VRM III 8063 ATS-08-306

MAY - 5 2008

OCD-ARTESIA 593 OCD-ARTESIA

Form 3160-3
(February 2005)

FORM APPROVED
OMB NO. 1004-0137
Expires March 31,2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No: **NM-100817**

6. If Indian, Allottee or Tribe Name: **N/A**

7 If Unit or CA Agreement, Name and No: **N/A**

8. Lease Name and Well No.: **Banquet BKQ Federal #1**

1a. Type of Work. [x] DRILL [ ] REENTER

1b Type of Well: [ ] Oil Well [x] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

2. Name of Operator: **Yates Petroleum Corporation** 025575

9. API Well No.: 30-015-36316

3a. Address: **105 South Fourth Street, Artesia, NM 88210**

3b. Phone No. *(include area code)*: **505-748-1471**

10 Field and Pool, or Exploratory: Little Box Canyon; **Morrow**

4. Location of well *(Report location clearly and In accordance with any State requirements.*)*
At surface: **1680' FSL & 840' FWL, UL L, NWSW**
At proposed prod zone: **Same**

11. Sec , T , R., M , or Blk And Survey or Area: **Section 24-T21S-R21E**

14. Distance in miles and direction from the nearest town or post office*: **The well is about 21 miles west of Carlsbad, NM.**

12. County or Parish: **Eddy**

13 State: **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg unit line, if any)	16 No. of acres in lease	17 Spacing Unit dedicated to this well
840'	**320.00**	**South Half of 24-21S-21E**
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
None	**8,500'**	**NATIONWIDE BOND #NMB000434**
21. Elevations (Show whether DF, KDB, RT, GL, etc)	22. Aproximate date work will start*	23 Estimated duration
4537' GL	**ASAP**	

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 must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by 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	Name *(Printed/ Typed)*	Date
Debbie S. Caffall	**Debbie Caffall**	**3/13/2008**

Title: **Regulatory Agent**

Approved By *(Signature)*	Name *(Printed/ Typed)*	Date
/s/ James Stovall		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 cc 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 wilfully to make to any department or agency of the Unitec States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

* *(Instructions on page 2)* C-144 IS ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Roswell Controlled Water Basin

Approval Subject to General Requirements & Special Stipulations Attached

RMD 5-15-08

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	80240	Undesignated Little Box; Morrow Gas Pool

Property Code	Property Name	Well Number
37161	BANQUET "BKQ" FEDERAL	1

OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORP.	4537

Surface Location

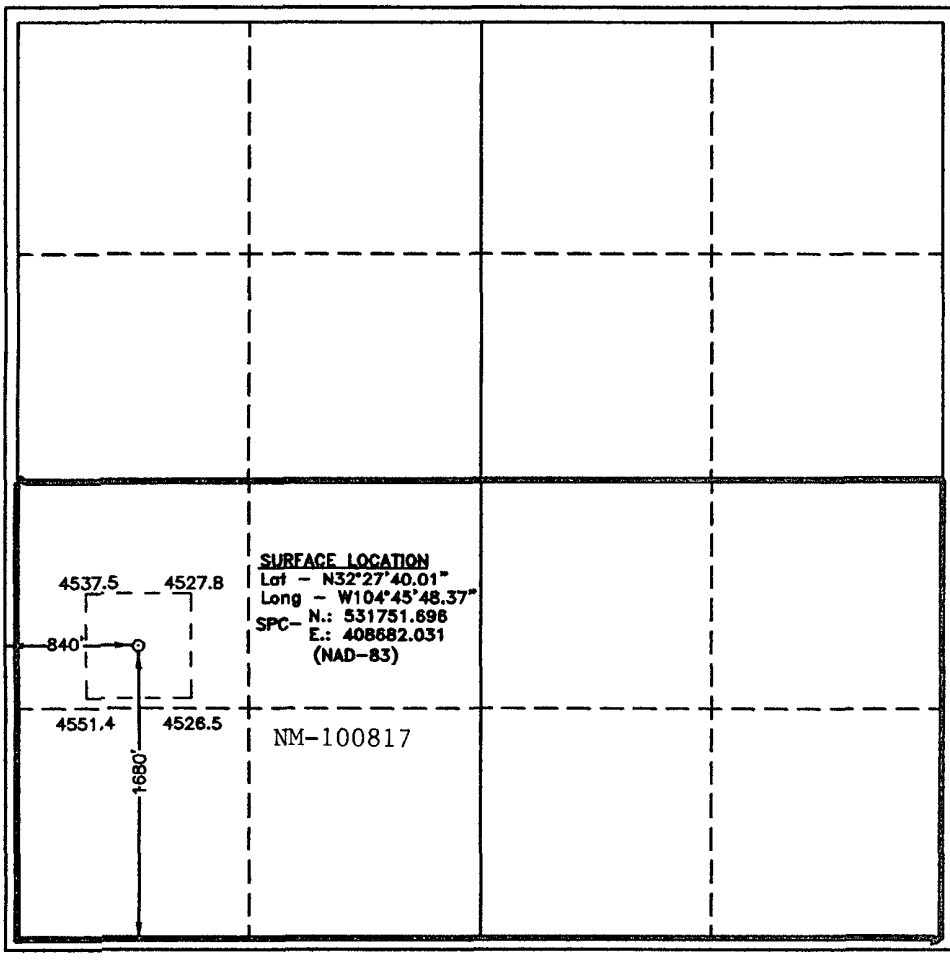
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	24	21 S	21 E		1680	SOUTH	840	WEST	EDDY

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.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

Signature — Date: 3/13/08

Debbie L. Caffall
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 supervison, and that the same is true and correct to the best of my belief.

