

FEB 21 2008

OCD-ARTESIA

OCD-ARTESIA

Form 3160-3
(February 2005)

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342

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5	Lease Serial No	NM-100549
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.	37020
	Blast BLA Federal #1	
9	API Well No.	30-015-36136
10	Field and Pool, or Exploratory	97338
	Wildcat Mississippian	
11	Sec., T., R., M., or Blk. And Survey or Area	Section 17-T26S-R27E
12	County or Parish	Eddy
13	State	NM

1a	Type of Work:	<input checked="" type="checkbox"/> DRILL	<input type="checkbox"/> REENTER
1b	Type of Well	<input type="checkbox"/> Oil Well	<input checked="" type="checkbox"/> Gas Well
		<input type="checkbox"/> Other	<input type="checkbox"/> Single Zone
			<input type="checkbox"/> Multiple Zone

2	Name of Operator	Yates Petroleum Corporation 025575
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3a	Address	105 South Fourth Street, Artesia, NM 88210
3b	Phone No (include area code)	505-748-1471

4	Location of well (Report location clearly and in accordance with any State requirements *)	1980' FSL & 1650' FEL. UL J, NWSE
	At surface	
	At proposed prod. zone	Same

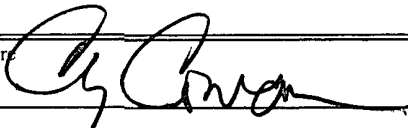
14	Distance in miles and direction from the nearest town or post office*	The well is about 25 miles southeast of Malaga, NM.
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15	Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)	1650'	16	No. of acres in lease	1920.00	17	Spacing Unit dedicated to this well	South Half of 17-26S-27E
18	Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	None	19	Proposed Depth	13,350'	20	BLM/ BIA Bond No. on file	NATIONWIDE BOND #NMB000434
21	Elevations (Show whether DF, KDB, RT, GL, etc)	3331' GL	22	Aproximate date work will start*	ASAP	23	Estimated duration	Sixty (60) Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1 shall be attached to this form:

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by existing bond on file(see item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 6. Such other site specific information and/ or plans as may be required by the BLM |

25	Signature	Name (Printed/ Typed)	Date
		Cy Cowan	1/10/2008
	Title Regulatory Agent		

Approved By (Signature)	Name (Printed/ Typed)	Date
/s/ James Stovall		FEB 19 2008
Title	Office	
FIELD MANAGER	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 United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**

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 DepartmentOIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505Form C-102
Revised October 12, 2006Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 97338	Pool Name Wildcat Mississippian
Property Code	Property Name BLAST "BLA" FEDERAL	Well Number 1
OGRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3331'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	17	26 S	27 E		1980	SOUTH	1650	EAST	EDDY

Bottom Hole Location If Different From Surface

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

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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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

<div style="text-align: center;"> <p>SURFACE LOCATION Lat - N32°02'25.99" Long - W104°12'32.32" SPC- N.: 378513.146 E.: 579869.333 (NAD-83)</p> </div>		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. 1/10/08 Signature _____ Date _____ Cy Cowan 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. DECEMBER 15, 2007 Date Surveyed _____ Signature _____ Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS

YATES PETROLEUM CORPORATION

Blast BLA Federal #1

1980' FSL and 1650' FEL

Section 17-T26S-R27E

Eddy County, New Mexico

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

Castile/LM/SD	490'	Strawn	11,200'
Delaware	2040'	Morrow Clastic	11950'
Cherry Canyon	2910'	Morrow Lower	12600'
Brushy Canyon	4100'	Barnett/SH	13000'
Bone Springs	5670'	Mississippi Lime	13270'
Wolfcamp	8750'	TD	13350'

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

Water: 50'

Oil or Gas: See above.

3. Pressure Control Equipment: A 3K system will be installed on the 13.375" casing. BOPE will be installed on the 9.625" casing and the 7" casing and will be rated for 5000# BOP systems 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.

See
COA

- A. 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.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: **ALL NEW CASING WILL BE USED.**

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"	7.0"	26#	J-55	LT&C	0-500'	500' 600'
8.75"	7.0"	23#	J-55	LT&C	500-5100'	4600' 4500'
8.75"	7.0"	26#	J-55	LT&C	5100-7100'	2000'
8.75"	7.0"	26#	HCP-110	LT&C	7100-8850'	1750'
6.125"	4.5"	13.5#	P-110	LT&C	0-13350'	13350'

any
operator
2/13/08
WWT

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8
2. A 3000# BOP will be nipped up on the 13.375 casing. A 5,000 psi BOP will be nipped up on the 9.625" casing and 7" casing and tested to 5000 psi.

- B. CEMENTING PROGRAM:

Surface Casing: 220 sx Permium (YLD 1.35 WT 14.8). Tail in 200skPremium+C (YLD 1.35 14.8). Circulate to surface.

Blast BLA Federal #1
Page Two

First Intermediate Casing: Lead 550 sx Premium Lite + CaCl₂ (YLD 1.97 WT 12.5) and tail in with 200 sx Premium PI + CaCl₂ (YLD 1.32 WT 14.8). Cement circulated to surface.

Second Intermediate Casing: Lead with 400 sx interfill (YLD 2.76 WT 11.5). Tail in with 675 sx Super H (YLD 1.66 WT 13.0). Top of cement 1600'.

