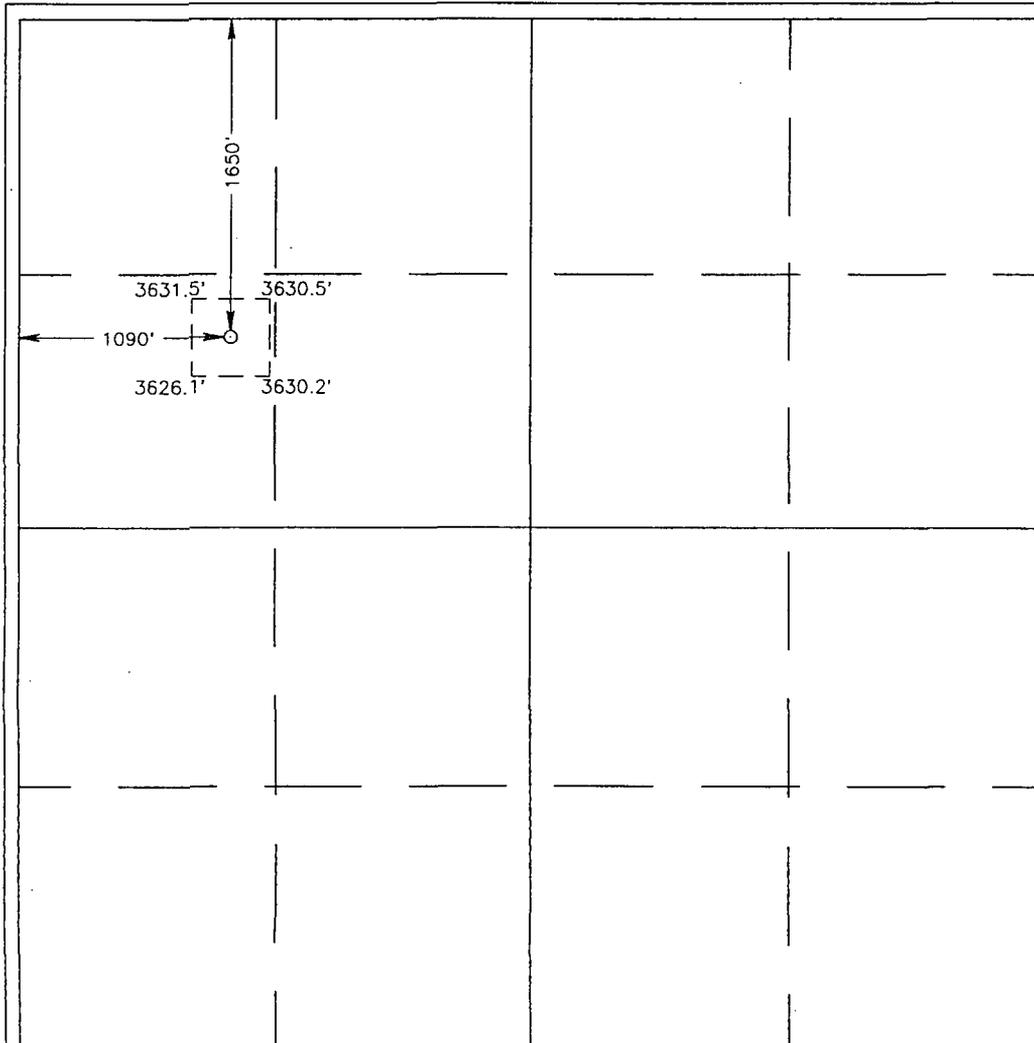
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	20	17 S	30 E		1650	NORTH	1090	WEST	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 that 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

1-28-97
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.

DEC. 30, 1996
Date Surveyed

DMCC

Signature & Seal of Professional Surveyor

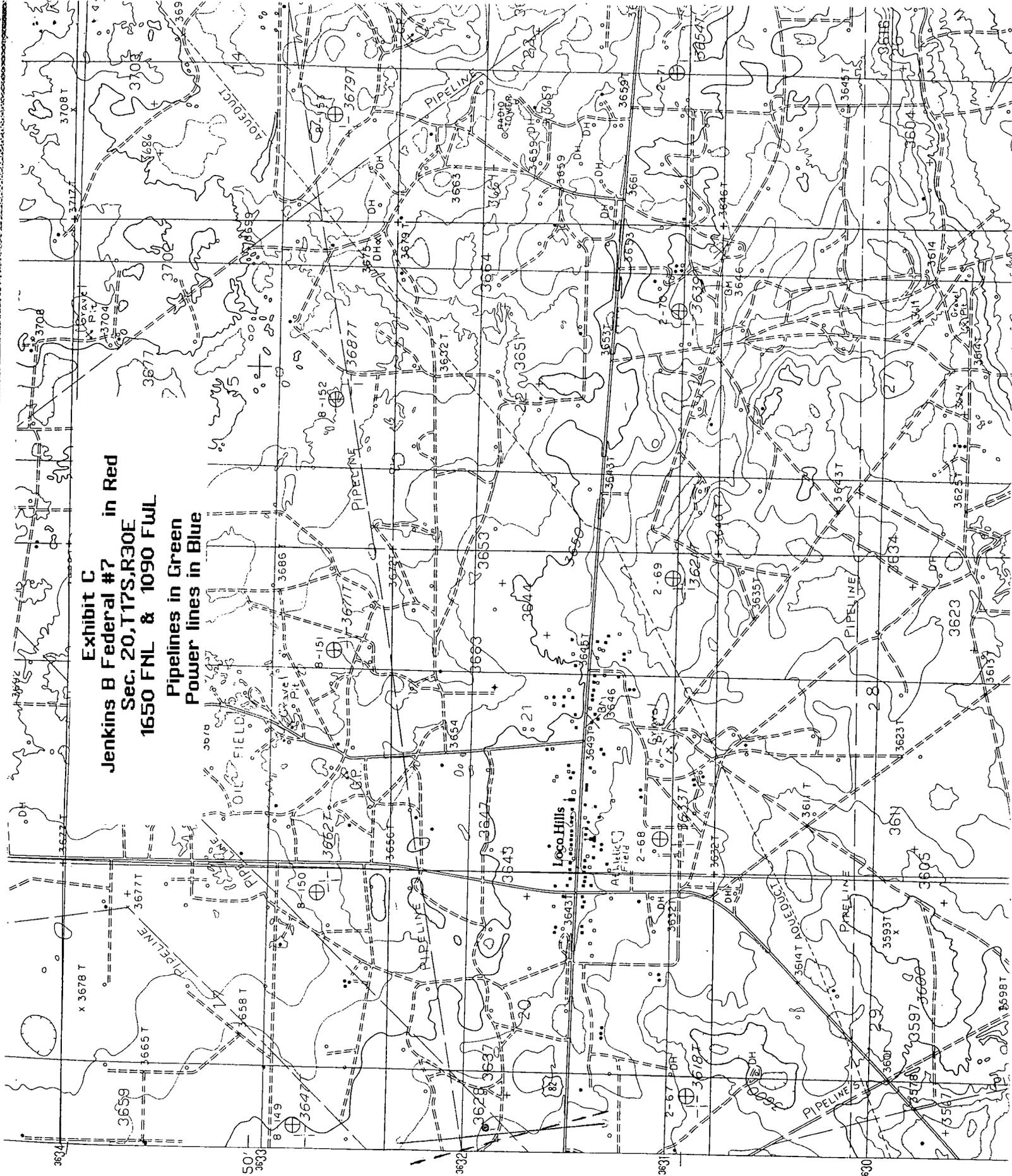
Ronald W. Eidson
Professional Surveyor

NEW MEXICO
3233
196-11-1572
12-31-96

Certificate No. JOHN W. WEST 676
RONALD W. EIDSON 3239
RONALD W. EIDSON 12641

Exhibit C
Jenkins B Federal #7 in Red
Sec. 20, T17S, R30E
1650 FNL & 1090 FWL

Pipelines in Green
Power lines in Blue



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.
LC-054988 - B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Jenkins B Federal

9. API WELL NO.
7

10. FIELD AND POOL, OR WILDCAT
Grayburg Jackson 7R,Q,GB,S,A

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC 20 T17S R30E

12. COUNTY OR PARISH
EDDY

13. STATE
NM

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
DRILL DEEPEN

b. TYPE OF WELL
OIL WELL Gas Well OTHER

SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
MACK ENERGY CORPORATION

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 FNL 1090 FWL
At proposed prod. zone 1650 FNL 1090 FWL
SUBJECT TO LIKE APPROVAL BY STATE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
.9 MILES WEST OF LOCO HILLS

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1090	16. NO. OF ACRES IN LEASE 160	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. 660	19. PROPOSED DEPTH 5500	20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3629 -3623 GR
ROSWELL CONTROLLED WATER BASIN

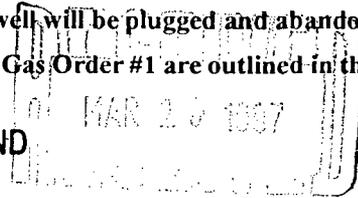
22. APPROX. DATE WORK WILL START*
2/14/97

23. CASING PROGRAM AMENDED SEE ATTACHED SUNDRY see PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	K-55, 13 3/8	54.5	250	CIRC TO SURFACE
12 1/4	K-55, 8 5/8	24	1100	SUFF. TO CIRC
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 Equip
 - 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



