

RESUBMITTAL

ATS-08-581

JUN 05 2008

Form 3160-3  
(April 2004)

OCD-ARTESIA

OCD-ARTESIA

FORM APPROVED  
OMB NO 1004-0137  
Expires: March 31, 2007UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
APPLICATION FOR PERMIT TO DRILL OR REENTER

S

5. Lease Serial No.

NM-57274

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No

Lease Name and Well No

Haracz AMO Federal #2

14835

9. API Well No.

30-015-36355

10. Field and Pool, or Exploratory

Cotton Draw Brushy Canyon

11. Sec., T., R., M., or Blk. And Survey or Area

Section 24, T24S-R31E

12. County or Parish

Eddy

13. State

NM

1a. Type of Work ☒ DRILL ☐ REENTER1b. Type of Well. ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Yates Petroleum Corporation

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

660' FSL and 1980' FWL, Unit N

At proposed prod. zone

same as above

14. Distance in miles and direction from the nearest town or post office\*

Approximately 29 miles SE of Loving, New Mexico

15. Distance from proposed\*

location to nearest  
property or lease line, ft  
(Also to nearest drlg. unit line, if any)

16. No. of acres in lease

1743.52

17. Spacing Unit dedicated to this well

SESW 40 acres

18. Distance from proposed location\*

to nearest well, drilling, completed,  
applied for, on this lease, ft

19. Proposed Depth

8600'

20. BLM/ BIA Bond No. on file

NATIONWIDE BOND #NMB000434

21. Elevations (Show whether DF, RT, GR, etc.)

3549' GL

22. Approximate date work will start\*

ASAP

23. Estimated duration

45 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 a  
authorized officer.

25. Signature

Regulatory Agent

Name (Printed/ Typed)

Cy Cowan

Date

4/15/2008

Title

Approved By (Signature)

/s/ Don Peterson

Name (Printed/ Typed)

Date

JUN 3 2008

Title

FOR FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or  
operations thereon

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C.

States any false, fictitious or fraudulent state

\* (Instructions on page 2)

Previously

NOTE: New Pit Rule  
NMAC 19-15-17

rights in the subject lease which would entitle the applicant to cc

APPROVAL FOR TWO YEARS

y and willfully to make to any department or agency of the Unite  
tion

C-144 attached

Approval Subject to General Requirements  
& Special Stipulations Attached

Carlsbad Controlled Water Basin

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

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 & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 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

<sup>1</sup> API Number	<sup>2</sup> Pool Code 13370	<sup>3</sup> Pool Name COTTON DRAW BRUSHY CANYON
<sup>4</sup> Property Code	<sup>5</sup> Property Name HARACZ "AMO" FEDERAL	<sup>6</sup> Well Number 2
<sup>7</sup> OGRID No. 025575	<sup>8</sup> Operator Name YATES PETROLEUM CORPORATION	<sup>9</sup> Elevation 3549

<sup>10</sup> Surface Location

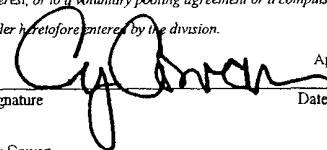
UL or lot no. N	Section 24	Township 24S	Range 31E	Lot Idn	Feet from the 660	North/South line SOUTH	Feet from the 1980	East/West line WEST	County EDDY
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<sup>16</sup>				<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  Signature _____ Date April 15, 2007 Cy Cowan Printed Name Regulatory Agent Title
				<sup>18</sup> 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 Date of Survey Signature and Seal of Professional Surveyor REFER TO ORIGINAL PLAT Certificate Number
1980'	NM-57274			

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Dept.

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>YATES PETROLEUM CORPORATION</b>			Lease <b>HARACZ "AMO" FEDERAL</b>		Well No. <b>2</b>
Unit Letter <b>N</b>	Section <b>24</b>	Township <b>24 SOUTH</b>	Range <b>31 EAST</b>	County <b>EDDY</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>WEST</b> line and <b>660</b> feet from the <b>SOUTH</b> line					
Ground level Elev. <b>3549</b>	Producing Formation <b>DELAWARE</b>		Pool <b>COTTON DRAW BRASHY CANYON</b>	Dedicated Acreage <b>40 Acres</b>	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation: \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary).  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

