

7012

Hackberry Lake ARTS-08-440  
OHV area

614

OCD-ARTESIA

Form 3160-3  
(April 2004)

JUN 09 2008

OCD-ARTESIA

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.  
**LC-028990-B**

6. If Indian, Allottee or Tribe Name  
**Not Applicable**

7. If Unit or CA Agreement, Name and No.  
Lease Name and Well No.  
**Creek AL Federal Com #17**

9. API Well No.  
**30-015-36375**

10. Field and Pool, or Exploratory  
**North Hackberry; Morrow, North**

11. Sec., T., R., M., or Blk. And Survey or Area  
**Section 24, T18S-R30E**

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator  
**Yates Petroleum Corporation 25575**

3a. Address  
**105 South Fourth Street, Artesia New Mexico 88210**

3b. Phone No. (include area code)  
**(575) 748-1471**

4. Location of well (Report location clearly and in accordance with any State requirements. \*)  
At surface  
**700' FSL and 860' FEL, Unit P**  
At proposed prod. zone  
**same as above**

14. Distance in miles and direction from the nearest town or post office\*  
**Approximately 8 miles Southwest of Loco Hills, New Mexico**

12 County or Parish  
**Eddy**  
13 State  
**NM**

15. Distance from proposed\* location to nearest property or lease line, ft  
(Also to nearest drlg. unit line, if any)  
**700'**

16. No. of acres in lease  
**560.00**

17. Spacing Unit dedicated to this well  
**S1/2 320.00 acres**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft  
**200'**

19. Proposed Depth  
**12,200'**

20. BLM/ BIA Bond No. on file  
**NATIONWIDE BOND #NMB000434**

21. Elevations (Show whether DF RT, GR, etc.)  
**3635' GL**

22. Approximate date work will start\*  
**ASAP**

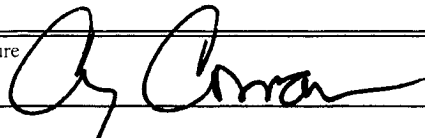
23. Estimated duration  
**30 Days**

24. Attachments

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

- 1 Well plat certified by a registered surveyor
- 2 A Drilling Plan
- 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

- 4 Bond to cover the operations unless covered by existing bond on file(see item 20 above)
- 5 Operator certification
- 6 Such other site specific information and/ or plans as may be required by the authorized officer

25. Signature  Name (Printed/ Typed) **Cy Cowan** Date **3/12/2008**  
Title **Regulatory Agent**

Approved By (Signature) **/s/ Linda S.C. Rundell** Name (Printed/ Typed) **/s/ Linda S.C. Rundell** Date **JUN 2 2008**  
Title **STATE DIRECTOR** Office **NM STATE 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, n

States any false, fictitious or fraudulent statements or representa  
\* (Instructions on page 2) Previously approved C-102

**NOTE: New Pit Rule  
NMAC 19-15-17**

take to any department or agency of the United

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**Approval Subject to General Requirements  
& Special Stipulations Attached**

**Capitan Controlled Water Basin**

DISTRICT II  
811 South First, Artesia, NM 88210

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87503

# OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code <i>97474</i>	Pool Name <i>North Hackberry</i>
Property Code <i>32575</i>	Property Name CREEK "AL" FEDERAL	Well Number 17
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3635

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<i>P</i>	<i>24</i>	<i>18S</i>	<i>30E</i>		<i>700</i>	<i>SOUTH</i>	<i>860</i>	<i>EAST</i>	<i>EDDY</i>

### 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

<i>LC-02899-B</i>	<i>NM-93771</i>		

N.32°43'39.2"  
W.103°55'10.9"

3637 3641

3632 3634

700' 860'

### OPERATOR CERTIFICATION

I hereby certify the the information  
contained herein is true and complete to the  
best of my knowledge and belief.

