

OCD-ARTESIA

ATS-08-848
EA-88-1249Form 3160-3
(August 2007)

S

SEP - 5 2008

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work. <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-112917
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		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Yates Petroleum Corporation 025575		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) 505-748-1471	8. Lease Name and Well No. Magellan Federal Unit #3 35435
4. Location of well (Report location clearly and in accordance with any State requirements *) At surface 1800' FSL & 1650' FWL. UL K, NESW At proposed prod zone Same		9. API Well No. 30-015-36606
14. Distance in miles and direction from the nearest town or post office* The well is about 25 miles southeast of Malaga, NM.		10. Field and Pool, or Exploratory Jackberry Draw, Morrow, N 96785
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg unit line, if any) 1650'		11. Sec., T., R., M., or Blk. And Survey or Area Section 4-T25S-R27E
16. No. of acres in lease 637.04	17. Spacing Unit dedicated to this well South Half of 4-25S-27E	12. County or Parish Eddy
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft None	19. Proposed Depth 12540'	13. State NM
20. BLM/ BIA Bond No. on file NATIONWIDE BOND #NMB000434	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3313' GL	22. Aproximate date work will start* ASAP
23. Estimated duration		

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 <i>Clifton R. Mayfor</i>	Name (Printed/ Typed) Cy Cowan	Date 7/24/2008
Title Regulatory Agent		
Approved By (Signature) <i>/s/ Don Peterson</i>	Name (Printed/ Typed) <i>/s/ Don Peterson</i>	Date AUG 29 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 United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* (Instructions on page 2)

CARLSBAD CONTROLLED WATER BASIN

SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Yates Petroleum Corporation 25575

3a. Address

105 South Fourth Street, Artesia, NM 88210

3b. Phone No. (include area code)

(575) 748-1471

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1800' FSL and 1650' FWL, Unit K (NESW)

5. Lease Serial No.

NM-100552

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/o

8. Well Name and No.

Magellan Federal Unit #3

9. API Well No.

10. Field and Pool, or Exploratory Area

Wildcat Morrow

11. County or Parish, State

Eddy County, New Mexico

Section 4, T25S-R27E

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change of Surface Use Plan
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

Yates Petroleum Corporation will be using a closed loop system instead of a temporary reserve pit for the drilling of the captioned well.

Thank you.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Cy Cowan

Title

Regulatory Agent/Land Department

Email

cy@ypcnm.com

Signature

Date

August 15, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

/s/ Don Peterson

FIELD MANAGER

Date

AUG 29 2008

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001, 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.

Topo map and plans attached.
(Instructions on reverse)

Yates Petroleum Corporation Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:

- 1 – double panel shale shaker
- 1 – (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges
- On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System
- 1 – minimum centrifugal pump to transfer fluids
- 2- 500 bbl. FW Tanks
- 1 – 500 bbl. BW Tank
- 1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.
- 1 Set of rail cars / catch bins
- Certain wells will use an ASC Auger Tank

Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors personnel.

Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, Lea Land Farm or CRI.

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 96785	Pool Name Hackberry, Morrow, N
Property Code	Property Name MAGELLAN FEDERAL UNIT	Well Number 3
OGRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3313'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	4	25 S	27 E		1800	SOUTH	1650	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 320	Joint or Infill	Consolidation Code	Order No.						

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

	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Clifton R. May</i> 7/24/08 Signature Date</p> <p>Clifton R. May Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JULY 23, 2008 Date Surveyed</p> <p><i>Gary L. Jones</i> Signature Professional Surveyor</p> <p>No. 7977 Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
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YATES PETROLEUM CORPORATION
Magellan Federal Unit #3
 1800' FSL and 1650' FEL
 Section 4-T25S-R27E
 Eddy County, New Mexico

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

Castile/LM/SD	410'	Atoka	11,200'
Delaware	2270'	Morrow Clastic	11,870'
Bone Springs	5580'	Morrow Lower	12,260'
Wolfcamp	8990'	TD	12,540'
Strawn	10920'		

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

Water: 20'

Oil or Gas: Gas: 11,200', 11,870' & 12, 260'.

3. Pressure Control Equipment: A 3K system will be installed on the 13 3/8 " 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.

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:

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-400'	400'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-2350'	2350'
8 3/4"	7.0"	26#	J-55	LT&C	0-900'	900'
8 3/4"	7.0"	23#	J-55	LT&C	900-5000'	4100'
8 3/4"	7.0"	26#	J-55	LT&C	5000-7100'	2100'
8 3/4"	7.0"	26#	L-80	LT&C	7100-9100'	2000'
6 1/8"	4.5"	11.6#	HCP-110	LT&C	0-12540'	12540'

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 3/8" casing. A 5,000 psi BOP will be nipped up on the 9 5/8" casing and 7" casing and tested to 5000 psi .

B. CEMENTING PROGRAM:

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

First Intermediate Casing: Lead 600 sx Premium Lite + CaCl₂ (WT 12.5 YLD 1.97) and tail in with 200 sx Premium PI + CaCl₂ (WT 14.8 YLD 1.35). Cement circulated to surface.

Second Intermediate Casing: Lead with 350 sx interfill (WT 11.5 YLD 2.76). Tail in with 725 sx Super H (WT 13.0 YLD 1.66). Top of cement 1850'.

Production Casing: 450 sx Super H (WT 13.0 YLD 1.67). Top of cement 8600'

~~**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.~~

Not needed per operator
8/27/08
LWJ

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
0-400	FW Gel	8.4-9.0	32-34	N/C
400-2350	Brine Water	10-10	28-28	N/C
2350-9100	Fresh Water	8.4-9.9	28-28	15-20CC
9100-10000	Brine Water	10-10.2	28-28	N/C
10000-TD	SGel/Starch/6%KCL	10.7-11.5	36-40	10CC

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; CMR
 Coring: None anticipated
 DST's: None anticipated
 Mudlogging: Yes

