409A OCD-ARTESIA ATS-07-215 AM

Form 3160-3
(September 2001)

321

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 21 2009

FORM APPROVED
OMB No 1004-0136
Expires January 31, 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.	LC-028731-A
6 If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No	
8 Lease Name and Well No	Dodd Federal Unit #531
9 API Well No	30-015-37091
10 Field and Pool, or Exploratory	GRBG Jackson SR Q GRBG SA
11. Sec., T., R., M., or Blk and Survey or Area	Sec. 15, T17-S R29-E
12 County or Parish	Eddy County
13. State	NM

1a Type of Work: ☑ DRILL ☐ REENTER

1b Type of Well ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

2. Name of Operator: Marbob Energy Corporation

3a. Address: P.O. Box 227, Artesia, NM 88211-0227

3b. Phone No. *(include area code)*: 505-748-3303

4 Location of Well *(Report location clearly and in accordance with any State requirements *)*

At surface ~~330'~~ 475 per SN 9/12/08 & 4/8/09 CR FSL & 2310' FEL

At proposed prod zone: Roswell Controlled Water Basin

14 Distance in miles and direction from nearest town or post office*

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any)	16 No of Acres in lease	17 Spacing Unit dedicated to this well
		40

18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19 Proposed Depth	20 BLM/BIA Bond No on file
	5000'	~~NM-2056~~ NM B000412 CR

21. Elevations (Show whether DF, KDB, RT, GL, etc)	22. Approximate date work will start*	23 Estimated duration
GL 3575'	January 20, 2006	14 Days

24. Attachments

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
2 A Drilling Plan
3. 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 Item 20 above)
5 Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25 Signature	Name *(Printed/Typed)*	Date
Nancy T. Agnew	Nancy T Agnew	12-20-06

Title: Land Department

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Don Peterson	/s/ Don Peterson	MAY 19 2009
Title: FIELD MANAGER	Office: CARLSBAD FIELD OFFICE	

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, are attached

APPROVAL FOR TWO YEARS

Title 18 U S C Section 1001 and Title 43 U S C Section 1212, make 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

(Instructions on reverse)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

see COA for
Casing/Cement,
BOP & Mud

Approval Subject to General Requirements & Special Stipulations Attached

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

5. Lease Serial No.
Lc028731A

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.
Dodd Federal Unit

1 Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8 Well Name and No
531

2 Name of Operator
Marbob Energy Corp.

9 API Well No.

3a Address
P O Box 227
Artesia, NM 88211-0227

3b Phone No. *(include area code)*
575 748 3303

10. Field and Pool or Exploratory Area
GRBG Jackson SR Q GRBG SA

4 Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
330 FSL 2310 FEL Sec 15 T17S R29E
4755

11. Country or Parish, State
Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☑ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Change well location
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13 Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Attached are the new plats for the Dodd Fed. #531. Thank you.

Reviewed - Inserted Revised COA in Pecos District COA,
WWI
5/9/09

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Title Landman

Signature

Date 4/3/09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /s/ Don Peterson

Title

Date MAY 19 2009

Conditions of approval, if any, are attached Approval of this notice 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

Office CARLSBAD FIELD OFFICE

Title 18 U S C Section 1001 and Title 43 U.S C. Section 1212, make 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

(Instructions on page 2)

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-015-37091	28509	GRBG JACKSON SR Q GRBG SA

Property Code	Property Name	Well Number
34537	DODD FEDERAL UNIT	531

OGRID No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	3579'