Production Casing: 575 sx Super H (YLD 1.67 WT 13.0). Tail in with 450 sx C (YLD 1.35 WT 14.8) Cement calculated to 3550'. Top of cement 8350'

****7" casing will only be set if hole conditions dictate. If 7" casing is not set, then 5.5" production casing will be set and cemented to tie back 500' into previous casing string.**

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-400	FW Gel	8.4-9.0	32-34	N/C
400-2100	Brine Water	10-10	28-28	N/C
2100-8850	Fresh Water	8.4-9.9	28-28	15-20CC
8850-11200	Brine Water	10-10	28-28	N/C
11200-TD	SGel/Starch/6%KCL	10.7-11.5	36-40	10CC

*9.4
per operator 2-13-08 used*

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.

6. EVALUATION PROGRAM:

Samples: Every 10' from surface casing to TD
Logging: Platform Express; CMR for the Delaware; SWC for Barnett Shale.
Coring: None anticipated
DST's: None anticipated

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:
Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP:

From: 0	TO: 400'	Anticipated Max.	BHP: 190	PSI
From: 400'	TO: 2100'	Anticipated Max.	BHP: 1090	PSI
From: 2100'	TO: 8550'	Anticipated Max.	BHP: 4555	PSI
From: 8550'	TO: 13350'	Anticipated Max.	BHP: 7980	PSI

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

8. 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.

BLAST BLA FEDERAL #1

Contingency production casing if 7" second intermediate is not run.

		300'						
		0 ft to 200 ft		Make up Torque ft-lbs			Total ft = 200	
O.D.	Weight	Grade	Threads	opt.	min.	mx.	300	
5.5 inches	20 #/ft	P-110	LT&C	5690	4270	7110		
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift		
11,100 psi	12,630 psi	548,000 #		641,000 #		4.653		

		300'		3900'				
		200 ft to 3,800 ft		Make up Torque ft-lbs			Total ft = 3,600	
O.D.	Weight	Grade	Threads	opt.	min.	mx.		
5.5 inches	17 #/ft	L-80	LT&C	3410	2560	4260		
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift		
6,290	7,740 psi	338,000 #		397,000 #		4.767		

		3900'						
		3,800 ft to 6,000 ft		Make up Torque ft-lbs			Total ft = 2,200	
O.D.	Weight	Grade	Threads	opt.	min.	mx.	2100	
5.5 inches	17 #/ft	J-55	LT&C	2470	1850	3090		
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift		
4,910	5,320 psi	247,000 #		273,000 #		4.767		

		6,000 ft to 12,600 ft		Make up Torque ft-lbs			Total ft = 6,600	
O.D.	Weight	Grade	Threads	opt.	min.	mx.		
5.5 inches	17 #/ft	HCP-110	LT&C	4620	3470	5780		
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift		
8,580 psi	10,640 psi	445,000 #		546,000 #		4.767		

		12,600 ft to 13,350 ft		Make up Torque ft-lbs			Total ft = 750	
O.D.	Weight	Grade	Threads	opt.	min.	mx.		
5.5 inches	20 #/ft	P-110	LT&C	5690	4270	7110		
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift		
11,100 psi	12,630 psi	548,000 #		641,000 #		4.653		