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

Anticipated pressures;			
0' to 400'	190 psi	2350' to 9100'	4730 psi
400' to 2350'	1225 psi	9100' to 12540'	7175 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.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Magellan Federal Unit #3
1800' FSL & 1650' FWL
Section 4-T25S-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 11 miles West of Malaga, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: Go west of Malaga, NM on Black River Village Road (CR-720) for approximately 2.5 miles to Road Runner Road. Turn left on Road Runner Road and go approximately 4.7 miles to a ranch on the right. Continue on Road Runner for approx. 1.5 miles to a lease road on the right. Orange and white flagging will be in a bush. Turn right and go approx. 0.7 of a mile. Turn left here (more flagging) and go approx. 0.8 of a mile. Turn right on east side of fence with a cattle guard in it and go approx. 0.4 of a mile. Turn left (this is the lease road that goes to the Magellan Unit #1 well) and go approx. 0.1 of a mile. The new road will start here going to the right for approx. 100 feet to the southeast corner of the proposed well pad.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 100' 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. No 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 unless electric power is ran to the 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 temporary drilling pit will be constructed, maintained and closed in compliance with the State of New Mexico, Energy and Natural Resources Department. Oil Conservation Division—the "Pit Rule" 19.15.17. NMAC. Form C-144 attached.
- C. Drilling fluids will be removed from the reserve pits.
- 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 20 mil. Yates Petroleum Corporation is in full compliance per OCD's "Pit Rule".
- 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.

Magellan Federal Unit #3
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
Magellan Federal Unit #3

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 24th day of July, 2008.

