OCD-HOBBS FORM APPROVED Form 3160-3 (August 1999) OMB No. 1004-0136 Expires November 30, 2000 UNITED STATES DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT NMLC058407B 6. If Indian, Allottee or Tribe Name LICATION FOR PERMIT TO DRILL OR REENTER DRILL ☐ REENTER la. Type of Work: If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. **ANTEATER FEDERAL 3** ⊠ Oil Well ☐ Gas Well Other Single Zone ☐ Multiple Zone 1b. Type of Well: 9. API Well No. 2. Name of Operator Contact: ROBERT CHASE MACK ENERGY CORPORATION E-Mail: jerrys@mackenergycorp.com 30-025-Field and Pool, or Explorator 3b. Phone No. (include area code) 3a. Address P O BOX 960 **DELAWARE** Ph: 505.748.1288 13190 ARTESIA, NM 88211-0960 Fx: 505.746.9539 11. Sec., T., R., M., or Blk. and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) Sec 35 T17S R32E Mer NMP SENE 2310FNL 990FEL 32:47306 N Lat, 103.43522 W Lon At surface SME: BLM At proposed prod. zone 13. State 12. County or Parish 14. Distance in miles and direction from nearest town or post office 5 1/2 MILES SOUTHEAST OF MALJAMAR LEA NM 15. Distance from proposed location to nearest property or 16. No. of Acres in Lease Spacing Unit dedicated to this well lease line, ft. (Also to nearest drig. unit line, if any) 330 40.00 19.18 BIM/BIA Bond No. on file 18. Distance from proposed location to nearest well, drilling, Proposed Depth completed, applied for, on this lease, ft. 5100 MD 23. Estimated duration 22. Approximate date work will start 21. Elevations (Show whether DF, KB, RT, GL, etc. 15 DAYS 3935 GL 03/01/2004 24. Attachments Controlled Water Bacin The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form: 1. Well plat certified by a registered surveyor. A Drilling Plan. Item 20 above).

- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) JERRY SHERRELL Ph: 505.748.1288	Date 02/03/2004
Title PRODUCTION CLERK		
Approved (Signer SLIE A. THEISS	Name (Printed/Syned) LESLIE A. THEISS	Date MAY 1 3 2004
Title	Office	

FIELD MANAGER

CARLSBAD FIELD OFFICE

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

Conditions of approval, if any, are attached ERAL REQUIREMENTS AND

APPROVAL FOR 1

Title 18 U.S.C. Section 1001 and The 12 Company of the United States any false, fictitious or fraudulent states are representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #27534 verified by the BLM Well Information System For MACK ENERGY CORPORATION, sent to the Hobbs

Committed to AFMSS for processing by ARMANDO LOPEZ on 02/04/2004 (04AL0047AE)

DECLARED WATER BASIN

DECLARED WATER BASIN, CEMENT BEHIND THE 13 CASING MUST BE <u>CIRCULATED</u> CEMENT BEHIND THE 8 Casing must be <u>Uir</u>

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

#### . Additional Operator Remarks:

NO REMARK PROVIDED

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 BD, Artesia, NM 86211-0719

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

#### OIL CONSERVATION DIVISION

P.O. Box 2088

DISTRICT IV P.O. BOX 2088, SANTA PE, N.M. 87604-2088 Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

P.O. BOX 2088, SANTA PE, N.M. 87804-2088	WELL LOCATION AND	ACREAGE DEDICATION PLAT	C AMENDED REPORT
30-025-36705	Pool Code   3190	Pool Name Wildcat Delaware	
Property Code 33999	Prop	erty Name R FEDERAL	Vell Number
OGRID No. 013837		ator Name Y CORPORATION	Elevation 3935'

#### Surface Location

1	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	н	35	17-S	32-E		2310	NORTH	990	EAST	LEA