RECEIVED
MAR 23 9 45 AM '97

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 Crista D. Carter TITLE Production Clerk DATE 1/29/97

(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 Jerry L. Ferguson TITLE ADM Minerals DATE 3-6-97

*See Instructions On Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OPERATOR'S COPY

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Designation and Serial No. LC-054988-B
2. Name of Operator Mack Energy Corporation		6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. P.O. Box 960, Artesia, NM 88211-0960 (505)748-1288		7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T. R., M. or Survey Description) 1650 FNL 1090 FWL Sec 20-T17S-R30E		8. Well Name and No. Jenkins B Federal #7
		9. API Well No.
		10. Field and Pool, or Exploratory Area Grayburg Jackson SR,QN,GB,SA
		11. County or Parish, State Eddy, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Amend Casing Program on APD
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*

Amend casing program to the following: will not run 13 3/8" casing, 8 5/8" to new depth of 450' & 5 1/2" will remain the same.

ok/aco

RECEIVED
 MAR 5 11 29 AM '97

14. I hereby certify that the foregoing is true and correct.
 Signed *Cass D. Carter* Title Production Clerk Date 3/5/97

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
 Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

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

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

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

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

OIL CONSERVATION DIVISION

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	28509	Grayburg Jackson 7RVS-QN-GB-SA
Property Code	Property Name	Well Number
006125	JENKINS B Federal	7
OGRID No.	Operator Name	Elevation
013837	MACK ENERGY CORPORATION	3629

Surface Location

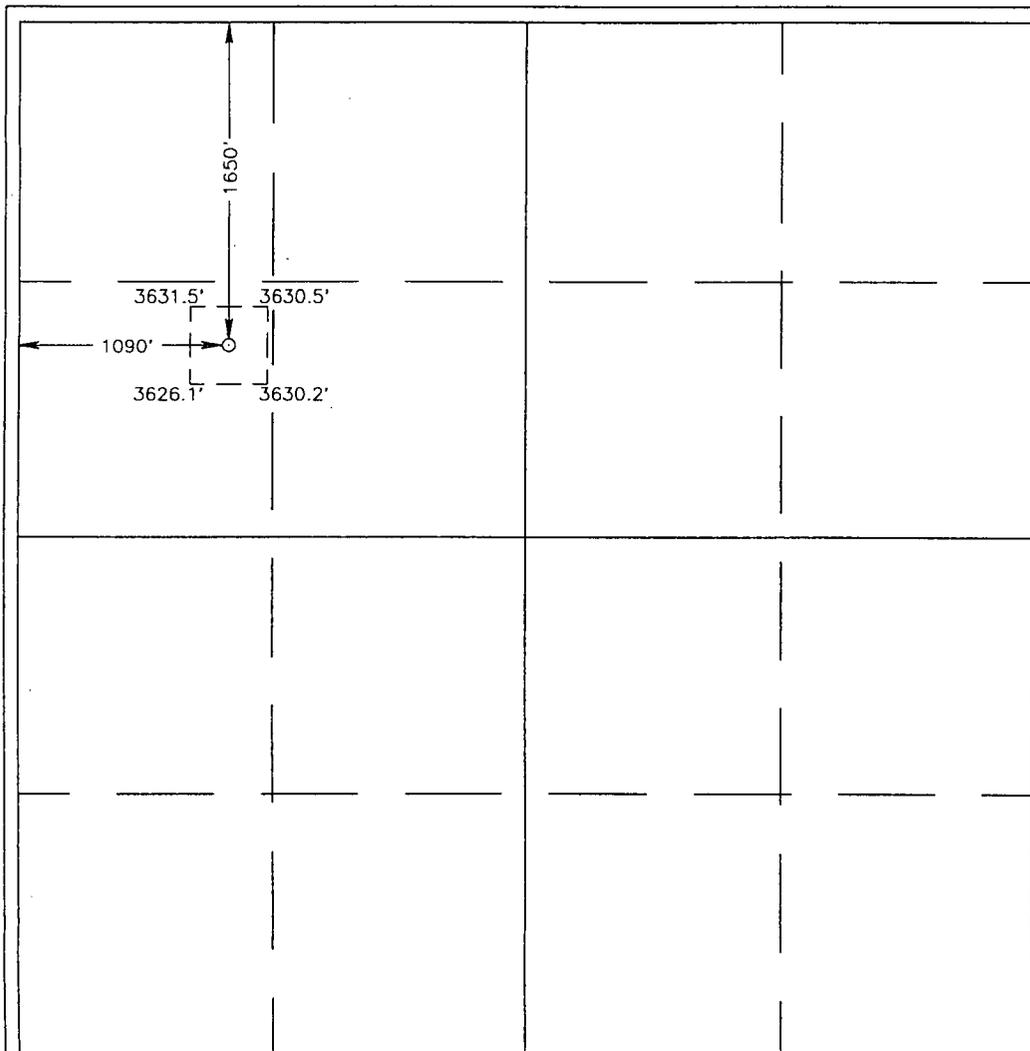
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	20	17 S	30 E		1650	NORTH	1090	WEST	EDDY

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.

Crissa D. Carter
Signature

Crissa D. Carter
Printed Name

Production Clerk
Title

1-28-97
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.

DEC. 30, 1996
Date Surveyed

DMCC

Signature & Seal of Professional Surveyor

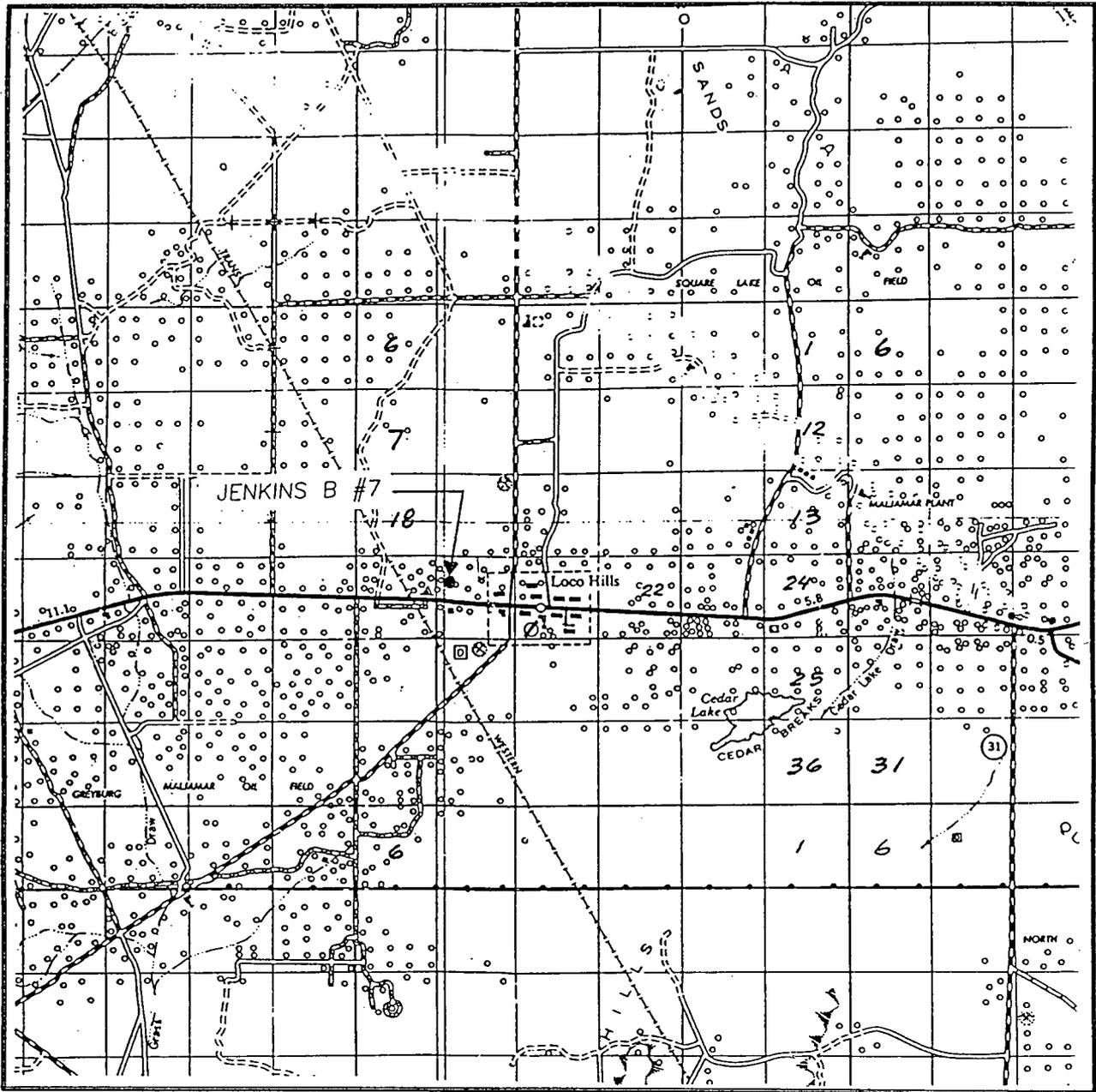
Donald P. Eidson
Professional Surveyor

NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR
3239
96-11-1572

12-31-96

Certificate No. JOHN W. WEST 676
RONALD S. EIDSON 3239
GARLAND EDSON 12641

VICINITY MAP



SCALE: 1" = 2 MILES

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

SURVEY _____ N.M.P.M.