Printed Name Cy Cowan

Signature Cliff R. May for Cy Cowan

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

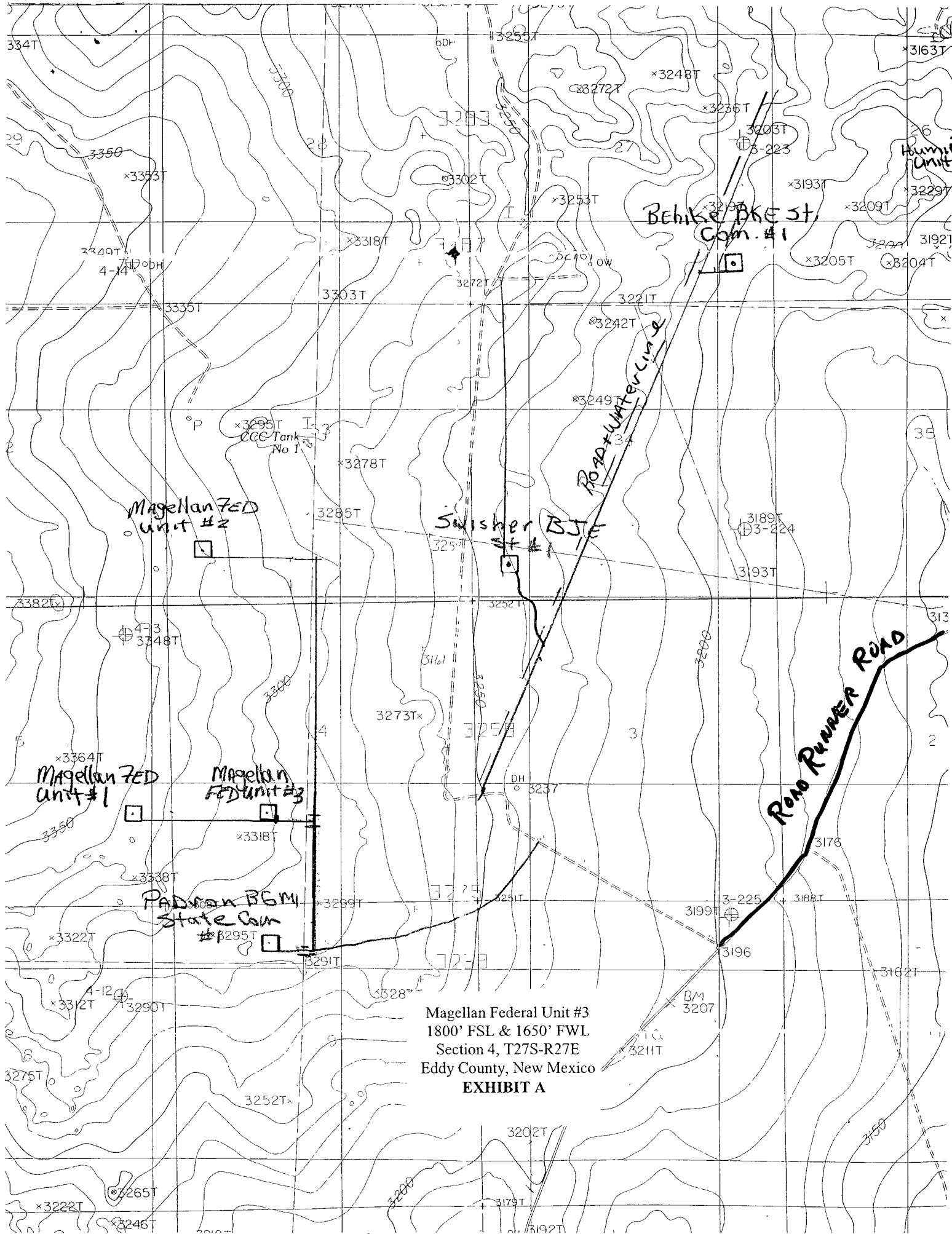
E-mail (optional) cyc@ypcnm.com

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

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

E-mail (optional) _____



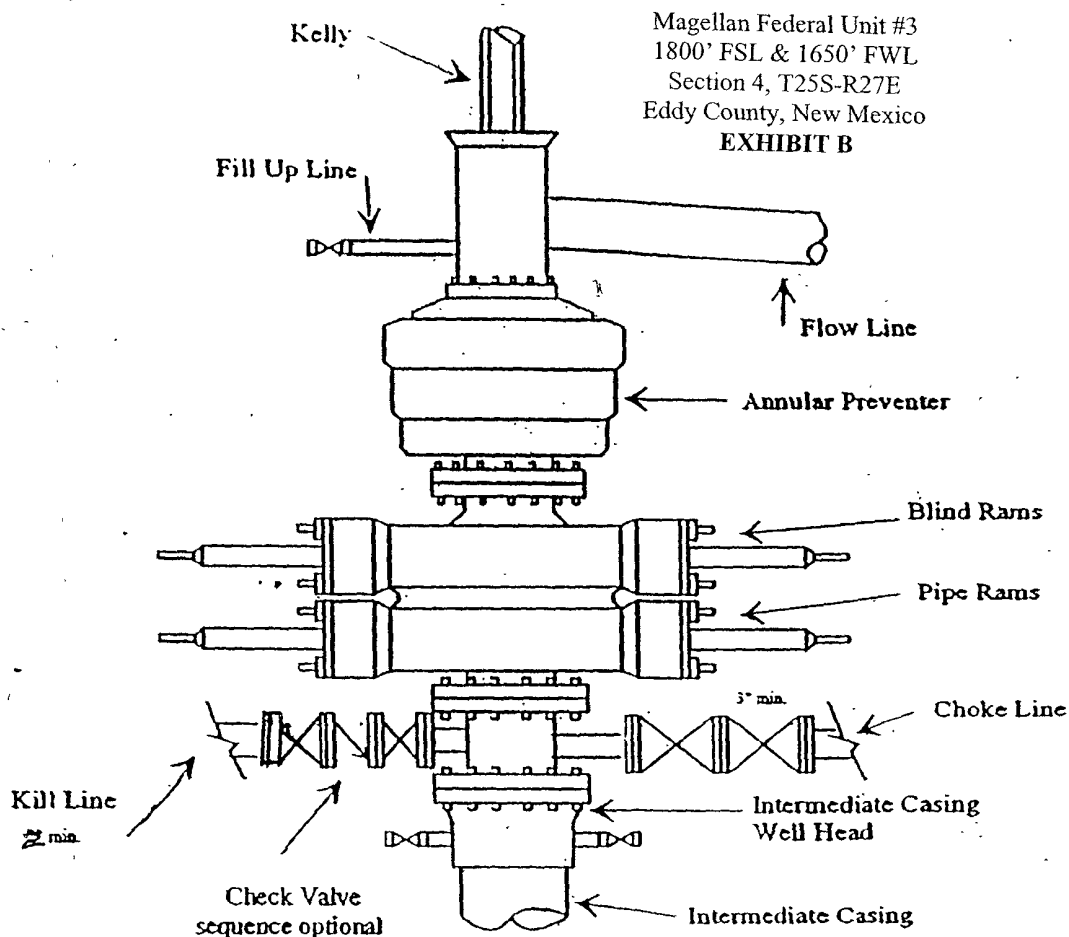
Magellan Federal Unit #3
1800' FSL & 1650' FWL
Section 4, T27S-R27E
Eddy County, New Mexico
EXHIBIT A