OPERATOR CERTIFICATION

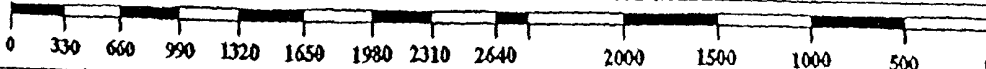
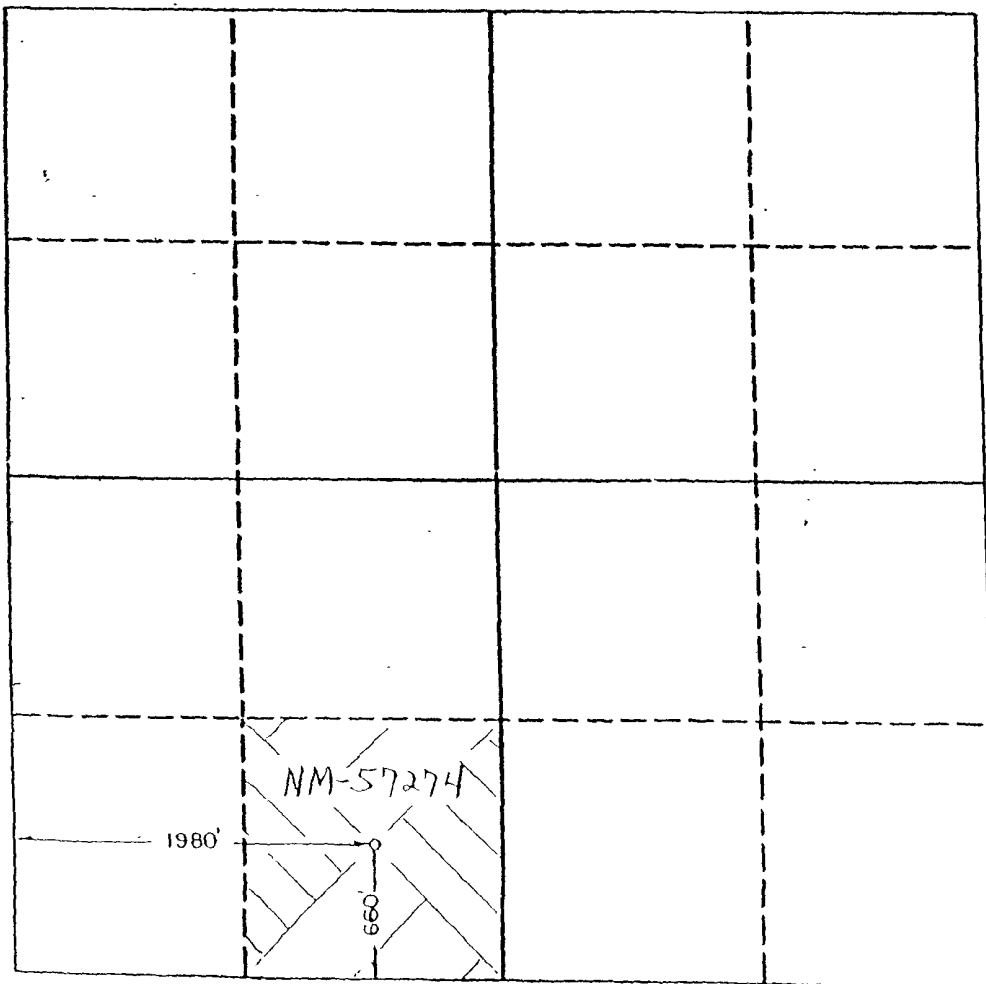
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature  
*Clifton R. May*  
Printed Name  
**Clifton R. May**  
Position  
**Permit Agent**  
Company  
**Yates Petroleum Corporation**  
Date  
**2/24/93**

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 knowledge and belief.

Date Surveyed  
**2/11/93**  
Signature & Seal of  
Professional Surveyor  
*Herschel L. Jones*  
Certificate No.  
**3640**



**YATES PETROLEUM CORPORATION**

**Haracz "AMO" Federal #2**

660' FSL and 1980' FWL

Section 24-T24S-R31E

Eddy County, New Mexico

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

Rustler	680'	No Pay
Top Salt	1017	No Pay
Base Salt	4315'	No Pay
Bell Canyon	4537'	Oil Pay
Cherry Canyon	5510'	Oil Pay
Brushy Canyon	7310'	Oil Pay
Bone Spring	8410'	Oil Pay
TD	8600'	Oil Pay

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

Water: 150'  
Oil or Gas: 4537', 7310' and 8410'.

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3000 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:**

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

**4. THE PROPOSED CASING AND CEMENTING PROGRAM:**

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

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	54.50	J-55	ST&C	0-900'	700'
11"	8 5/8"	32#	J-55	ST&C	0-4200'	4200'
11"	8 5/8"	32#	HC-80	LT&C	4200-4400'	200'
7 7/8"	5 1/2"	17#	J-55	LT&C	0-1000'	1000'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	1000'-7600'	6600'
7 7/8"	5 1/2"	17#	J-55	LT&C	7600'-8600'	1000'

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

# YATES PETROLEUM CORPORATION

Haracz AMO Federal #2  
660' FSL & 1980' FWL  
Section 24-T24S-R31E  
Eddy County, New Mexico

## 4. 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"	48.0#	H-40	ST&C	0-900'	900'
11"	8 5/8"	32.0#	J-55	ST&C	0-100'	100'
11"	8 5/8"	24.0#	J-55	ST&C	100'-2200'	2100'
11"	8 5/8"	32.0#	J-55	ST&C	2200'-4200'	2000'
7 7/8"	5 1/2"	17.0#	J-55	LT&C	0-100'	100'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	100'-7200'	7100'
7 7/8"	5 1/2"	17.0#	J-55	LT&C	7200-8600'	1400'

- 1, Minimum Casing Design Factors: Burst 1.0, Tensile Strength 1.8 and Collapse 1.125
2. A 3,000 psi BOP will be nipped up on the 13 3/8" and 8 5/8" and tested to 3000 psi .