#### Bottom Hole Location If Different From Surface

	UL or	io	t N	ío.	Section	Towns	híp	Range	Lot	ldn	Feet from the	North/South line	Feet from the	East/West line	County
Γ	Dedic	ate	d .	Acre	Jaint	or Infill	Co	nsolidation	ode	Or	der No.				
L		40										_			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

NO ALLOWALLE	OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE	E DIVISION
	OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE  3938.3'   3941.2'   990'   990'   3938.8'    GEODETIC COORDINATES  NAD 27 NME  Y = 652303.0 N    X = 685050.2 E    LAT. 32'47'30.56"N   LONG. 103'43'52.17"W	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and betief.  Signature  Jerry W. Sherrell  Printed Name  Production Clerk  Title  2/2/2004  Bate  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 supervison and that the same is true and correct to the best of my belief.  January 14, 2004  Date Surveyed  A.W.B.  Signature & Seat of Profesistional Surveyor  Love Duty 14, 2004
		Cortificate No. CARY EDSON. 12641

#### **DRILLING PROGRAM**

#### 1. Geologic Name of Surface Formation

Quaternary

#### 2. Estimated Tops of Important Geologic Markers:

Surface
800'
2400'
2600'
3650'
4100'
4450'

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

Water Sand	150'	Fresh Water
Grayburg	4100'	Oil/Gas
San Andres	4450'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 300' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protected by setting 8 5/8" casing to 2450' 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 casing, which will be run at TD.

#### 4. Casing Program:

Hole Size	e Interval	OD Casing	Weight, Grade, Jt, Cond., Type
17 ½"	0-300'	13 3/8"	48#, H-40, ST&C, New, R-3
12 ¼"	0-2450'	8 5/8"	32#, J-55, ST&C, New, R-3
7 7/8"	0-TD	5 1/2"	17#, J-55, LT&C, New, R-3

#### 5. Cement Program:

- 13 3/8" Surface Casing: Circulate to Surface with Class C w/2% CaCl2.
- 8 5/8 Intermiate Casing: Circulate to Surface 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 circulate to surface.

#### 6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ramtype (The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ramtype (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 nippled up on the 13 3/8" surface casing and tested to 2000# by a 3<sup>rd</sup> party. The BOP will then be nippled up on the 8 5/8" intermediate casing and tested by a 3<sup>rd</sup> party to 2000 psi and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 2000 psi before drilling out of intermediate casing. 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 (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with 2000 psi WP rating.clude a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) 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:

DEPTHTYPE	WEIG	HT	VISCOSITY	WATERLOSS
0-1100'	Fresh Water	8.5	28	N.C.
1100-2450'	Brine	10	30	N.C.
2450'-TD	Cut Brine	9.1	29	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.

#### 8. Auxiliary Well Control and Monitoring Equipment:

- 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 and will be ran from T.D. to 8 5/8 casing shoe.
- B. Drill Stem 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 monitors 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 has been reported in offsetting wells.

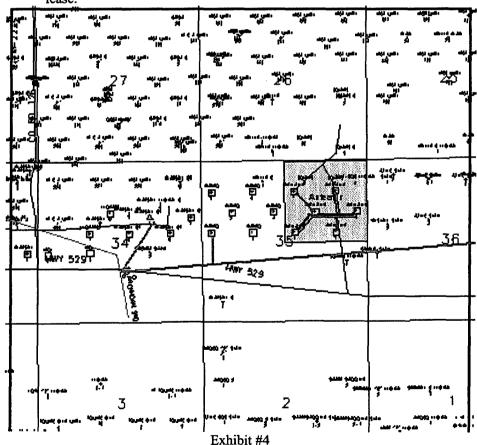
#### 11. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is March 1, 2004. 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.

#### SURFACE USE AND OPERATING PLAN

#### 1. Existing & Proposed Access Roads

- A. The well site and elevation plat for the proposed well is shown in Exhibit #1. John West Engineering, Hobbs, NM, staked the well.
- B. All roads to the location are shown in Exhibit below. The existing lease roads are illustrated in Blue and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling well will be done where necessary.
- C. Directions to Location: On Hwy 529, turn north 1/10 mile west of mile marker 9, go 1/10 mile, turn west 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.