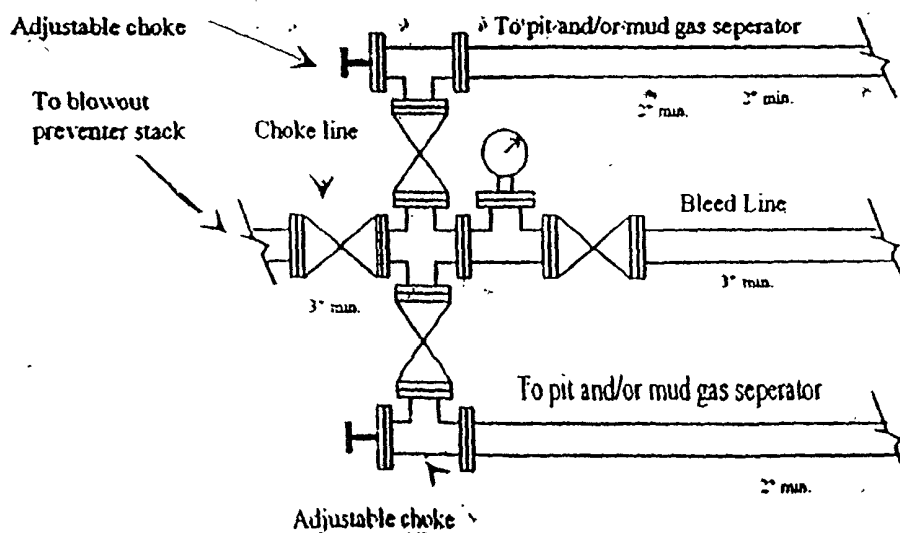
Yates Petroleum Corporation

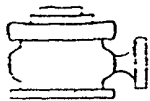
BOP-3

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



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

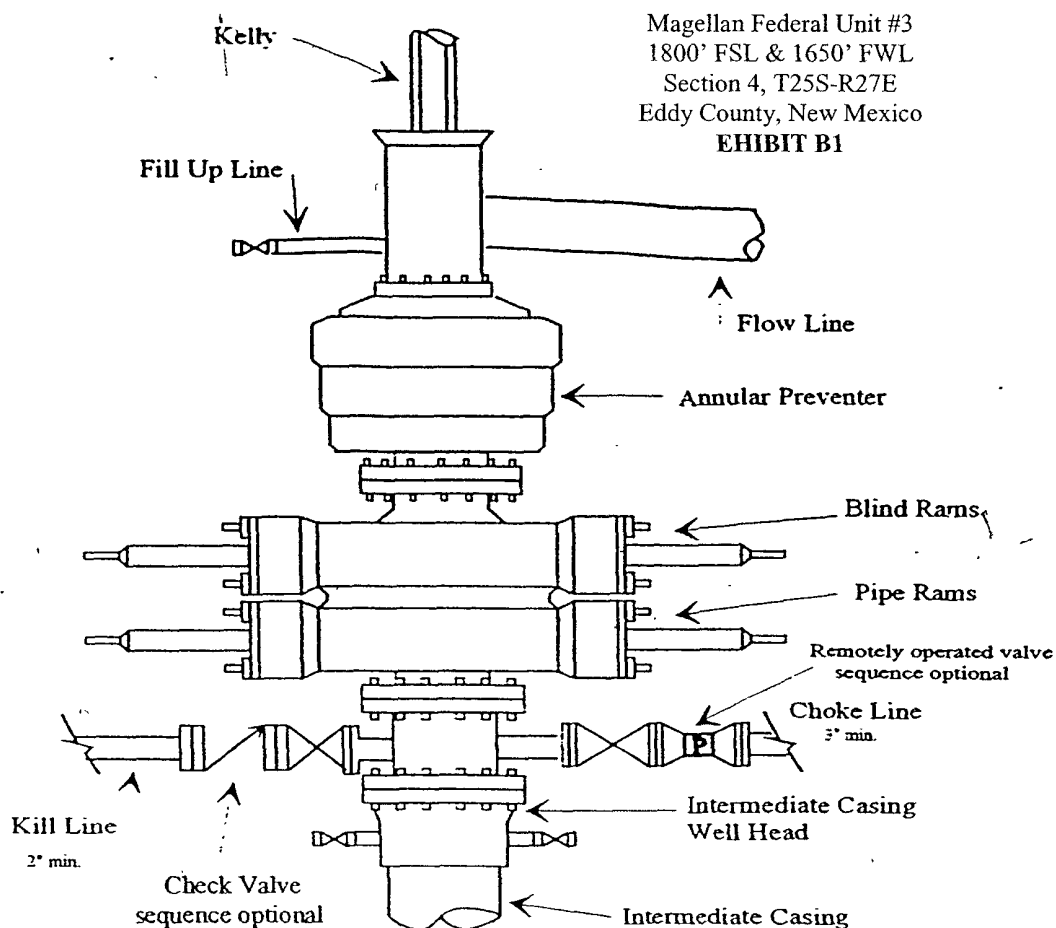




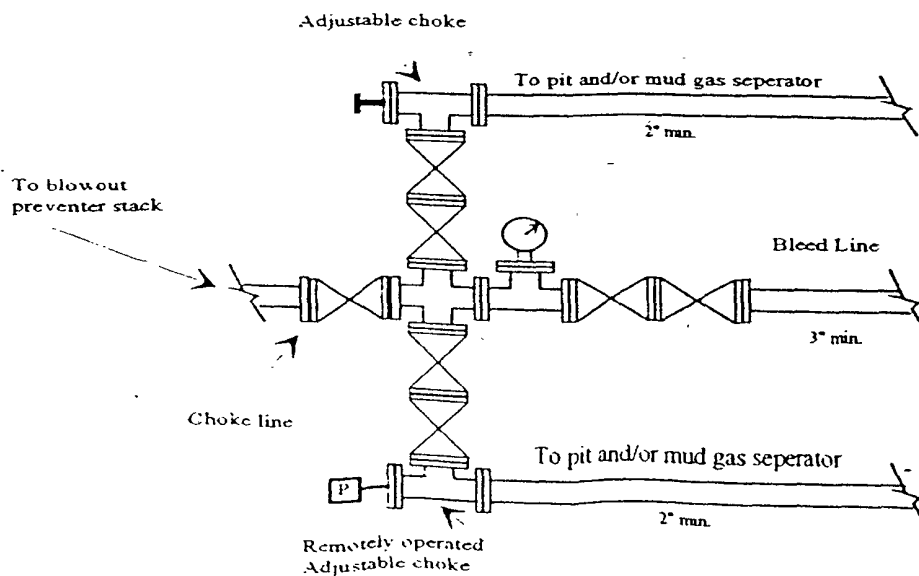
Yates Petroleum Corporation

BOP-4

Typical 5,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



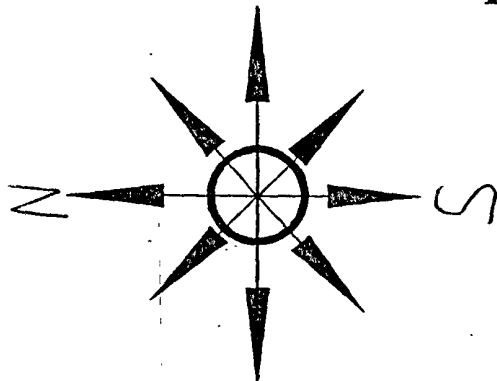
Typical 5,000 psi choke manifold assembly with at least these minimum features