It is requested to test the BOP on the 13 3/8" casing to 1000psi using rig pumps

### B. CEMENTING PROGRAM:

Surface Casing: Cement with 500sx C Lite (YLD 1.97 WT 12.5). Tail in with 200sx class "C" (YLD 1.35 WT 14.8). TOC-Surface

Intermediate Casing: Cement with 950sx C Lite (YLD 1.97 WT 12.5). Tail in with 225sx class "C" (YLD 1.35 WT 14.8). TOC-Surface

Production Casing: Stage I: 250sx Super H (YLD 1.66 WT 13.0), cement calculated to 7400'. DV tool set at approx. 7400'.

Stage II: Cement with 425sx Lite Crete (YLD 2.78 WT 9.9). Tail in with 100sx PVL (YLD 1.41 WT 13), TOC 4000'.

## B. CEMENTING PROGRAM:

Surface casing: 350 sx Pacesetter Lite "C" w/ 1/4 # Cellocel & 3% CaCl<sub>2</sub>  
(Yld 1.84 Wt. 12.7) & 250 sx Class "C" w/2% CaCl<sub>2</sub>  
(YLD 1.84 WT 14.8) Circulate to surface.

Intermediate Casing: 1100 sx Pacesetter Lite "C" w/ 1/4 # Cellocel + 3% CaCl<sub>2</sub>.  
(Yld 1.84 Wt 12.7). + 250 sx. Class "C" w/2% CaCl<sub>2</sub>.  
(Yld 1.32 Wt. 14.8) Circulate to surface.

Production Casing: Stage I: 150 sx "H" w/8# sx CSE, +0.6% CF-14 + 5# Sack Gilsonite (Yld 1.76 Wt. 13.6), Cement calculated to 7400' DV Tool; set at approx. 7400'.

Stage II: 600 sx Lite "C" w/5# Gilsonite, 1/4# sx Cellocel, + 0.5% CF-14 (Yld 1.84 Wt 12.7) + 200 "H" w/o 0.6% CF-14 8# sx CSE, 5 sx Gilsonite (Yld 1.76 Wt. 13.6) Cement to reach at least 500 feet above the uppermost hydrocarbon productive interval.

## 5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
0-900'	FW/Gel	8.4-8.9	32-36	N/C
700'-4415'	Brine	10.0	28	N/C
4415'-8300'	Cut Brine	8.6-9.1	28	<15cc

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

## 6. EVALUATION PROGRAM:

Samples: Every 10' from surface casing to TD.

Logging: CNL-LTD from TD to casing with GR-CNL up to surface; DLL from TD to casing w/Rxo.

Coring: None.

DST's: None.

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

Anticipated BHP:

From: 0	TO: 900'	Anticipated Max. BHP: 255	PSI
From: 700'	TO: 4415'	Anticipated Max. BHP: 1610	PSI
From: 4415'	TO: 8600'	Anticipated Max. BHP: 3130	PSI

No abnormal pressures or temperatures are anticipated.

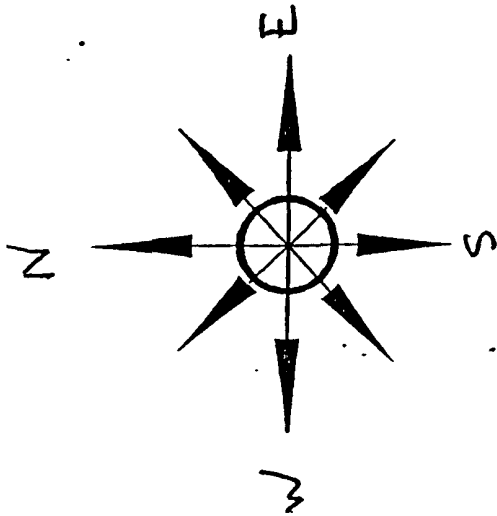
Lost Circulation Zones Anticipated: None

H<sub>2</sub>S Zones Anticipated: None

Maximum Bottom Hole Temperature: 140F

## 8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 15 days to drill the well with completion taking another 20 days.