*Cy Cowan*  
Signature

Cy Cowan

Printed Name

Regulatory Agent

Title

April 18, 2002

Date

### 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.

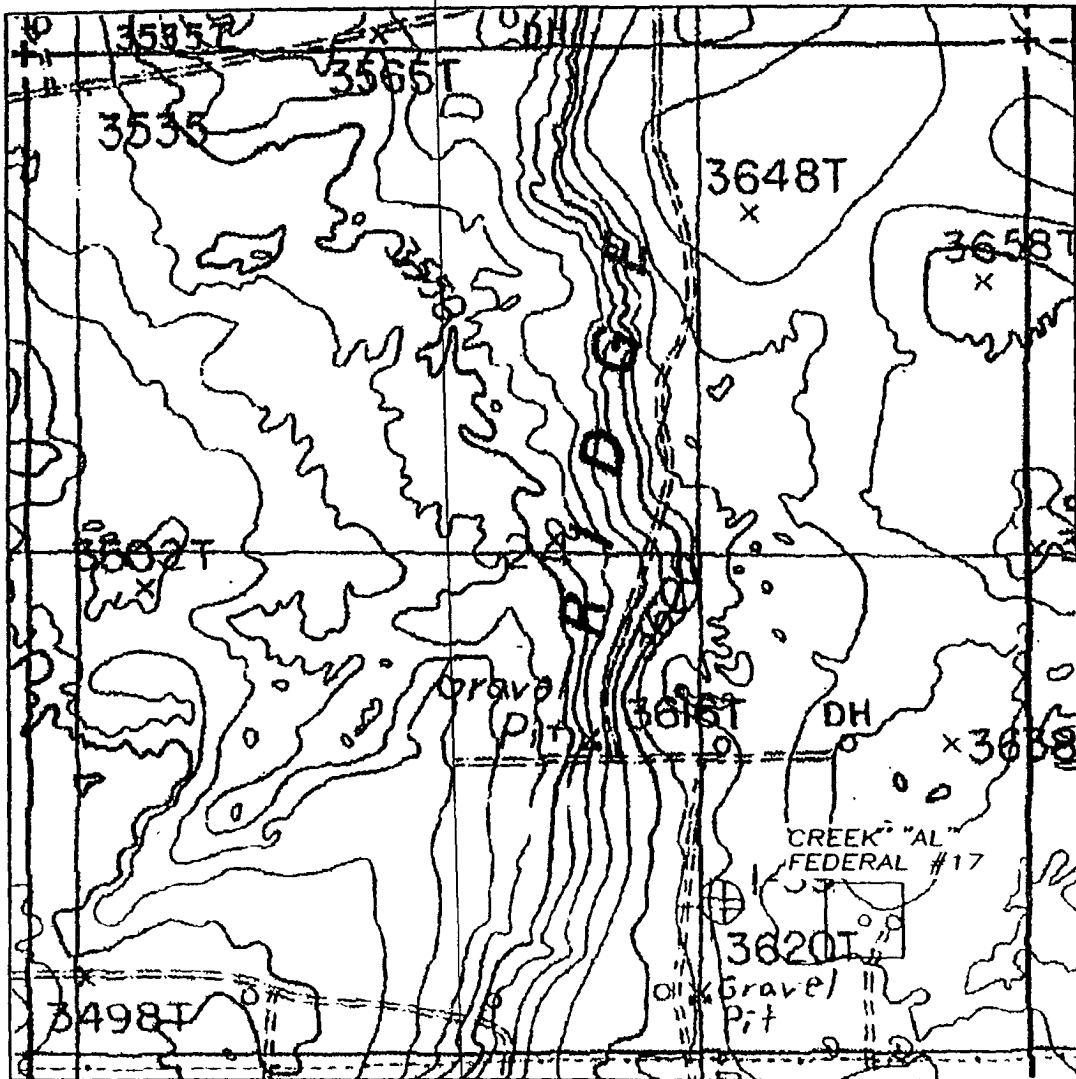
4/11/2002

Date Surveyed

Signature  
Professional Surveyor

*Herschel L. Jones*  
Herschel L. Jones  
NEW MEXICO  
3640  
Certification No. Herschel L. Jones RLS 3640  
PROFESSIONAL LAND SURVEYOR  
GENERAL SURVEYING COMPANY

SECTION 24, TOWNSHIP 18 S, RANGE 30 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



1000' 0 1000' 2000'

Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

*Herschel L. Jones*  
HERSCHEL L. JONES, R.L.S. No. 3640

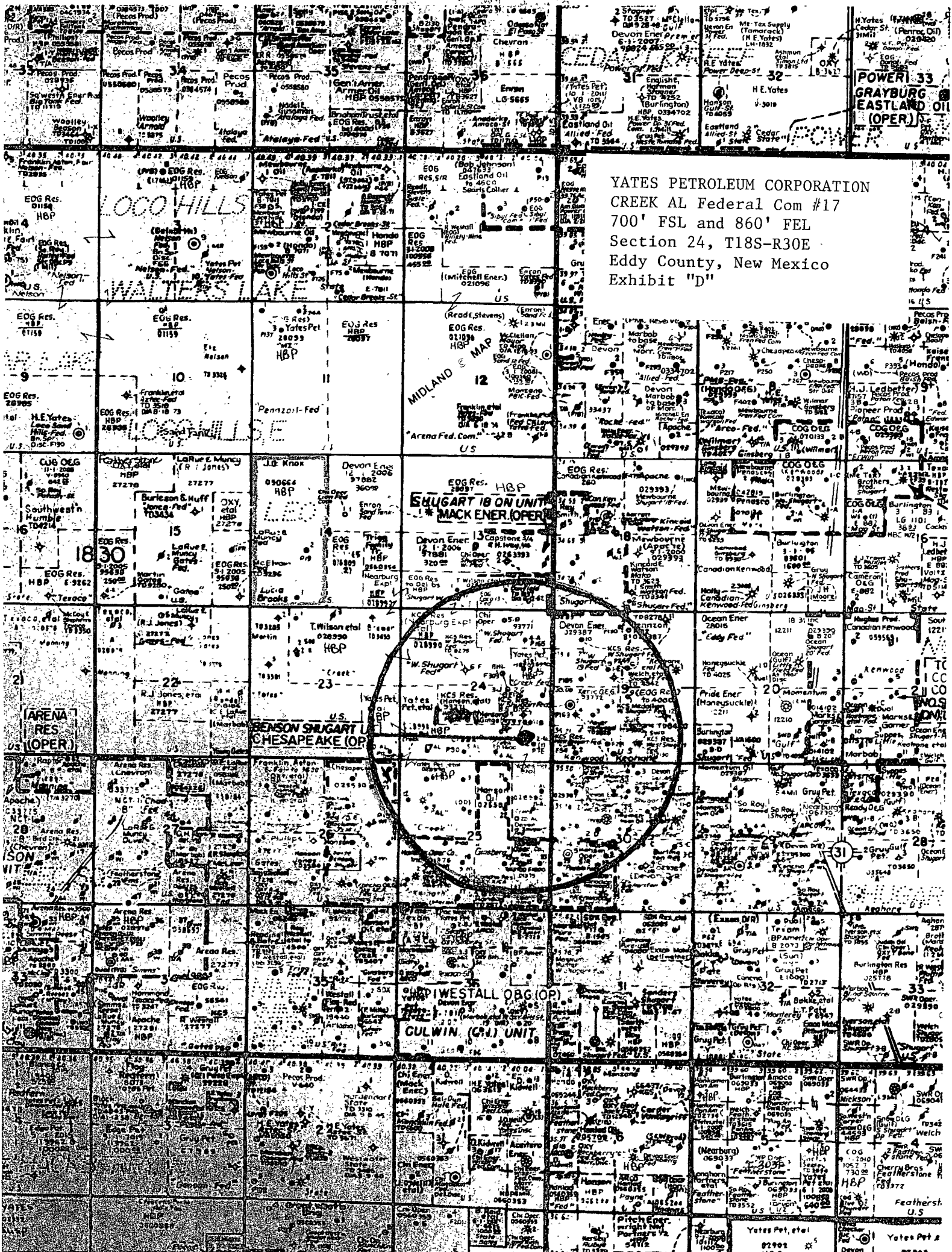
GENERAL SURVEYING COMPANY P.O. BOX 1928  
LOVINGTON, NEW MEXICO 88260

YATES PETROLEUM CORP.