COUNTY _____ EDDY

DESCRIPTION 1650' FNL & 1090' FWL

ELEVATION _____ 3629

OPERATOR MACK ENERGY CORPORATION

LEASE _____ JENKINS B

**JOHN WEST ENGINEERING
HOBBS, NEW MEXICO**

(505) 393-3117

Attached to Form 3160-3
 Mack Energy Corporation
 Jenkins B #7
 1650 FNL 1090 FWL
 SW/4 NW/4, Sec 20 T17S R30E
 Eddy County, NM

DRILLING PROGRAM

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface
Top of Salt	505'
Base of Salt	1025'
Yates	1600'
Queen	2130'
San Andres	3050'
Glorietta	4320'

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

Water Sand	150'	Fresh Water
Grayburg	2580'	Oil/Gas
San Andres	3050'	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" casing to 250' and circulating cement back to surface. Salt will be protected by setting 8 5/8" casing to 1100' and Attempting to circulate cement back to surface or tie back to 13 3/8" Surface casing. 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 casing which will be run at TD.

4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond., Type
17 1/2"	0-250'	13 3/8"	54.5#, K-55, ST&C, New, R-3
12 1/4"	0-1100'	8 5/8"	24#, K-55, ST&C, New, R-3
7 7/8"	0-TD	5 1/2"	17#, J-55, ST&C, New, R-3

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
 LOCO HILLS - 10'
 RED LAKE SE - 10'

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

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1650' FNL & 1090' FWL

ELEVATION 3629

OPERATOR MACK ENERGY CORPORATION

LEASE JENKINS B

U.S.G.S. TOPOGRAPHIC MAP

LOCO HILLS, RED LAKE SE, N.M.

**JOHN WEST ENGINEERING
 HOBBS, NEW MEXICO**

(505) 393-3117

Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

5. Cement Program:

13 3/8" Surface Casing: Cement to Surface with Class C w/2% CaCl₂.

8 5/8" Intermediate Casing: Attempt to Circulate to Surface or Tie back to 13 3/8" Surface Casing with Class C w/2% CaCl₂.

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 tie back to 8 5/8" Casing.

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (2000 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 8 5/8" Intermediate casing and used continuously until 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 2000 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 the BOP equipment will include a Kelly cock and floor safety valve and choke lines and choke manifold with 2000 psi WP rating.

7. 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
0-250'	Fresh Water	8.5	28	N.C.
250-1100'	Brine	10	30	N.C.
1100-TD	Cut Brine	9.6	32	N.C.

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

Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

8. 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.

9. Logging, Testing and Coring Program:

- (A) The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log, GR-Dual Laterolog will be ran from T.D. to 8 5/8 casing shoe. All other logs will ran from T.D. back to 2500'.
- (B) Drillstem test is not 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.

10. Abnormal Conditions, Pressures, Temperatures and 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. Low levels of Hydrogen sulfide have been monitor in producing wells in the area , so H2S may be present while drilling of the well a plan is attached to the Drilling program. No major loss of circulation zones have been reported in offsetting wells.

11. Anticipated Starting Date and Duration of Operations:

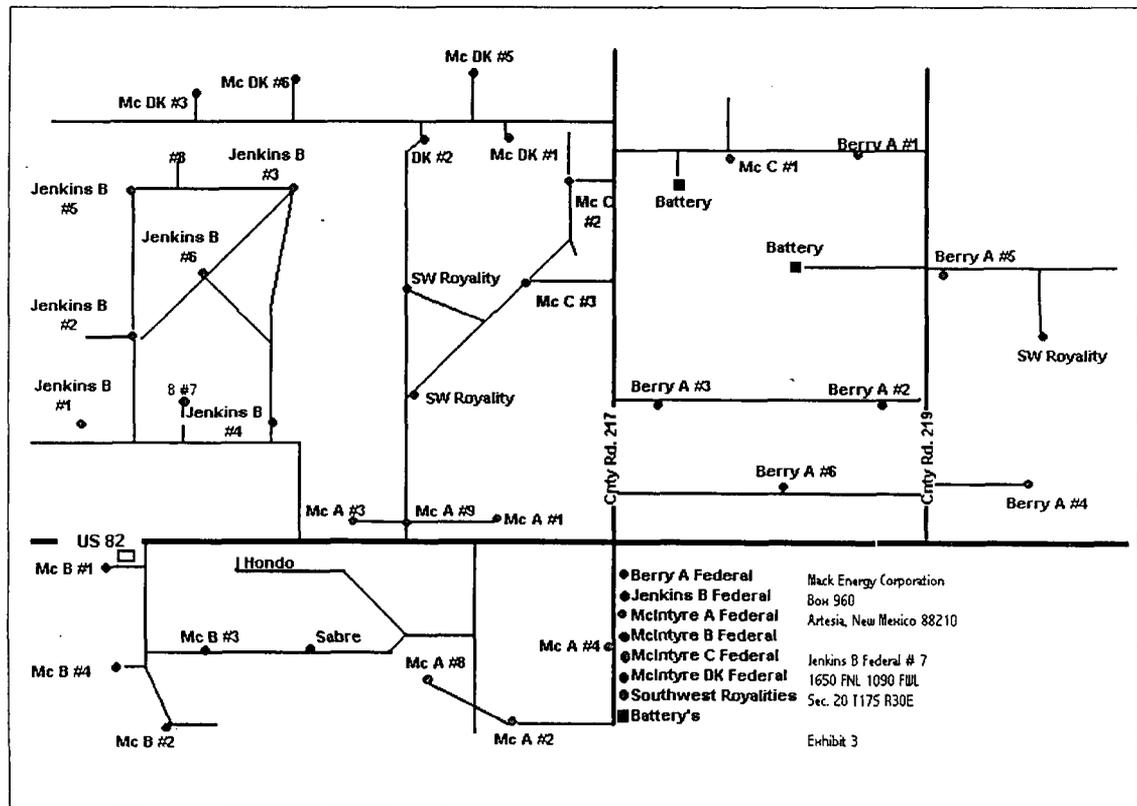
Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is February 14, 1997. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

SURFACE USE AND OPERATING PLAN

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, NM.
- B. All roads to the location are shown in Exhibit below. The existing roads are illustrated in Yellow and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling well will be done where necessary.
- C. Directions to Location: From Loco Hills and County Road 217 in loco Hill go South on US 82 approximatly .9 miles turn North on a caliche road and continue for approximatly .4 miles and turn right to 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.



Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

2. Proposed Access Road:

Exhibit #3 shows the 200' of new access road to be constructed and is illustrated in Green. The road will be constructed as follows:

- A. The Maximum width of the running surface will be 14'. The road will be crowned and ditched and constructed of 6" 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.
- 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 or reserve pit area.
- 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:

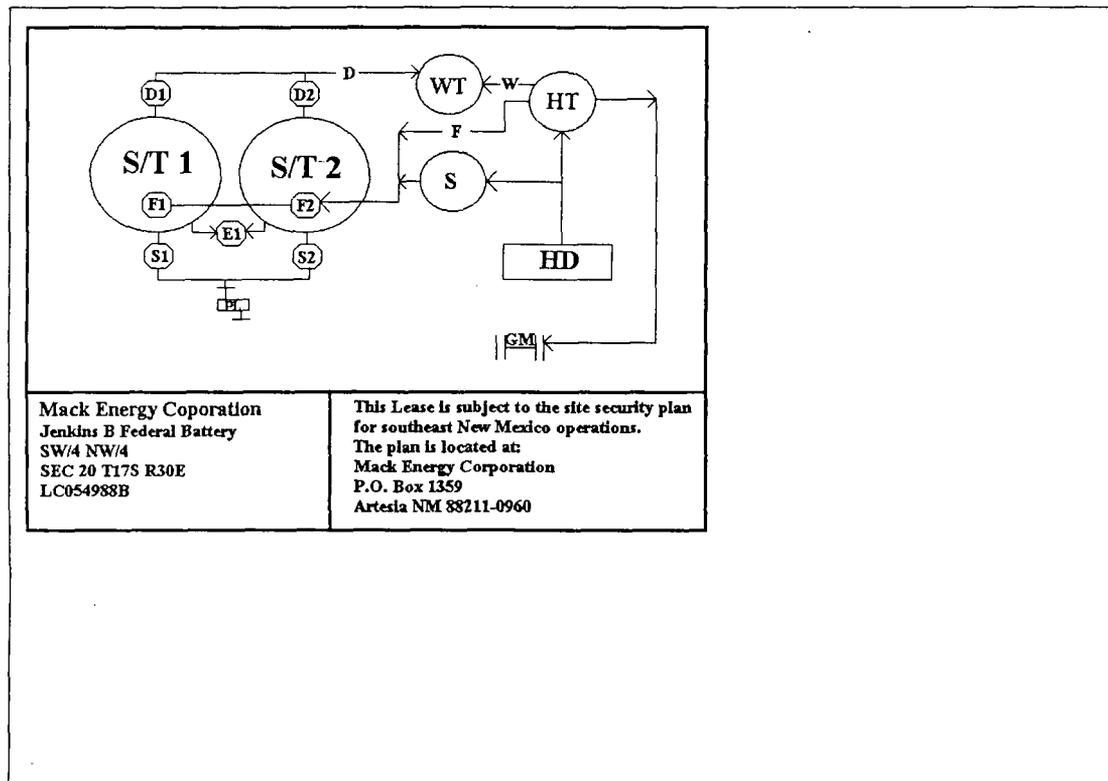
Exhibit #4 shows all existing wells within a one mile radius of this well. As shown on this plat there are numerous Grayburg Jackson wells which are producing Grayburg San Andres wells.