MARCH 05, 2008
Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

YATES PETROLEUM CORPORATION
Banquet BKQ Federal #1
1680' FSL and 840' FWL
Section 24-T21S-R21E
Eddy County, New Mexico

1. The estimated tops of geologic markers are as follows:

San Andres	605'	Cisco	5960'
Glorieta	2070'	Strawn	7330'
Yeso Upper	2105'	Atoka	7870'
Tubb	2850'	Morrow Upper	8100'
Yeso Lower	2940'	Lower Morrow	8230'
Abo	3580'	Chester	8450'
Wolfcamp	4720'	TD	8500'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encounter

   Water: 800'
   Oil or Gas: Gas: Abo, Wolfcamp, Cisco, Strawn, Atoka, Morrow Upper, Lower Morrow, & Chester

3. Pressure Control Equipment: A rotating head will be installed on the 13.375" casing. A 3000# BOPE will be installed on the 9.625" casing and will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

4. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when Kelly is not in use.

5. THE PROPOSED CASING AND CEMENTING PROGRAM:

   A. Casing Program: All New Casing

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17.5"	13.375"	48#	H-40	ST&C	0-400'	400'
12.25"	9.625"	36#	J-55	ST&C	0-2100'	2100'
8.75"	5,5"	17#	J-55	LT&C	0-100'	100'
8.75"	5.5"	15.5#	J-55	LT&C	100-6800'	6700'
8.75"	5.5"	17#	L-80	LT&C	6800-8500'	1700'

   1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8

   B. CEMENTING PROGRAM:
   Surface Casing: 425 sx Permium Pl + CaCl2 (YLD 1.35 WT 14.8). Circulate cement to surface.

Intermediate Casing: Lead 180 sx Thixotropl (YLD 1.52 WT 14.6). Lead with 400 sx C lite (YLD 1.98 WT 12.5) and tail in with 200 sx C+ CaCl2 (YLD 1.34 WT 14.8). Cement circulated to surface.

Production Casing: Lead with 600 sx interfillH (YLD ~~1.67~~ 2.45 WT ~~13.0~~ 11.9). Tail in with 450 sx C (YLD 2.45 WT 11.9) Tail in with 1325 sx Super H (YLD 1.66 WT 13.0). Top cement calculated to 1600'.

-per J. Mullen Yates 4-17-08 LB

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

SEE COA

Interval	Type	Weight	Viscosity	Fluid Loss
0-400	FW /Air Mist	8.4-8.4	28-28	N/C
400-2100	FW/Air Mist	8.4-8.4	28-28	N/C
2100-7330	Cut Brine/6% KCL by Abo	9.0-9.4	28-28	15-20CC
7330-8500	Salt Water Gel/Starch	9.4-9.6	28-28	10-15cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Rig personnel will check mud hourly.

7. EVALUATION PROGRAM:

Samples: Every 10' from surface casing to TD
Logging: Platform Express/HALS/NGT; Possible FMI
Coring: None anticipated
DST's: None anticipated

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Anticipated BHP:

0-400'	175 psi
400'-920'	920 psi
2100'-8500'	4245 psi

Abnormal Pressures Anticipated: None
Lost Circulation Zones Anticipated: None.
H2S Zones Anticipated: None Anticipated
Maximum Bottom Hole Temperature: 180 F

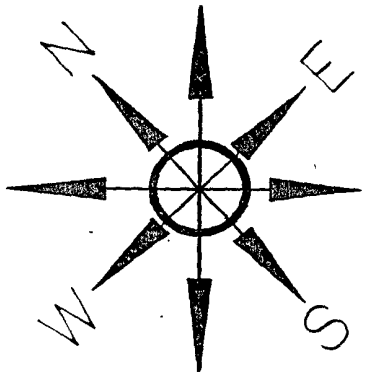
9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 20 days.