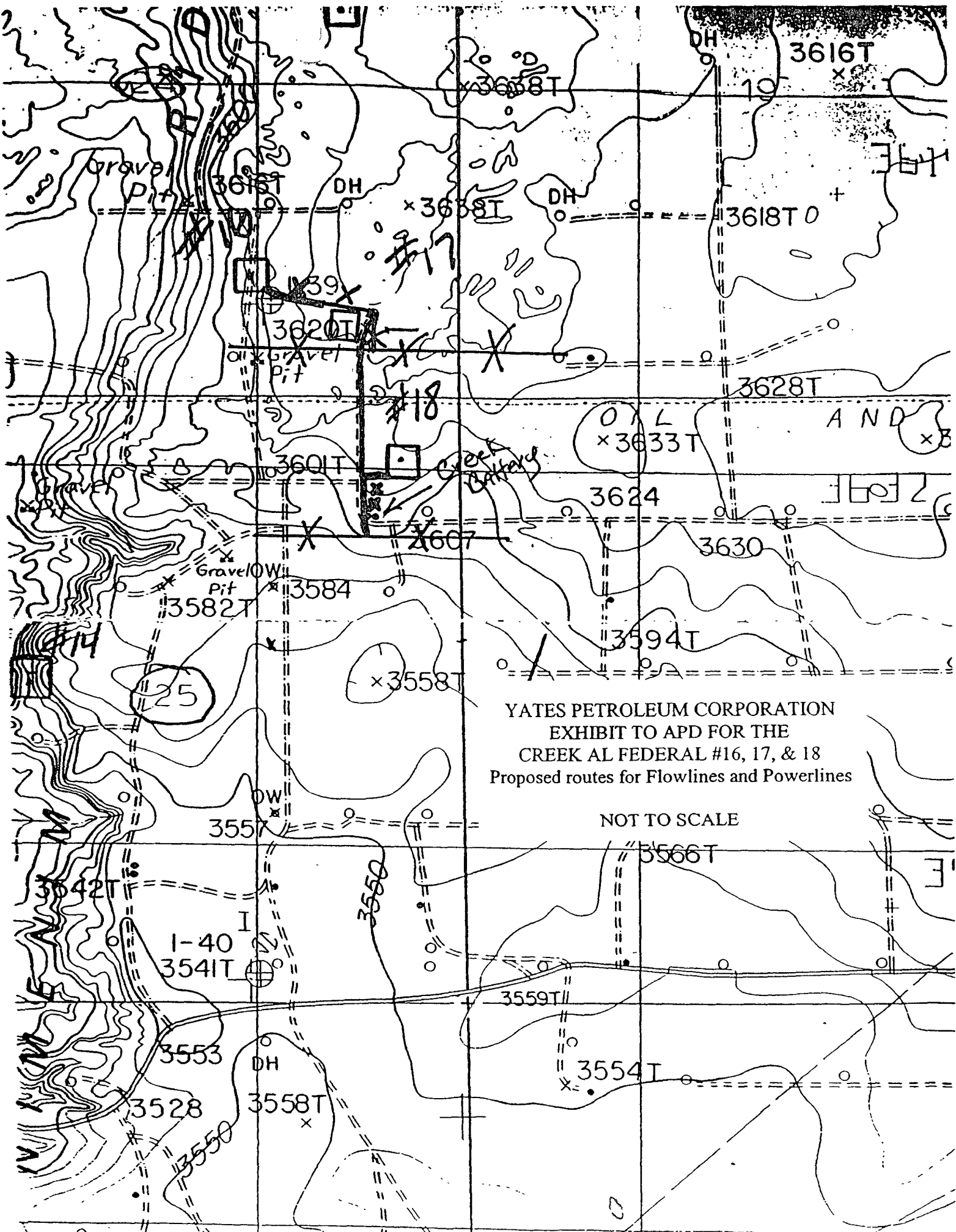
LEASE ROAD TO ACCESS THE YATES  
CREEK "AL" FEDERAL COM. #17, LOCATED  
IN SECTION 24, TOWNSHIP 18 SOUTH,  
RANGE 30 EAST, NMPM, EDDY COUNTY,  
NEW MEXICO

Survey Date: 4/11/2002	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 4/12/02	Scale 1" = 1000' CREEK





YATES PETROLEUM CORPORATION  
CREEK AL Federal Com #17  
700' FSL and 860' FEL  
Section 24, T18S-R30E  
Eddy County, New Mexico  
Exhibit "D"



YATES PETROLEUM CORPORATION  
EXHIBIT TO APD FOR THE  
CREEK AL FEDERAL #16, 17, & 18  
Proposed routes for Flowlines and Powerlines

NOT TO SCALE





# YATES PETROLEUM CORPORATION

## Creek "AL" Federal Com. #17

700' FSL and 860' FEL  
Section 24-T18S-R30E  
Eddy County, New Mexico

- The estimated tops of geologic markers are as follows:

Rustler	485'	No Pay	Dolomite	8200'	Oil Pay
Tansill	1800'	Oil Pay	Wolfcamp	9500'	Oil Pay
Yates	1910'	Oil Pay	Strawn	10,750'	Oil Pay
Seven Rivers	2350'	Oil Pay	Atoka	11,075'	Oil Pay
Queen	3075'	Oil Pay	Morrow	11,450'	Oil Pay
Grayburg	3560'	Oil Pay	Chester	12,120'	Oil Pay
Delaware	4600'	Oil Pay	TD	12,200'	Oil Pay
Bone Spring	5820'	Oil Pay			

- The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: 250'-350'  
Oil or Gas: All potential zones.

- Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and rated for 5000 BOP systems 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.

### Auxiliary Equipment:

- 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.

- THE PROPOSED CASING AND CEMENTING PROGRAM:

### A. Casing Program: (All New)

$SF_c = 0.95$

NEW DESIGN FROM MULLIN YATES 5/7/08 CB

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-700'	700'
<del>12 1/4"</del>	<del>9 5/8"</del>	<del>36#</del>	<del>J-55</del>	<del>ST&amp;C</del>	<del>0-4000'</del>	<del>4000'</del>
8 3/4"	7"	29#	P-110	LT&C	0-100'	100'
8 3/4"	7"	26#	L-80	LT&C	100'-8600'	8500'
8 3/4"	7"	26#	HCP-110	LT&C	8600'-11000'	2400'
8 3/4"	7"	29#	P-110	LT&C	11000'-12200'	1200'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 1.8

INTER 9 5/8" 5 1/2"

0-100	J-55	40#	$P_c = 2570$	WT = 4.0	$P_B =$
100-3300	J-55	36#	$P_c = 2020 \text{ PSI}$	WT = 115.2	$P_B =$
3300-4000	J-55	40#	$P_c = 2570$	WT = 28.0	$P_B =$
				TOTAL = 147.2	



B. CEMENTING PROGRAM:

Surface casing: 400' sx Lite (Yld 2 Wt. 12.5) Tail in w/250' sx Class "C" + 2% CaCL2 (Yld 1.32 WT 14.8). Cemented to surface.

Intermediate Casing: Lead w/1100' sx Lite (Yld 2 Wt 12.5). Tail in w/250' sx Class "C" + 2% CaCL2 (Yld 1.32 Wt. 14.8). Circulate to surface.

Production Casing: TOC 3500' 600' sx Lite (Yld 2 Wt. 12.5). Tail in w/500' sx Super "C" (Yld 1.62 Wt. 1.32). Cement shall tie back 200 feet into the 9 5/8" casing.

500

95/8" @ 4000'

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
0-700'	FW Gel/Paper	8.6-9.0	32-36	N/C
700'-4000'	Brine	10.0-10.2	28	N/C
4000'-11000'	Cut Brine	8.8-9.5	28	N/C
11000-12200'	SGEL/Starch/Drispac/KCL	9.5-10.0	32-40	<10 cc

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. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: 30' samples to 5000'. 10' samples to 5000' to TD.  
Logging: Platform HALS.  
Coring: Sidewall cores as warranted.  
DST's: As warranted.

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

**Anticipated BHP:**

<b>From: 0</b>	<b>TO: 700'</b>	<b>Anticipated Max. BHP: 300 PSI</b>
<b>From: 700'</b>	<b>TO: 4000'</b>	<b>Anticipated Max. BHP: 1700 PSI</b>
<b>From: 4000'</b>	<b>TO: TD</b>	<b>Anticipated Max. BHP: 6100 PSI</b>

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None

H2S Zones Anticipated: None Anticipated

8. ANTICIPATED STARTING DATE:

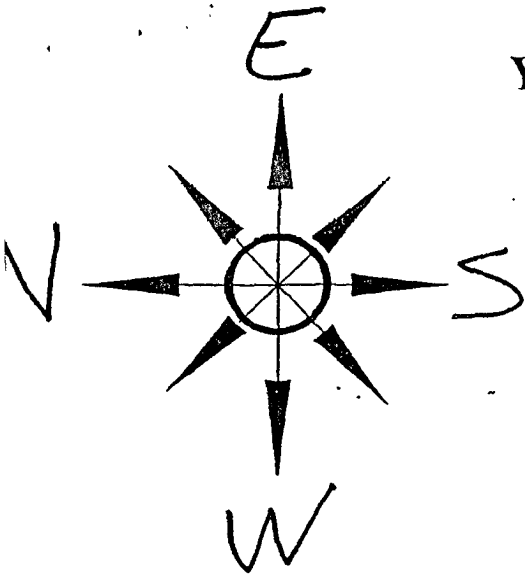
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 30 days to drill the well with completion taking another 15 days.