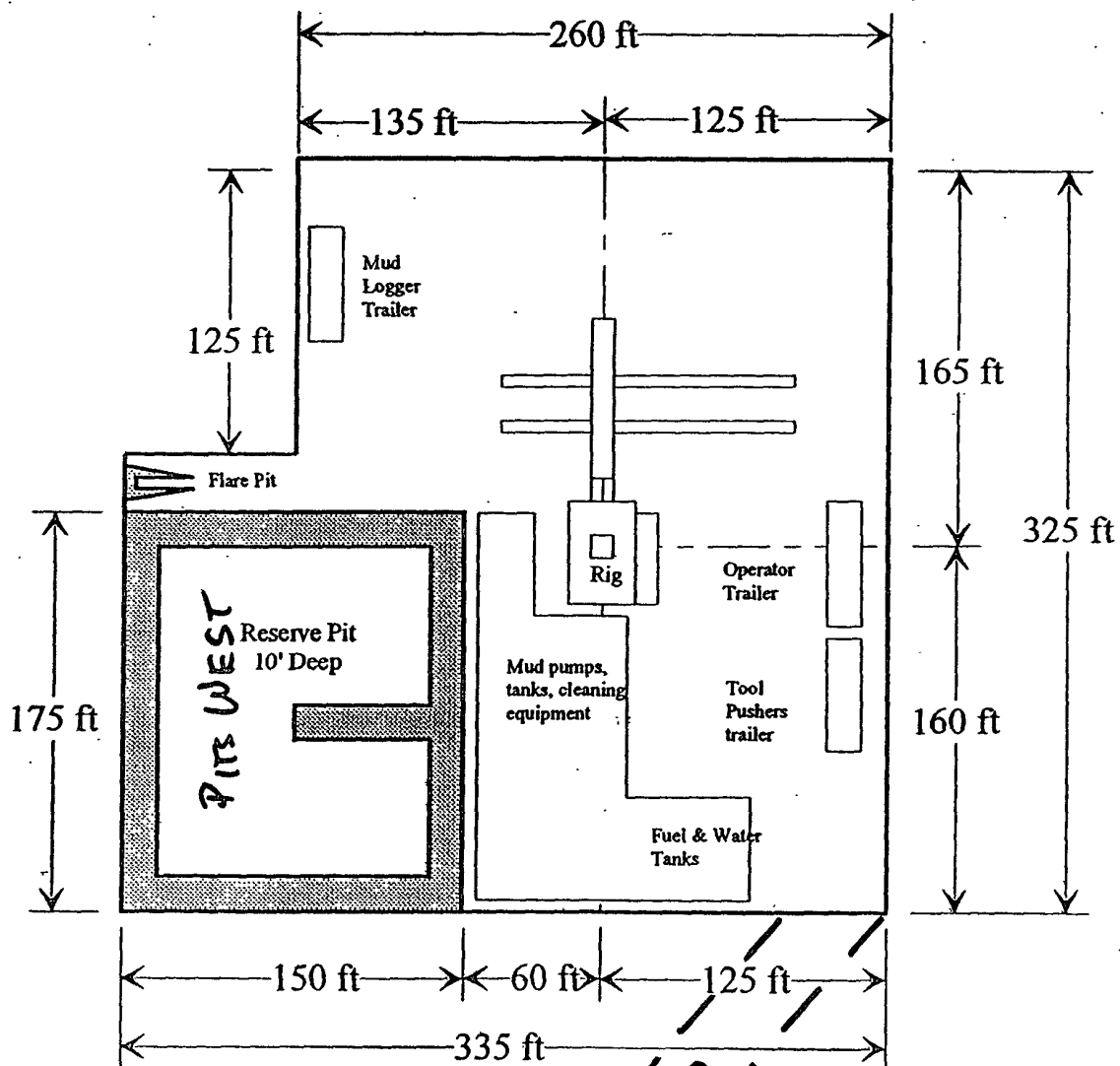
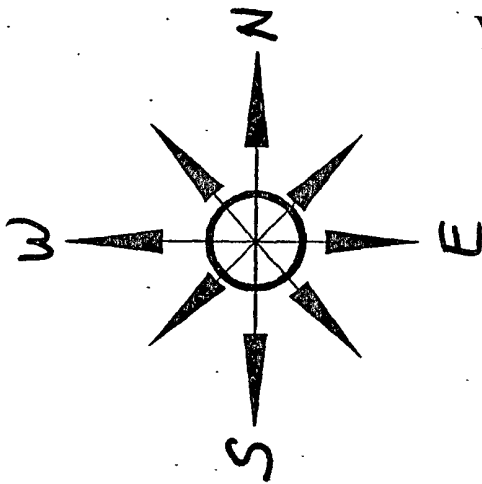
Lead w/660sx Interfill H (YLD 2.76 WT 11.5) and tail w/2500sx Super H (YLD 1.67 WT 13) TOC= 1,600'

changes per
operation
2/13/08
HMK

Yates Petroleum Corporation
 Location Layout for Permian Basin
 Up to 12,000'

EXHIBIT C

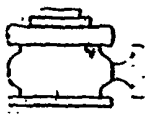
Yates Petroleum Corporation
 Blast BLA Federal #1
 1980' FSL & 1650' FEL
 Section 17-T26S-R27E
 Eddy County, New Mexico