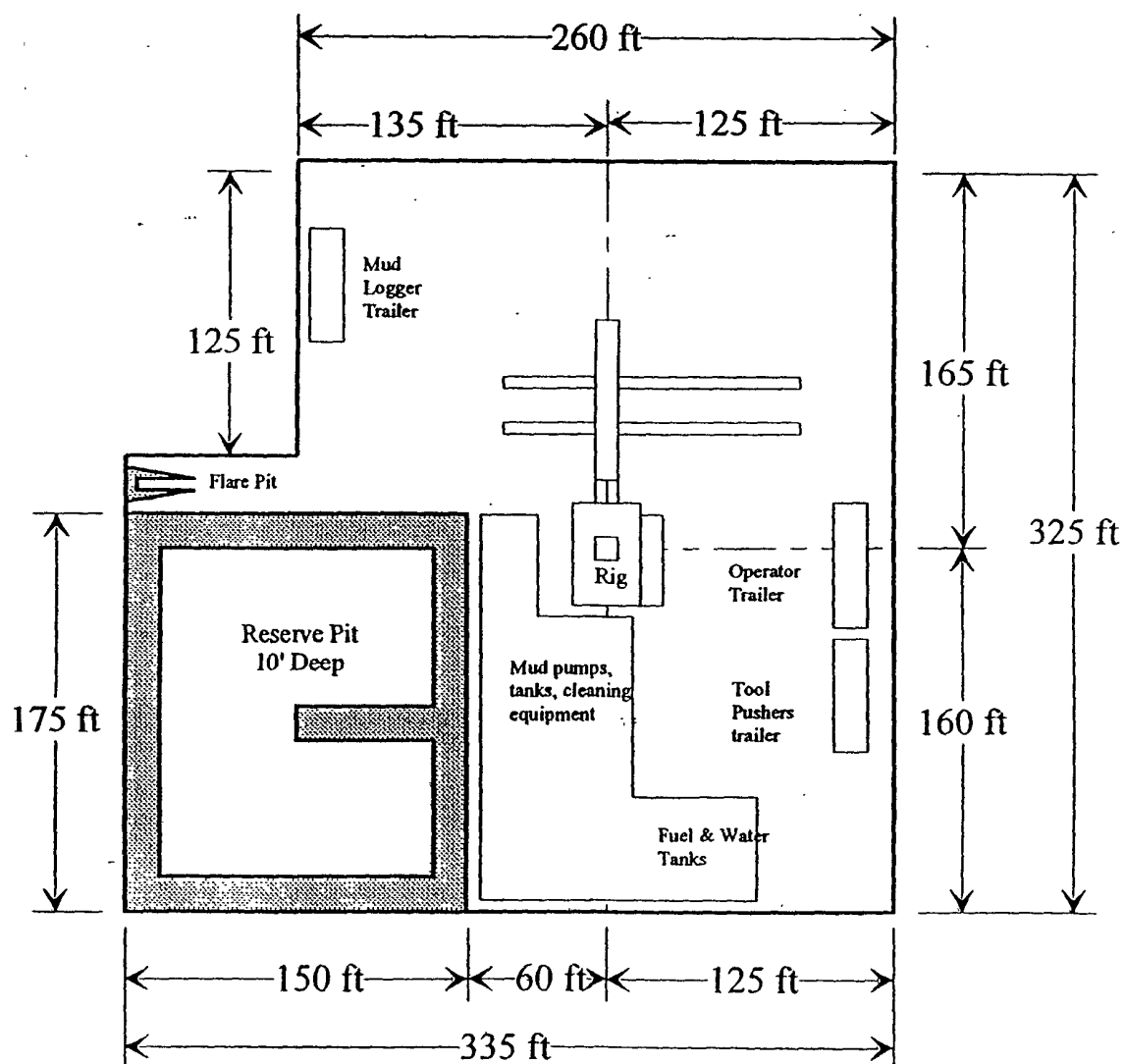
Yates Petroleum Corporation

Location Layout for Permian Basin

Up to 12,000'

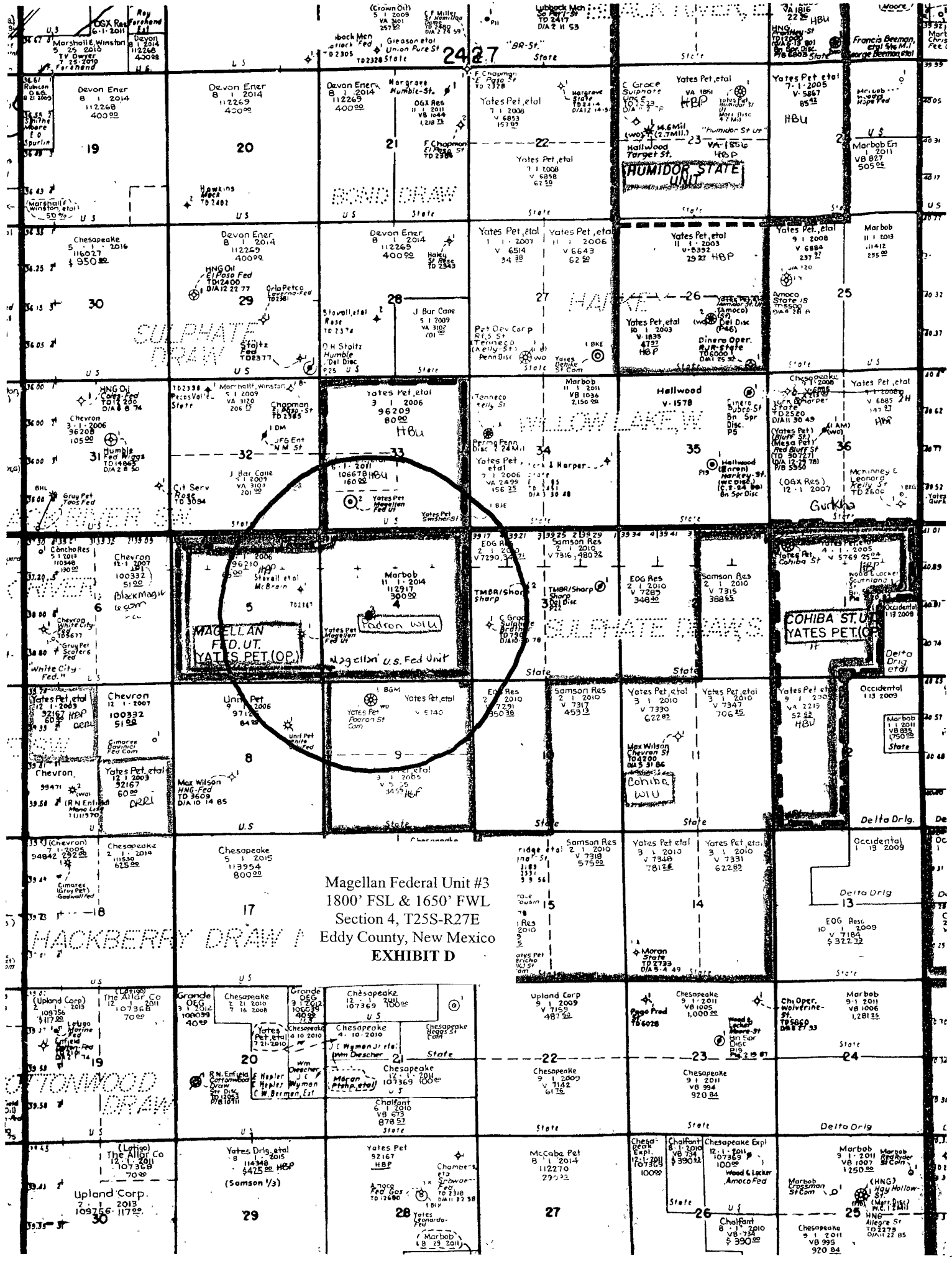


Magellan Federal Unit #3
 1800' FSL & 1650' FWL
 Section 3, T26S-R27E
 Eddy County, New Mexico
EXHIBIT C



Distance from Well
 Head to Reserve Pit
 will vary between rigs

The above dimension
 should be a maximum



Magellan Federal Unit #3
1800' FSL & 1650' FWL
Section 4, T25S-R27E
Eddy County, New Mexico
EXHIBIT D

Exhibit "A"

Magellan Federal Unit #3
1800' FSL and 1650' FWL Unit K
Section 4, T25S-R27E
Eddy County, New Mexico

Our Regulatory Agent has been on site and location shows no sign to be prone to flooding.

