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OCD-ARTESIA

OCD-ARTESIA

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Form 3160-3
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Split Estate

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

1a Type of work ☑ DRILL ☐ REENTER	5 Lease Serial No **NMLC 0054406**
1b Type of Well ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	6 If Indian, Allotee or Tribe Name
2 Name of Operator **Marbob Energy Corporation** 14049	7 If Unit or CA Agreement, Name and No **NMNM88525X**
3a Address **P.O. Box 227, Artesia, NM 88211-0228**	8 Lease Name and Well No **Burch Keely Unit #997** 6497
3b Phone No *(include area code)* **505-748-3303**	9 API Well No 30-015-36345
4 Location of Well *(Report location clearly and in accordance with any State requirements *)* At surface **1355' FNL & 2190' FWL** At proposed prod zone UNORTHODOX LOCATION	10 Field and Pool, or Exploratory **Grayburg Jackson SR Q Grbg SA**
14 Distance in miles and direction from nearest town or post office* **About 2 miles from Loco Hills, NM**	11 Sec, T R M or Blk and Survey or Area **Sec. 24 T17S - R29E**
	12 County or Parish **Eddy County** / 13 State **NM**
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) **35'**	16 No of acres in lease **40.00** / 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 **4800'** / 20 BLM/BIA Bond No on file **NMB000412**
21 Elevations (Show whether DF, KDB, RT, GL, etc) **3592' GL**	22 Approximate date work will start* **04/26/2008** / 23 Estimated duration **14 Days**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must 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 must 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 BLM

25 Signature Nancy T. Agnew	Name *(Printed/Typed)* **Nancy T. Agnew**	Date **03/26/2008**
Title **Land Department**		
Approved by *(Signature)* **/s/ James Stovall**	Name *(Printed/Typed)*	Date APR 30 2008
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 page 2)

Roswell Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

MAR 17 2008

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
	28509	GRBG JACKSON SR Q GRBG SA

Property Code	Property Name	Well Number
	BURCH KEELY UNIT	997

OGRID No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	3592'

Surface Location

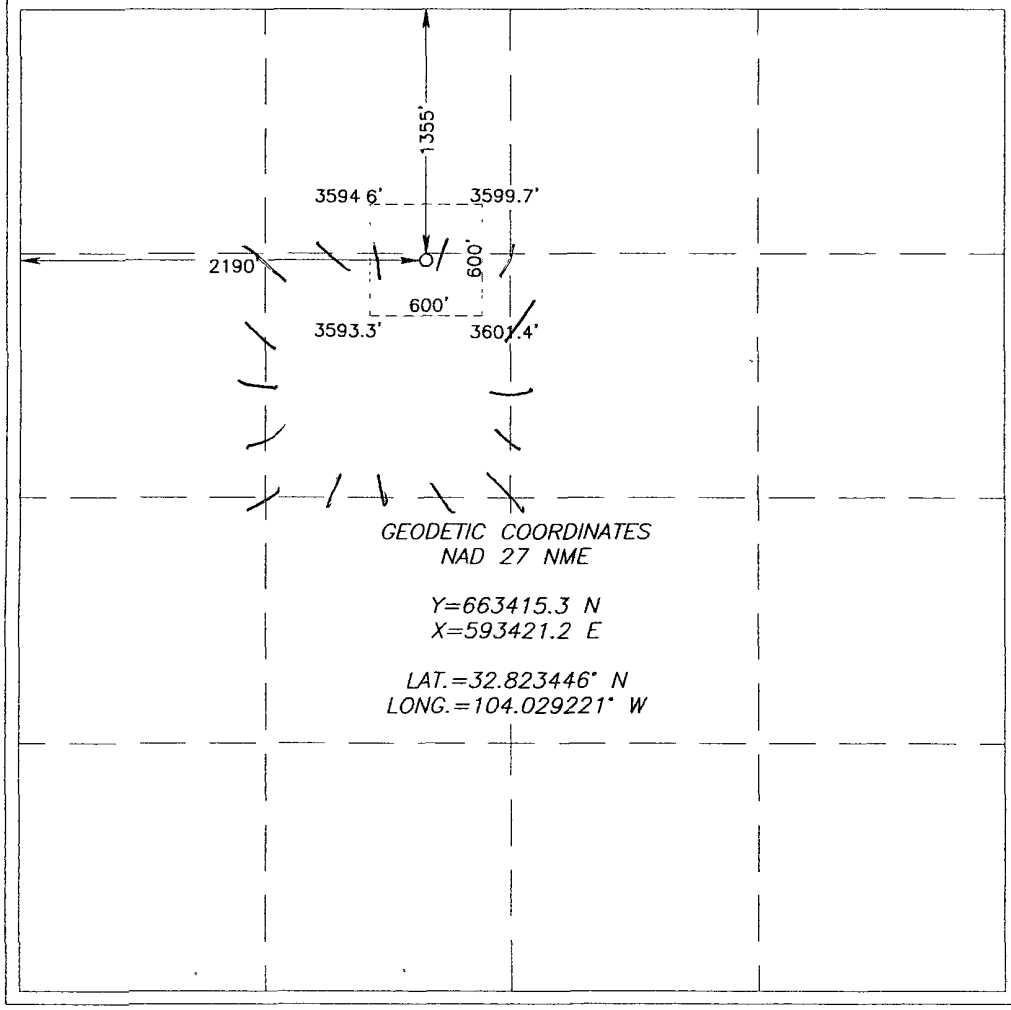
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	24	17-S	29-E		1355	NORTH	2190	WEST	EDDY

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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 3/24/08
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.

MARCH 11, 2008
Date Surveyed DSS

Signature & Seal of Professional Surveyor

Ronald J. Eidson 3/13/08

08.11.0334

Certificate No. GARY EIDSON 12641
RONALD EIDSON 3239

DRILLING PROGRAM

Burch Keely Unit No. 997
1355' FNL & 2190' FWL
Section 24-17S-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 21 days. If the well is productive, an additional 30 to 60 days will be required for completion and testing of the well.