4. Location of Existing and/or Proposed Facilities:

- A. Mack Energy Corporation does operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
 - (1) Paddock Completion: Jenkins B #7 Tank battery will be built on the exiting Well Pad. The Facility is shown in Exhibit #5A.
 - (2) Grayburg San Andres Completion: Jenkins B #7 will be added to the exiting battery located SW/4 NW/4 Sec 20 T17S R30E. The exiting battery diagram is shown below
 - (3) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
 - (4) Any additional caliche for fire walls, etc. will be obtained from a BLM approved caliche pit. Any additional construction materials will be Purchased from contractors.

Attached to Form 3160-3
 Mack Energy Corporation
 Jenkins B #7
 1650 FNL 1090 FWL
 SW/4 NW/4, Sec 20 T17S R30E
 Eddy County, NM

- (5) It will be necessary to run electric power if this well is productive. Power will be run by CVE and the 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) Topsoil removed from the drill site will be used to recontour the pit area 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, fasline may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

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.

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 150' X 100' 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 will be only lined 100' X 100' X 10' the remaining 50' of pit will not be lined and used only as an emergency pit. In the event that it is used fluid will be removed in 48 hours. The reserve pit and 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 pumped to an approved disposal system; produced oil will be collected in steel tanks until sold.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to a 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.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and backfill, and reseeded as per BLM specifications as weather permits. In the event of a dry hole only a dry hole marker will remain.

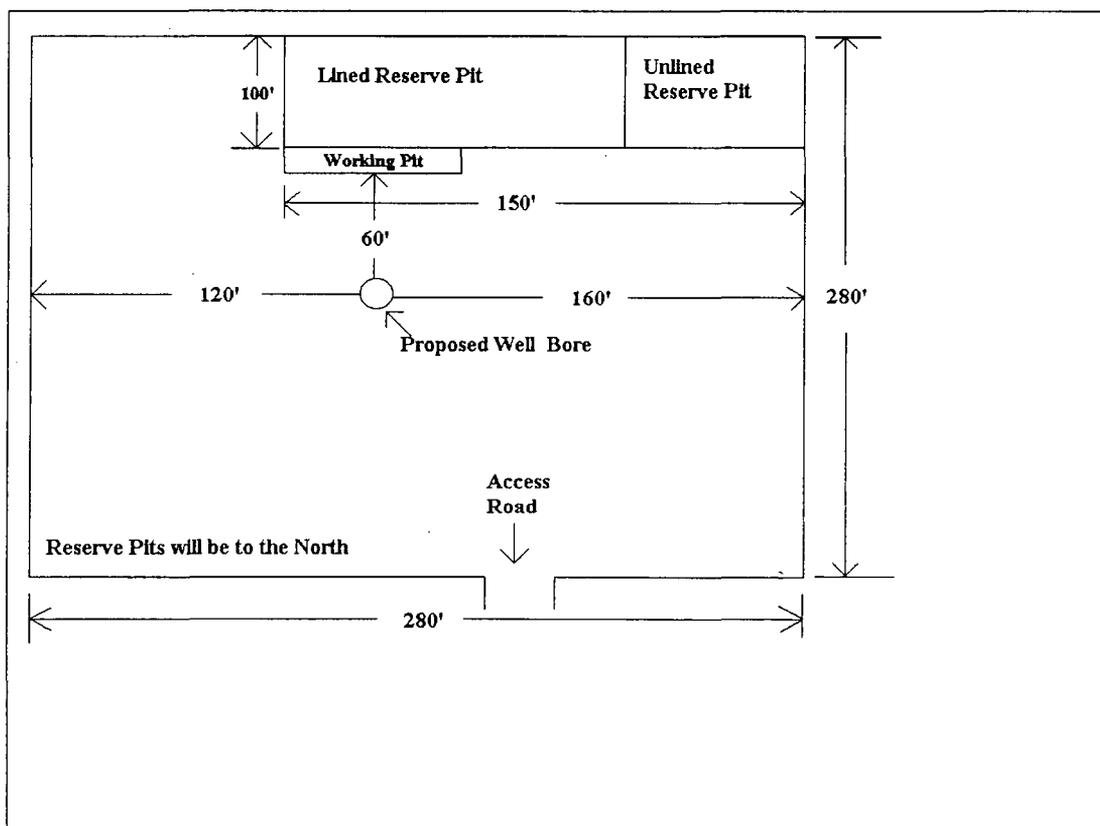
8. Ancillary Facilities:

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

Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

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. Because the pad is almost level no major cuts will be required.
- B. Diagram below shows the proposed orientation of reserve pit, working pit and access road. There is a possibility that the pits will be moved around depending on Calihe in the area. 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).



Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

10. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, The pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the pit area 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. 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 to its original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The well site and lease is located entirely on Federal surface. We have notified the surface lessee of the impending operations. According to BLM the lessee is Charles Martin, P.O. Box 706, Artesia , NM 88211

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.

Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

13. Lessee's and Operator's Representative:

The Mack Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

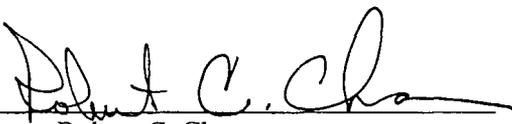
Dan Girand
Mack Energy Corporation
P.O. Box 960
Artesia, NM 88211-0960
Phone (505)748-1288 (office)

Attached to Form 3160-3
Mack Energy Corporation
Jenkins B #7
1650 FNL 1090 FWL
SW/4 NW/4, Sec 20 T17S R30E
Eddy County, NM

CERTIFICATION

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site 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 18 U.S.C. 1001 for the filing of a false statement.

Date: 1-28-97

Signed: 
Robert C. Chase

Mack Energy Corporation

Hydrogen Sulfide Drilling operation plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

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

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:
 - A. Flare line with electronic igniter or continuous pilot.
 - B. Choke manifold with a minimum of one remote choke.
 - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - D. Auxiliary equipment to include: annular preventer, rotating head, and flare gun with flares.
2. Protective equipment for essential personnel:
 - A. Mark II Survive air 30 minute units located in the dog house and at briefing areas, as indicated on well site diagram.
3. H2S detection and monitoring equipment:
 - A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
4. Visual warning systems:
 - A. Wind direction indicators as shown on well site diagram.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
5. Mud program:
 - A. 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 will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- B. All elastomers used for packing and seals shall be H₂S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2 way radio.
- B. Land line (telephone) communication at Office.

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

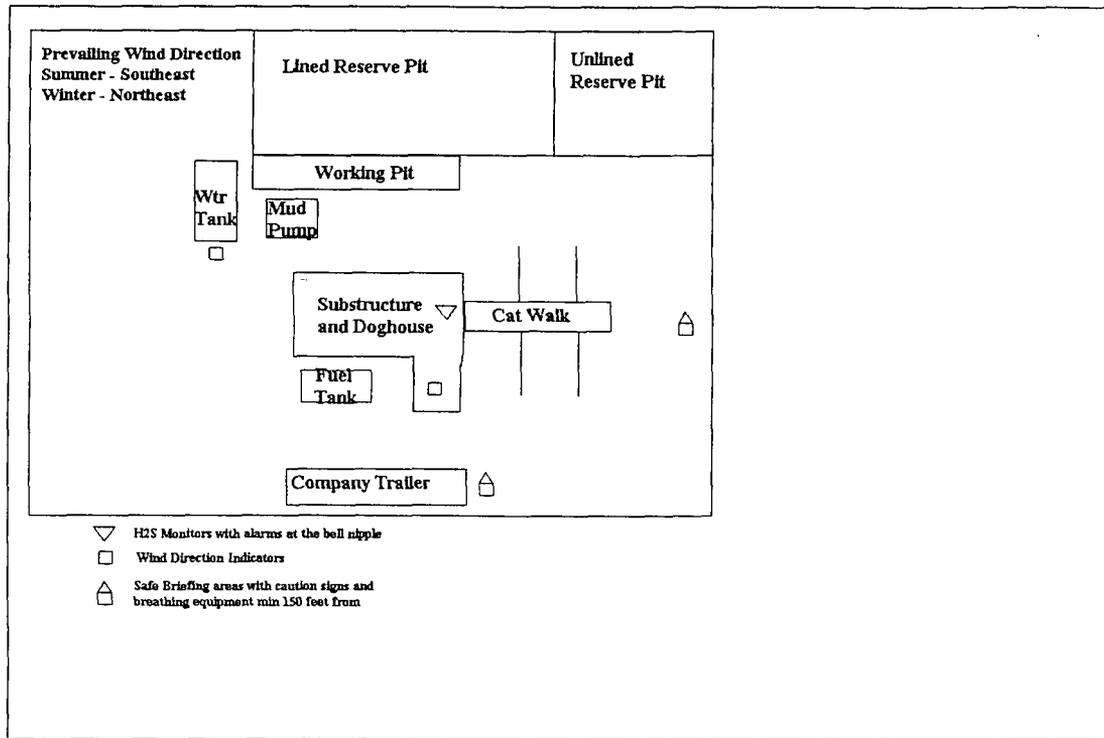
EXHIBIT #6

WARNING
YOU ARE ENTERING AN H₂S
AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CHECK WITH MACK ENERGY FOREMAN AT OFFICE