PB - L1

# Yates Petroleum Corporation

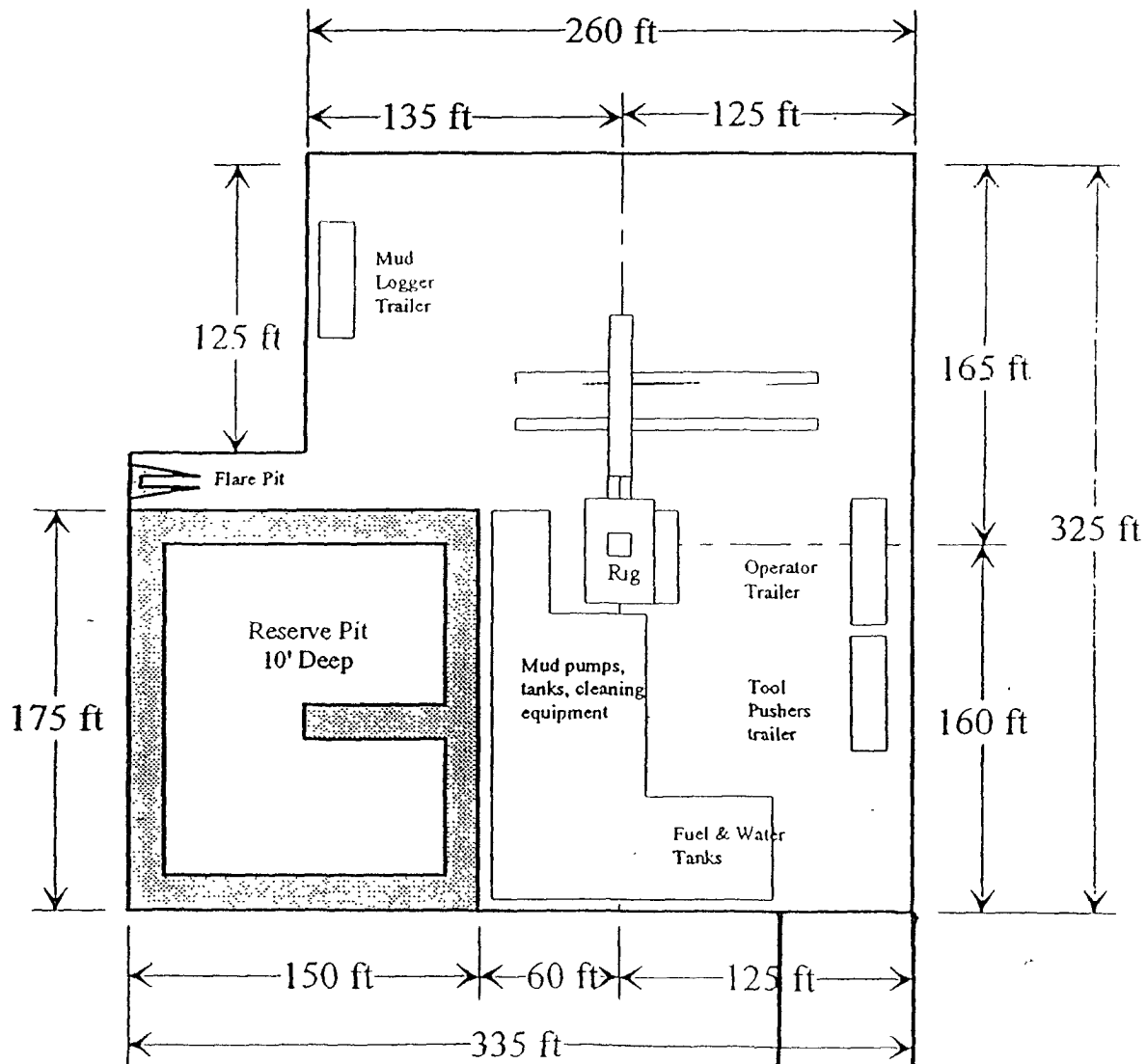
Location Layout for Permian Basin

Up to 12,000'



Pits North

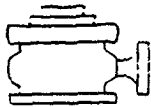
YATES PETROLEUM CORPORATION  
CREEK AL Federal Com #17  
700' FSL and 860' FEL  
Section 24, T18S-R30E  
Eddy County, New Mexico  
Exhibit "B"