PB - L1

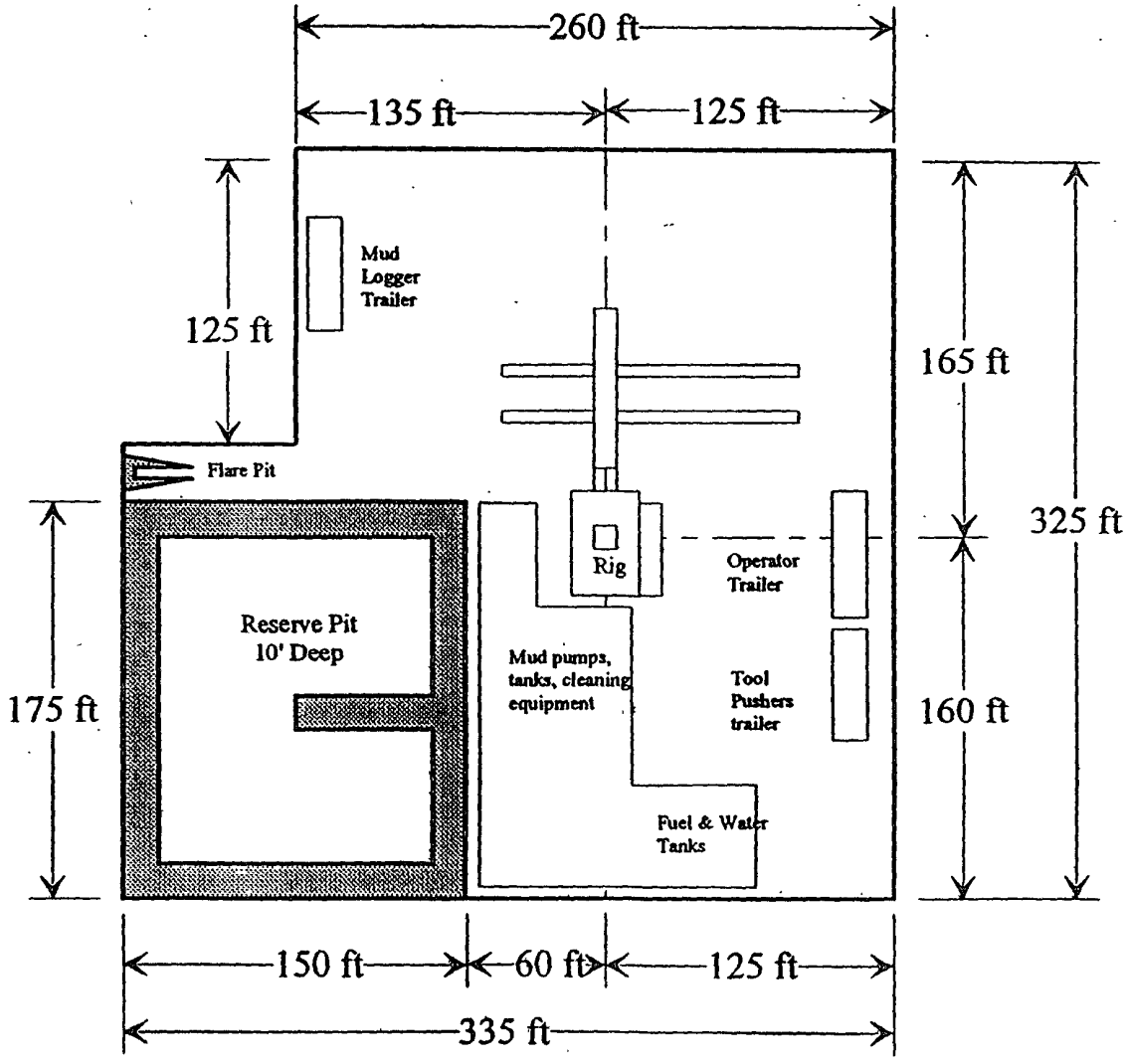
Yates Petroleum Corporation

Location Layout for Permian Basin
Up to 12,000'



Yates Petroleum Corporation
Banquet BKQ Federal #1
1680' FSL & 840' FWL Unit L (NWSW
Section 24, T21S, R21E
Eddy County, New Mexico
Exhibit "C"

PITS TO SOUTHWEST



DRAWING NOT TO SCALE

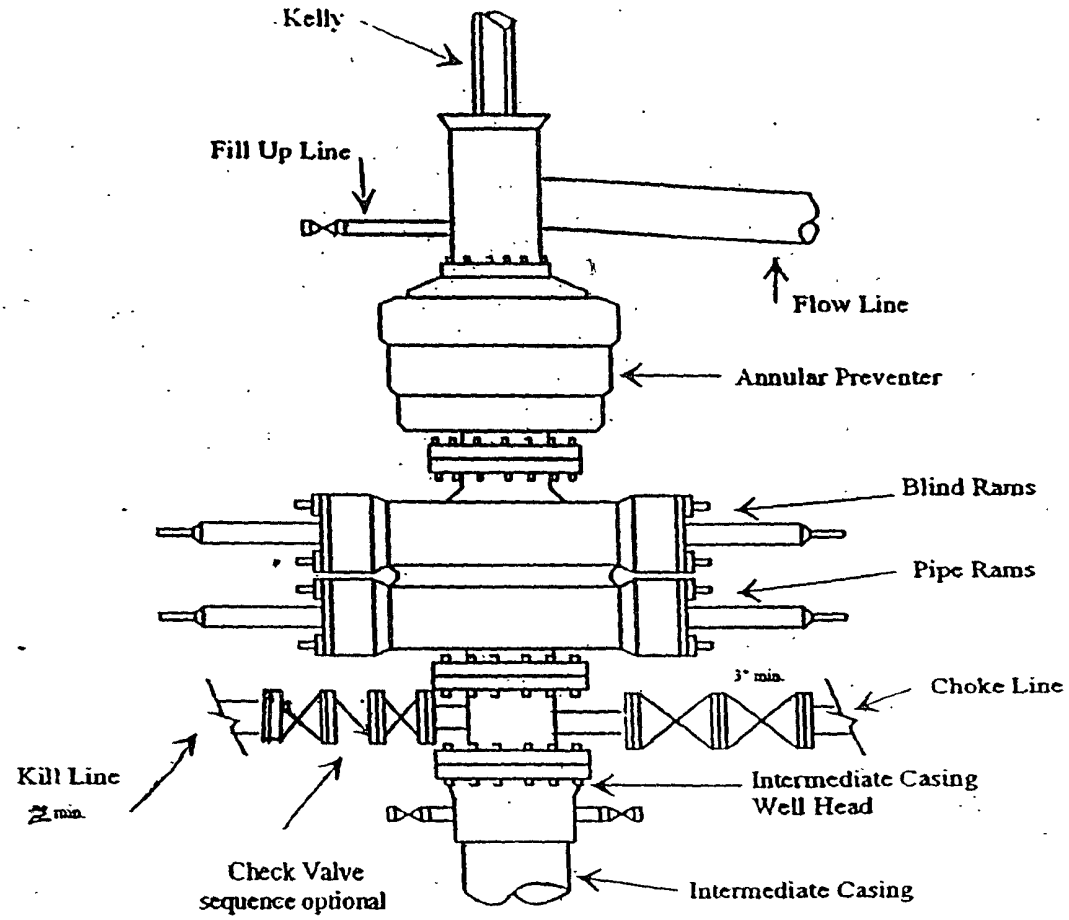
Distance from Well Head to Reserve Pit will vary between rigs