Surface Location

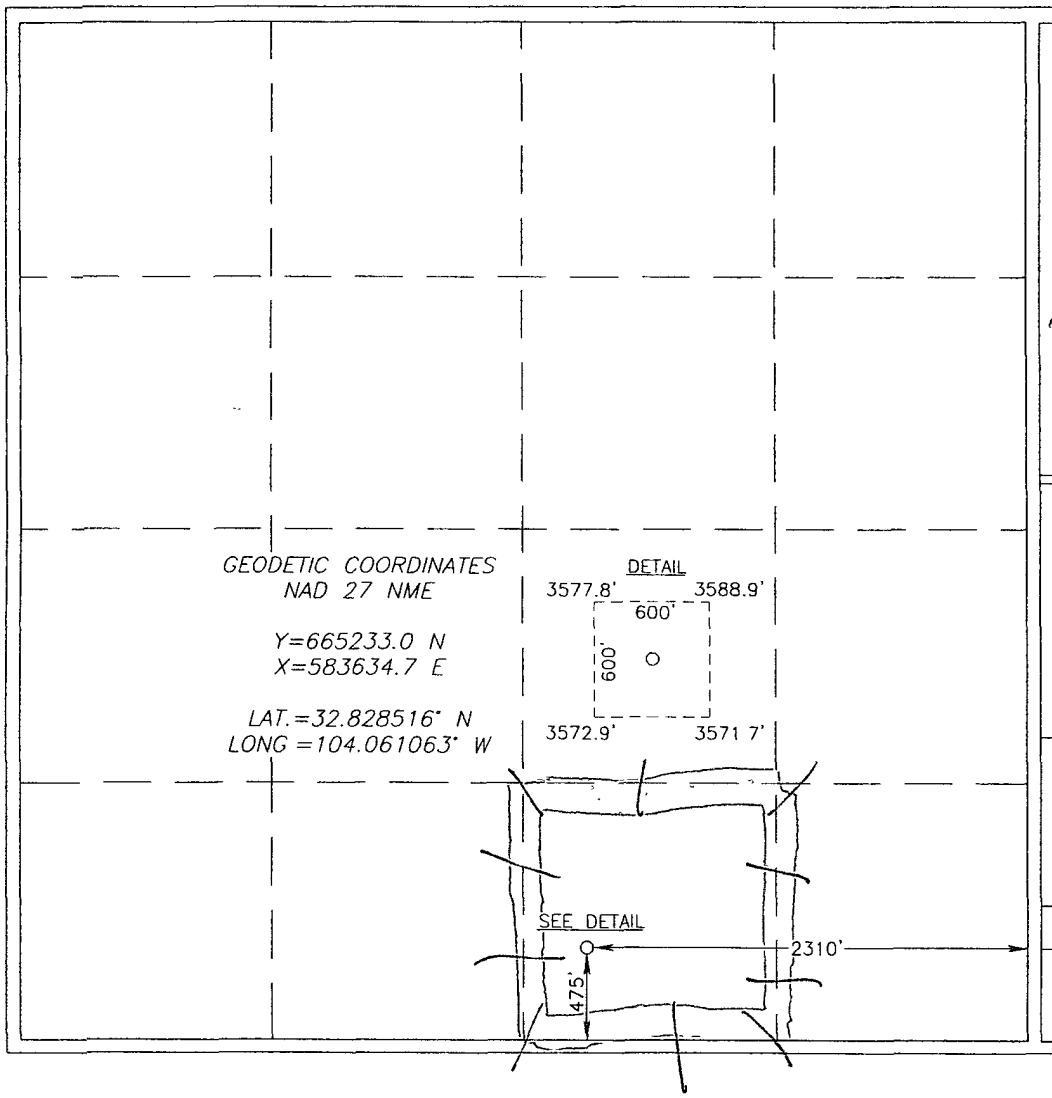
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	15	17-S	29-E		475	SOUTH	2310	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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 herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nancy T. Agnew 4/3/09
Signature Date

NANCY T AGNEW
Printed Name

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

RONALD J. EIDSON
SEPTEMBER 30, 2008
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