Distance from Well  
Head to Reserve Pit  
will vary between rigs

The above dimension  
should be a maximum

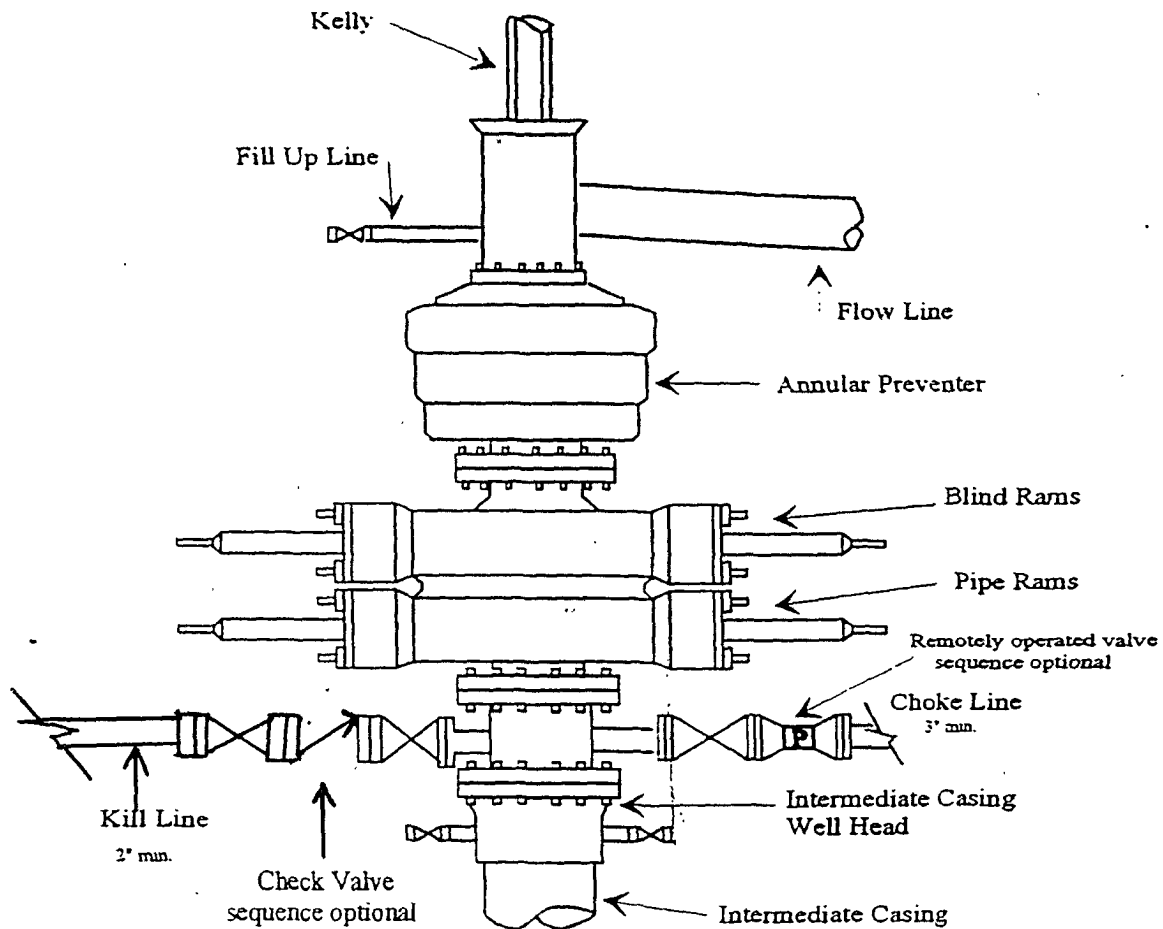
ACCESS



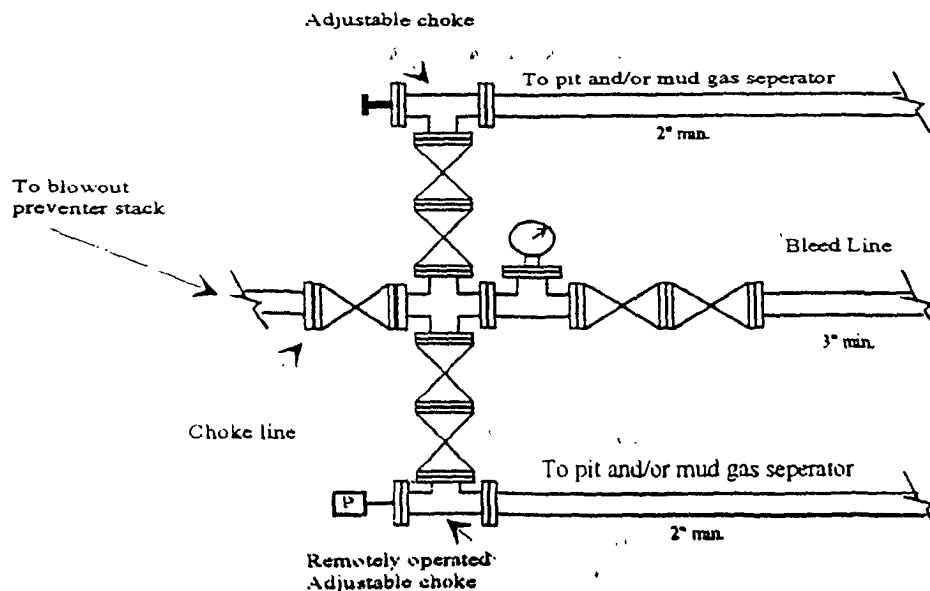
# Yates Petroleum Corporation

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

BOP-4  
Creek AL Federal Com. #17



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



# **Yates Petroleum Corporation**

**105 S. Fourth Street  
Artesia, NM 88210**

## **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

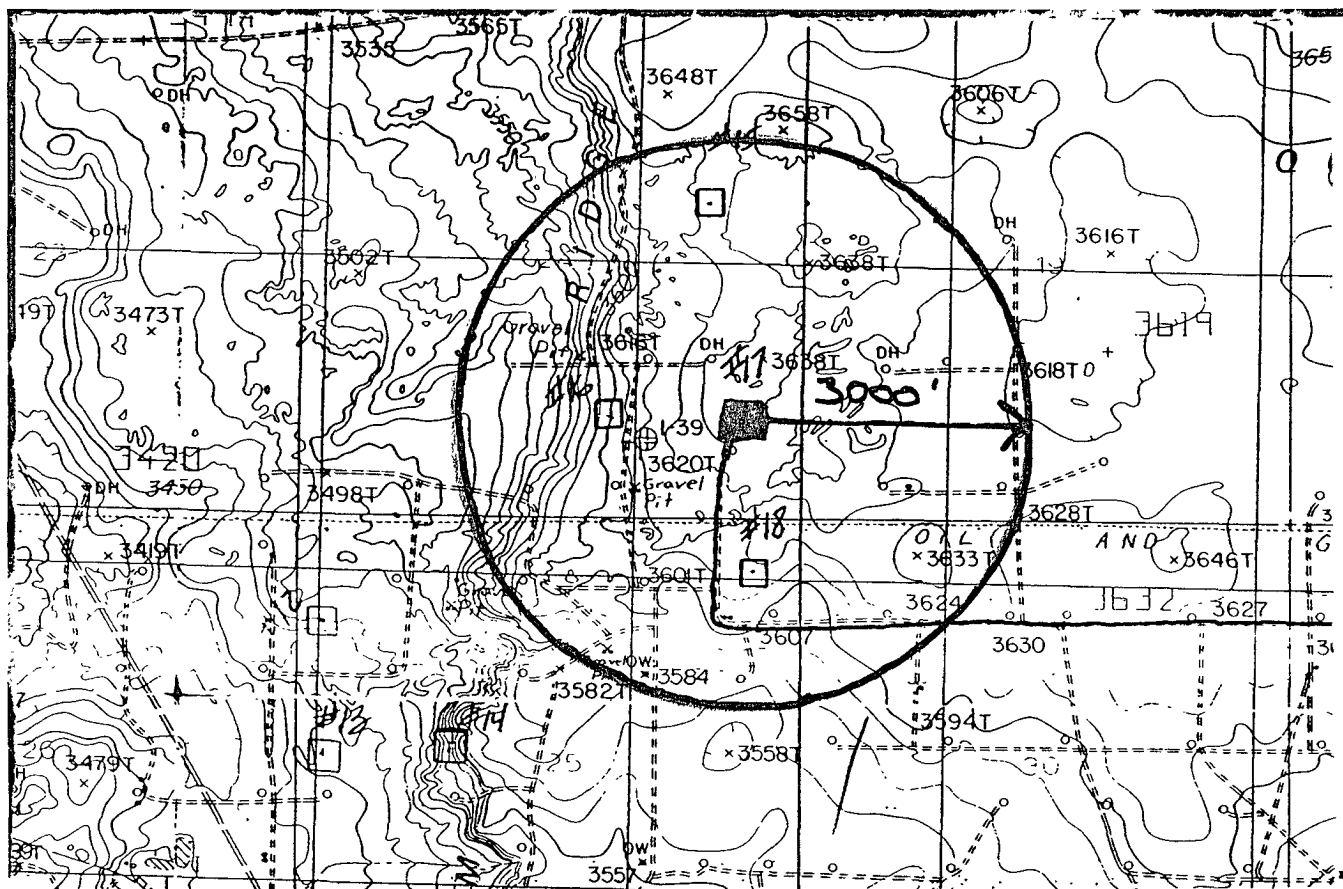
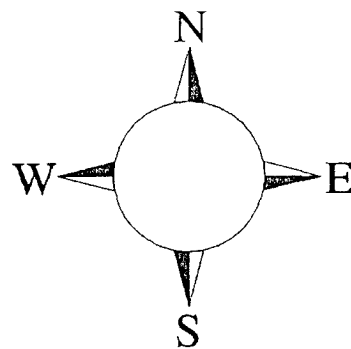
**Creek AL Federal #17**