The above dimension should be a maximum

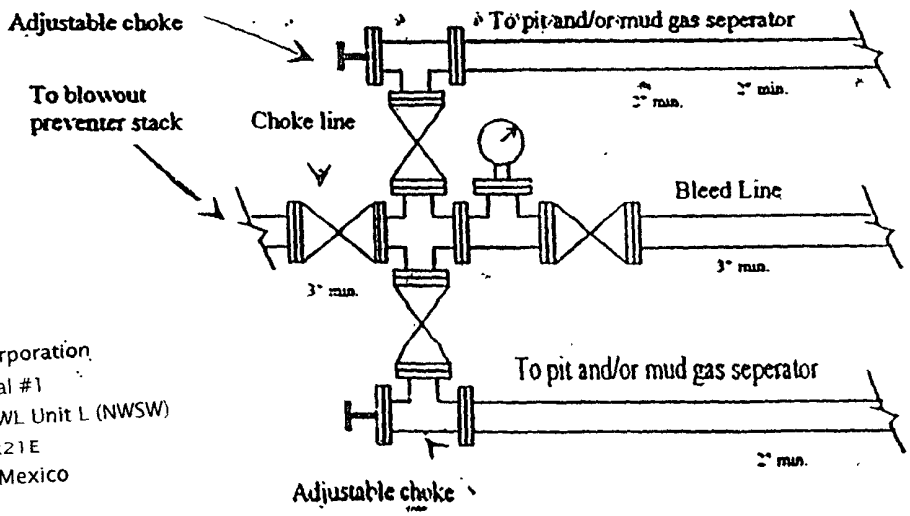
Yates Petroleum Corporation

BOP-3

Typical 3,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



Typical 3,000 psi choke manifold assembly with at least these minimun features



Yates Petroleum Corporation
Banquet BKQ Federal #1
1680' FSL & 840' FWL Unit L (NWSW)
Section 24, T21S, R21E
Eddy County, New Mexico
Exhibit "B"