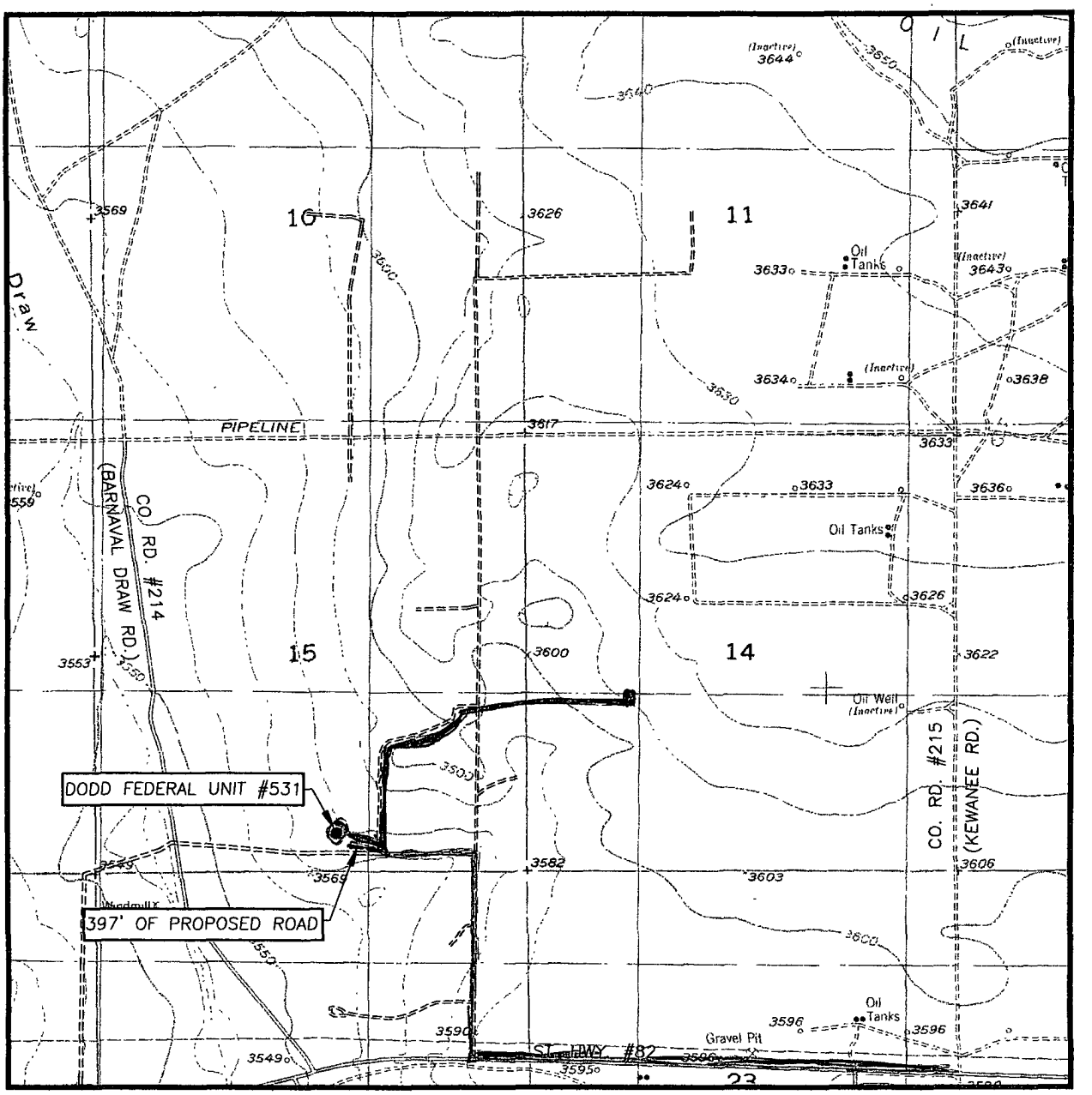
Date Surveyed LA

Signature & Seal of Professional Surveyor

Ronald J. Eidson 10/02/08
08-11-1623

Certificate No. RONALD EIDSON 3239

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
RED LAKE SE, N.M. – 10'

SEC. 15 TWP. 17-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 475' FSL & 2310' FEL

ELEVATION 3579'

OPERATOR MARBOB ENERGY CORPORATION

LEASE DODD FEDERAL UNIT

U.S.G.S. TOPOGRAPHIC MAP
RED LAKE SE, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

Existing Roads
Proposed Flowline

Exhibit #2

MARBOB ENERGY CORPORTATION
MASTER DRILLING PROGRAM
DODD FEDERAL UNIT

Attached to Form 3160-3

T-17S, R29E		T-17S, R29E	
E/2W/2	Section 10	S/2NE/4	Section 22
E/2	Section 10	NE/4NE/4	Section 22
ALL	Section 11	SE/4SW/4	Section 22
ALL	Section 14		
W/2	Section 15		
SE/4	Section 22		

Eddy County, New Mexico

1. Geological Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

Yates	830`
Queen	1765`
Grayburg	2078`
San Andres	2418`
Glorieta	3888`
Yeso	3954`

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

Permian Sands	200`
Grayburg	2078`
San Andres	2418`
Yeso	3954`

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 8-5/8" casing at 375` 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 inserting a float shoe joint into the 5 ½" production casing which will be run at TD to sufficiently cover all known oil and gas horizons above 200`.

7. Auxiliary Well Control and Monitoring Equipment:

(A) A Kelly cock will be kept in the drill string at all time.

(B) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

8. Logging, Testing, and Coring Program:

(A) No Drillstem tests are anticipated.

(B) The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log. Selected SW cores may be taken in zones of interest.

(C) No conventional coring is anticipated.

(D) Further testing procedures will be determined after the 5 ½`` production casing has been cemented at TD based on drill shows, and log evaluation, and drill stem test results.

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

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 104` and estimated bottom hole pressure (BHP) is 2250 psig.

This area has a potential H_2S hazard. An H_2S Drilling Plan is attached, including a diagram of the drilling rig layout with H_2S monitors and wind direction indicators shown.

10. Anticipated Starting Date and Duration of Operations:

Location and road work will not begin until approval has been received from the BLM. The anticipated spud date will be provided with each well application. Once commenced, the drilling operation should be finished in approximately 14 days. If the well is productive, an additional 30 to 60 days will be required for completion and testing before a decision is made to install permanent facilities.

DRILLING PROGRAM

Dodd Federal Unit #531
330' FSL & 2310' FEL
H75 **Section 15-17S-29E**
Eddy County, New Mexico