MACK ENERGY CORPORATION
1-505-748-1288

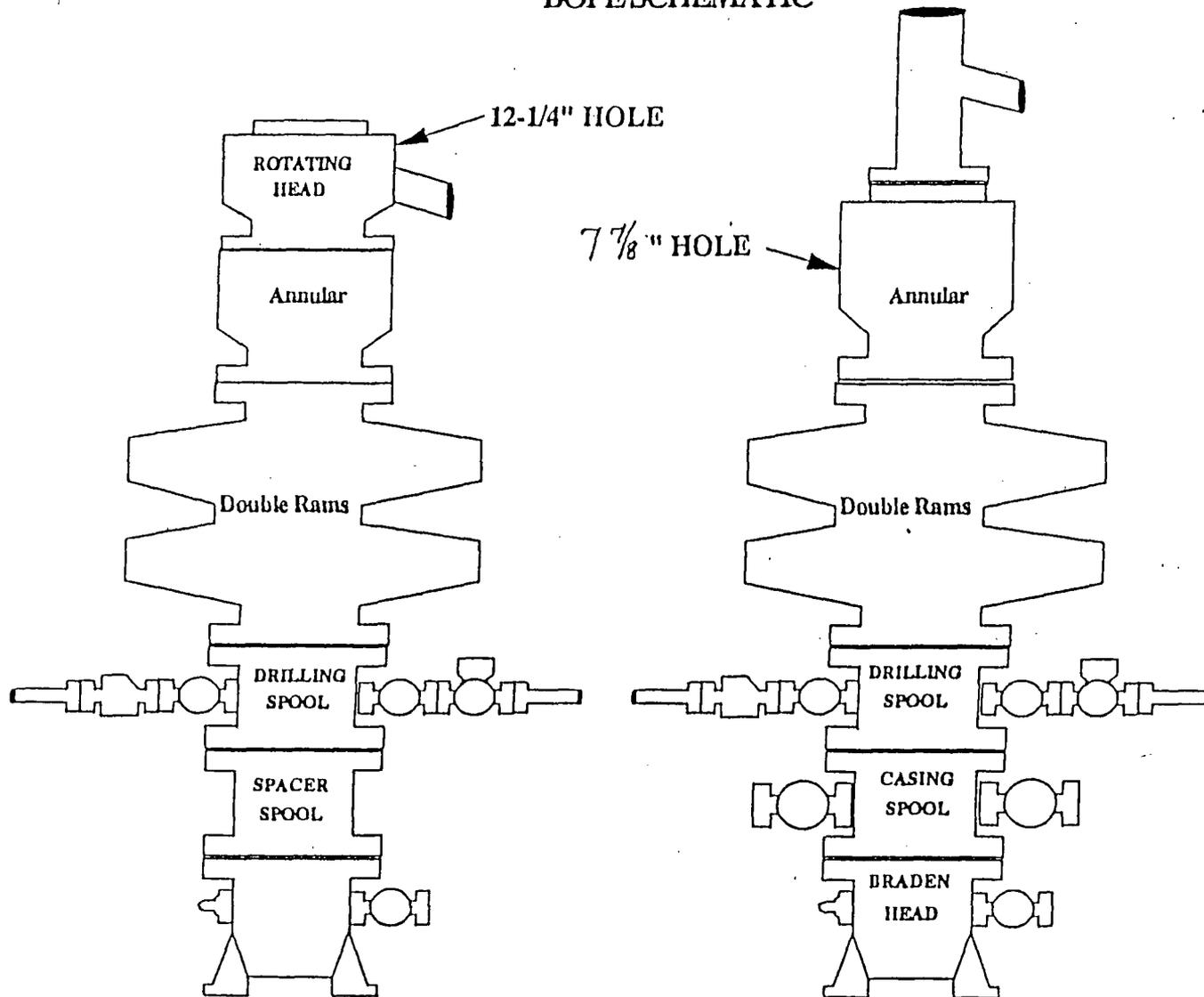
Exhibit # 6
DRILLING LOCATION H2S SAFTY EQUIPMENT



Attachment to Exhibit #1
NOTES REGARDING THE BLOWOUT PREVENTERS
Jenkins B #7
Eddy County, New Mexico

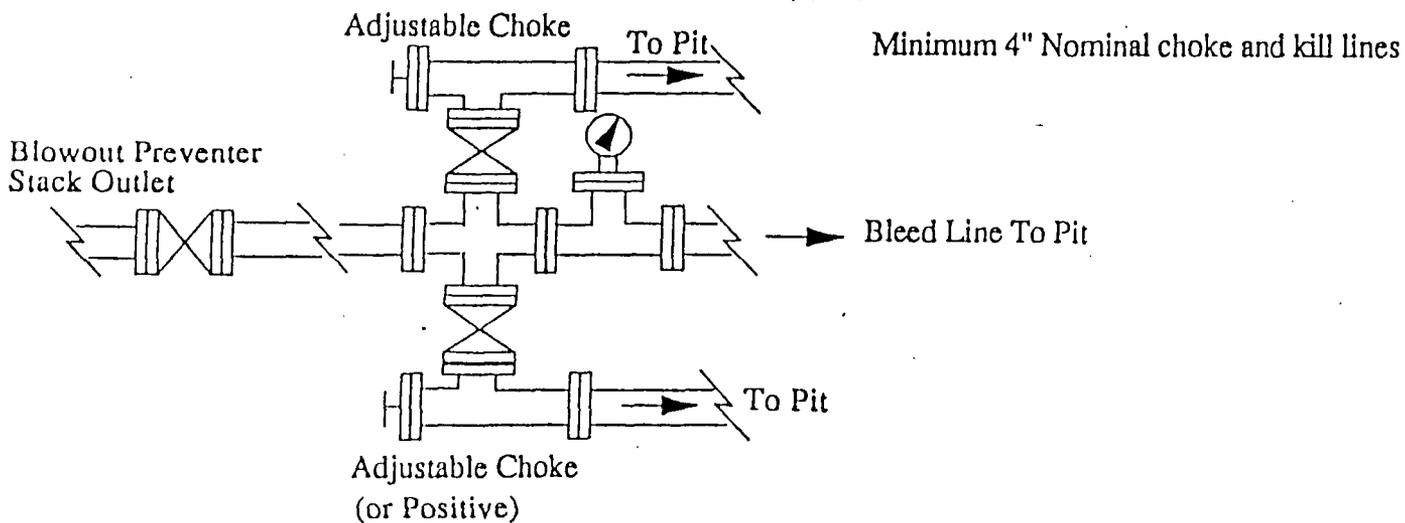
1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 2000 psi W.P. minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi W.P. minimum.
6. All choke and fill lines to be securely anchored, especially 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 be 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 all API specifications.

BOPE SCHEMATIC



Choke Manifold Requirement (2 000 psi WP)

NO ANNULAR REQ'D



MACK ENERGY CORPORATION
EXHIBIT #1-A

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

2,000 psi Working Pressure

2 MWP

MACK ENERGY CORPORATION
EXHIBIT #1-A

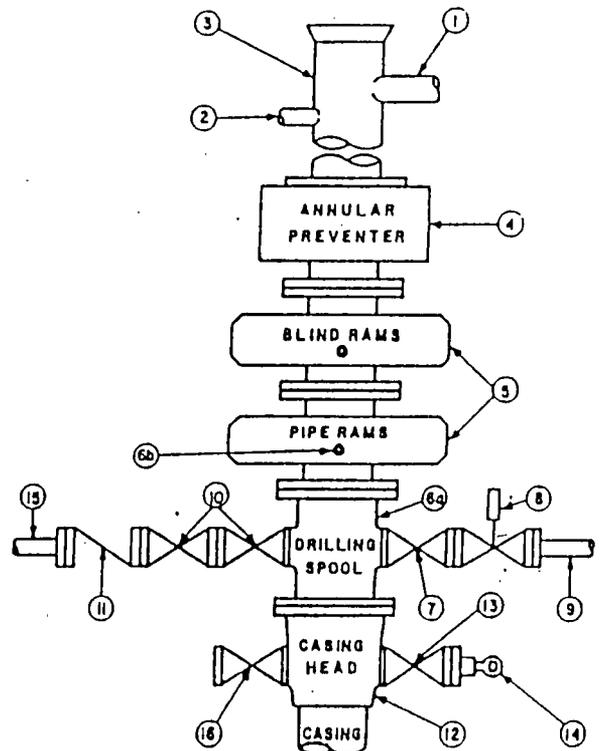
STACK REQUIREMENTS

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		2" Choke
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 slide valves.
- Wear bushing, if required.

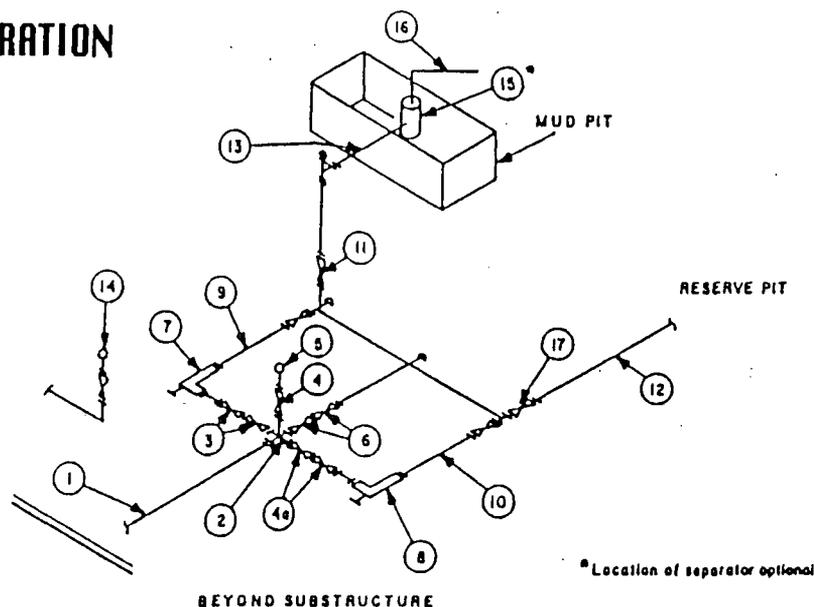
GENERAL NOTES:

- 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 choke. 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.