Clifton R. May
Regulatory Agent

7/25/2008
Date

**New Mexico Office of the State Engineer
POD Reports and Downloads**

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name (First): (Last): ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

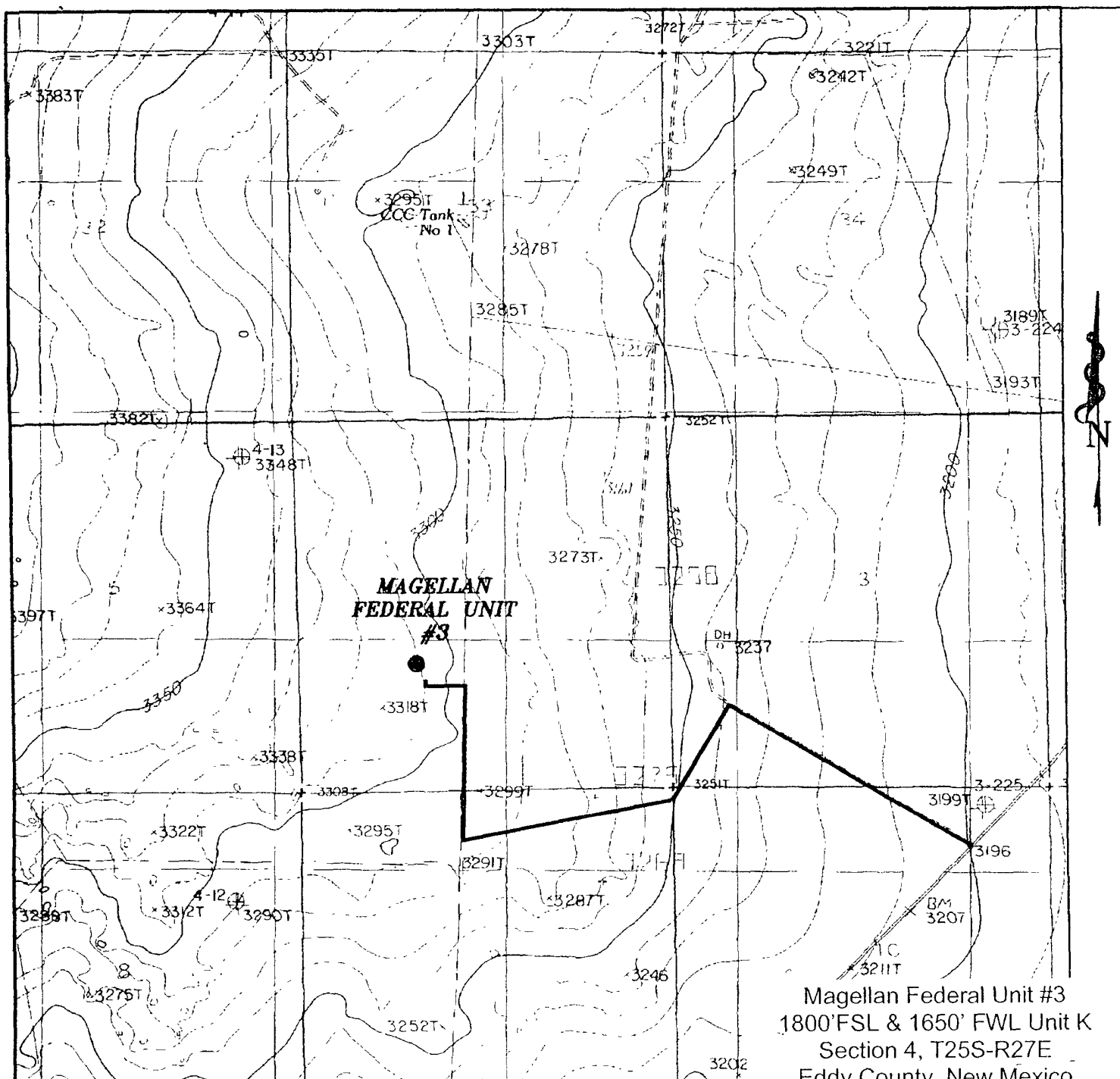
Help

AVERAGE DEPTH OF WATER REPORT 07/23/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
C	24S	27E	08				9	17	37	26
C	24S	27E	09				2	35	50	43
C	24S	27E	12				4	25	32	27
C	24S	27E	13				2	30	31	31
C	24S	27E	18				2	33	35	34
C	24S	27E	22				1	70	70	70

Record Count: 20

Magellan Federal Unit #3
1800' FSL & 1650' FWL Unit K
Section 4, T25S-R27E
Eddy County, New Mexico
Exhibit "B"



**MAGELLAN
FEDERAL UNIT
#3**

Magellan Federal Unit #3
1800' FSL & 1650' FWL Unit K
Section 4, T25S-R27E
Eddy County, New Mexico
Exhibit "C"

MAGELLAN FEDERAL UNIT #3

Located at 1800' FSL AND 1650' FWL
Section 4, Township 25 South, Range 27 East,
N.M.P.M., Eddy County, New Mexico.

**basin
surveys**
focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W O Number: 20182

Survey Date: 07-23-2008

Scale: 1" = 2000'

Date: 07-24-2008

**YATES
PETROLEUM
CORP.**

Yates Petroleum Corporation Design Requirements For Temporary Reserve Pit

Sign posted on site / location or on the fence of reserve pit identifying the operator, listing their phone #, location of site by ¼ / ¼ or unit letter, and S- T- R.

Pit must be fenced to prevent unauthorized access. Fence must remain in good repair. The fence to be barbed wire, space at 1 foot intervals from 1' to 4' off ground. Pit will be fenced on 3 sides during drilling; the 4th side will be fenced upon removal of drilling rig.

Slope of the pit walls is no greater than two horizontal feet to one vertical foot.

Welded liner seams must run up & down the banks of the pit, not horizontally across them.

Field seams must be welded.

Edges of the liner must be anchored in trenches at least 18 inches deep.
Edge of liner will protrude from the outside edge of the trench.

Pit shall be designed to prevent to run on of surface water.

Magellan Federal Unit #3
1800' FSL & 1650' FWL Unit K
Section 4, T25S-R27E
Eddy County, New Mexico
Exhibit "D"

Yates Petroleum Corporation

Drilling Operations Requirements for Temporary Reserve Pit

While the drilling rig is onsite, Operator's representative will inspect the temporary pit daily to ensure that the liner is intact, and that no releases are occurring. Thereafter, the operator shall inspect at least once weekly as long as liquids remain in the temporary pit.