MARBOB ENERGY CORPORATION
MASTER DRILLING PROGRAM
BURCH-KEELY UNIT

Attached to Form 3160-3

T-17S, R-29E		T-17S, R-30E	
SE/4SE/4	Section 12	ALL	Section 18
ALL	Section 13	ALL	Section 19
ALL	Section 23	ALL	Section 30
ALL	Section 24		
ALL	Section 25		
ALL	Section 26		

Eddy County, New Mexico

1. Geological Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface	Queen	1815'
Salt	360'	Grayburg	2140'
Base of Salt	780'	San Andres	2510'
Yates	930'	Glorietta	3900'
Seven Rivers	1145'		

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

Upper Permian Sands	100'	Fresh Water
Yates	930'	Oil
Seven Rivers	1145'	Oil
Queen	1815'	Oil
Grayburg	2140'	Oil
San Andres	2510'	Oil
Glorietta	3900'	Oil

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 350' 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 5-1/2" production casing which will be run at TD.

4. Casing Program:

Hole Size	Interval	OD Csg.	Weight	Grade	Jt.	Cond.	Type	Collapse	Burst	Tension
12 1/4"	0-350'	8 5/8"	24#	J-55	STC	NEW	R-3	1.125	1.125	1.6
7 7/8"	0-TD	5 1/2"	17#	J-55	LTC	NEW	R-3	1.125	1.125	1.6

Cement Program:

8 5/8" Surface: Cement to surface with 300 sk "C" yield 1.34 wt 14.8 ppg

5 1/2" Production: 1st Stage with 250 sk "H" wt 13.0 ppg yield 1.67, TOC 3250'. 2nd Stage lead300 sk "H" Lite wt 12.7 yield 1.91 Tail in with 300 sk "H" wt 13.0 ppg yield 1.67 DV Tool @ 3250' TOC 100'

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3000 psi wp) preventer. This unit will be hydraulically operated and the ram-type preventer will be quipped with blind rams on the top and 4 1/2`` drill pipe rams on bottom. This BOP will be nippled up on the 8-5/8`` surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to ~~1000~~ psi before drilling out of surface casing. See COA

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. A 2`` kill line and a 3`` choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi wp rating.

6. Types and Characteristics of the Proposed Mud System:

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

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0- 350'	Fresh Water (Spud)	8.5	48	N.C.
350`-4800`	Brine	9.8-10.2	40-45	N.C.

7. Auxiliary Well Control and Monitoring Equipment:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe stabbing valve (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 1/2" 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:

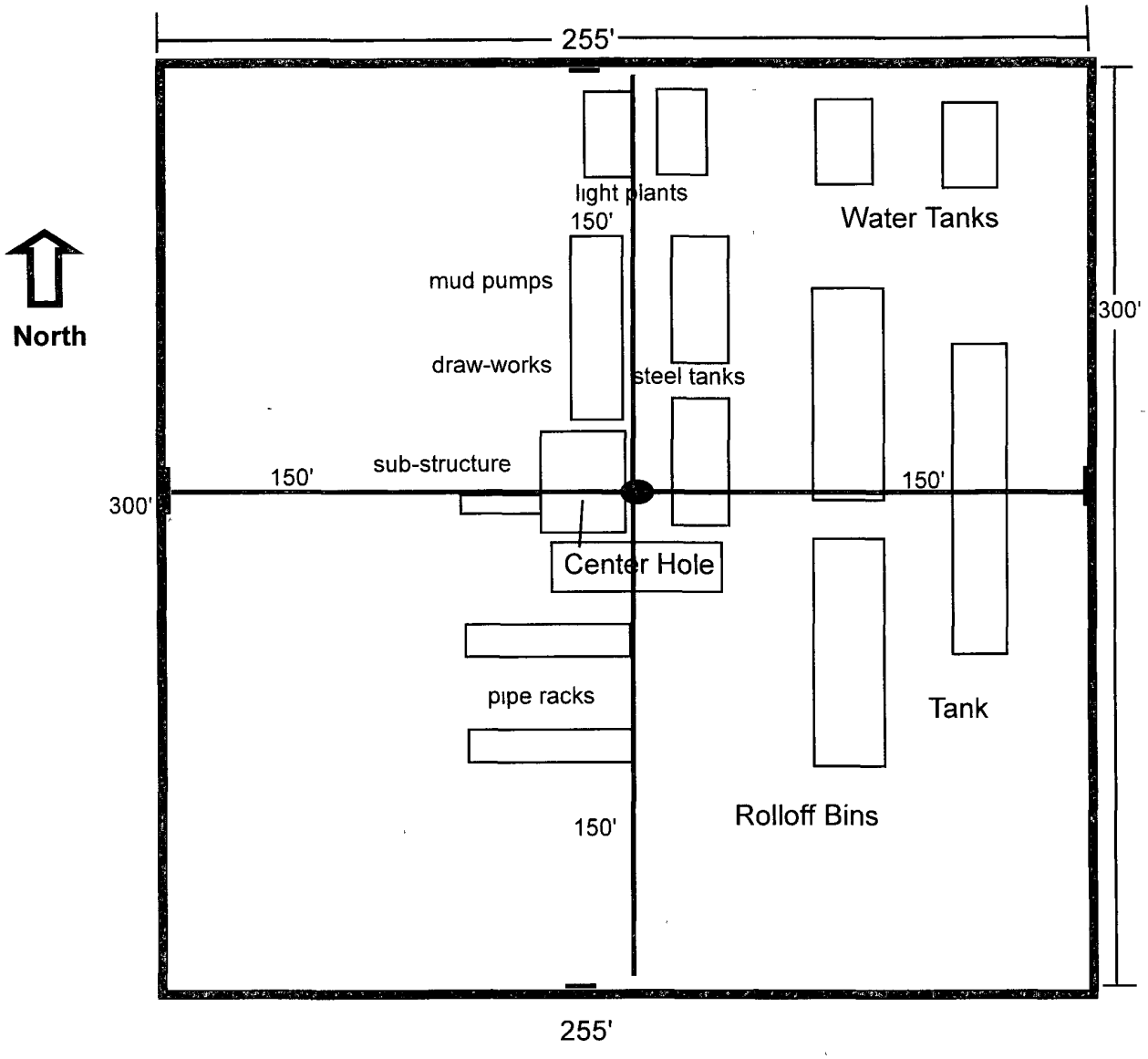
No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 104' and estimated bottom hole pressure (BHP) is 2250 psig.

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 form the BLM. The anticipated spud date will be provided with each well application. Once commenced, the drilling operation should be finished in approximately 21 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.