Yates Petroleum Corporation

105 S. Fourth Street
Artesia, NM 88210

Hydrogen Sulfide (H_2S) Contingency Plan

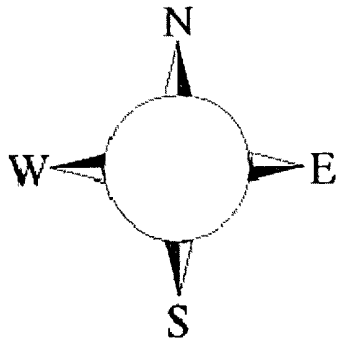
For

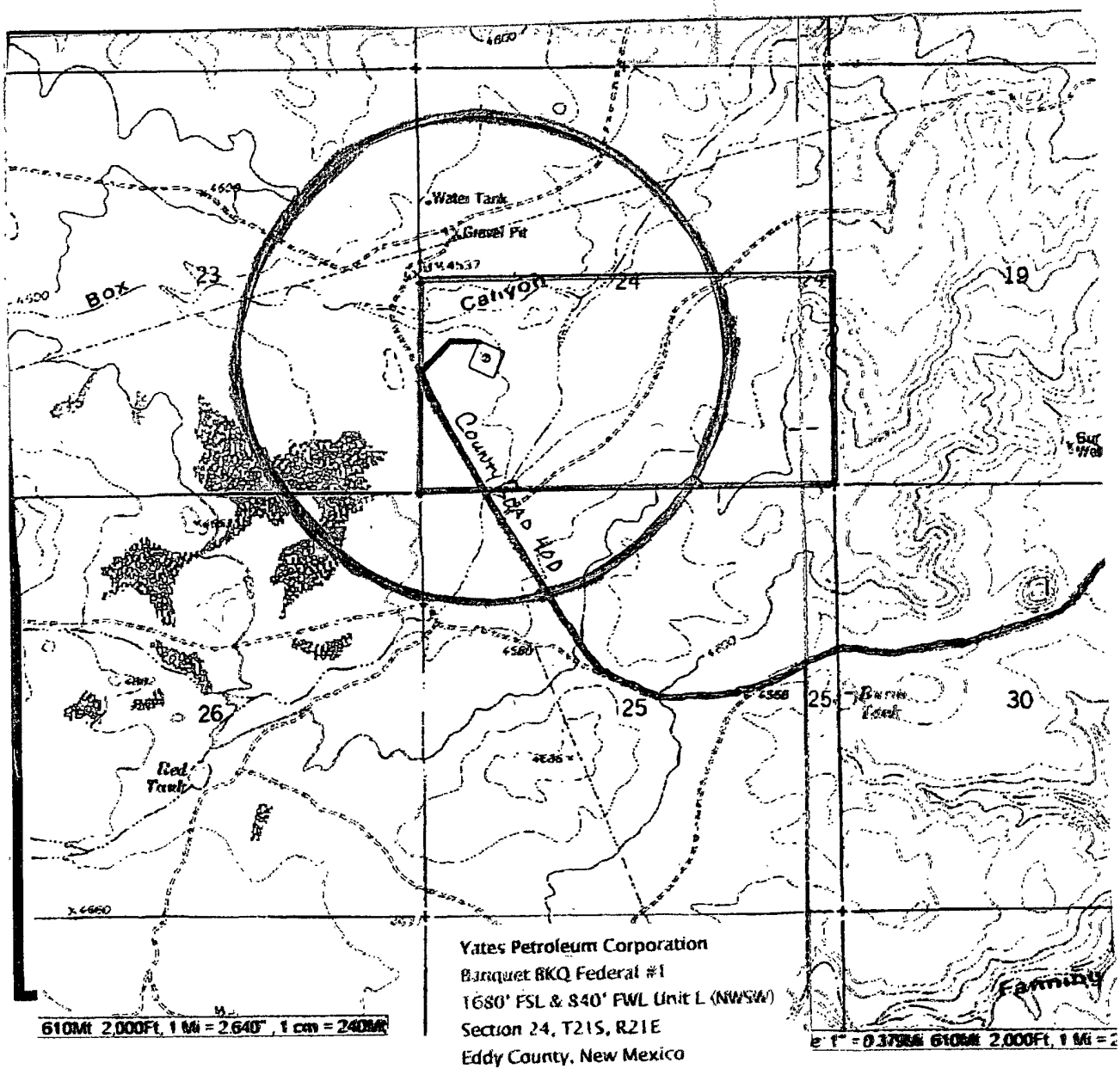
Banquet BKQ Federal #1

1680' FSL, 840' FWL
Section 24, T-21S, R-21E
Eddy County NM

Banquet BKQ Federal #1 Location

This is an open drilling site. H2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H2S, including warning signs, wind indicators and H2S monitor.





Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan.

Emergency Procedures

In the case of a release of gas containing H_2S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H_2S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H_2S monitors and air packs in order to control the release. Use the "buddy system' to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentr-ation
Hydrogen Sulfide	**H_2S**	**1.189 Air = 1**	**10 ppm**	**100 ppm/hr**	**600 ppm**
Sulfur Dioxide	**SO_2**	**2.21 Air = 1**	**2 ppm**	**N/A**	**1000 ppm**

Contacting Authorities

YPC personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. YPC Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Yates Petroleum Corporation Phone Numbers

YPC Office ..... (505) 748-1471
Paul Ragsdale/Operations Manager..... (505) 748-4520
Ron Beasley/Production Manager ..... (505) 748-4210
Wade Bennett/Prod Superintendent ..... (505) 748-4236
Mike Lankin/Drilling ..... (505) 748-4222
Paul Hanes/Prod. Foreman/Roswell ..... (505) 624-2805
Tim Bussell/Drilling Superintendent..... (505) 748-4221
Artesia Answering Service..... (505) 748-4302
(During non-office hours)

Agency Call List

Eddy County (505)

Artesia

State Police..... 746-2703
City Police..... 746-2703
Sheriff's Office..... 746-9888
Ambulance..... 911
Fire Department..... 746-2701
LEPC (Local Emergency Planning Committee) 746-2122
NMOCD..... 748-1283

Carlsbad

State Police..... 885-3137
City Police..... 885-2111
Sheriff's Office..... 887-7551
Ambulance..... 911
Fire Department..... 885-2111
LEPC (Local Emergency Planning Committee)..... 887-3798
US Bureau of Land Management..... 887-6544

New Mexico Emergency Response Commission (Santa Fe) (505)476-9600
24 HR ..... (505) 827-9126
New Mexico State Emergency Operations Center..... (505) 476-9635
National Emergency Response Center (Washington, DC) ..... (800) 424-8802

Other

Boots & Coots IWC .....1-800-256-9688 or (281) 931-8884
Cudd Pressure Control.....(915) 699-0139 or (915) 563-3356
Halliburton .....(505) 746-2757
B. J. Services.....(505) 746-3569

Flight For Life -4000 24th St, Lubbock, TX .....(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX .....(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM .....(505) 842-4949

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Banquet BKQ Federal #1
1680' FSL & 840' FWL
Section 24-T21S-R21E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximately 21 miles west of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: Go south of Artesia, NM on highway 285 for approximately 18 miles to White Pine Road. Turn right here and go approximately 11.7 miles to Marathon Road. Go approximately 7.3 miles west to Box Canyon Road. Take Box Canyon Road northerly for approximately 7.0 miles. The new road will start here and go northeasterly for about 0.2 of a mile to the southwest edge of the pad.

2. PLANNED ACCESS ROAD:

A. The proposed new access will be approximately 0.2 of a mile in length from the point of origin to the southwest corner of the drilling pad.
B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
C. The new road will be bladed with drainage on one sides. Traffic turnouts will be constructed as needed.
D. The route of the road is visible.
E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

A. There is drilling activity within a one-mile radius of the well site.
B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. There are no production facilities on this lease at the present time.

B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is a producing gas well.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

It will be up to the dirt contractor to locate construction materials and obtain any permits needed. No caliche will be taken from Federal sources without permission.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the reserve pits.
B. The reserve pits will be constructed and reclamation done according to NMOCD guidelines and Yates' approved pit general plan. The C-144 is attached to APD.
C. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
E. Oil produced during operations will be stored in tanks until sold.
F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
G. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, pulling unit orientation and access road approach.
B. The reserve pits will be plastic lined with 12 mil. Yates Petroleum Corporation is in full compliance with the OCD General Plan for Drilling Pits approved on April 15, 2004.
C. A 600' x 600' area has been staked and flagged for archaeological purposes.