# Yates Petroleum Corporation

Location Layout for Permian Basin  
Up to 12,000'

**YATES PETROLEUM CORPORATION**

105 South 4<sup>th</sup> Street

Artesia, NM 88210

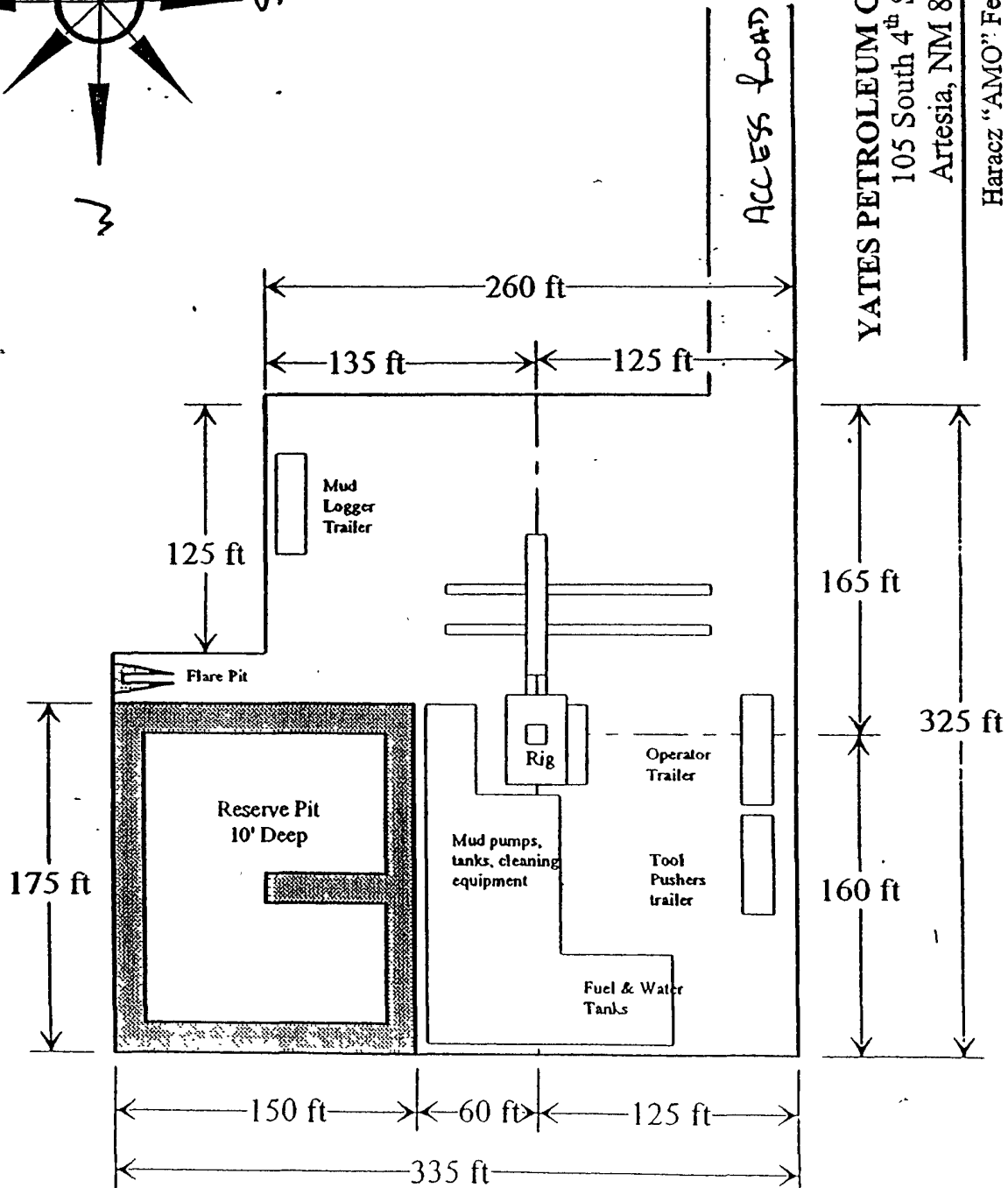
Haracz "AMO" Federal #2

660' FSL & 1980' FWL

Section 24-T24S-R31E

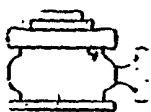
Eddy County, New Mexico

Exhibit "C"