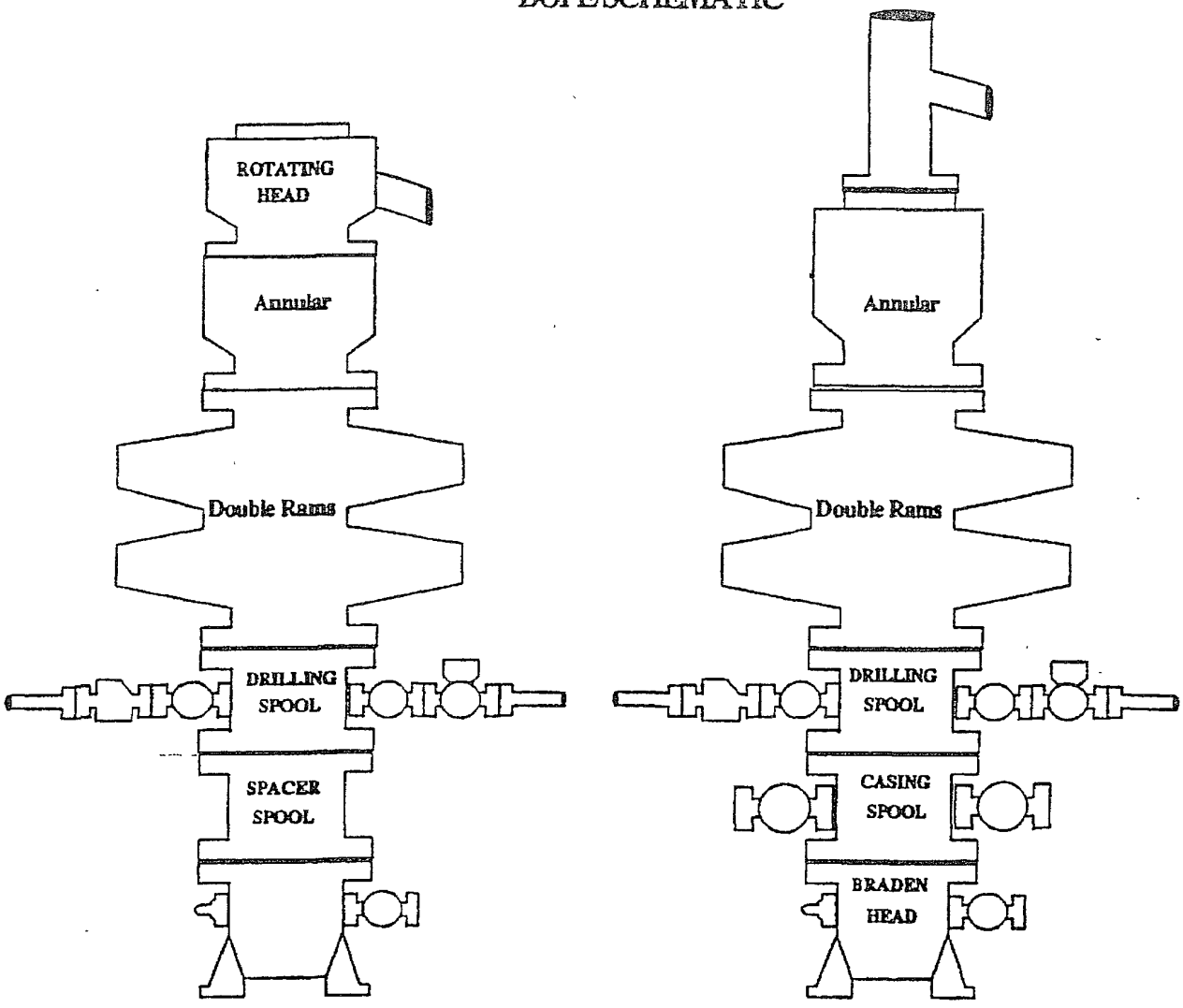
Well Site Lay-Out Plat



Burch Keely Unit No. 997
1355' FNL & 2190' FWL
Section 24-17S-29E
Eddy County, New Mexico