Distance from Well
 Head to Reserve Pit
 will vary between rigs

The above dimension
 should be a maximum

SEE ATTACHED FOR
 CONDITIONS OF APPROVAL



Yates Petroleum Corporation

BOP-3

Typical 3,000 psi Pressure System

Schematic

Annular with Double Ram Preventer Stack

EXHIBIT B

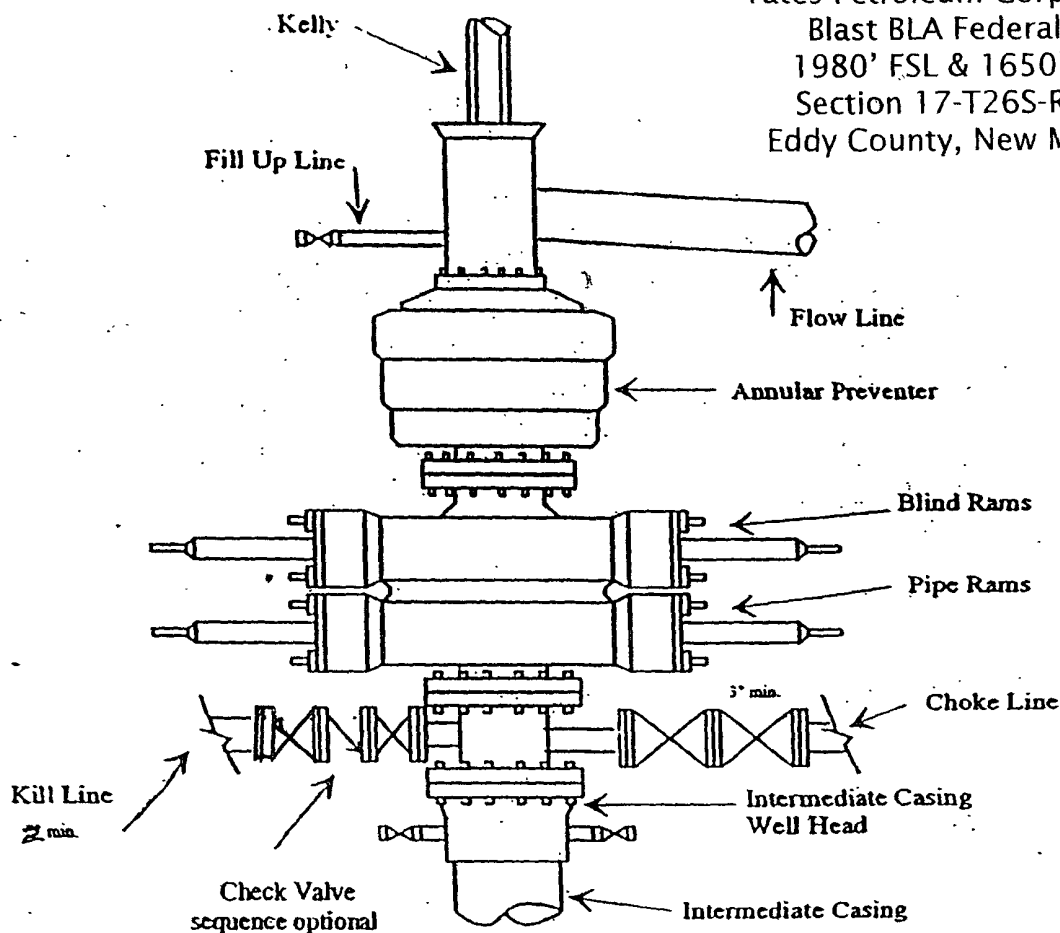
Yates Petroleum Corporation

Blast BLA Federal #1

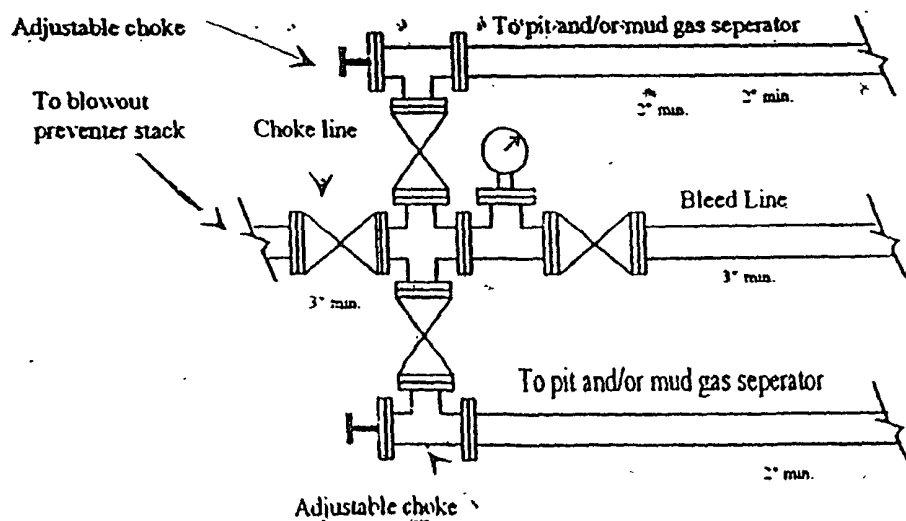
1980' FSL & 1650' FEL

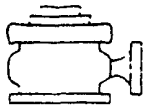
Section 17-T26S-R27E

Eddy County, New Mexico



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





Yates Petroleum Corporation

BOP-4

Typical 5,000 psi Pressure System

Schematic

Annular with Double Ram Preventer Stack *EXHIBIT B1*

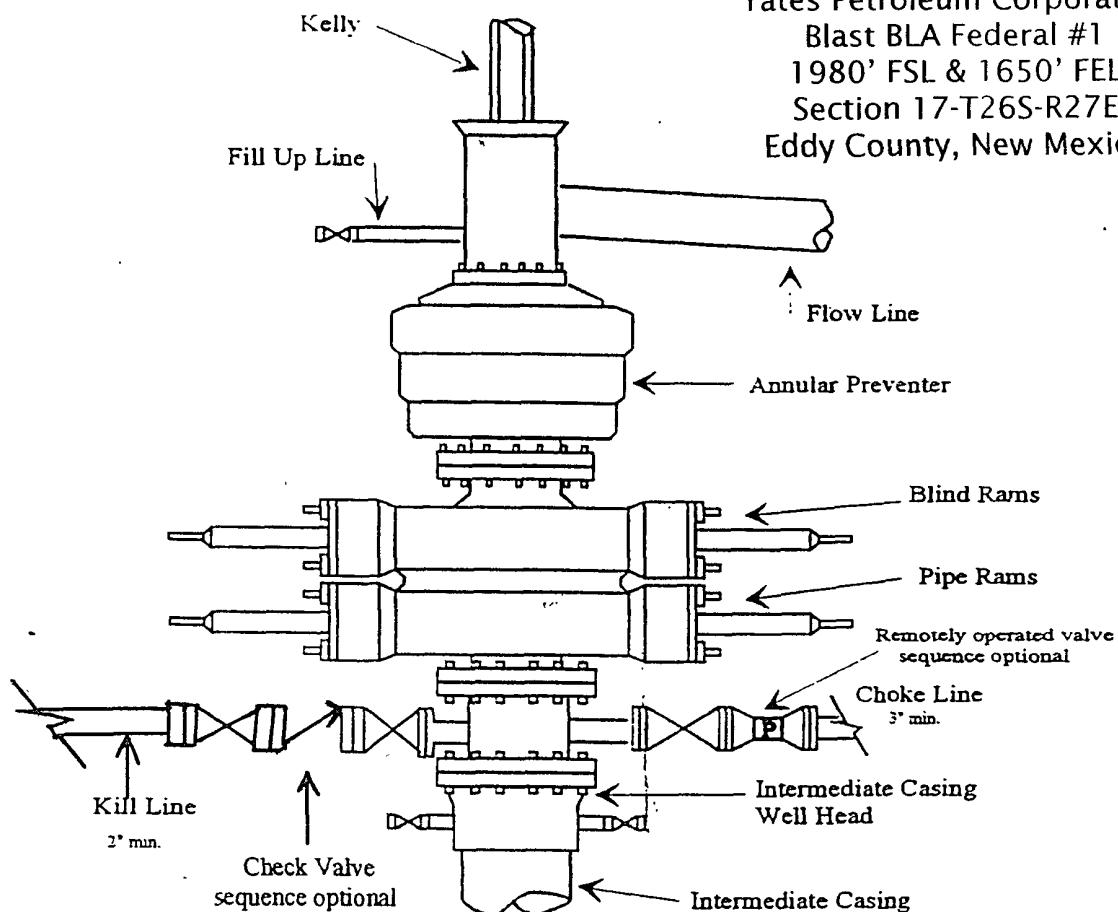
Yates Petroleum Corporation

Blast BLA Federal #1

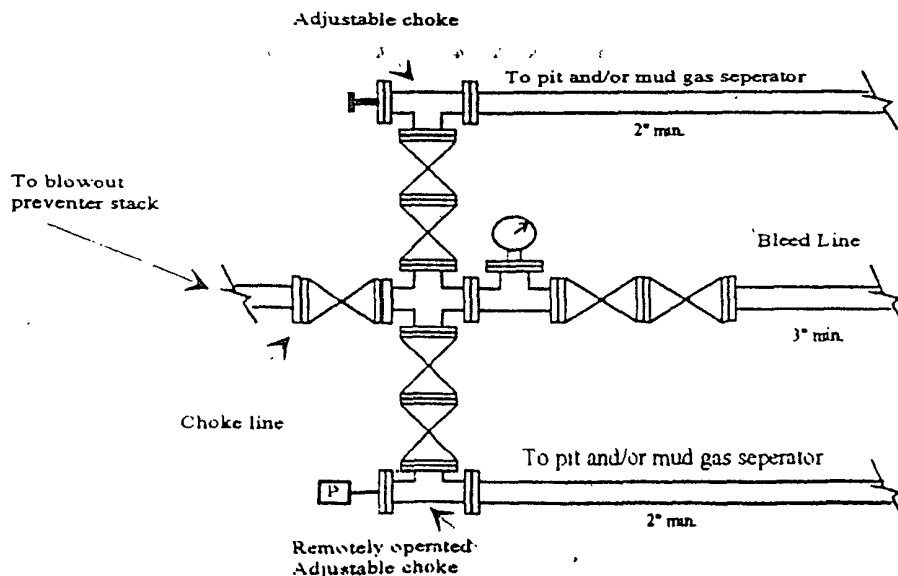
1980' FSL & 1650' FEL

Section 17-T26S-R27E

Eddy County, New Mexico



Typical 5,000 psi choke manifold assembly with at least these minimum features



MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Blast BLA Federal #1
1980' FSL & 1650' FEL
Section 17-T26S-R27E
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 25 miles Southeast of Malaga, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: Go south Malaga, NM on highway 285 for approximately 10.7 miles to Whites City Road (CR-724). Turn right here and go approximately 10.8 miles to the intersection Whites City Road and John D. Forehand Road (CR-742). Turn south on Forehand Road for approximately 2.2 miles. Turn left at this point and cross a cattle guard. Go east for approximately 0.7 of a mile to the Owl Draw #1 SWD well location. The new road will start here going south along an existing pipeline right-of-way for approximately 0.4 of a mile. At this point turn east along the pipeline and go approximately 0.8 of a mile to a fence across the pipeline. At this point go left along the fence for approximately 0.2 of a mile. The new road will go northeast across the pasture for approximately 0.4 of a mile to the southeast corner of the well location.

2. **PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately 1.8 mile in length from the point of origin to the southeast 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 no 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. Note: Pits to the West.
- 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.

Blast BLA Federal #1
Page Three

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.

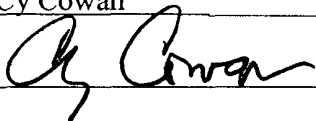
CERTIFICATION
YATES PETROLEUM CORPORATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have 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 I, or the company I represent, am 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 10th day of January, 20 08.