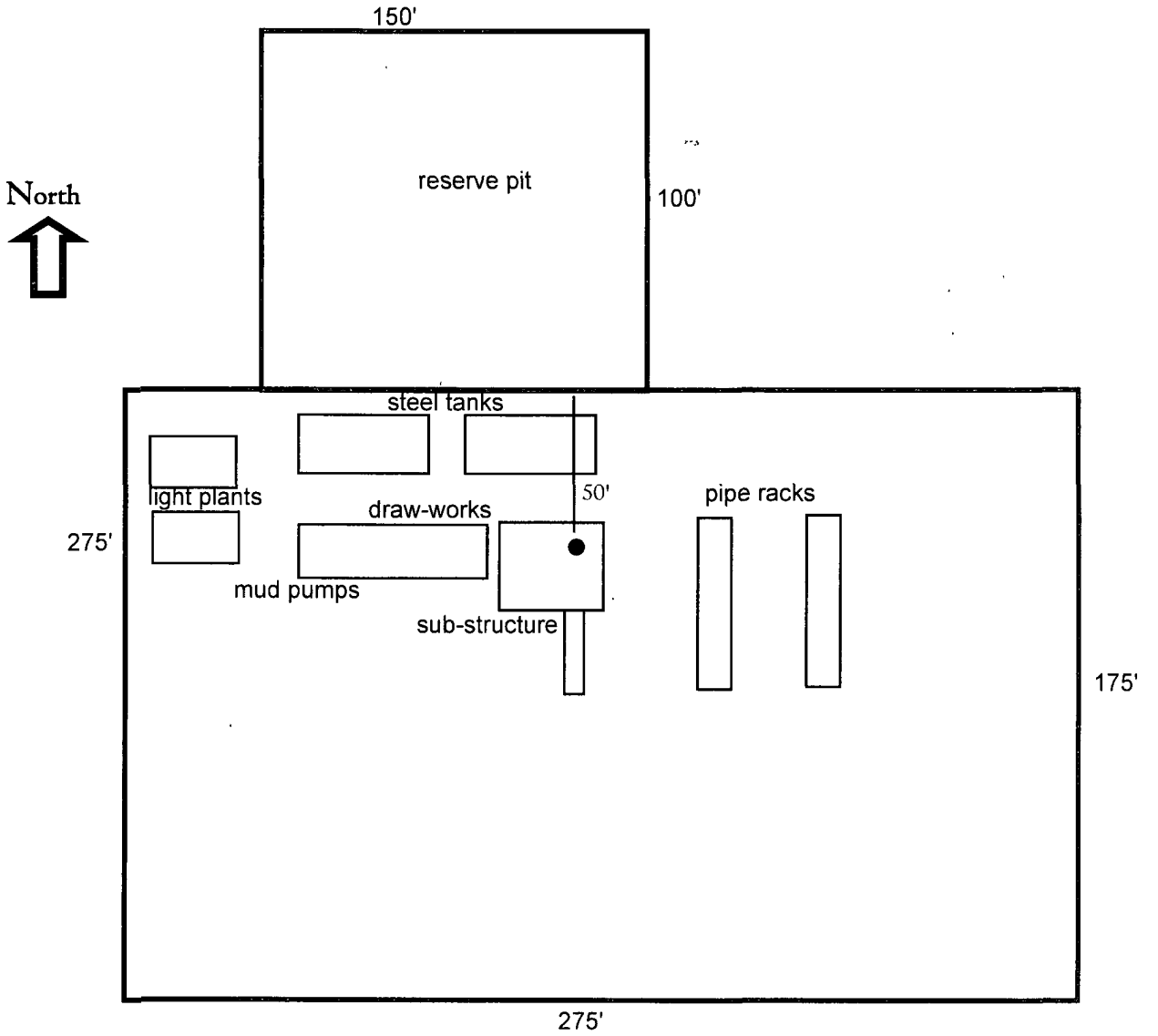
10. Anticipated Starting Date and Duration of Operations

Starting date will be scheduled upon approval.

Duration of Operations: Once commenced, the drilling operations should be completed in approximately 14 days. If the well is productive, an additional 30 to 60 days will be required for completion and testing of the well.

Well Site Lay-Out Plat

(Deep)



Dodd Federal Unit #531
~~330'~~ 1475' FSL & 2310' FEL, Unit O
Section 15, T17S, R29E
Eddy County, New Mexico

EXHIBIT THREE

Attachment to Exhibit #1
Notes Regarding the Blowout Preventers

1. Blow out preventer and all fittings must be in good condition, 2000 psi W.P. minimum.

2. All fittings to be flanged.

3. Safety valve must be available on rig floor at all times with proper connections, valve to be bore 2000 psi W.P. minimum.

4. All choke and fill line to be securely anchored, especially ends of choke lines.

5. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.