New Access Road-Red Flow line-Green

2. Proposed Access Road:

Exhibit #3 shows 0' of new access road to be constructed. 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 & Proposed flow lines for New Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well. As shown on this plat there are numerous wells producing from the Grayburg formations. Proposed flow lines, will follow an archaeologically approved route (Exhibit #4) to the Anteater Tank Battery.

#### 4. Location of Existing and/or Proposed Facilities:

- A. Mack Energy Corporation does not operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
  - 1) Delaware Completion: Will be sent to the Anteater Federal Tank Battery. The Facility is shown in Exhibit #5.
  - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
  - 3) Any additional caliche 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.

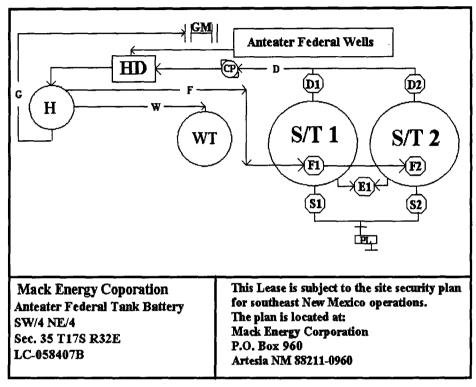


Exhibit #5

- A. 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 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 #4. 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.

#### 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 100' X 200' 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 lined 100' X 200' X 10'. The reserve pit and working pit will be lined (9-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 an approved landfill. 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.

#### 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. Topsoil, 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. There is a possibility that the pits will be moved around depending on Caliche 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 high quality plastic sheeting (5-7 mil thickness).

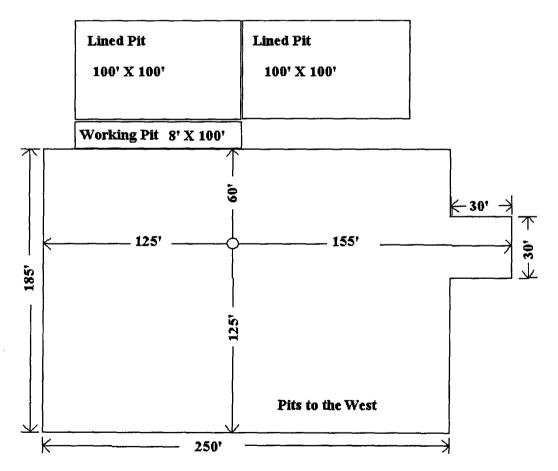


Exhibit #6

Surface Use Plan

#### 10. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, the pit area, after allowing drying, will be broken out and leveled. The original topsoil 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 lease is Caswell Ranches, 1702 Gillham Dr. Brownsfield, TX 79316.

#### 12. Other Information:

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grass 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:

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

Attached to Form 3160-3 **Mack Energy Corporation** White Star Federal #16 1650 FNL & 1600 FEL SW/4 NE/4, Sec 30 T17S R29E **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: 2/3/2004

Signed: Jerry W. Sherrell

#### **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 an 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 tubular are to be used, personnel well 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.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

#### 2. Protective equipment for essential personnel:

A. Mark II Survive air 30-minute units located in the doghouse 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 (Exhibit #8).
- B. Caution/Danger signs (Exhibit #7) 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 preventer, 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 #7

### WARNING

#### YOU ARE ENTERING AN H2S

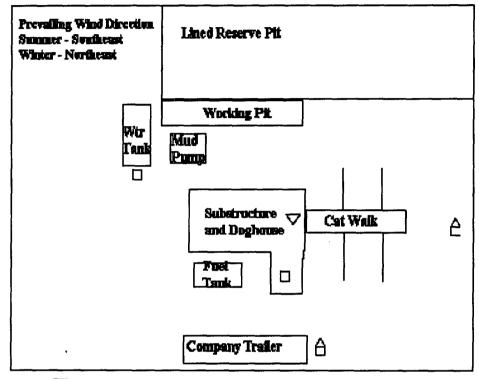
#### AUTHORIZED PERSONNEL ONLY

- 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

### DRILLING LOCATION H2S SAFTY EQUIPMENT Exhibit # 8



- N2 ii Manifers with clarens at the bell alpute
  - Wind Olivacións Indicators
- herothing spagment min. 150 feet from