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

MACK ENERGY CORPORATION
EXHIBIT #1-A



No.		MINIMUM REQUIREMENTS								
		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
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"	10,000
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'	
16	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

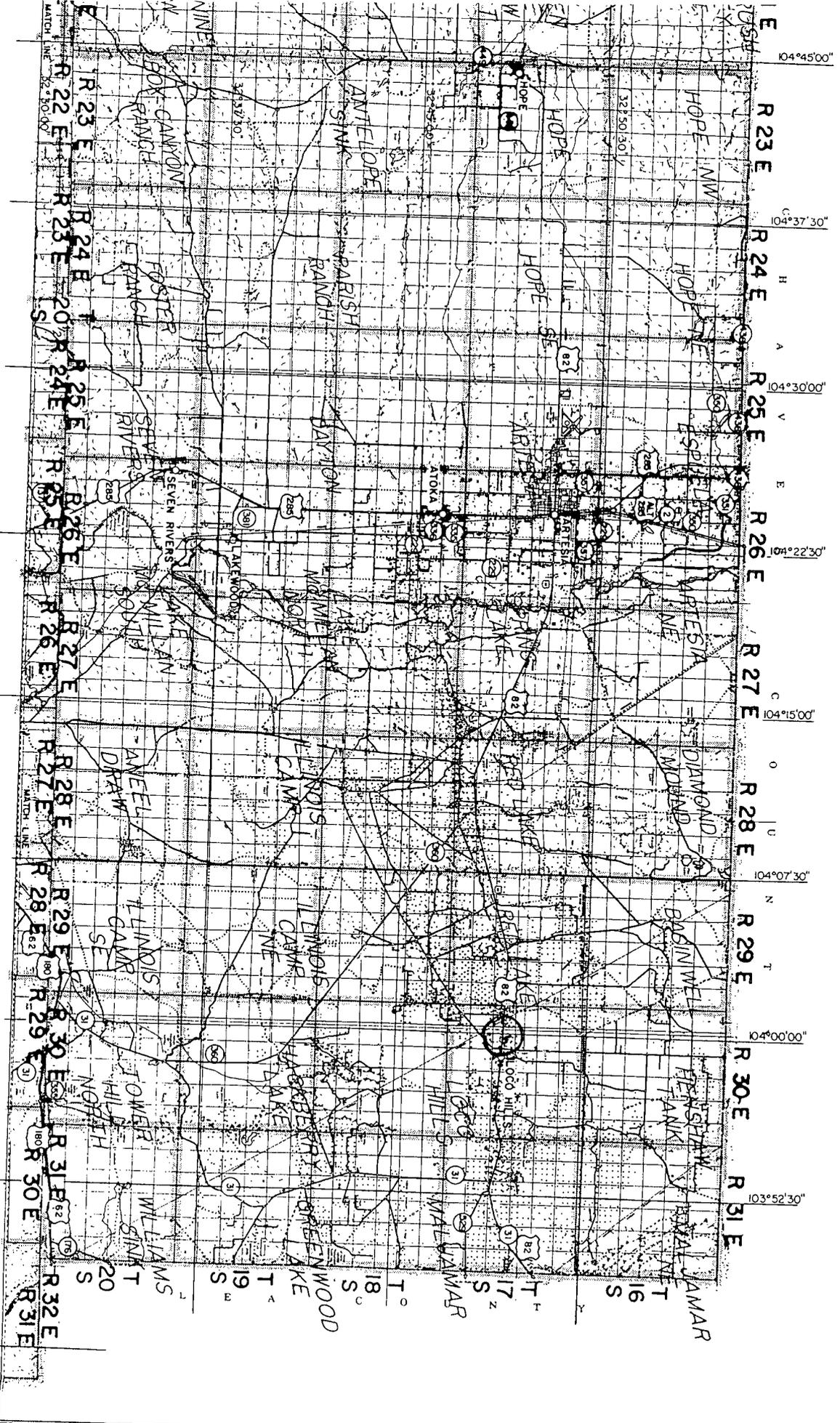
(1) Only one required in Class 3M.

(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 bends or 90° bends using bull plugged tees.



14	11	22	28	34	38	44	51
1	4	6	8	9	11	1	6
12	1	6	9	10	11	12	7
14	11	22	28	34	38	44	51



THESE U.S.G.S. TOPOGRAPHIC MAPS
ARE AVAILABLE FROM:
TOPOGRAPHIC LAND SURVEYORS



INDEX OF
USGS TOPOGRAPHIC MAP
COVERAGE AND

MACK ENERGY CORPORATION
EXHIBIT #3
JENKINS B FEDERAL #7
1650 FNL 1090 FULL
Sec 20-T17S-R30E
Eddy County, New Mexico

United State Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell Resource Area

P.O. Drawer 1857

Roswell, New Mexico 88202-1857

RECEIVED
JAN 29 9 45 AM '97
BLM
DISTRICT

Statement Accepting Responsibility for Operations

Operator name: Mack Energy Corporation
Street or box : P.O. Box 960
City, State : Artesia, NM
Zip Code, : 88211-0960

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

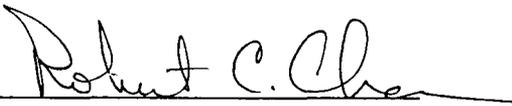
Lease No.: LC-054988 Jenkins B Federal #7

Legal Description of land: Sec 20-T17S-R30E SW/4 NW/4

Formation(s) (if applicable): Grayburg Jackson; 7RVS-QN-GB-SA

Bond Coverage: (State if individually bonded or another's bond)
Individually Bonded

BLM Bond File No.: 58 59 88

Authorized Signature: 
Robert C. Chase

Title: Vice President

Date: 1/28/97

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATOR'S NAME MACK ENERGY CORPORATION WELL NO. & NAME #7 JENKINS B FEDERAL
LOCATION 1650' F N L & 1090' W L SEC. 20, T. 17S., R. 30E.
LEASE NO. LC-054988 COUNTY EDDY STATE NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- Lesser Prairie Chicken (Stips attached) Floodplain (Stips attached)
 San Simon Swale (Stips attached) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

The BLM will monitor construction of this drill site. Notify the Carlsbad Resource Area Office at (505) 887-6544 Hobbs Office at (505) 393-3612, at least 3 working days prior to commencing construction.

Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.

Other

III. WELL COMPLETION REQUIREMENTS

A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- | | |
|--|--|
| <input type="checkbox"/> A. Seed Mixture 1 (Loamy Site)
Lehmans Lovegrass (<u>Eragrostis lehmanniana</u>) 1.0
Side Oats Grass (<u>Bouteloua curtipendula</u>) 5.0
Sand Dropseed (<u>Sporobolus cryptandrus</u>) 1.0 | <input type="checkbox"/> B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (<u>Sporobolus cryptandrus</u>) 1.0
Sand Lovegrass (<u>Eragrostis trichodes</u>) 1.0
Plains Bristlegrass (<u>Setaria magrostachya</u>) 2.0 |
| <input type="checkbox"/> C. Seed Mixture 3 (Shallow Sites)
Sideoats Grama (<u>Bouteloua curtipendula</u>) 1.0
Lehmans Lovegrass (<u>Eragrostis lehmanniana</u>) 1.0
or Boar Lovegrass (<u>E. chloromalas</u>) | <input checked="" type="checkbox"/> D. Seed Mixture 4 ("Gyp" Sites)
Alkali Sacaton (<u>Sporobolus airoides</u>) 1.0
Four-Wing Saltbush (<u>Atriplex canescens</u>) 5.0 |

Seeding should be done either late in the fall (September 15 - November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Mack Energy Corporation
Well Name & No. Jenkins B Federal #7
Location: 1650' FNL, 1090' FWL, Section 20, T17S R30E, Eddy County, NM
Lease: LC-054988
.....

I. DRILLING OPERATIONS REQUIREMENTS:

The Bureau of Land Management (BLM) is to be notified at the Carlsbad Resource Area Office, 620 East Greene St., Carlsbad, NM 88220, (505) 887-6544 for wells in Eddy County in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: 8-5/8 inch 5-1/2 inch
3. BOP tests
4. A Hydrogen Sulfide (H₂S) Drilling Operation Contingency Plan shall be activated prior to drilling into the Queen formation. A copy of the plan shall be posted at the drilling site.
5. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
6. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The 8-5/8 inch surface casing shall be set at 450 feet and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 5-1/2 inch production casing is to tie 200 feet into the 8-5/8 inch casing.