10. PLANS FOR RESTORATION:

A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
C. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be reclaimed according to the Yates' NMOCD approved general plan.

11. SURFACE OWNERSHIP:

Federal surface administered by Bureau of Land Management, Carlsbad NM Field Office.

12. OTHER INFORMATION:

A. Topography: Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
B. The primary surface use is for grazing.

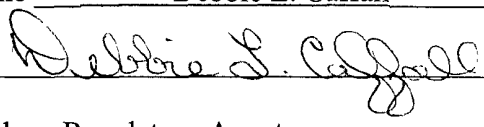
CERTIFICATION

YATES PETROLEUM CORPORATION
Banquet BKQ Federal #1

I hereby certify that I or the company I represent, have inspected the drill site and access route proposed herein; that the company I represent is familiar with the conditions which currently exist; that full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that the company I represent is responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 13th day of March, 2008.

Printed Name Debbie L. Caffall

Signature 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

E-mail (optional) debbie@ypcnm.com

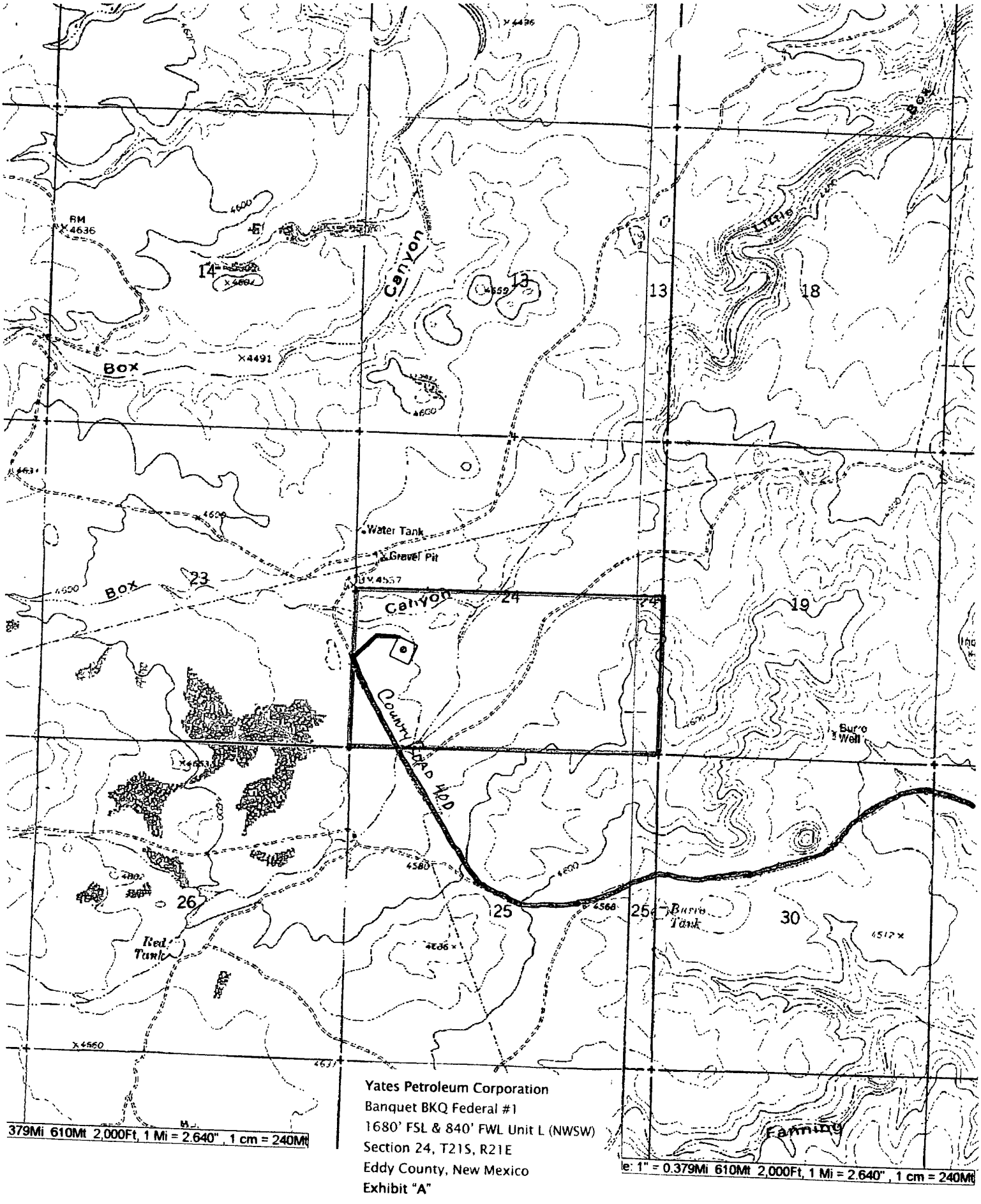
Telephone 575-748-4376

Field Representative (if not above signatory) Tim Bussell

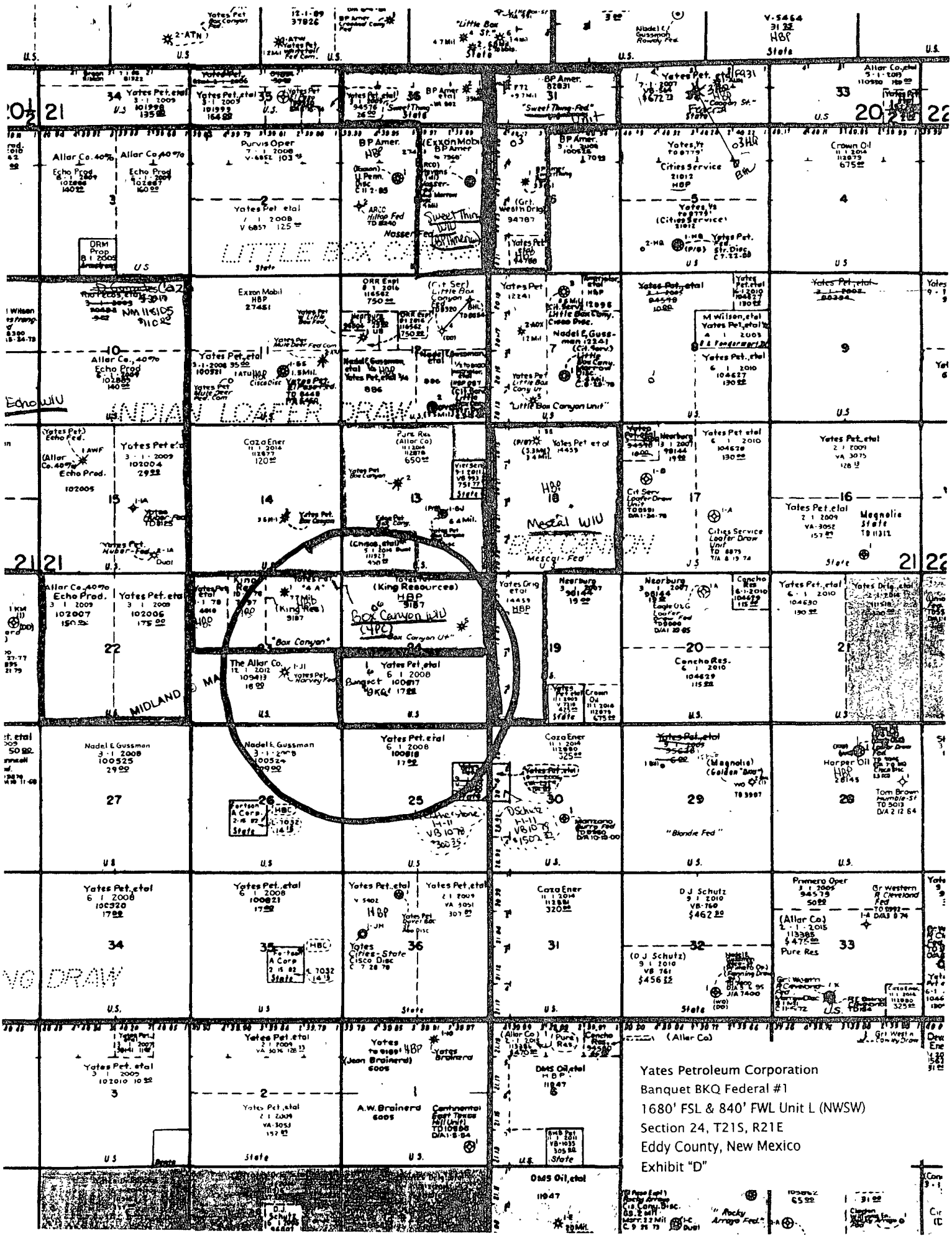
Address (if different from above) Same