EXHIBIT THREE

BOPE SCHEMATIC



Choke Manifold

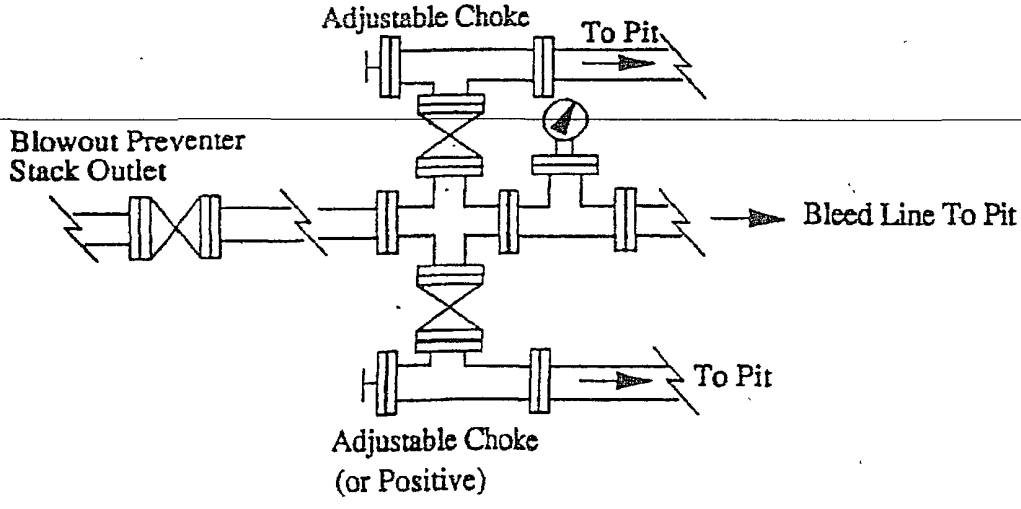
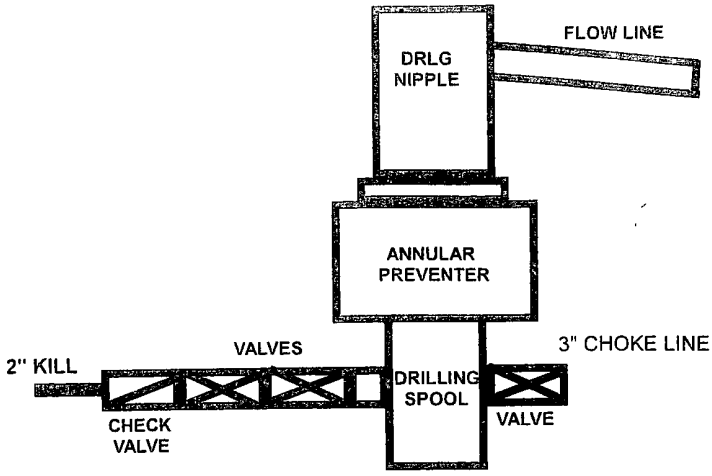
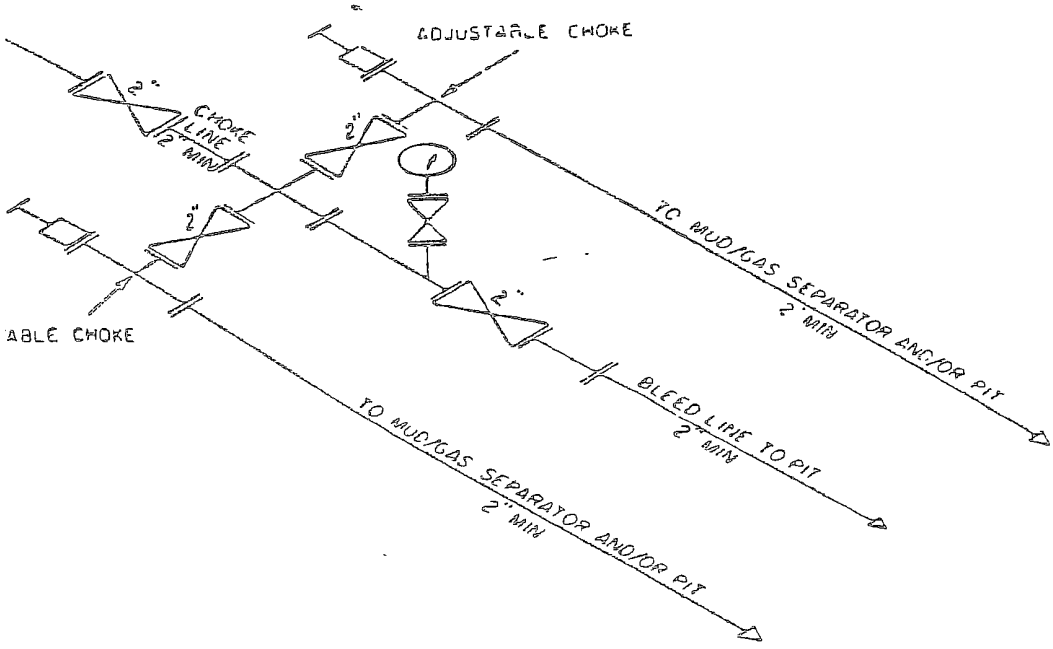


Exhibit One

2M SYSTEM





2M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

Exhibit One

Attachment to Exhibit #1
NOTES REGARDING THE BLOWOUT PREVENTERS

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.

2. Wear ring to be properly installed in head.

3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.

4. All fittings to be flanged.

5. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.

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

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

8. Kelly cock on kelly.

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

10. Blow out preventer control to be located as close to driller's position as feasible.

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

MARBOB ENERGY CORPORATION

HYDROGEN SULFIDE (H_2S) CONTINGENCY PLAN
FOR DRILLING/COMPLETING/WORKOVER/FACILITY
WITH THE EXPECTATION OF H_2S IN EXCESS OF 100 PPM

Burch Keely Unit #997
NEW WELL DRILL
1355' FNL & 2190' FWL
SECTION 24-T17S-R29E
EDDY COUNTY, NEW MEXICO

This well/facility is not expected to have H_2S, but due to the sensitive location, the following is submitted as requested.

TABLE OF CONTENTS

General Emergency Plan	Page 1
Emergency Procedure for Uncontrolled Release of H_2S	Page 1
Emergency Numbers for Notification	Page 2
Location Map	Page 3
Protection of the General (ROE) Radius of Exposure	Page 4
Public Evacuation Plan	Page 4
Procedure for Igniting an Uncontrollable Condition	Page 5
Required Emergency Equipment	Page 5 & 6
Using Self-Contained Breathing Air Equipment (SCBA)	Page 6
Rescue & First Aid for Victims of H_2S Poisoning	Page 7
H_2S Toxic Effects	Page 8
H_2S Physical Effects	Page 8

GENERAL H_2S EMERGENCY ACTIONS

In the event of an H_2S emergency, the following plan will be initiated

1) All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area"

2) If for any reason a person must enter the hazardous area, they must wear a SCBA (self contained breathing apparatus)

3) Always us the "buddy system"

4) Isolate the well/problem if possible

5) Account for all personnel

6) Display the proper colors warning all unsuspecting personnel of the danger at hand.

7) Contact the company representative as soon as possible if not at the location (use the enclosed call list as instructed)

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of emergency response agencies and residents

EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H_2S

1) All personnel will don the self contained breathing apparatus

2) Remove all personnel to the "safe area" (always use the "buddy system")

3) Contact company representative if not on location

4) Set in motion the steps to protect and/or remove the general public to any upwind "safe area" Maintain strict security and safety procedures while dealing with the source

5) No entry to any unauthorized personnel

6) Notify the appropriate agencies
   City Police – City streets
   State Police – State Roads
   County Sheriff – County Roads

7) Call the NMOCD

If at this time the supervising person determines the release of H_2S cannot be contained to the site location and the general public is in harms way, he will immediately notify public safety personnel

EMERGENCY CALL LIST

	Office	Mobile	Home
Marbob Energy Corp.	505-748-3303		
Sheryl Baker	505-748-3303	505-748-5489	505-748-2396
Johnny C. Gray	505-748-3303	505-748-5983	505-885-3879
Raye Miller	505-748-3303	505-513-0176	505-746-9577
Dean Chumbley	505-748-3303	505-748-5988	505-748-2426

EMERGENCY RESPONSE NUMBERS
Eddy County, New Mexico

State Police	505-748-9718
Eddy County Sheriff	505-746-2701
Emergency Medical Services (Ambulance)	911 or 505-746-2701
Eddy County Emergency Management (Harry Burgess)	505-887-9511
State Emergency Response Center (SERC)	505-476-9620
Carlsbad Police Department	505-885-2111
Carlsbad Fire Department	505-885-3125
New Mexico Oil Conservation Division	505-748-1283
Indian Fire & Safety	800-530-8693
Halliburton Services	800-844-8451

PROTECTION OF THE GENERAL PUBLIC/ROE

In the event greater than 100 ppg H_2S is present, the ROE (Radius of Exposure) calculations will be done to determine if the following is warranted

- 100 ppm at any public area (any place not associated with this site)
- 500 ppm at any public road (any road which the general public may travel)
- 100 ppm radius of 3000' will be assumed if there is insufficient data to do the calculations, and there is a reasonable expectation that H_2S could be present in concentrations greater than 100 ppm in the gas mixture

Calculation for the 100 ppm ROE:

X = [(1 589)(concentration)(Q)] (0 6258)

Calculation for the 500 ppm ROE:

X = [(0.4546)(concentration)(Q)] (06258)

(H_2S concentrations in decimal form)
10,000 ppm + = 01
1,000 ppm + = 001
100 ppm + = 0001
10 ppm + = 00001

EXAMPLE If a well/facility has been determined to have 150 ppm H_2S in the gas mixture and the well/facility is producing at a gas rate of 200 MCFD then.