III. PRESSURE CONTROL:

Before drilling below the surface casing shoe, the blowout preventer assembly shall consist of a minimum of: One Annular Preventer and/or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

The BOPE shall be installed before drilling below the 8-5/8 inch casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

03/05/97
acs

EXHIBIT A

BLM Serial Number: LC-054988

Company Reference: #7 JENKINS B FEDERAL

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS
THE ROSWELL DISTRICT, BLM

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES	
Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

400 foot intervals.

___ foot intervals.

locations staked in the field as per spacing intervals above.

locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

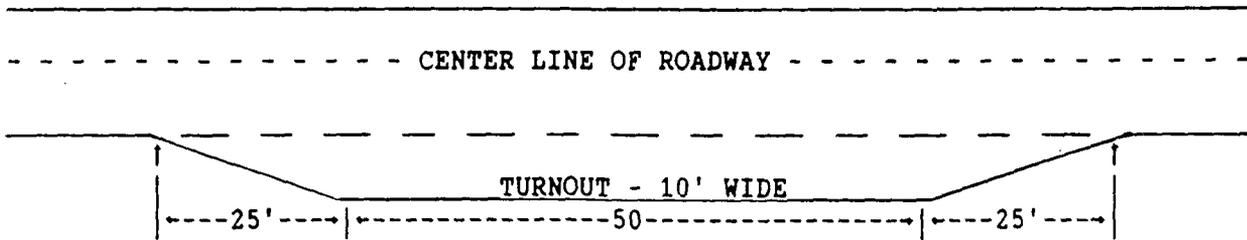
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Example: 4% slope: spacing interval = $\frac{400}{4} + 100 = 200$ feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

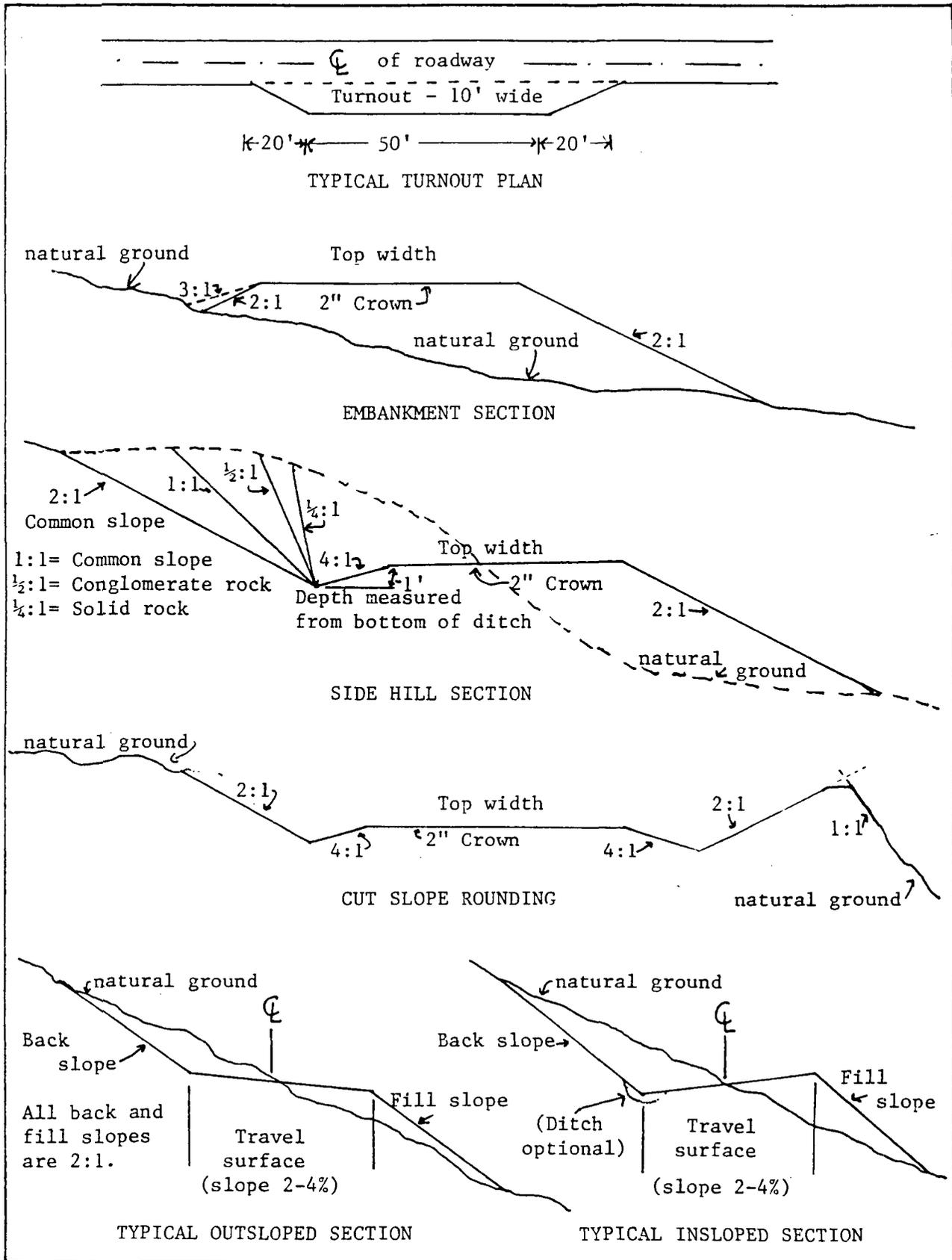
9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS: *None.*

FIGURE 1: CROSS-SECTIONS AND PLANS FOR TYPICAL ROAD CONSTRUCTION REPRESENTATIVE OF BLM RESOURCE, AND HIGHER CLASS, ROADS.

(Travel way, top width, driving surface, and travel surface are synonymous.)





NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

July 16, 1997

Mack Energy Corporation
Attention: Matt J. Brewer
P.O. Box 960
Artesia, New Mexico 88211-0960

Re: Administrative application for an unorthodox oil well location in the Loco Hills-Paddock Pool for the proposed Jenkins "B" Federal Well No. 7 (API No. 30-015-29451) to be drilled 1650 feet from the North line and 1090 feet from the West line (Unit E) of Section 20, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.

Dear Mr. Brewer:

In reviewing the subject application dated July 18, 1997, the information submitted on the OCD Form C-102 shows a Grayburg-Jackson completion while the body of the application references the Loco Hills-Paddock Pool. Please provide an explanation for this discrepancy. Also, please provide a copy of the Federal APD for this well.

Please note too that Division Order No. R-7808, as referenced in the subject application, is applicable only to the Grayburg-Jackson Pool within certain leases in Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico and has no bearing for similar applications outside that particular area.

Thank you for your cooperation in this matter and should you have any questions concerning this matter, please contact me in Santa Fe at (505) 827-8185.

Sincerely,

Michael E. Stogner
Chief Hearing Officer/Engineer

cc: New Mexico Oil Conservation Division - Artesia
William J. LeMay, Director - OCD, Santa Fe

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 8433
Order No. R-7808

APPLICATION OF MARBOB ENERGY
CORPORATION FOR AN EXCEPTION TO
GENERAL RULE 104 F I AND FOR INFILL
WELL FINDINGS, EDDY COUNTY, NEW MEXICO.

See Also Order No

7808-A

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on December 10, 1984, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana.

NOW, on this 5th day of June, 1985, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Marbob Energy Corporation, seeks approval of an administrative procedure for the approval of unorthodox oil well locations within the lands described in Exhibit "A", attached hereto and made a part hereof, hereafter referred to as the "Subject Area".
- (3) The applicant also seeks a finding that infill wells within the Subject Area, completed in the Grayburg Jackson Seven Rivers Queen Grayburg San Andres Pool, are necessary to effectively and efficiently drain portions of the reservoir which cannot be drained by any existing wells in the Subject Area.
- (4) Section 271.305(b) of the Rules of the Federal Energy Regulatory Commission promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new, onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the

reservoir covered by the proration unit which cannot be so drained by any existing well within the proration unit.

(5) The lateral continuity of the Grayburg-San Andres pay zone throughout the Subject Area is considered to be good in a gross sense, but localized barriers to fluid flow exist between wells because of the lenticular nature of the reservoir rock.

(6) Applicant's drilling of nineteen "Infill" wells (as described in Exhibit "B" attached hereto and made a part hereof), have increased the estimated ultimate recovery of the Subject Area by 833,100 barrels of oil and 1,781,000 mcf of gas.

(7) The current 40-acre spacing and proration units in the Subject Area have been inadequately drained of recoverable reserves by the existing wells and "Infill" wells are necessary to effectively and efficiently drain reserves from said proration units.

(8) The applicant plans to drill additional "Infill" wells within the Subject Area.

(9) Much of the Subject Area has previously been subject to secondary recovery.

(10) The applicant plans to drill additional wells in the Subject Area at orthodox and unorthodox locations both to increase current recovery and to increase the efficiency of a planned secondary recovery project.

(11) Prior to initiation of active secondary recovery operations in the subject Area, an administrative procedure should be established for approval of the drilling of wells at unorthodox locations therein provided that no well should be located closer than 330 feet to the boundary of any lease or unitized area nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(12) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the oil in the affected pool, will prevent economic loss caused by the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

(13) The application should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The nineteen infill wells drilled by the applicant, Marbob Energy Corporation, and described in Exhibit "B" attached to this order, are hereby found to be necessary for the effective and efficient drainage of reserves underlying the Subject Area, as described in Exhibit "A" attached to this order within the Grayburg Jackson Seven Rivers Queen Grayburg San Andres Pool, Eddy County, New Mexico, which could not be drained by any other well.