Printed Name Cy Cowan

Signature



Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

E-mail (optional) cy@ypcnm.com

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

Telephone (if different from above) 575-748-4221

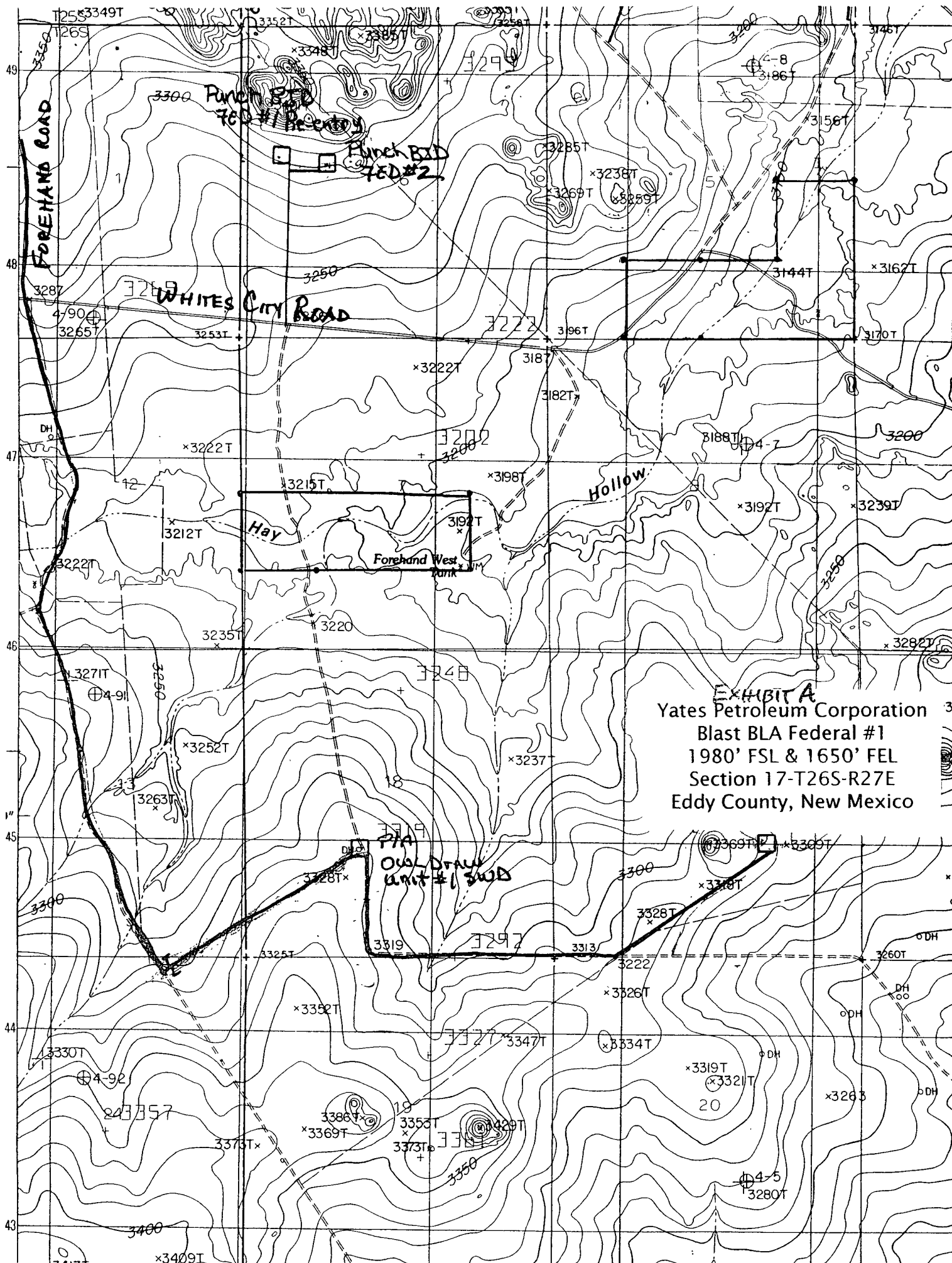
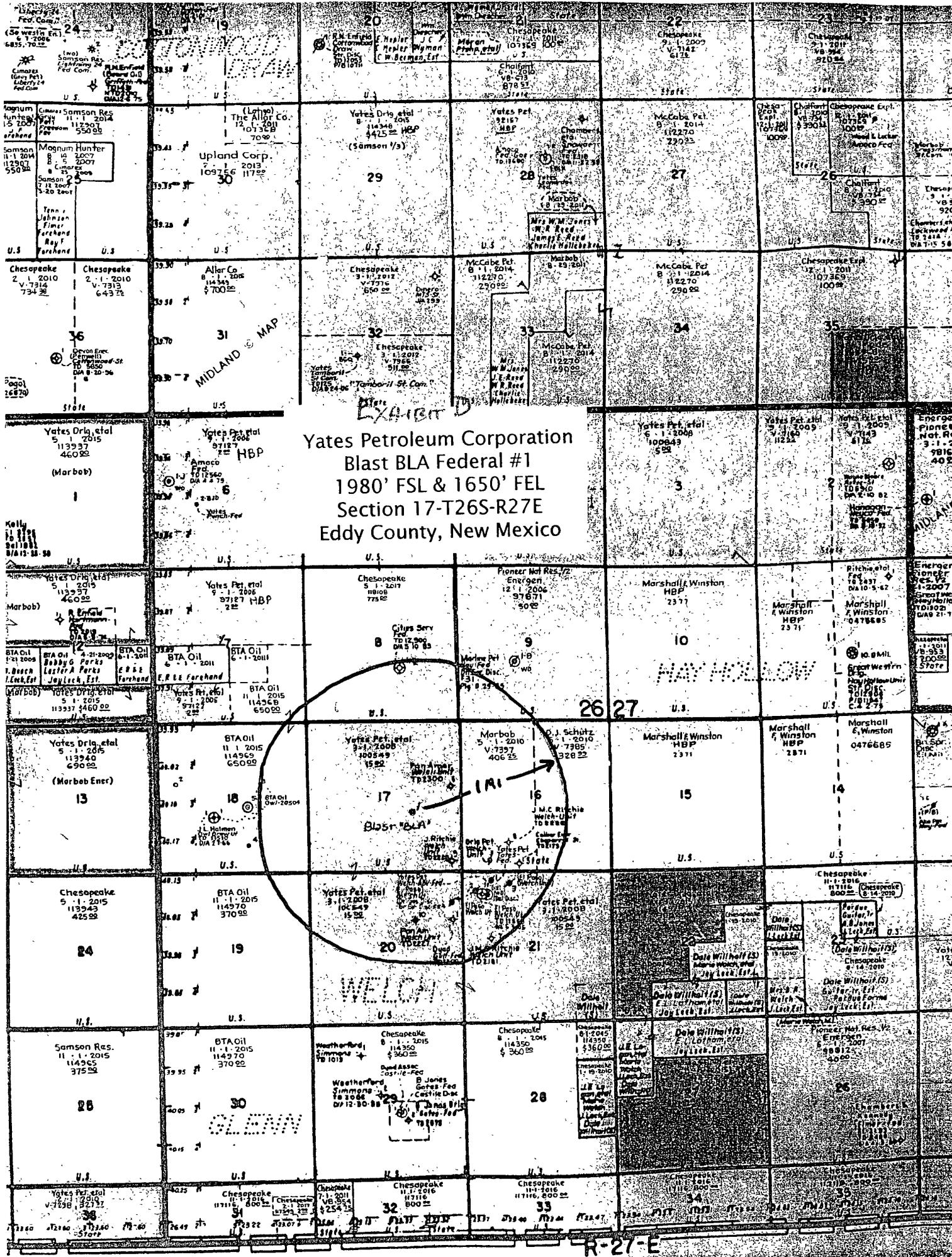