ROE for 100 ppm X=[(1 589)(00010)(200,000)] (0 6258)
X=8 8'

ROE for 500 ppm X=[(4546)(00050)(200,000)] (0 6258)
X=10 9'

These calculations will be forwarded to the appropriate NMOCD district office when applicable

PUBLIC EVACUATION PLAN

When the supervisor has determined that the general public will be involved, the following plan will be implemented

1) Notification of the emergency response agencies of the hazardous condition and implement evacuation procedures

2) A trained person in H_2S safety shall monitor with detection equipment the H_2S concentration, wind and area of exposure This person will determine the outer perimeter of the hazardous area The extent of the evacuation area will be determined from the data being collected Monitoring shall continue until the situation has been resolved. All monitoring equipment shall be UL approved for use in Class I Groups A, B, C & D, Division I hazardous locations All monitors will have a minimum capability of measuring H_2S, oxygen, and flammable values.

3) Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure

4) The company representative shall stay in communication with all agencies throughout the duration of the situation and inform such agencies when the situation has been contained and the effected area is safe to enter

PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION

The decision to ignite a well should be a last resort and one, if not both, of the following pertain:

1) Human life and/or property are in danger

2) There is no hope of bringing the situation under control with the prevailing conditions at the site

INSTRUCTIONS FOR IGNITION

1) Two people are required They must be equipped with positive pressure, self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness Non-flammable rope will be attached

2) One of the people will be a qualified safety person who will test the atmosphere for H_2S, oxygen and LFL The other person will be the company representative

3) Ignite up-wind from a distance no closer than necessary Make sure that where you ignite from has the maximum escape avenue available A 25 mm flare gun shall be used, with a +-500' range to ignite the gas

4) Prior to ignition, make a final check for combustible gases

5) Following ignition, continue with the emergency actions and procedures as before

REQUIRED EMERGENCY EQUIPMENT

1) Breathing Apparatus

- Rescue Packs (SCBA) – 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- Work/Escape Packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity
- Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation

2) Signage and Flagging

- One Color Code Condition Sign will be placed at the entrance to the site reflecting the possible conditions at the site
- A Colored Condition flag will be on display reflecting the condition at the site at that time

3) Briefing Area

- Two perpendicular areas will be designated by signs and readily accessible

4) Wind Socks

- Two windsocks will be placed in strategic locations, visible from all angles

5) H_2S Detectors and Alarm

- The stationary detector with three (3) sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible alarm @ 15 ppm. Calibrate a minimum of every 30 days or as needed. The three sensors will be placed in the following places (Gas sample tubes will be stored in the safety trailer)

  - Rig floor
  - Bell nipple
  - End of flow line or where well bore fluid is being discharged

6) Auxiliary Rescue Equipment

- Stretcher
- Two OSHA full body harnesses
- 100' of 5/8" OSHA approved rope
- One 20 lb Class ABC fire extinguisher
- Communication via cell phones on location and vehicles on location

USING SELF-CONTAINED BREATHING AIR EQUIPMENT (SCBA)

1) SCBA should be worn when any of the following are performed

- Working near the top or on top of a tank
- Disconnecting any line where H_2S can reasonably be expected
- Sampling air in the area to determine if toxic concentrations of H_2S exist
- Working in areas where over 10 ppm of H_2S has been detected.
- At any time there is a doubt of the level of H_2S in the area

2) All personnel shall be trained in the use of SCBA prior to working in a potentially hazardous location

3) Facial hair and standard eyeglasses are not allowed with SCBA.

4) Contact lenses are never allowed with SCBA

5) Air quality shall be continuously checked during the entire operation

6) After each use, the SCBA unit shall be cleaned, disinfected, serviced and inspected.

7) All SCBA shall be inspected monthly

RESCUE & FIRST AID FOR VICTIMS OF H_2S POISONING

- Do not panic.
- Remain calm & think.
- Get on the breathing apparatus
- Remove the victim to the safe breathing area as quickly as possible, upwind and uphill from source or cross wind to achieve upwind
- Notify emergency response personnel
- Provide artificial respiration and/or CPR as necessary
- Remove all contaminated clothing to avoid further exposure.
- A minimum of two (2) personnel on location shall be trained in CPR and First Aid.

H_2S TOXIC EFFECTS

H_2S is extremely toxic The acceptable ceiling for eight hours of exposure is 10 ppm, which is .001% by volume. H_2S is approximately 20% heavier than air (Sp Gr=1.19 / Air=1) and colorless. It forms an explosive mixture with air between 4 3% and 46 0% By volume hydrogen sulfide (H_2S) is almost as toxic as hydrogen cyanide and is 5-6 times more toxic than carbon monoxide

Various Gases

Common Name	Chemical Abbrev.	Sp Gr	Threshold Limits	Hazardous Limits	Lethal Concentration
Hydrogen Sulfide	H_2S	1.19	10 ppm 15 ppm	100 ppm/hr	600 ppm
Hydrogen Cyanide	HCN	0 94	10 ppm	150 ppm/hr	300 ppm
Sulfur Dioxide	SO_2	2 21	2 ppm	N/A	1000 ppm
Chlorine	CL_2	2 45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0 97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO_2	1 52	5000 ppm	5%	10%
Methane	CH_4	0.55	90,000	Combustible @ 5%	N/A

1 Threshold limit – Concentrations at which it is believed that all workers may be repeatedly exposed, day after day, without adverse effects
2 Hazardous limit – Concentration that may cause death
3 Lethal concentration – Concentration that will cause death with short-term exposure
4 Threshold limit – 10 ppm – NIOSH guide to chemical hazards
5 Short-term threshold limit