(2) Future infill wells within the Subject Area are hereby found to be necessary for the effective and efficient drainage of reserves underlying said Subject Area which could not be drained by existing wells therein.

(3) The Division Director shall have authority to grant approval of unorthodox well locations in the area subject to this order, provided that any such unorthodox location within such project is no closer than 330 feet to the outer boundary of the lease, or the unitized area, nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(4) Applications for administrative approval of unorthodox locations shall be filed in triplicate and shall be accompanied by plats, showing the ownership of all leases offsetting the proration or spacing unit for which the unorthodox location is sought, and also all wells completed thereon.

(5) The Oil Conservation's district office at Artesia and all operators of proration or spacing units offsetting the unit for which the unorthodox location is sought shall be notified of the application by certified or registered mail, and the application shall state that such notification has been given. The Division Director may approve the unorthodox location upon receipt of waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Director has received the application.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-4-
Case No. 8433
Order No. R-7808

DONE at Santa Fe, New Mexico, on the day and year
hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



R. L. STAMETS,
Director

S E A L

"SUBJECT AREA"

All of the leases and lands described in this Exhibit "A" are located in Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico. Unless otherwise shown below, Applicant is operator of the entire Grayburg-San Andres formation:

M. Dodd A Lease (LC-028731 A)

Section 14: SE/4 SW/4, W/2 SW/4
Section 22: SE/4 SE/4, SE/4 SW/4, W/2 SE/4
Section 15: SE/4, only to a subsurface depth of
4,000 feet
Section 22: NE/4 SE/4, SW/4 NE/4, E/2 NE/4, only
to a subsurface depth of 4,000 feet

M. Dodd B Lease (LC-028731 B)

Section 10: E/2 W/2, E/2
Section 11: W/2
Section 14: N/2, NE/4 SW/4, SE/4
Section 15: NE/4

Boyd-Dodd Lease (LC-058362)

Section 11: SE/4

Continental State (E-4200)

Section 15: NW/4, only to a subsurface depth of
3,500 feet
E/2 SW/4, only to a subsurface depth of
3,403 feet

Folk Federal Lease (NM-0397623)

Section 17: N/2, N/2 SW/4

Folk State Lease (B-10714)

Section 17: N/2 SE/4

Grayburg-Jackson West Co-Op Unit

Section 16: All
Section 21: All
Section 28: All
Section 15: W/2 SW/4
Section 22: NW/4, NW/4 NE/4, NE/4 SW/4,
W/2 SW/4
Section 27: W/2 SW/4

Only to a subsurface depth of 3,600 feet. (The Grayburg Jackson West Cooperative Unit covers that portion of the Grayburg-San Andres formation encountered between the depths of 2,220 feet and 3,600 feet.)

EXHIBIT "A"
ORDER NO. R-7808

INFILL WELLS DRILLED AND COMPLETED FROM
OCTOBER 82 TO OCTOBER 84 BY MARBOB ENERGY CORPORATION

<u>WELL NO.</u>	<u>FOOTAGE LOCATION</u>	<u>SEC.-TWN-RGE</u>
M. Dodd A No. 21	660' FSL & 1934' FEL	15-17-29
M. Dodd A No. 22	2310' FSL & 330' FEL	22-17-29
M. Dodd A No. 23	2615' FSL & 1345' FEL	22-17-29
M. Dodd A No. 24	2310' FSL & 2310' FEL	22-17-29
M. Dodd A No. 25	990' FSL & 2210' FEL	22-17-29
M. Dodd A No. 26	2615' FSL & 1345' FEL	22-17-29
M. Dodd A No. 27	940' FSL & 330' FEL	22-17-29
M. Dodd A No. 28	990' FSL & 1652' FWL	22-17-29
M. Dodd A No. 29	1650' FNL & 1370' FEL	22-17-29
M. Dodd A No. 31	1350' FNL & 330' FEL	22-17-29
M. Dodd A No. 32	1650' FNL & 2210' FEL	22-17-29
M. Dodd A No. 33	990' FNL & 990' FEL	22-17-29
M. Dodd B No. 36	330' FSL & 1345' FEL	14-17-29
M. Dodd B No. 37	1345' FSL & 1295' FEL	14-17-29
M. Dodd B No. 38	1345' FSL & 2310' FEL	14-17-29
M. Dodd B No. 39	330' FEL & 1345' FSL	14-17-29
M. Dodd B No. 40	1650' FSL & 1650' FWL	14-17-29
M. Dodd B No. 41	2615' FNL & 330' FEL	14-17-29
M. Dodd B No. 42	2615' FNL & 1345' FEL	14-17-29

EXHIBIT "B"
ORDER NO. R-7808

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

CASE NO. 8433
Order No. R-7808-A

APPLICATION OF MARBOB ENERGY
CORPORATION FOR AN EXCEPTION TO
GENERAL RULE 104 F I AND FOR INFILL
WELL FINDINGS, EDDY COUNTY, NEW MEXICO.

See Also Order No

NUNC PRO TUNC ORDER

R-7808

BY THE DIVISION:

It appearing to the Division that Division Order No. R-7808 dated June 5, 1985, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED THAT:

(1) The first paragraph of the introductory section on page 1 of Division Order No. R-7808 dated June 5, 1985, be and the same is hereby amended to read in its entirety as follows:

"This cause came on for hearing at 8 a.m. on December 19, 1984, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana."

(2) The corrections set forth in this order be entered nunc pro tunc as of June 5, 1985.

DONE at Santa Fe, New Mexico, on this 12th day of June, 1985.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



R. L. STAMETS
Director

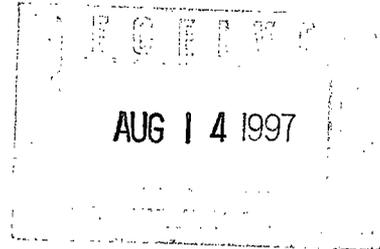
S E A L

fd/

MACK ENERGY CORPORATION

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

August 12, 1997



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

Re: *Unorthodox Location for the:
Jenkins B Federal #7
1650 FNL & 1090 FWL
Sec. 20-T17S-R30E
Eddy County, New Mexico*

Dear Mr. Stogner:

Pursuant to your letter dated July 16, 1997, enclosed you will find the requested approved Federal APD. Please note the intention to test the San Andres and the Paddock formations. We intend to complete the Jenkins B Federal #7 in the Loco Hills Paddock pool after successfully deepening the Jenkins B Federal #2, #3 and #4 wells in this formation.

Thank you for your assistance in this matter. If you have any questions, please feel free to call me at (505)748-1288.

Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Matt J. Brewer".

Matt J. Brewer
Engineer

/MB

Enclosures

Mike Stogner

From: JLWLCO[SMTP:jlwco@flash.net]
Sent: Thursday, October 09, 1997 6:58 AM
To: MikStogner
Subject: Clipper bills

Mike,

Your share of the bills is \$260.40. You should get your bill tomorrow in the mail. I sent it to the po box.

Later,

Jeff

CMD :
OG6C101

ONGARD
C101-APPLICATION FOR PERMIT TO DRILL

10/09/97 09:51:51
OGOMES -EME7

OGRID Idn : 13837 API Well No: 30 15 29755 APD Status(A/C/P): A
Opr Name, Addr: **MACK ENERGY CORP** Aprvl/Cncl Date : 07-25-1997
PO BOX 960
ARTESIA,NM 88211-0960

Prop Idn: 6125 **JENKINS B FEDERAL** Well No: 9

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
Surface Locn :	E	20	17S	30E		FTG 2310 F N	FTG 330 F W
OCD U/L :	E	API County :		15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : R
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3627

State Lease No: Multiple Comp (Y/N) : N
Prpsd Depth : 5500 Prpsd Frmtn : Paddock

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD :
OG6C101

ONGARD
C101-APPLICATION FOR PERMIT TO DRILL

08/06/97 19:36:40
OGOMES -EMGR

OGRID Idn : 13837 API Well No: 30 15 29451 APD Status(A/C/P): A
Opr Name, Addr: MACK ENERGY CORP Aprvl/Cncl Date : 03-06-1997
PO BOX 960
ARTESIA,NM 88211-0960

Prop Idn: 6125 JENKINS B FEDERAL Well No: 7

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
Surface Locn	:	E	20	17S	30E		FTG 1650 F N	FTG 1090 F W
OCD U/L	:	E	API County :		15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : R
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3629

State Lease No: Multiple Comp (Y/N) : N
Prpsd Depth : 5500 Prpsd Frmtn : SAN ANDRES

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD :
OG6C101

ONGARD
C101-APPLICATION FOR PERMIT TO DRILL

08/06/97 19:36:00
OGOMES -EMGR

OGRID Idn : 13837 API Well No: 30 15 29755 APD Status(A/C/P) : A
Opr Name, Addr: MACK ENERGY CORP Aprvl/Cncl Date : 07-25-1997
PO BOX 960
ARTESIA,NM 88211-0960

Prop Idn: 6125 JENKINS B FEDERAL Well No: 9

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
Surface Locn	: E	20	17S	30E			FTG 2310 F N	FTG 330 F W
OCD U/L	: E		API County	: 15				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C) : O Cable/Rotary (C/R) : R
Lease typ(F/S/P/N/J/U/I) : F Ground Level Elevation : 3627

State Lease No: Multiple Comp (Y/N) : N
Prpsd Depth : 5500 Prpsd Frmtn : Paddock

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