Operator will maintain a log of such inspections and make the log available to the appropriate NMOCD District office upon request.

A copy of the inspection log shall be filed with the NMOCD when operator closes the pit.

Operator must notify NMOCD if liner is damaged, and must repair or replace the damaged liner. Operator has 48 hours to notify NMOCD and make repairs.

NO HOLES in pit liners – not even in the part of the liner that is not in the reserve pit .

All drilling fluids to be removed from temporary pit within 30 days of rig release date

Hydrocarbon based drilling fluids will be stored in steel pits.

Liner –will be 20mil.,string reinforced with welded seams.

Fluids to be added to pit through a header, diverter, or other hardware that prevents damage to liner by erosion, fluid jets, or impacts from installations and removal of hoses or pipes.

Operator shall have onsite an oil absorbent boom or other device to contain and remove oil from a pits surface.

Operator must maintain a freeboard of at least two feet for a temporary pit.

Pit will be bermed to prevent run on of water into the pit.

Safety:

With the use of a temporary pit operator is better able to conduct flammable and dangerous fluids further away from rig personnel and well bore.

Magellan Federal Unit #3
1800' FSL & 1650' FWL Unit K
Section 4, T25S-R27E
Eddy County, New Mexico
Exhibit "E"

Closure Procedure For Temporary Drilling Pits

1. De-water pit within 30 days of rig release.
2. Weekly inspection of fluid level in drilling pit after rig release date until fluids are removed. Weekly levels will be recorded in a log to be submitted to the appropriate OCD district office at time of pit closure.
3. All removed pit fluids will be disposed of in an OCD approved manner at one of the listed OCD approved disposal facilities.

Disposal Facility: Gandy Marley or CRI

Disposal Facility Permit Number: NM-01-0019 or R-9166

4. If fluids are reclaimed the appropriate OCD district office will be contacted beforehand for approval to do so.
5. Within 6 months of the rig release date and after the removal of all free liquids from the temporary drilling pit, the surface owner will be notified by certified mail, return receipt requested that the operator will close the pit. OCD division office will be notified verbally that waste excavation and removal will begin.
6. All impacted contents of the temporary drilling pit will be stabilized by mixing of dry non-waste containing earthen material so that such material will pass a paint filter test.
7. All stabilized pit contents, including the synthetic pit liner will be loaded into trucks and transferred to the division-approved facility listed below for proper disposal.

Disposal Facility: Gandy Marley or CRI

Disposal Facility Permit Number: NM-01-0019 or R-9166

8. Once all visually impacted materials have been removed from the temporary drilling pit, testing and analyzing of the soils beneath the pit will be conducted in accordance with 19.15.17.13, B., 1(b) (i) or (ii) whichever is appropriate to determine if a release has occurred during utilization of the pit.

Magellan Federal Unit #3
1800' FSL & 1650' FWL Unit K
Section 4, T25S-R27E
Eddy County, New Mexico
Exhibit "F"

- 9. When analysis indicates that the soils within the pit area are within the recommended actions levels backfilling will begin.**
- 10. Backfill material will consist of non-waste containing earthen material. The cleaned out drilling pit will be filled with such material to a level which shall allow space for the addition of topsoil which will be equal to the thickness of the background topsoil or one foot whichever is greater as directed in 19.15.17.13, H (1) NMAC.**
- 11. The topsoil cover will be placed on to the drilling pit area in a manner of existing grade and will prevent ponding of water and erosion of the cover material.**
- 12. Within 60 days of closure completion a closure report on form C-144 will be submitted to the appropriate district office. The report will contain detailed information on the backfilling, capping. The closure report will also include a plat of the closed pit location on a form C-105.**
- 13. Within the first growing season after the approved pit closure seeding of the pit area shall occur. The seeding will be performed in accordance with 19.15.17.13, I, (2) (3) (4) (5).**

MARTIN YATES, III
1912-1985

FRANK W YATES
1936-1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471

S P. YATES
CHAIRMAN EMERITUS

JOHN A. YATES
CHAIRMAN OF THE BOARD

FRANK YATES, JR.
PRESIDENT

PEYTON YATES
DIRECTOR

JOHN A. YATES, JR.
DIRECTOR

As per BLM instructions, Yates Petroleum Corporation is tendering the \$4,000.00 APD Processing Fee for the Magellan Federal Unit #3, APD date submitted: July 24, 2008, Section 4, Township 25 South, Range 27 East, Eddy County, New Mexico.

Please be advised we are tendering this fee under protest as we believe it contradicts language in the Energy Policy Act of 2005 signed by President Bush.

First National Bank
ARTESIA, NEW MEXICO

95-43
1122



YATES BUILDING • ARTESIA, N.M. 88210

No. 155410

JUL 25, 2008

PAY *****4000*DOLLARS*AND*00*CENTS

\$*****4,000.00

34600 BUREAU OF LAND MANAGEMENT
TO THE CARLSBAD
ORDER 620 EAST GREENE STREET
OF CARLSBAD, NM 88220-6292

⑈155410⑈ ⑆112200439⑆

⑈69408810⑈

DETACH BEFORE DEPOSITING CHECK

YATES PETROLEUM CORPORATION
105 SOUTH 4TH STREET ARTESIA, N.M. 88210

No. 155410

\$4,000.00

CRM/MS
RECORDING/FILING FEES
FEDERAL FILING FEE FOR APPLICATION FOR PERMIT TO DRILL
WAGGELLAN FEDERAL UNIT #3
SECTION 4, T25S R27E
LIDDY COUNTY, NEW MEXICO

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corporation
LEASE NO.:	NMNM112917
WELL NAME & NO.:	Magellan Federal Unit No 3
SURFACE HOLE FOOTAGE:	1800' FSL & 1650' FWL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 4, T. 25 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**
- ☐ **Noxious Weeds**
- ☐ **Special Requirements**

- ☒ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads

- ☒ **Road Section Diagram**

- ☒ **Drilling**

- ☐ **Production (Post Drilling)**

- Well Structures & Facilities

- Pipelines

- Electric Lines

- ☐ **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. SPECIAL REQUIREMENT(S)

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 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.