Distance from Well Head to Reserve Pit will vary between rigs

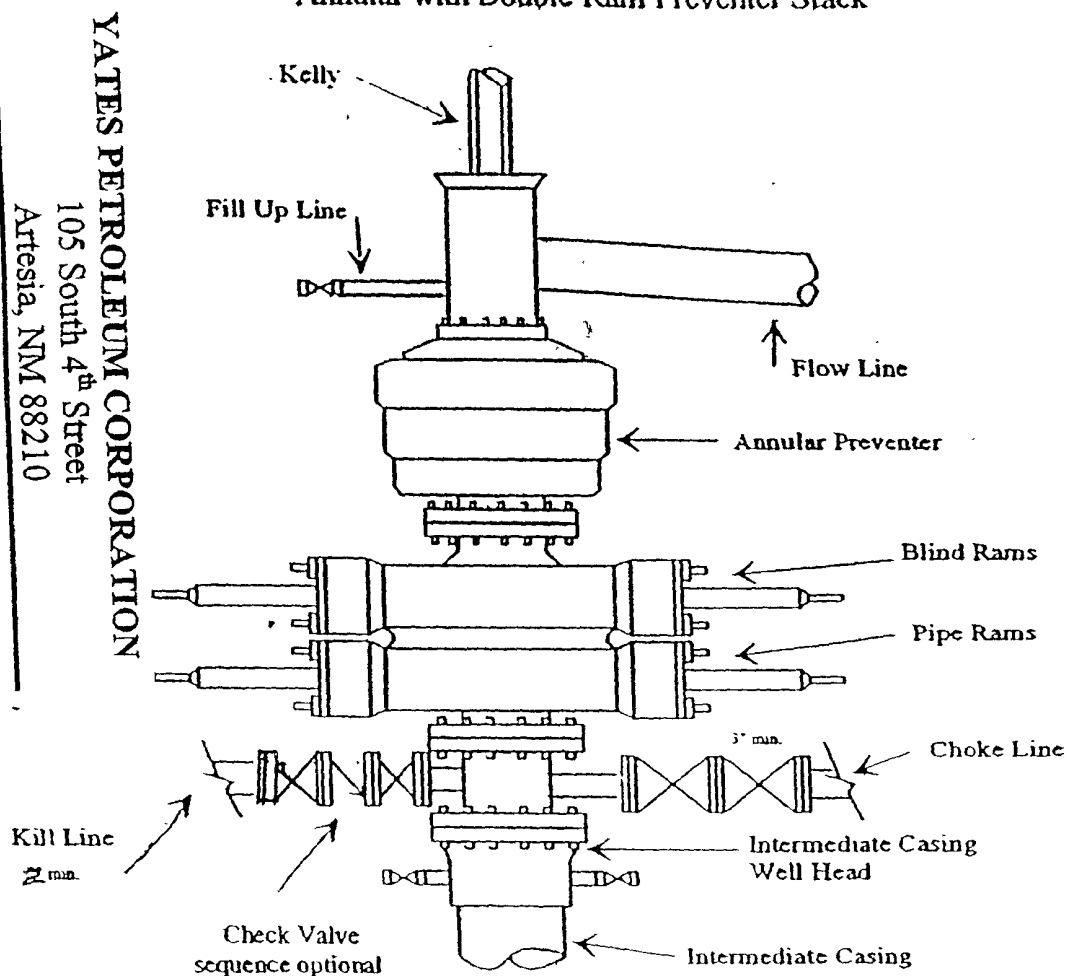
The above dimension should be a maximum



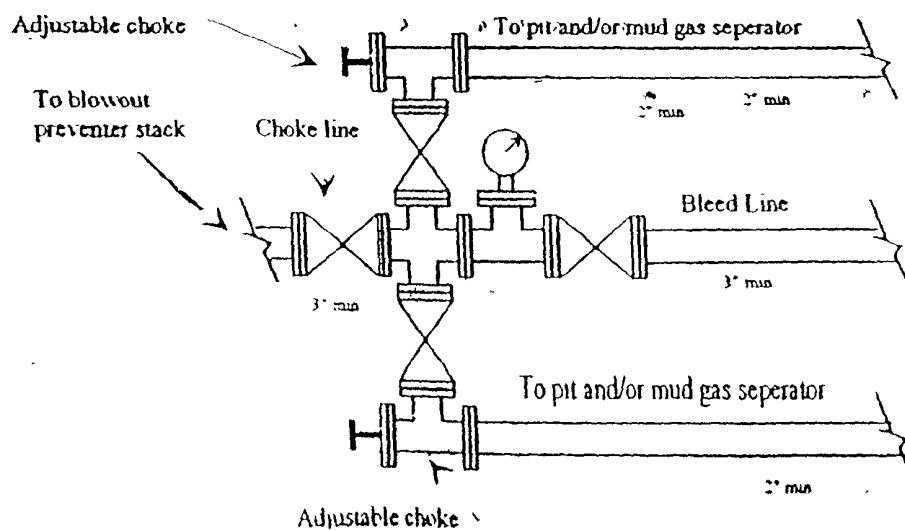
# Yates Petroleum Corporation

BOP-3

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



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



YATES PETROLEUM CORPORATION  
105 South 4<sup>th</sup> Street  
Artesia, NM 88210  
Haracz "AMO" Federal #2  
660' FSL & 1980' FWL  
Section 24-T24S-R31E  
Eddy County, New Mexico