Telephone (if different from above) 505-748-4221

E-mail (optional)



Yates Petroleum Corporation
Banquet BKQ Federal #1
1680' FSL & 840' FWL Unit L (NWSW)
Section 24, T21S, R21E
Eddy County, New Mexico
Exhibit "A"


Yates Petroleum Corporation
Banquet BKQ Federal #1
1680' FSL & 840' FWL Unit L (NWSW)
Section 24, T21S, R21E
Eddy County, New Mexico
Exhibit "D"

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corp
LEASE NO.:	NM-100817
WELL NAME & NO.:	1-Banquet BKQ Federal
SURFACE HOLE FOOTAGE:	1680' FSL & 840' FWL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 24, T. 21 S., R 21 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.

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 and any collection facilities that are needed will be bermed to contain any spills that may occur.

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

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 175' X 150' on the Southwest side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

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.

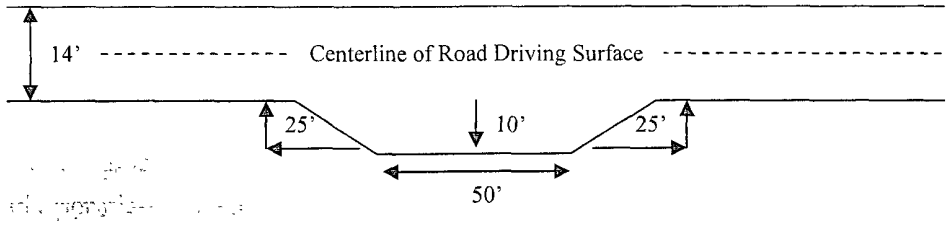
Ditching

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

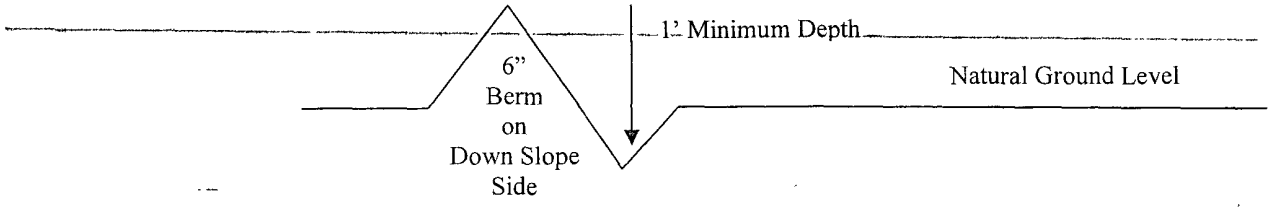


Drainage

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.