See SN for Closed loop.
The reserve pit shall be constructed 175' X 150' on the North side of the well pad V-Door East.

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.

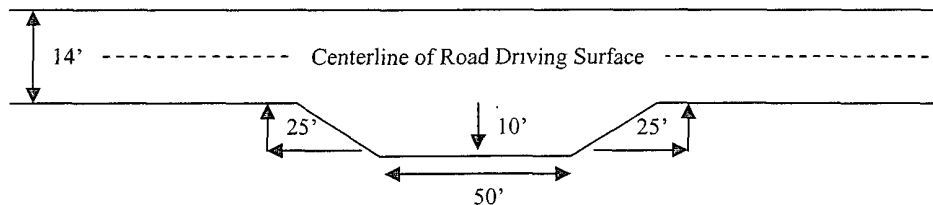
Ditching

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

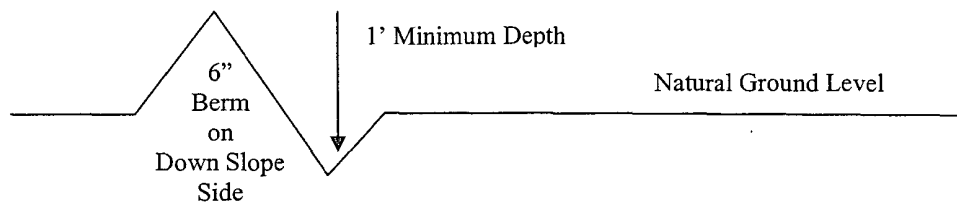


Drainage

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

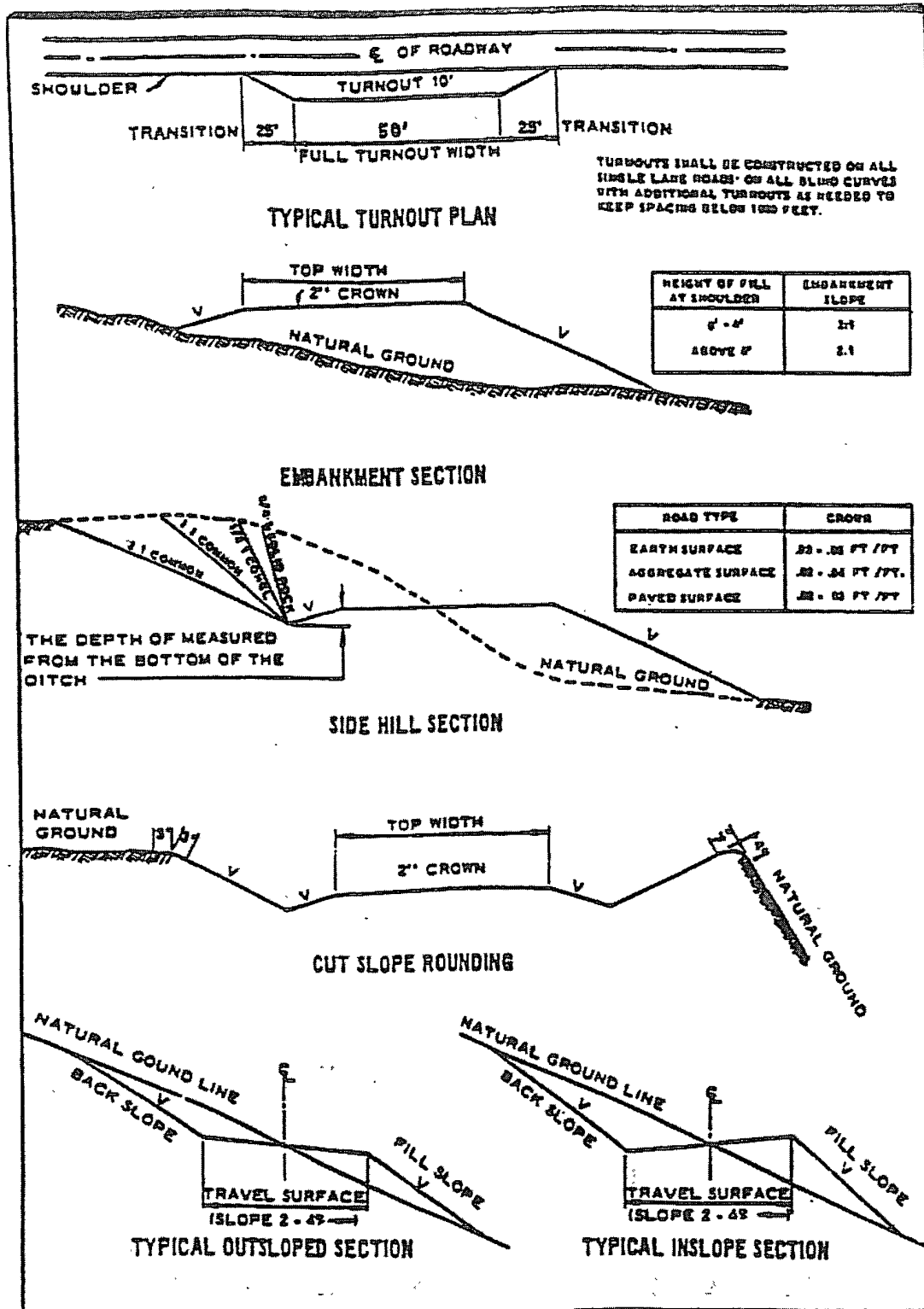
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



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. **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

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

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

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

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

Medium cave/karst.

Possible lost circulation in the Chinle and Delaware formations.

Possible abnormal pressures in the Wolfcamp and high pressure in the Pennsylvanian section.

The 13-3/8 inch surface casing shall be set at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) 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 includes the lead cement slurry.**
 - 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 9-5/8 inch intermediate casing is:
- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Casing to be set in the Lamar Limestone or basal anhydrite at the base of the salt at approximately 2300 feet. Fresh water mud to be used below this depth.**

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the next hole segment.

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

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

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole.

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. 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.

E. DRILL STEM TEST

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

WWI 082708

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

C. ELECTRIC LINES

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 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 \subseteq Four-wing saltbush (<i>Atriplex canescens</i>)	5.0

\subseteq DWS: DeWinged Seed

*Pounds of pure live seed:

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

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.