PHYSICAL EFFECTS OF HYDROGEN SULFIDE (H_2S)

CONCENTRATIONS		PHYSICAL EFFECTS
001%	10 ppm	Obvious and unpleasant odor Safe for 8 hr. exposure
005%	50 ppm	Can cause some flu-like symptoms and can cause pneumonia
01%	100 ppm	Kills the sense of smell in 3-15 minutes May irritate eyes and throat
02%	200 ppm	Kills the sense of smell rapidly Severely irritates eyes and throat Severe flu-like symptoms after 4 or more hrs May cause lung damage and/or death.
06%	600 ppm	Loss of consciousness quickly, death will result if not rescued promptly

SURFACE USE AND OPERATING PLAN

Burch Keely Unit No. 997
1355' FNL & 2190' FWL
Section 24-17S-29E
Eddy County, New Mexico

1. (c) Directions to Locations: From the intersection of US Hwy #82 and Co. Rd #215 (Kewanee Rd.), go north on Co. Rd. #215 approx. 0.35 miles. Turn right and go east approx. 0.4 miles to a proposed road survey. Follow road survey approx. 473 feet south. This location is approx. 258 feet southeast.

2. There will be a proposed access road of 473' ending on the northwestern side of the well pad.

4. (a) If productive, this well will use Satellite "B".

MARBOB ENERGY CORPORATION
MASTER SURFACE USE AND OPERATING PLAN
BURCH-KEELY UNIT

Attached to Form 3160-3

T-17S, R-29E		T-17S, R-30E	
SE/4SE/4	Section 12	ALL	Section 18
ALL	Section 13	ALL	Section 19
ALL	Section 23	ALL	Section 30
ALL	Section 24		
ALL	Section 25		
ALL	Section 26		

Eddy County, New Mexico

1. Existing Roads:

(A) The well site and elevation plat for the proposed well is shown. It was staked by John West Engineering.

(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 as 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 yellow. 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.

1-24-03

(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 Wells:

Exhibit #3 will show all existing wells within a one-half mile radius of the well.

4. Location of Existing and/or Proposed Facilities:

(A) Marbob Energy Corporation already has a collection facility set up for this lease. There are seven satellite collection points which separate the gas from the production string before sending the fluids to one of two tank batteries. The satellites are located:

Satellite A	NE/4SE/4	24-17S-29E
Satellite B	SE/4NW/4	19-17S-30E
Satellite C	SE/4NE/4	13-17S-29E
Satellite D	SE/4NE/4	23-17S-29E
Satellite E	SW/4SE/4	23-17S-29E
Satellite F	SW/4NW/4	25-17S-29E
Satellite G	SE/4NW/4	30-17S-30E

The tank batteries are located:

Central Tank Battery	NW/4SE/4	24-17S-29E
Satellite E Tank Battery	SE/4SW/4	23-17S-29E

Each new well will use the Satellite facility nearest to it.

(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 Satellite or to the Central Tank Battery if the production from the well exceeds the capacity of the Satellite vessel. Anticipated pressures in the flowline should not exceed 75 psi.

(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.

1-24-08

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

The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to 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.

6. Source of Construction Materials:
All Caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

7. Methods of Handling Water Disposal:

a. All trash, junk and other waste material will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill.

b. The supplier, including broken sacks, will pick up slats remaining after completion of well.

c. A porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

d. Disposal of fluids and cuttings below the fresh water zone will be transported by an approved disposal company.

8. Ancillary Facilities:

No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout:

a. Exhibit.3 shows the proposed well site layout with dimensions of the pad layout.

b. This exhibit indicates proposed location of fresh water sump pits if utilized and living facilities.

c. Mud pits in the active circulating system will be steel pits and a closed loop system will be utilized.

10. Plans for Restoration of the Surface:

a. After finishing drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original state.

b. The location and road will be rehabilitated as recommended by the BLM.

c. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. 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.

12. **Lessee's and Operator's Representative:**

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

Johnny C. Gray
Marbob Energy Corporation
324 West Main, Suite 103
Post Office Box 227
Artesia, New Mexico 88211-0227
Phone: 505/748-3303 (office)
505/885-3879 (home)

Certification:

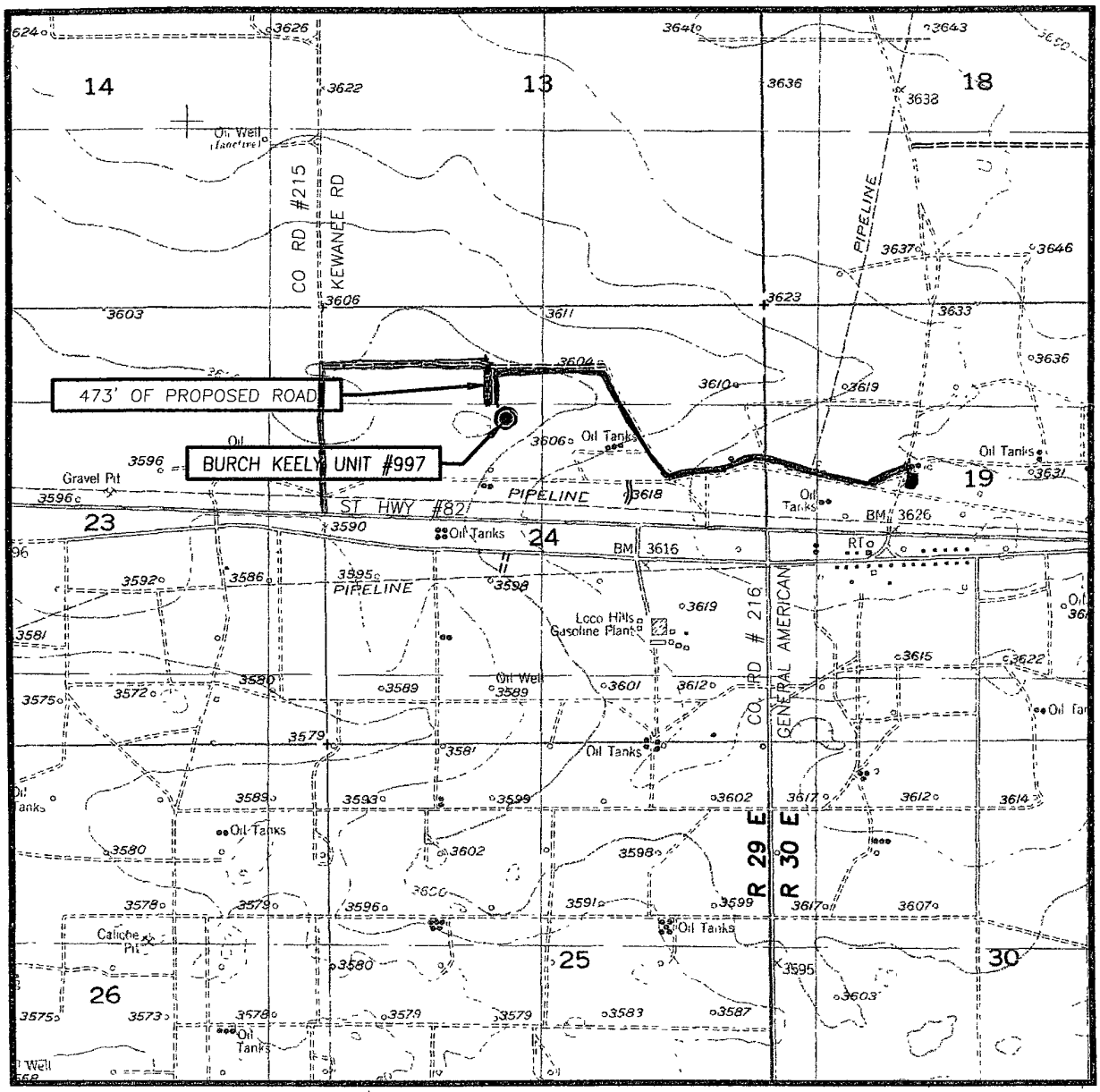
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with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