# **Yates Petroleum Corporation**

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

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

**For**

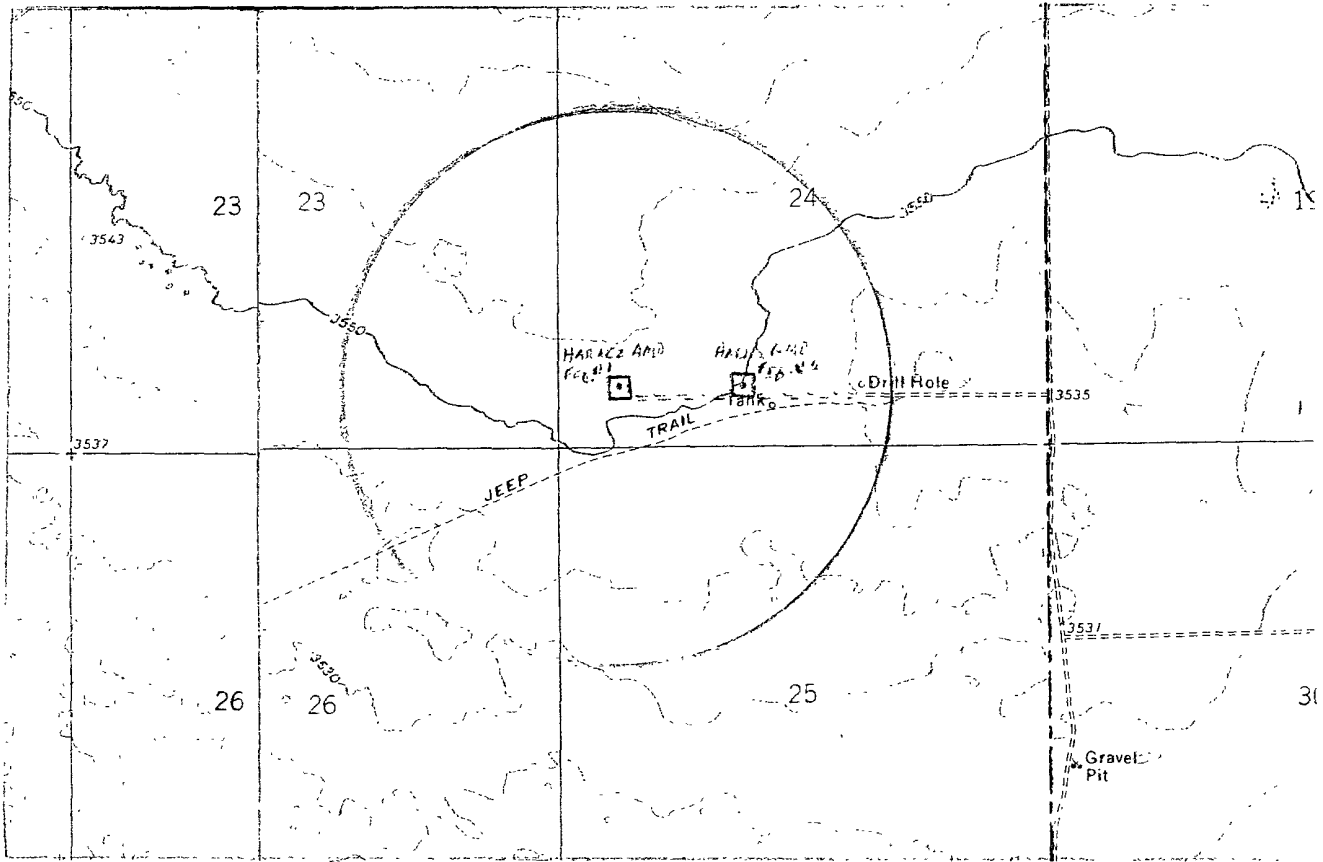
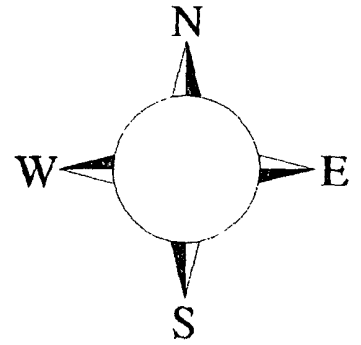
### **Haracz AMO Federal #2**

**660' FSL, 1980' FWL  
Section 24., T-24S, R-31E  
Eddy County NM**

RECEIVED  
MAY 27 PM 4:24  
BUREAU OF LAND MANAGEMENT  
OFFICE OF THE DISTRICT MANAGER  
ALBUQUERQUE, NEW MEXICO

## Haracz AMO Federal #2 Location

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 H<sub>2</sub>S concentration shall trigger activation of this plan.**

## Emergency Procedures

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

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

## Ignition of Gas Source

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

## Characteristics of $H_2S$ and $SO_2$

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

## Contacting Authorities

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

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

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YPC Office .....	(575) 748-1471
Paul Ragsdale/Operations Manager.....	(575) 748-4520
Ron Beasley/Production Manager .....	(575) 748-4210
Wade Bennett/Prod Superintendent .....	(575) 748-4236
Mike Lankin/Drilling .....	(575) 748-4222
Paul Hanes/Prod. Foreman/Roswell .....	(575) 624-2805
Tim Bussell/Drilling Superintendent.....	(575) 748-4221
Artesia Answering Service .....	(575) 748-4302
(During non-office hours)	