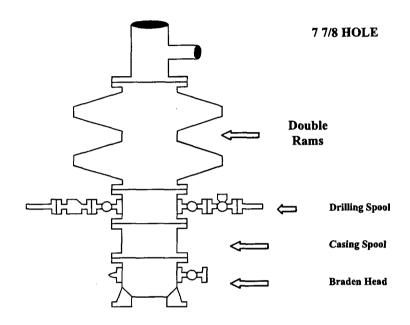
## Attachment to Exhibit #9 NOTES REGARDING THE BLOWOUT PREVENTERS Anteater Federal #3 Lea County, New Mexico

- 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 WP 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 WP 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 hands 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.

### **Mack Energy Corporation**

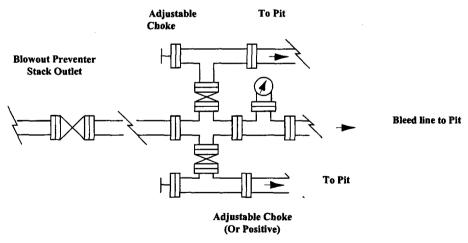
Blowout Preventers Page 15

## Exhibit #9 BOPE Schematic



#### Choke Manifold Requirement (2000 psi WP) No Annular Required

Minimum 4" Nominal choke and kill lines



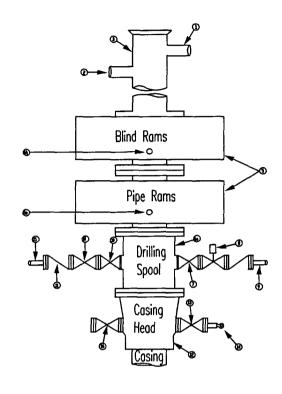
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#### **Energy Corporation**

## Minimum Blowout Preventer Requirements 2000 psi Working Pressure 2 MWP EXHIBIT #10

**Stack Requirements** 

	Stack Requireme		7
NO.	Items	Min.	Min.
L		I,D.	Nominal
1	Flow line		2"
2	Fill up line		2"
3	Drilling nipple	l	
4	Annular preventer		
5	Two single or one dual hydraulically		
	operated rams		
6a	Drilling spool with 2" min. kill line and 3"	ľ	2"
1	min choke line outlets		Choke
6b	2" min. kill line and 3" min. choke line		
[ ]	outlets in ram. (Alternate to 6a above)		
7	Valve Gate	3 1/8	
<u> </u>	Plug		
8	Gate valve-power operated	3 1/8	
9	Line to choke manifold		3"
10	Valve Gate	2 1/16	
}	Plug	ł	1 :
11	Check valve	2 1/16	
12	Casing head		
13	Valve Gate	1 13/16	
	Plug		]
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"



#### **OPTIONAL**

1.7	T1. 137.1	1 12/16
1 10	Flanged Valve	1 1 1 1 1 1 1 1
1		1 15/10

#### CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above Braden head or casing head. Working pressure of preventers to be 2000-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.
- 3. BOP controls, to be located near drillers' position.
- 4. 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.
- 7. 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:

- 1. Braden head or casing head and side valves.
- 2. Wear bushing. If required.

2

#### 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
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beans.

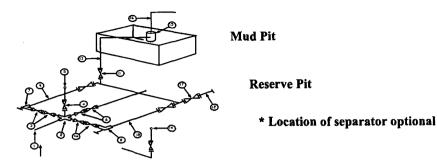
  Replaceable parts for adjustable choke, or bean

- sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with hand-wheels or handles ready for immediate use.
- Choke lines must be suitably anchored.
- 7. Hand wheels and extensions to be connected and ready for
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casing head connections shall not be used except in case of emergency.
- 11. Do not use kill line for routine fill up operations.