Signed:

Date: 5-25-95

Johnny C. Gray, Vice-President

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 24 TWP. 17-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1355' FNL & 2190' FWL

ELEVATION 3592'

OPERATOR MARBOB ENERGY CORPORATION

LEASE BURCH KEELY UNIT

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

—Existing Roads
—Proposed Flowline

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

Exhibit #2

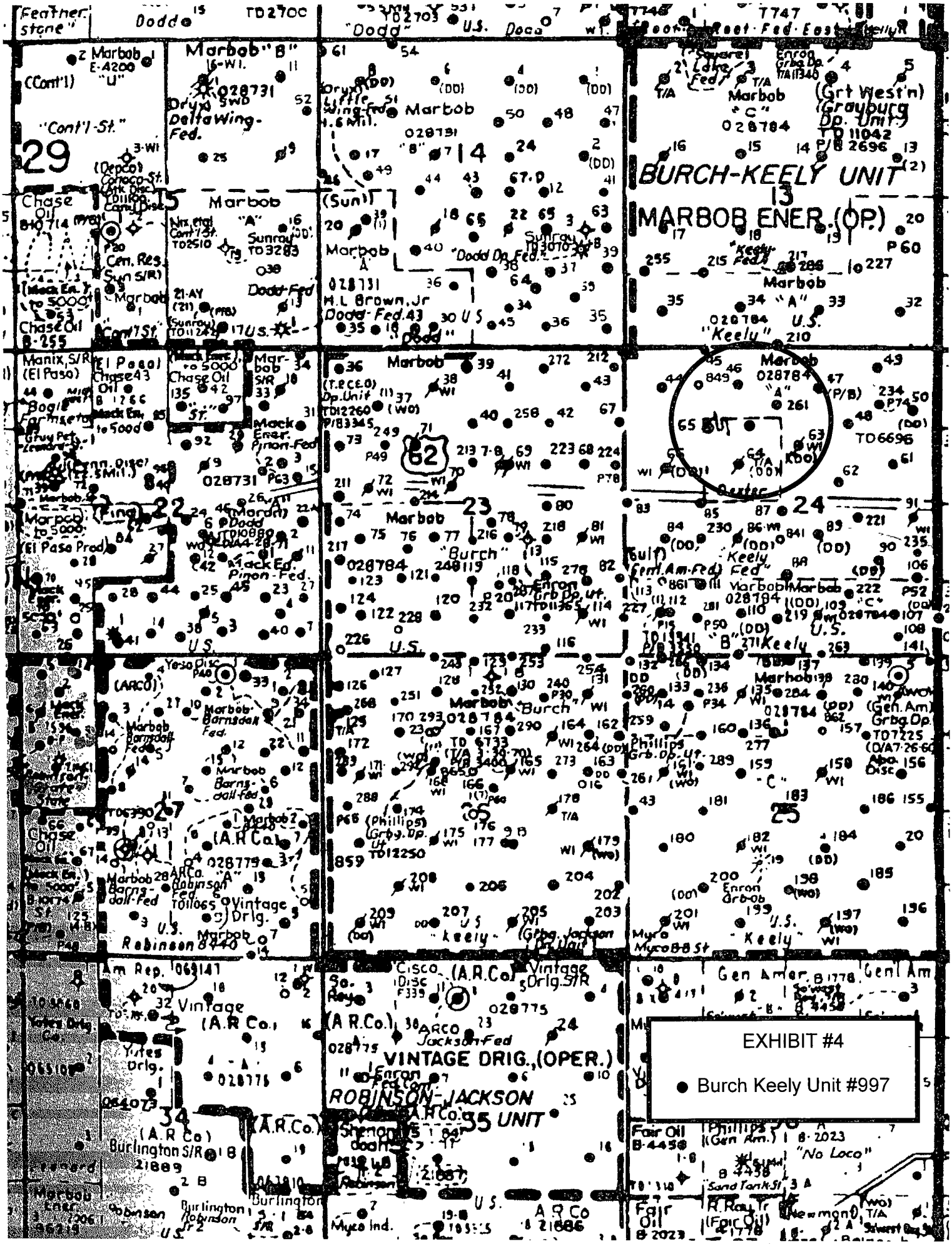


EXHIBIT #4
Burch Keely Unit #997

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Marbob Energy Corp
LEASE NO.:	LC-054406
WELL NAME & NO.:	997-Burch Keely Unit
SURFACE HOLE FOOTAGE:	1355' FNL & 2190' FWL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 24, T. 17 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
  - **Pad orientation and berming**
- ☐ **Construction**
  - Notification
  - Topsoil
  - Reserve Pit
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post-Drilling)**
  - Well Structures & Facilities
  - Pipelines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

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)

V-DOOR SOUTH AND CONSTRUCT A 3 FT. EARTHEN BERM, OFF THE WELL PAD, ALONG SIDE THE ENTIRE WEST EDGE OF THE WELL PAD AND 50 FT. TO THE EAST ON THE NORTH AND SOUTH EDGE TO CATCH ANY SPILLAGE THAT MIGHT RUN OFF PAD TOWARD THE PLAYA TO THE WEST.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

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.