### **Agency Call List**

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

##### **Artesia**

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

##### **Carlsbad**

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

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

##### **Other**

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

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

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**YATES PETROLEUM CORPORATION**  
**Haracz "AMO" Federal #2**  
660' FSL and 1980' FWL  
Section 24-T24S-R31E  
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 29 miles southeast of Loving, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east out of Carlsbad on Pecos Hwy. Turn left on Hwy 31 and go to 128. Turn right on 128 and go approx. 20 miles to Buck Jackson Rd. Turn right and go approx. 0.5 of a mile and turn left. Follow caliche road approximately 2.3 miles and turn right. Go approximately 0.5 of a mile and new access will start here and go north around water tank.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will go south for approx. 750' in length from the point of origin to the southeast corner of the drilling pad. The road will lie in a westerly 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. No 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 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:

Pit in Sec. 7-T24S-R32E

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 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, 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 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 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 BLM, 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  
Haracz AMO Federal #2

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 15th day of April, 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) Tim Bussell

Address (if different from above) Same

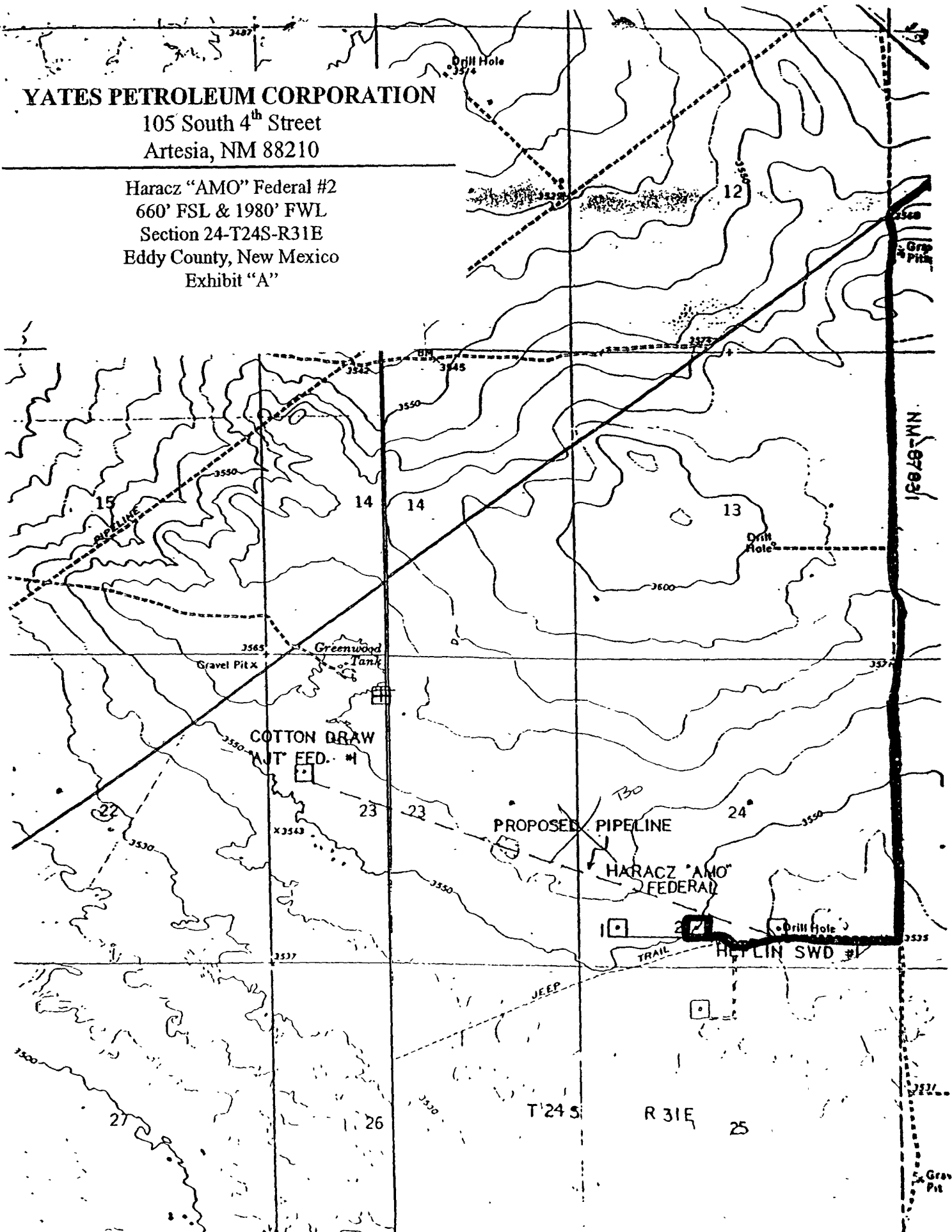
Telephone (if different from above) 575-748-4215