**700' FSL, 860' FEL Surface Location**

**Sec-24, T-18S, R-30E**

**Eddy County NM**

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



Assumed 100 ppm ROE = 3000  
100 ppm H2S concentration shall trigger activation of this plan

## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

## Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

## Contacting Authorities

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

## ***Yates Petroleum Corporation Phone Numbers***

---

YPC Office .....	(505) 748-1471
Paul Ragsdale/Operations Manager.....	(505) 748-4520
Wade Bennett/Production Manager .....	(505) 748-4236
Ron Beasley/Prod Superintendent .....	(505) 748-4210
Al Springer/Drilling .....	(505) 748-4225
Paul Hanes/Prod. Foreman/Roswell .....	(505) 624-2805
Tim Bussell/Drilling Superintendent.....	(505) 748-4221
Artesia Answering Service .....	(505) 748-4302
(During non-office hours)	

### **Agency Call List**

#### **Eddy County (505)**

##### **Artesia**

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

##### **Carlsbad**

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

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

##### **Other**

Boots & Coots IWC .....	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control.....	(915) 699-0139 or (915) 563-3356
Halliburton .....	(505) 746-2757
B. J. Services.....	(505) 746-3569
Flight For Life -4000 24th St, Lubbock, TX .....	(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX .....	(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....	(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM .....	(505) 842-4949



**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**YATES PETROLEUM CORPORATION**  
**Creek "AL" Federal Com. #17**  
700' FSL and 860' FEL  
Section 24-T18S-R30E  
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 8 miles Southeast of Loco Hills, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go East of Artesia on Highway 82 to Highway 360. Turn Right on 360 and go to Duval Shaft Road (CR 251). Turn left on Duval Shaft Road and to Grubbs Rd (CR 250). Turn right on Grubbs Rd. and go approx. 4.8 miles. Turn north here and go approx. 0.7 of a mile. Turn left and go 0.7 of a mile to the Creek AL Battery on the right. On the west side of the Creek Battery follow road to the north for approx. 0.3 of a mile to the Creek AL Fee #2 well. The Creek AL Federal Com. #17 well location will be located 300 feet to the west.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will go west for approximately 300' to the Southeast corner of the drilling pad. The road will lie in a east to west direction.
- 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 side. Some traffic turnouts will be built.
- 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 productive of gas.

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:

Dirt contractor will locate nearest pit and obtain any permits and materials needed for construction.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. 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 land fill. Burial on site is not approved.

8. ANCILLARY FACILITIES: INCLUDE ONE (1) 3" SDR-11, POLY, SURFACE FLOWLINE AND ONE (1) 640 VOLT, 3 PHASE, RAPTOR PROOF POWERLINE FOLLOW ACCESS ROADS TO THE CREEK BATTERY. SEE EXHIBIT.

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, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' x 400' area has been staked and flagged.

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 wellsite 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 non-productive, 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 filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP: Federal Surface, Administered by Bureau of Land Management, Carlsbad, New Mexico.

12. OTHER INFORMATION:

- A. Topography: Refer to the existing 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  
Creek AL Federal Com #17

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 12th day of March, 2008.

Printed Name Cy Cowan

Signature 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

Field Representative (if not above signatory) Jim Krogman

Address (if different from above) Same

Telephone (if different from above) 575-748-4215

E-mail (optional) cy@ypcnm.com

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	YATES PETROLEUM CORPORATION
LEASE NO.:	LC-028990-B
WELL NAME & NO.:	CREEK AL FEDERAL COM. #17
SURFACE HOLE FOOTAGE:	700' FSL & 860' FEL
BOTTOM HOLE FOOTAGE:	Same
LOCATION:	Section 24, T. 18 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

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

- ☐ **General Provisions**
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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. SPECIAL REQUIREMENT(S)**

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 15 through June 15 annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.



## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

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

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

### **B. TOPSOIL**

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

### **C. RESERVE PITS**

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

The reserve pit shall be constructed 175' X 150' on the North 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.