6. Kelly cock on Kelly.

7. Extension wrenches and hand wheels to be properly installed.

8. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

BOPE SCHEMATIC

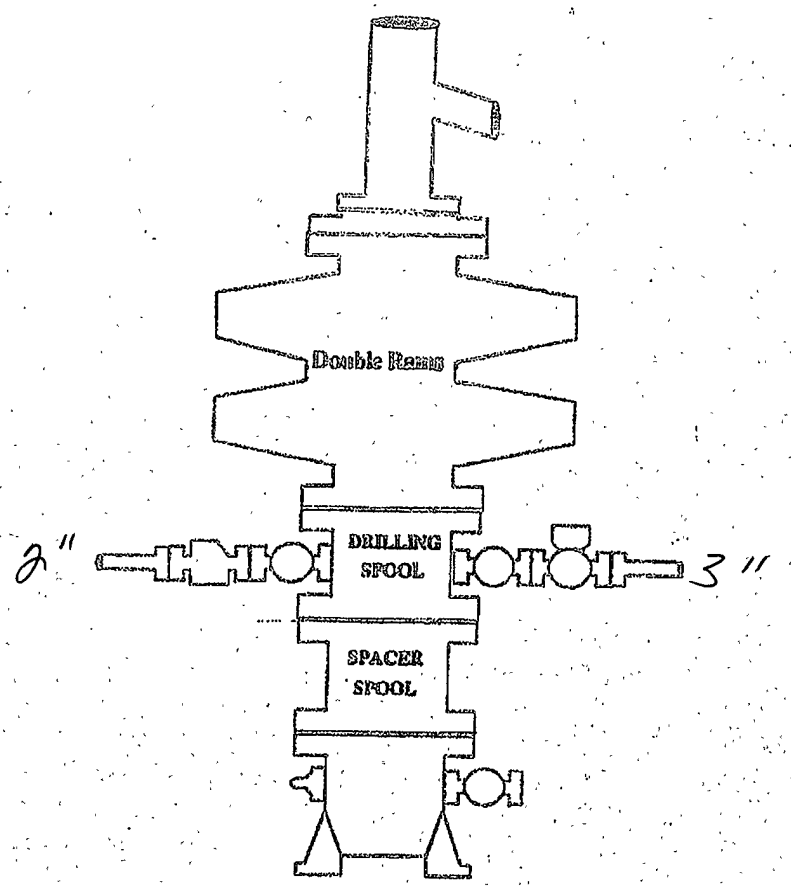
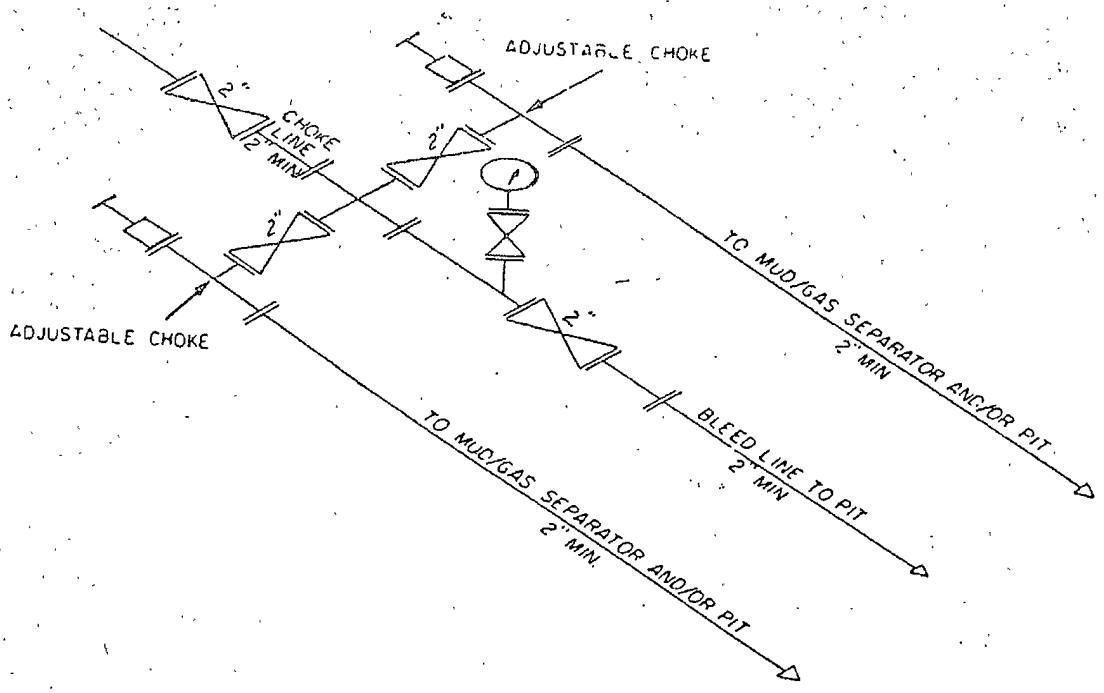
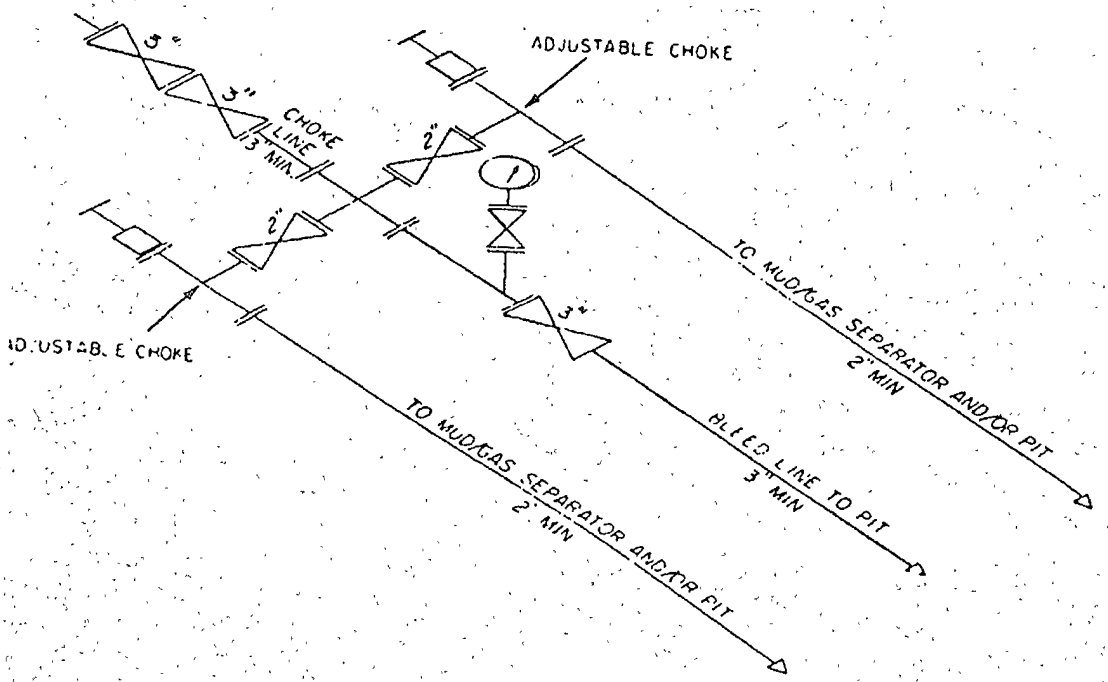