#### **Mack Energy Corporation**

Exhibit #11
MIMIMUM 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



**Below Substructure** 

#### Mimimum requirements

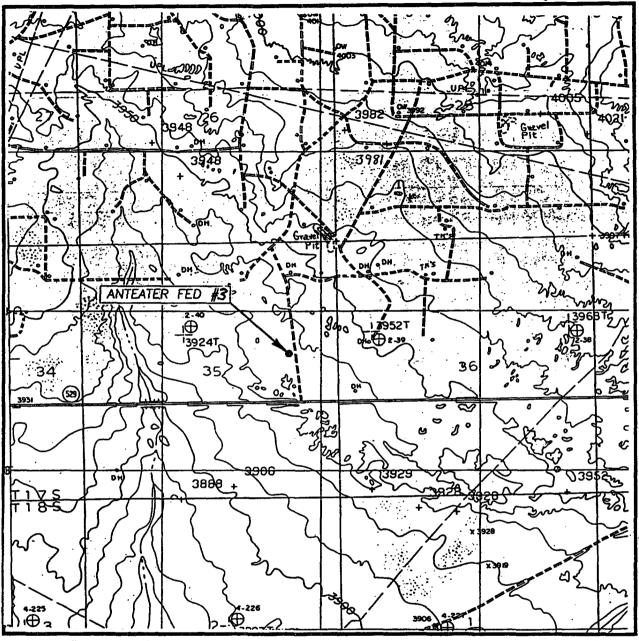
			74	THEFT STATES	u require					
3,000 MWP 5,000 MWP					,000 MWP	10,000 MWP				
No.		I.D.	NOMINAL	Rating	I.D.	Nominal	Rating	I.D.	Nominal	Rating
1	Line from drilling Spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3" x 3" x 3" x 2"			3,000			5,000			
2	Cross 3" x 3" x 3" x 2"									10,000
3	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
4	Valve Gate Plug	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	2 1/16		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valve Gate Plug	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		2"	10,000
11	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
12	Line		3"	1,000		3"	1,000		3"	2,000
13	Line		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound Standpipe pressure quage			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	Valve Gate Plug	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 10 M
- (3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

#### EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

- 1. 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.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. 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 bee as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.

Blowout Preventers Page 18



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' DOG LAKE, N.M.

SEC. <u>35</u>	TWP. <u>17-S</u>	RGE. 32-E
SURVEY	N.M.P.M.	
COUNTY	LEA	
DESCRIPTION_	2310' FNL &	990' FEL
ELEVATION	3935'	

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117

SUP: 5'

OPERATOR MACK ENERGY CORPORATION

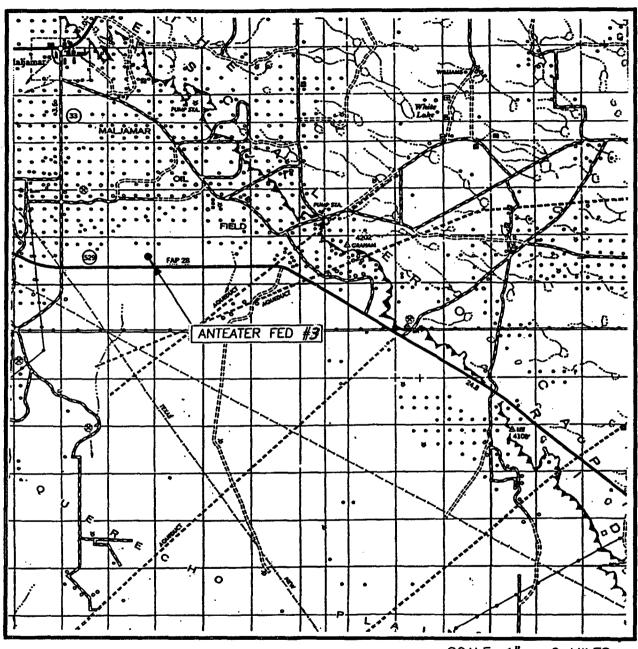
LEASE ANTEATER FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

DOG LAKE, N.M.