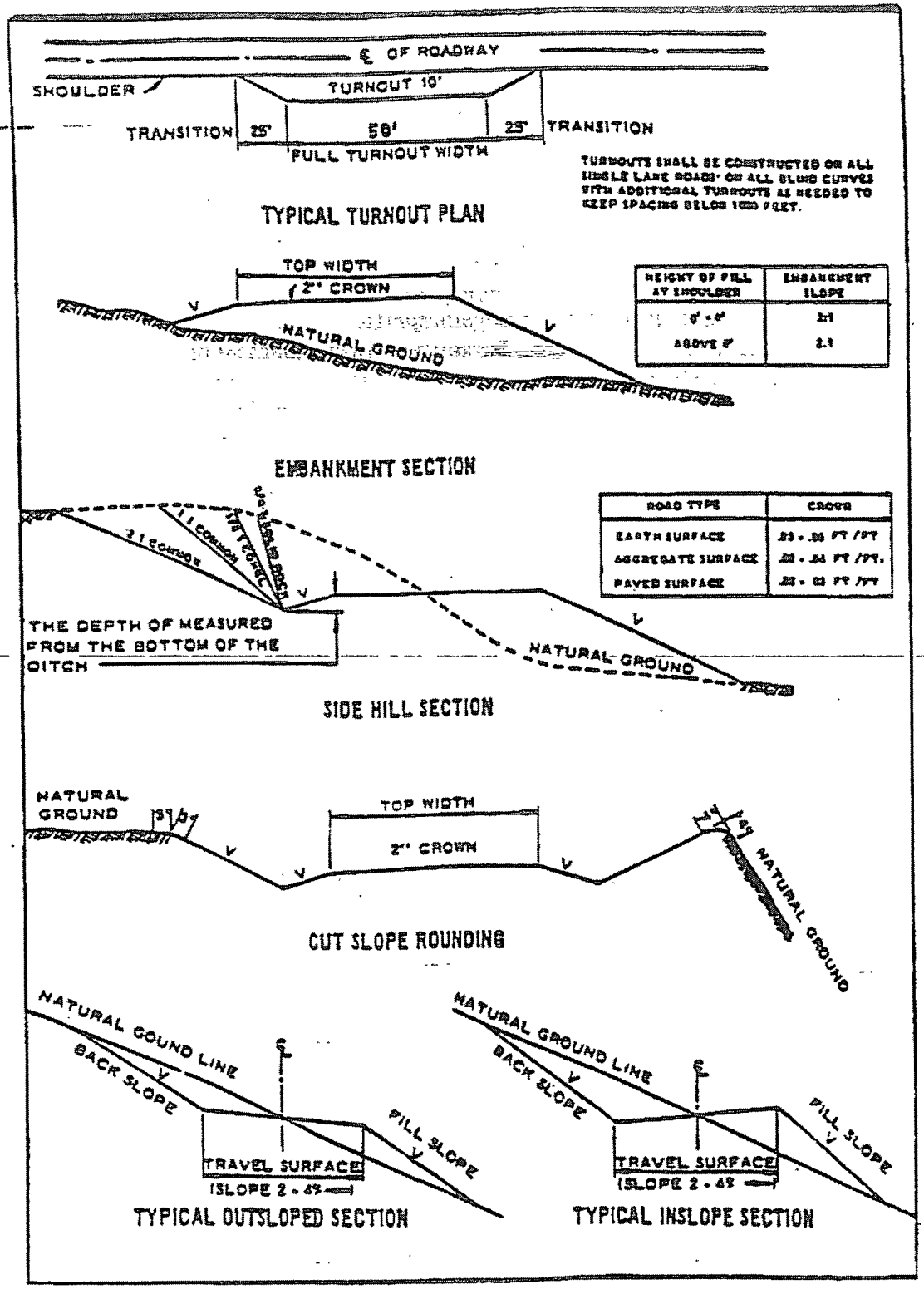
A gate shall be constructed and fastened securely to H-braces.

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. BOP/BOPE tests

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

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a possible hazard. It has been reported in section 23. If Hydrogen Sulfide is encountered, please report measured amounts 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.

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

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 as per Onshore Order 2.III.B.1.f

Medium cave/karst
Possible lost circulation in the San Andres, Glorieta and Wolfcamp Formations
Possible over pressured zones within the Wolfcamp Formation and Pennsylvanian Group

During drilling from 0-2100 feet fresh water will be used unless lost circulation is encountered then air may be used concurrently to lighten the hydrostatic pressure

1. The **13-3/8** inch surface casing shall be set at **approximately 400** feet 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 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.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a-d above.

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

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

   ☒ 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. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

LB 4/18/08

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

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.

At the time reserve pits are to be reclaimed, 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. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture 3, for Shallow 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 authorised 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
Plains Bristlegrass (*Setaria magrostachya*) 1.0	
Green Spangletop (*Leptochloa dubia*)	2.0
Side oats Grama (*Bouteloua curtipendula)*	5.0

*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.