Exhibit One



2M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY



3M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

MARBOB ENERGY CORPORTATION

HYDROGEN SULFIDE DRILLING OPERATIONS 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 (H_2S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S 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 H_2S 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 H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S 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. H_2S SAFTEY EQUIPMENT AND SYSTEMS

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days

prior penetrating the first zone containing or reasonably expected to contain H_2S.

1. Well Control Equipment:

   A. Choke manifold

   B. Blind rams and pipe rams to accommodate all pipe sixes with properly sized closing unit.

2. Protective equipment for essential personnel:

   A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.

3. H_2S detection and monitoring equipment:

   A. 2 - portable H_2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S levels of 20 ppm are reached.

   B. 1 – portable S02 monitor positioned near flow line.

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 H_2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H_2S scavengers will minimize hazards when penetrating H_2S 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 H_2S service.

   B. All elastomers used for packing and seals shall be H_2S trim.

7. Communication:

   A. Radio communications in company vehicles including cellular telephone and 2-way radio.

   B. Land line (telephone) communications at field office.

WARNING

YOU ARE ENTERING AN H_2S AREA
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. ***CK WITH MARBOB FOREMAN AT MAIN OFFICE***

MARBOB ENERGY CORPORATION

1-505-748-3303

SURFACE USE AND OPERATING PLAN

Dodd Federal Unit #531
475 ~~330~~' FSL & 2310' FEL
Section 15-17S-29E
Eddy County, New Mexico

1.(c) Directions to Locations: From the intersection of St. Hwy #82 and Co. Rd #215 (Kewanee Rd), go West on St. Hwy. #82 approx. 1.1 miles. Turn right and go North approx. 0.5 miles. Turn left and go West approx. 0.3 miles to a proposed road survey. Follow road survey West approx. 550 feet to this location.

2. There will be 397' ~~409'~~ of proposed access road.

4. (a) If productive, this well will use the North tank battery.

MARBOB ENERGY CORPORTATION
MASTER DRILLING PROGRAM
DODD FEDERAL UNIT

Attached to Form 3160-3

T-17S, R29E		T-17S, R29E	
E/2W/2	Section 10	S/2NE/4	Section 22
E/2	Section 10	NE/4NE/4	Section 22
ALL	Section 11	SE/4SW/4	Section 22
ALL	Section 14		
W/2	Section 15		
SE/4	Section 22		

Eddy County, New Mexico

1. Existing Roads:

   (A) The well site and elevation plat for the proposed well is shown.

   (B) All roads to the location are shown on Exhibit #2 of each individual application. The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary determined during the onsite inspection.

   (C) Directions to location will be provided for each individual well application.

   (D) Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

   Exhibit #2 of each application will show the new access road (if necessary) to be constructed and will be illustrated in red. The road will be constructed as follows:

   (A) The maximum width of the running surface will be 10`. The road will be crowned and ditched and constructed of 6`` of rolled and compacted caliche. Ditches will be at 3:1 slope and 4` wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good

drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.

(B) The average grade will be less than 1%.

(C) No turnouts are planned.

(D) No culverts, cattle guards, 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. Any additional materials that are required will be purchased from the dirt contractor.

3. Location of Existing and/or Proposed Facilities:

(A) Marbob Energy Corp. already has tank batteries set up for this lease. There are two tank batteries located on the lease. The tank batteries are located:

North Tank Battery	SESW	11-17S-29E
South Tank Battery	NWSE	22-17S-29E

Each new well will use either the North or South Tank facility corresponding to the side of highway it is located on.

(B) If the well is productive, a 2`` or 3`` plastic flowline (grade SDR 7 @ 265 psi) will be laid on the surface following the existing lease road Right-of-Way to the Tank Battery. Anticipated pressures in the flowline should not exceed 75 psi. Proposed flowline route is indicated in blue on exhibit #2.

(C) If the well is productive; power will be obtained from Central Valley Electric. Central Valley Electric will apply for ROW for their power lines.

(D) 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 10 months after the well is completed).

(2) Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original

natural level, as nearly as possible, and reseeded as per BLM specifications.

4. 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 the location by transport truck over the existing and proposed access roads. 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.

5. Source of Construction Materials:
All caliche required for construction of the drill pad (approximately 1500 cubic yards) will be obtained from a BLM approved caliche pit. The pads will be constructed of 6`` rolled and compacted caliche.