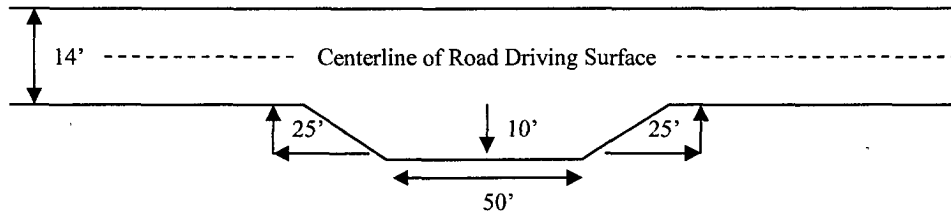
##### **Ditching**

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**

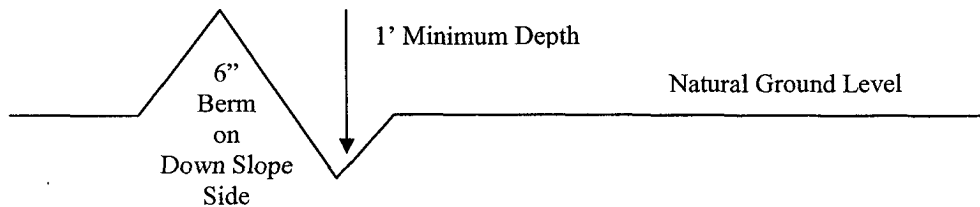


## Drainage

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**

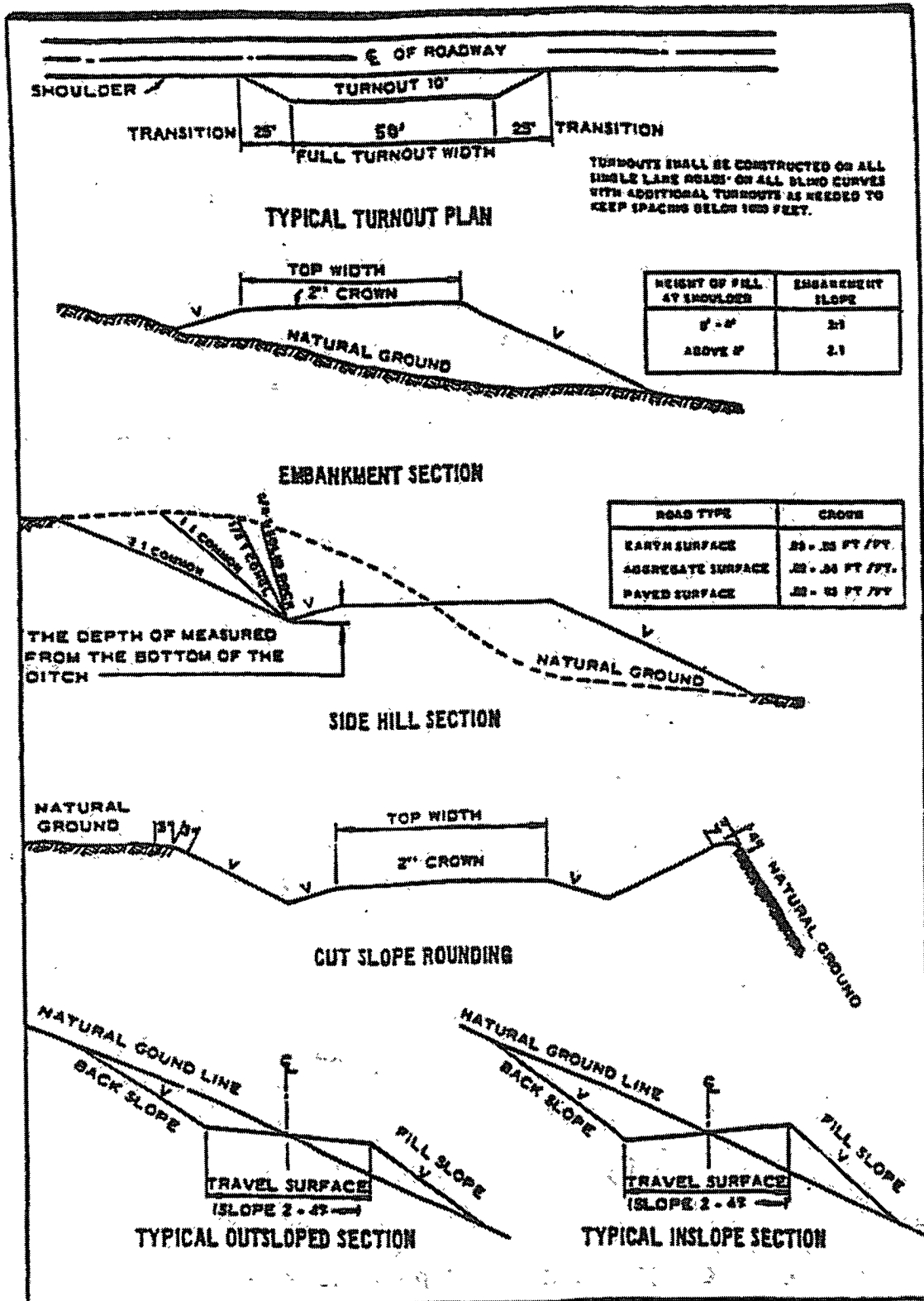
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



## VII. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of **4 hours** in advance for a representative to witness:

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

☒ **Eddy County**

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

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated **500** feet prior to drilling into the **Yates** Formation. Concentrations of 200+ ppm H<sub>2</sub>S in gas streams have been reported in NE1/4 NE1/4, Sec 25 immediately adjacent to this location.
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### B. CASING

**Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work.**

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

**Secretary's Potash Area**

**Possible water flows in the Salado Group and Grayburg**

**Possible high pressure gas bursts & overpressuring in the Wolfcamp and Penn**

1. The **13 3/8 inch** surface casing shall be set **at approximately 700 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. If salt is penetrated surface casing shall be set 25 feet above the salt.

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

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
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-e above.

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

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
- ☒ Cement should tie-back at least **500** feet into previous casing string. **Operator shall provide method of verification.**
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

**C. PRESSURE CONTROL**

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



2. The appropriate BLM office shall be notified a minimum of **4 hours** in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
  - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### **D. DRILLING MUD**

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

#### **E. DRILL STEM TEST**

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

LB 5/8/08

## **VIII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

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

#### **Containment Structures**

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

#### **Painting Requirement**

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

### **B. PIPELINES**

#### **STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES**

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

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

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

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

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

- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing.
  - (2) Earth-disturbing and earth-moving work.
  - (3) Blasting.
  - (4) Vandalism and sabotage.
- c. Acts of God.

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

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

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

of any responsibility as provided herein.

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

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

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

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

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

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

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

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

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

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

### **C. ELECTRIC LINES**

#### **STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES**

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

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

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.
6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.



## **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 for LPC Sand/Shinnery 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>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

\*\*Four-winged Saltbush 5lbs/A

\* This can be used around well pads and other areas where caliche cannot be removed.

\*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.