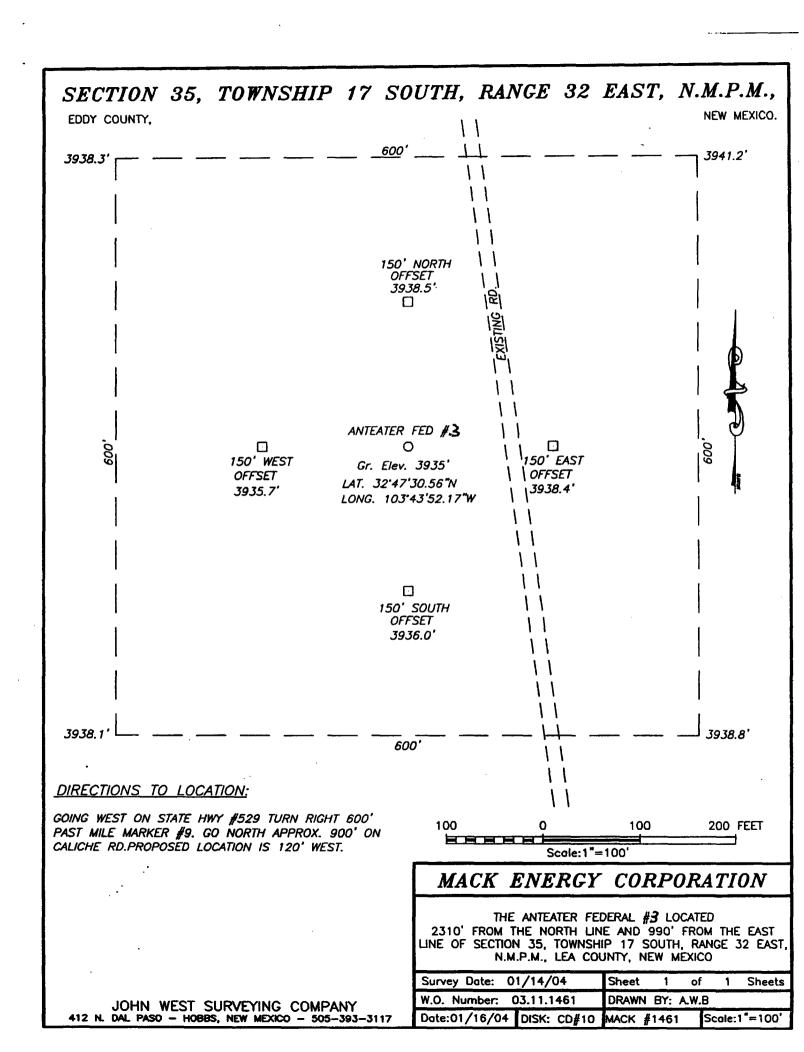
## VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 35 IWP. 17-S RGE. 32-E	
SURVEYN.M.P.M.	
COUNTYLEA	
126.3UNIE11UN 2310 EIN AC 990 EEL	JOHN WEST SURVEYING
ELEVATION3935'	HOBBS, NEW MEXICO
OPERATOR MACK ENERGY CORPORATION	(505) 202 2117
LEASE ANTEATER FEDERAL	

naine



#### United State Department of the Interior

# BUREAU OF LAND MANAGEMENT Roswell Resource Area P.O. Drawer 1857 Roswell, New Mexico 88202-1857

#### Statement Accepting Responsibility for Operations

Ope	era	tor	na	me:
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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.:

NMLC-058407B

Anteater Federal #3

Legal Description of land:

Sec 35-T17S-R32E

SE/4 NE/4

Formation(s) (if applicable):

Delaware

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

Individually Bonded

BLM Bond File No .:

58 59 88

Authorized Signature:

Ierry W. Sherrell

Title:

**Production Clerk** 

Date:

2/3/2004

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

March 12, 2004

Form C-144

For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure
Is pit or below-grade tank covered by a "general plan"? Yes No
Type of action: Registration of a pit or below-grade tank 🛮 Closure of a pit or below-grade tank 📗

Operator: Mack Energy Corporation Telephone: (505)748-1288 e-mail address: jerrys@mackenergycorp.com						
Address: P.O. Box 960, Artesia, NM 88211-0960						
Facility or well name: Anteater Federal #3 API #- 30.025						
County: Lea Latitude Longitude	NAD: 1927 🗌 1983 🗍 Surface Ov	wner Federal 🛛 State 🗌 Private 🔲 Indian 🗌				
	Y					
Pit	Below-grade tank					
Type: Drilling Production Disposal	Volume:bbl Type of fluid:					
Workover Emergency	Construction material:					
Lined Unlined	Double-walled, with leak detection? Yes  If not, explain why not,					
Liner type: Synthetic ▼ Thickness 20 mil Clay □ Volume 2000 bbl						
Depth to ground water (vertical distance from bottom of pit to seasonal high	Less than 50 feet	(20 points)				
water elevation of ground water.)	50 feet or more, but less than I 00 feet	(10 points)				
nate of tallon of ground mater.)	100 feet or more	( 0 points) 0 Points				
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)				
water source, or less than 1000 feet from all other water sources.)	No	(0 points)				
water source, or less than 1000 feet from an other water sources.)		0 Points				
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points) 7 8 9 7077				
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 Boints)				
	1000 feet or more	(20 points) 0 Points (20 points) 7 8 9 70 77 72 73 740 points) 0 Points				
	Ranking Score (Total Points)	Cos Q Points				
If this is a pit closure: (1) attach a diagram of the facility showing the pit's	relationship to other equipment and tanks. (2) Indica	7 C				
onsite offsite foffsite, name of facility						
date. (4) Groundwater encountered: No Tyes If yes, show depth belo						
diagram of sample locations and excavations.		(e) it much poin sample results and a				
I hereby certify that the information above is true and complete to the best of	my knowledge and belief. I further certify that the	above-described pit or below-grade tank has				
been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan						
Date: 5/17/04						
Printed Name/Title Jerry W. Sherrell/Production Clerk  Signature  Levy W. Sherrell  Sherrell  Signature						
Your certification and NMOCD approval ofthis application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.						
Approval:						
Date: 5/19/DETROLEUM ENGINEER	- IIh					
Printed Name/Title	Signature Cent 3	pla				
	7 - 6					

#### 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. Topsoil, 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. There is a possibility that the pits will be moved around depending on Caliche 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 high quality plastic sheeting (5-7 mil thickness).

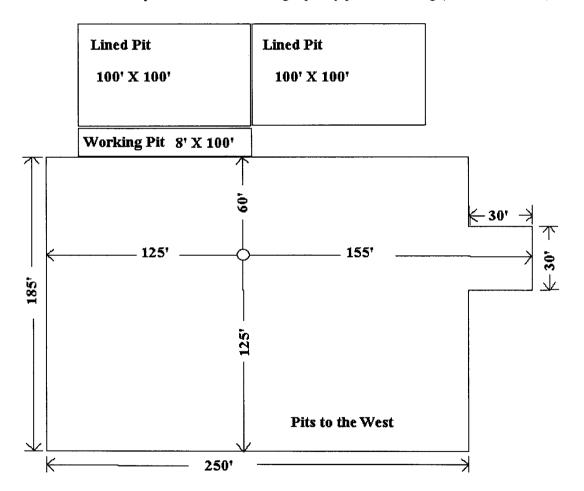


Exhibit #6