6. 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 lined working pits. 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 150` X 6` deep. A dike will be built across the pit, dividing it in half. One-half of the reserve pit will be plastic-lined to minimize loss of drilling fluids and saturation of the ground with brine water. The other half of the reserve pit will be lined with plastic if we encounter a waterflow during drilling operations and find that we need additional space. This portioin of the pit is a precautionary measure only. The portion of the pit that will be lined with plastic should be more than adequate for normal drilling operations. If a water flow is encountered, we should have ample time to line the other half of the pit with plastic before the water encroaches.

C. Water produced from the well during completion may be disposed into the reserve pit.

D. Garbage and trash produced during drilling or completion operations will be hauled off. All waste material will be contained to prevent scattering by the wind. 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. No adverse materials will be left on the location. The reserve pit is dry enough to breakout and fill, the reserve pit will be leveled and reseeded as per BLM specifications. In the event of a dry hole, the location will be ripped and seeded, as per BLM specifications, and a dry hole marker will remain.

7. Ancillary Facilities:

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

8. Well Site Layout:

(A) The drill pad layout will be shown on Exhibit #3 for each individual well. Dimensions of the pad and pits will be shown. Top soil, if available, will be stockpiled per BLM specifications as determined as the on-site inspection.

(B) The reserve pit will be lined with a high-quality plastic sheeting.

9. Plans for Restoration of the Surface:

(A) Upon finishing drilling and/or completion operations, all equipment and other material not needed for operations will be removed.

All trash, garbage, and pit lining will be hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 10 months after abandonment.

(B) 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. 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.

(C) Upon completion of the 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 the original natural level and reseeded as per BLM specifications.

10. Surface Ownership:

The wellsite and lease is located on federal surface.

(A) The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.

(B) There is no permanent or live water in the immediate area.

(C) A Cultural Resources Examination had been requested and will be forwarded to the BLM office for each location staked.

11. Lessee's and Operator's Representative:

The Marbob Energy Corp. representative responsible for assuring compliance with the surface use plan is as follows:

A. Through A.P.D. Approval:
Dean Chumbley, Landman
Marbob Energy Corporation
P. O. Box 227
Artesia, NM 88211-0227
Phone (505)748-3303
Cell (505)748-5988

B. Through Drilling Operations
Sheryl Baker, Drilling Supervisor
Marbob Energy Corporation
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Artesia, NM 88211-0227
Phone (505)748-3303
Cell (505)748-5489

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Marbob Energy Corporation and its contractors and subcontractors in conformity with this plan and provisions of 18 U.S.C. 1001 for the filing of a false statement.

Signed:

Date: 12-21-06

Johnny C. Gray, President

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Marbob Energy
LEASE NO.:	LC028731A
WELL NAME & NO.:	Dodd Federal No 531
SURFACE HOLE FOOTAGE:	475' FSL & 2310' FEL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 15, T. 17 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

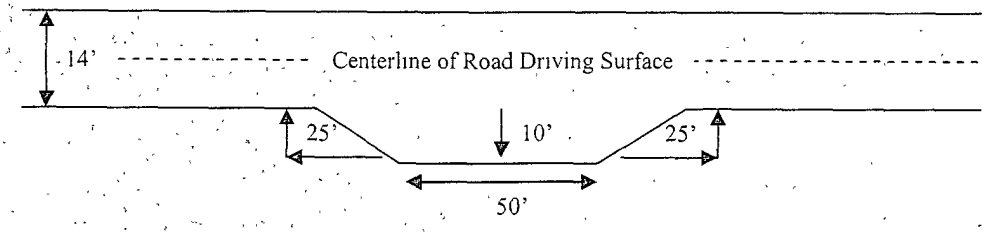
Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on the uphill side of the road.

Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

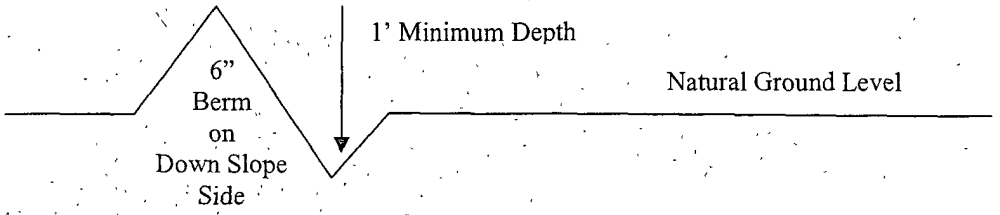


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

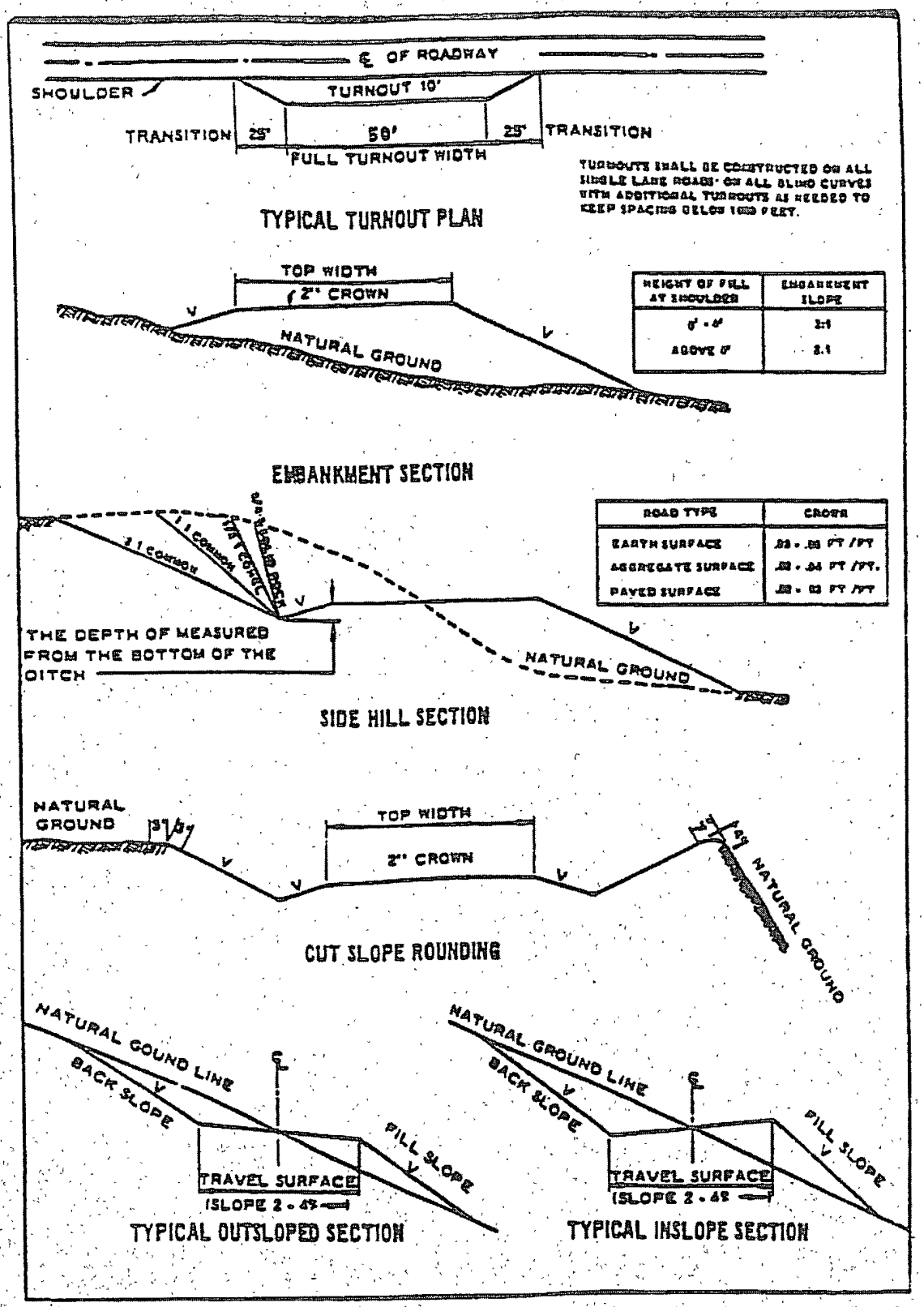
A gate shall be constructed and fastened securely to H-braces.

Fence Requirement
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access
Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Yates** formation. **Measurements in this area have recorded 1700 - 8000 ppm in the gas stream. If Hydrogen Sulfide is encountered, please report measurements and formations to the BLM.**

2. 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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible lost circulation in the Grayburg and San Andres formations.
Possible water flows in the Salado and Artesia Groups.

1. The **8-5/8** inch surface casing shall be set **at approximately 375 feet (a minimum of 25 feet into the Rustler Anhydrite and 25 feet above the salt)** and cemented to the surface.

   a. For the surface casing: If cement does not circulate to the surface, the appropriate BLM office shall be notified and a tag with 1" will be performed at four positions 90 degrees apart to verify cement depth. BLM Petroleum Engineer Technician to witness tags. If depth is greater than 100' or water is standing in the annulus, remedial cementing will be done. If no water and TOC tag is less than 100', when 100% excess cement of the annulus volume was run on the primary job, ready-mix can be used to bring cement to surface.

   b. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

   c. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   a. **First stage to DV tool, cement shall:**

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

   b. **Second stage above DV tool, cement shall:**

   ☒ Cement should tie-back at least 200 feet into previous casing string. **Operator shall provide method of verification.**

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

   a. The tests shall be done by an independent service company.

   b. The results of the test shall be reported to the appropriate BLM office.

   c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

   d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

   e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

WWI 050909

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

b. Activities of other parties including, but not limited to:

(1) Land clearing.
(2) Earth-disturbing and earth-moving work.
(3) Blasting.
(4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder

of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of **25** feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. 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 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. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his hehalf, on public or Federal land shall be immediately reported to the authorized officer. 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 cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

IX. INTERIM RECLAMATION & RESEEDING PROCEDURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

B. RESEEDING PROCEDURE

Once drilling is complete, completion procedures have been accomplished, and all trash has been removed from the site, reseed the entire location and any surrounding disturbed areas as follows:

Seed Mixture 4, for Gypsum Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Alkali Sacaton (Sporobolus airoides)	1.0
DWS Four-wing saltbush (Atriplex canescens)	5.0

DWS: DeWinged Seed

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.