EXHIBIT A
Yates Petroleum Corporation
Blast BLA Federal #1
1980' FSL & 1650' FEL
Section 17-T26S-R27E
Eddy County, New Mexico



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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
March 12, 2004

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

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Yates Petroleum Corporation Telephone: 505-748-4347 e-mail address: cy@ypcnm.com
Address 105 South Fourth Street, Artesia, New Mexico 88210
Facility or well name Blast BLA Federal #1 API #. U/L or Qtr/Qtr NWSE Sec 17 T26S R 27E
County: Eddy Latitude Longitude NAD 1927 ☐ 1983 ☒ Surface Owner Federal ☒ State ☐ Private ☒ Indian ☐

Pit

Type Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☐ Thickness 12 mil Clay ☐ Volume

24,000 bbl

Below-grade tank

Volume: bbl Type of fluid:

Construction material:

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) <u>50'</u>	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet XXXX	(10 points) XXXX
	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes	(20 points)
	No XXXX	(0 points) XXXX
Distance to surface water. (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet	(20 points)
	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more XXXX	(0 points) XXXX
	Ranking Score (Total Points)	10 points

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒, or an (attached) alternative OCD-approved plan ☐.

Date: January 10, 2008

Printed Name/Title Cy Cowan, Regulatory Agent

Signature 

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Date:

Printed Name/Title Signature

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corp.
LEASE NO.:	NM-100549
WELL NAME & NO.:	1-Blast BLA Federal
SURFACE HOLE FOOTAGE:	1980' FSL & 1650' FEL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 17, T. 26 S., R 27 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**
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- ☐ **Reserve Pit Closure/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. 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

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 West 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.

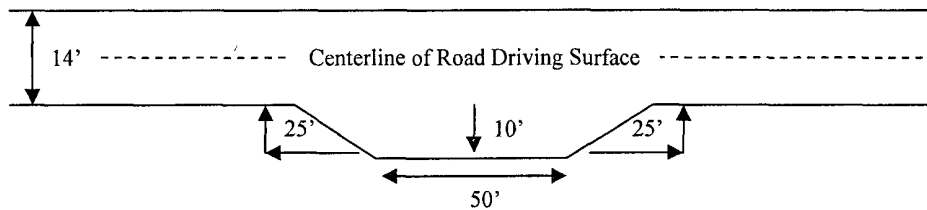
Ditching

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

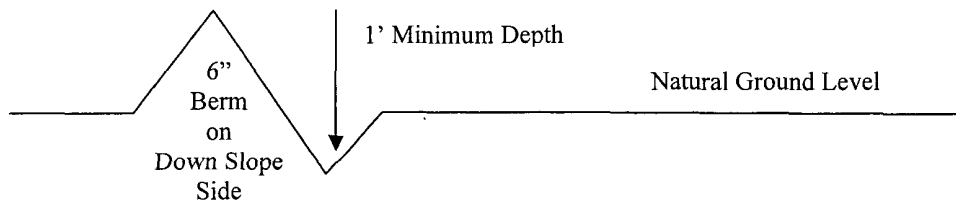


Drainage

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:

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

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

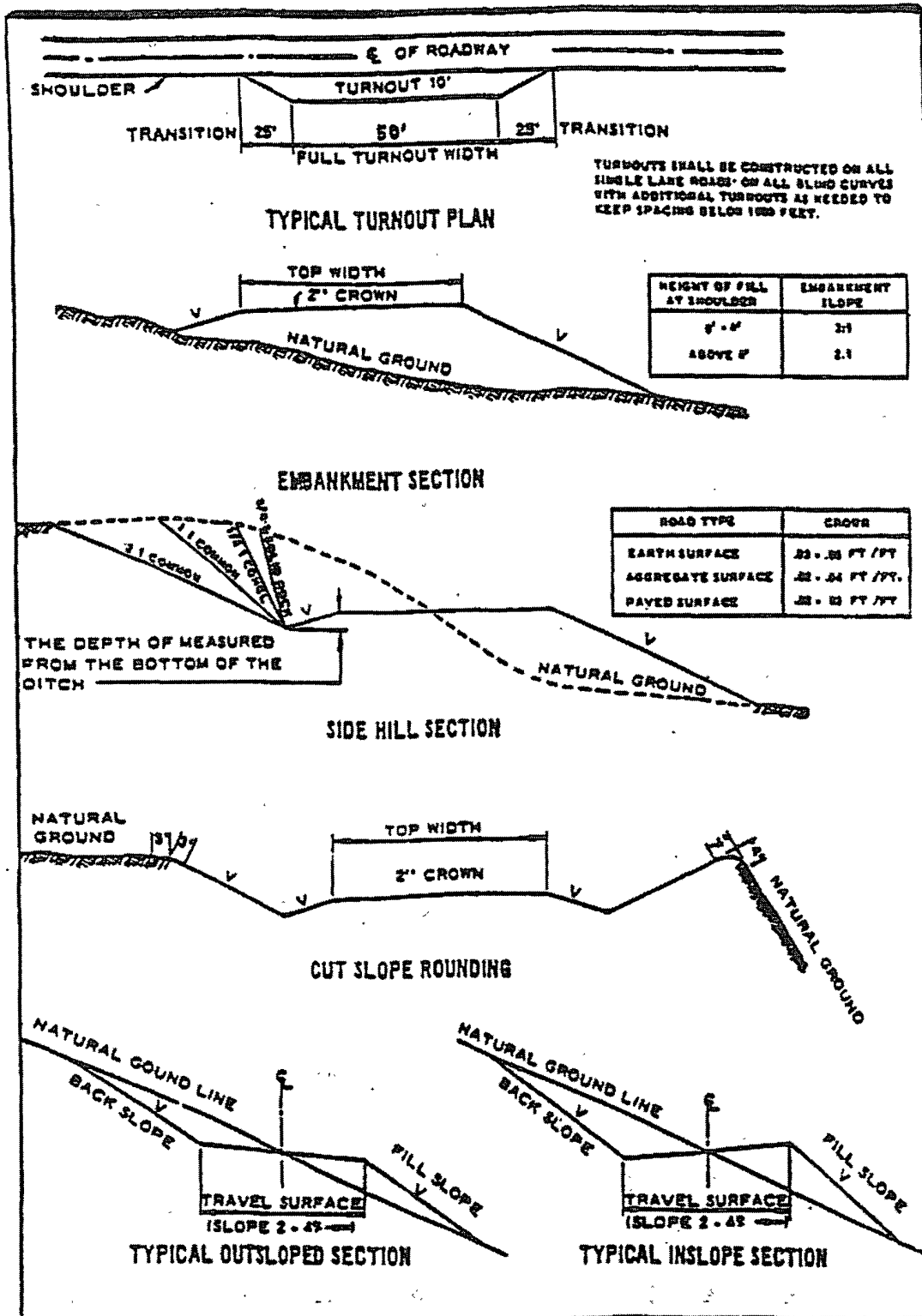
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



VI. 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. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts 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

1. The 13-3/8 inch surface casing shall be set at **approximately 400** feet and cemented to the surface.
 - 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). **Please provide WOC times to inspector for cement slurries.**

- 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, a remedial cement job will be done prior to drilling out that string.

Medium cave/karst.

Possible lost circulation in the Delaware.

Possible abnormal pressures in the Wolfcamp and high pressure gas in the Pennsylvanian Section.

- 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. **Please provide WOC times to inspector for cement slurries.**

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i.

Operator is proposing two possible scenarios for hole below 9-5/8" casing:

- 1. Run 7" and 4.5" casing.
- 2. Run 5.5" casing.

- 3. The minimum required fill of cement behind the 7 inch intermediate casing is:

- ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Please provide WOC times to inspector for cement slurries.**

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i.

- 4. The minimum required fill of cement behind the 4-1/2 inch production casing is:

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

- 5. 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.

- 6. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8" or 7"** intermediate casing shoe shall be **10,000 (10M)** psi.
3. 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.

E. DRILL STEM TEST

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

WWI 020408

VII. 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

VIII. 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 4, for Gypsum Sites

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

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

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

<u>Species</u>	<u>lb/acre</u>
Alkali Sacaton (<i>Sporobolus airoides</i>)	1.0
DWS⊆ Four-wing saltbush (<i>Atriplex canescens</i>)	5.0

⊆DWS: DeWinged Seed

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed
(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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