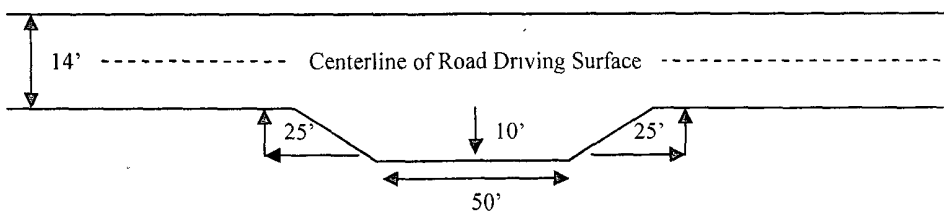
Ditching

Ditching shall be required on both sides 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

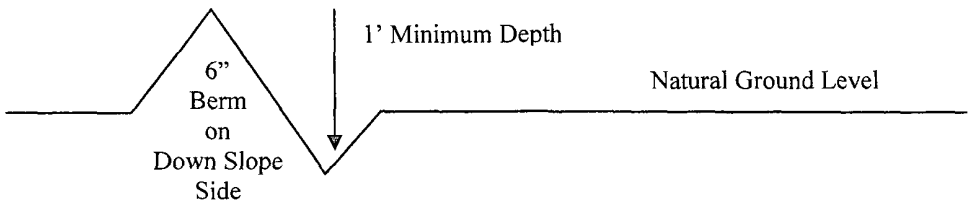


Drainage

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.

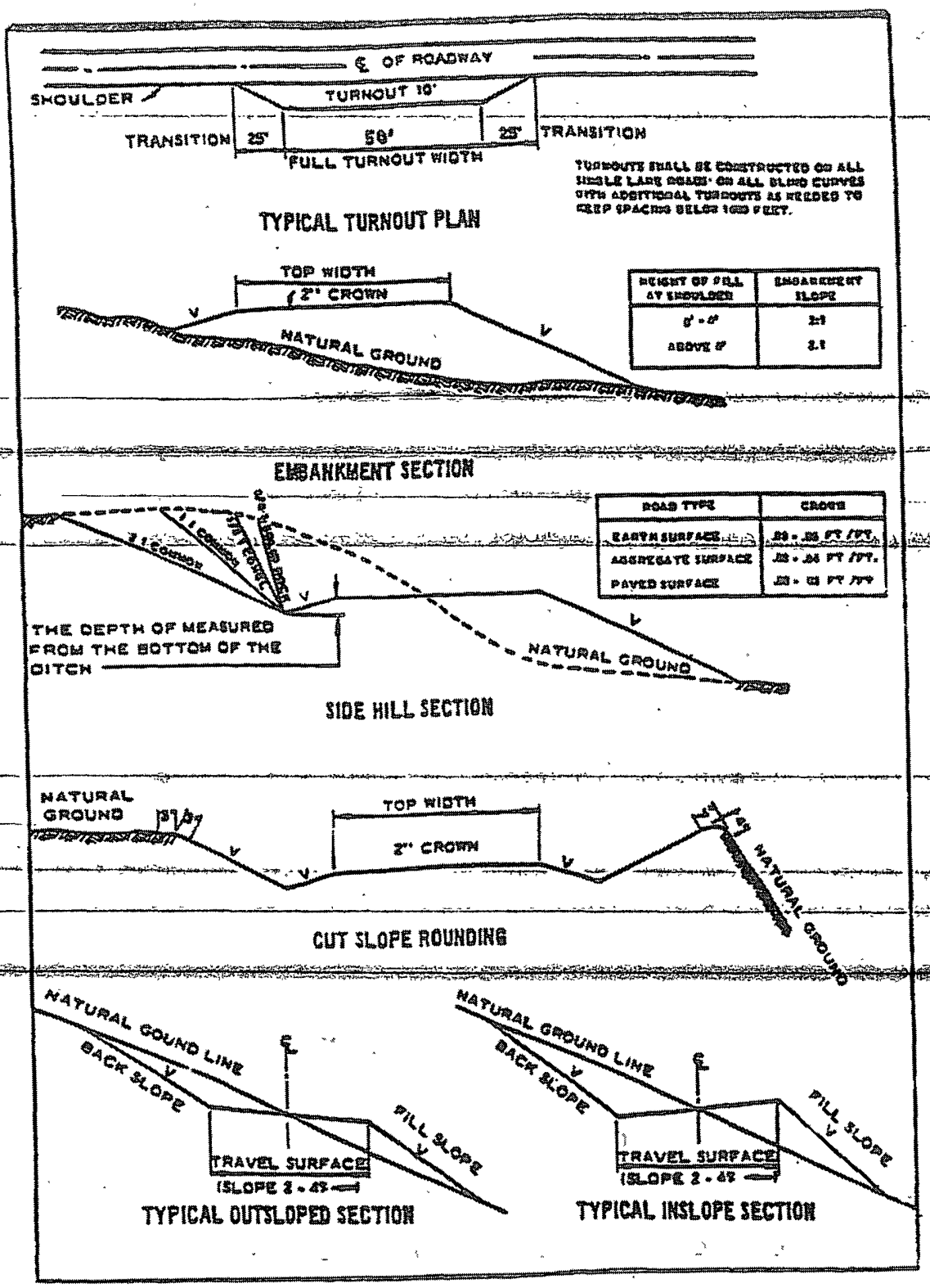
A gate shall be constructed and fastened securely to H-braces.

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 4 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.

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.

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

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 350 feet (a minimum of 25 feet into the Rustler Anhydrite and 25 feet above the salt)** and cemented to the surface.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.

a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

b. 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. (This is to include the lead cement).

c. 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.

d. 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 4 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. **No variance granted on BOP test when running only two casing strings.**

D. DRILL STEM TEST

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

WWI 042608

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 behalf, 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 & RESERVE PIT CLOSURE

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.

The 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.

Seed Mixture 2, for Sandy 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 see 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
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*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.