E-mail (optional) cy@ypcnm.com

# YATES PETROLEUM CORPORATION

105 South 4<sup>th</sup> Street  
Artesia, NM 88210

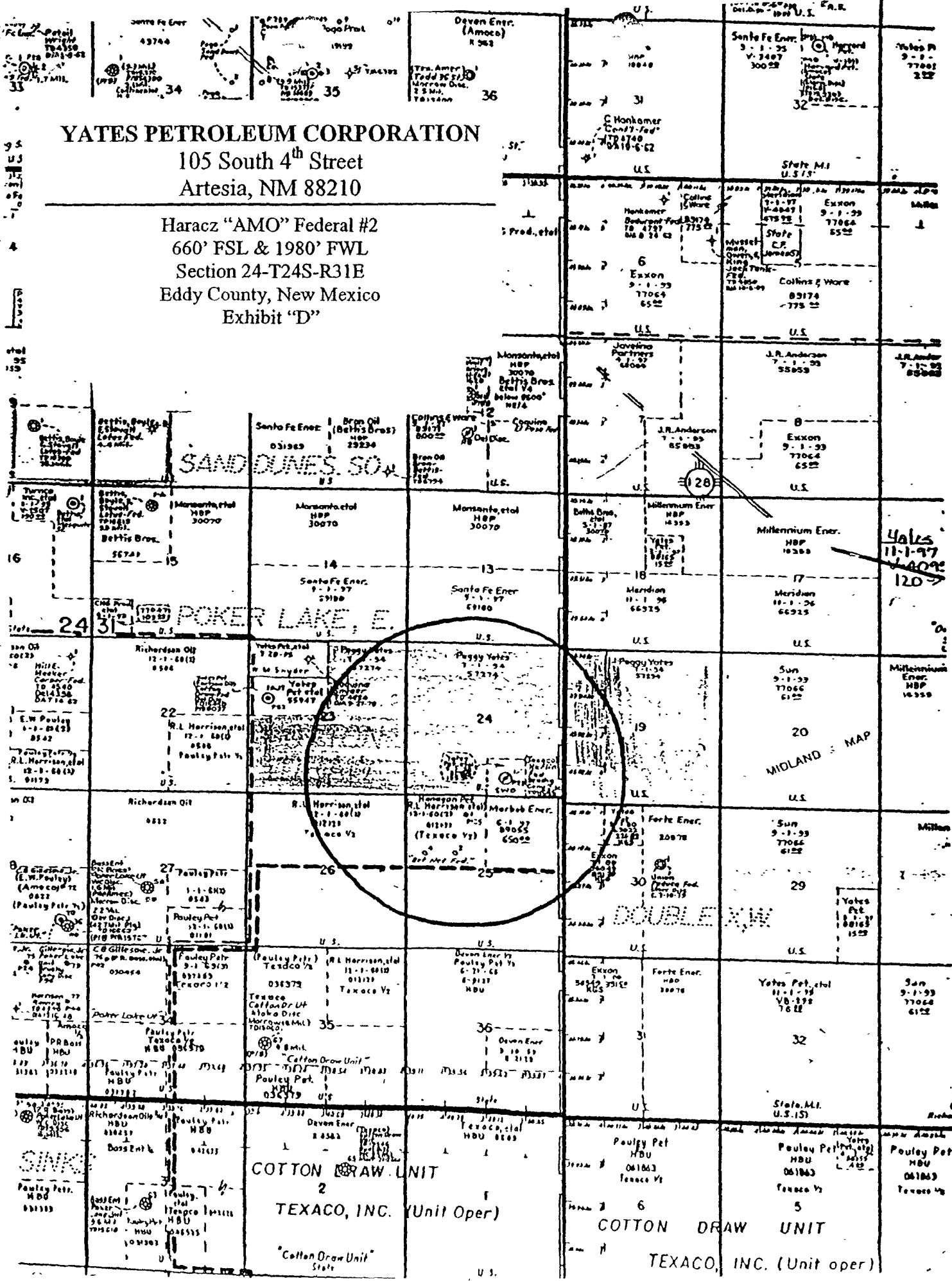
Haracz "AMO" Federal #2  
660' FSL & 1980' FWL  
Section 24-T24S-R31E  
Eddy County, New Mexico  
Exhibit "A"



# YATES PETROLEUM CORPORATION

105 South 4<sup>th</sup> Street  
Artesia, NM 88210

Haracz "AMO" Federal #2  
660' FSL & 1980' FWL  
Section 24-T24S-R31E  
Eddy County, New Mexico  
Exhibit "D"



## PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	YATES PETROLEUM CORPORATION
LEASE NO.:	NM-57274
WELL NAME & NO.:	Haracz AMO Federal No.2
SURFACE HOLE FOOTAGE:	660' FSL & 1980' FWL
BOTTOM HOLE FOOTAGE:	' F L & ' F L
LOCATION:	Section 24, T. 24 S., R. 31 E., NMPPM
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**
  - Lesser Prairie Chicken
- ☐ **Construction**
  - Notification
  - Topsoil
  - Reserve Pit
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
  - Well Structures & Facilities
- ☐ **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**

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

### **C. RESERVE PITS**

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

The reserve pit shall be constructed 150' X 175' 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.

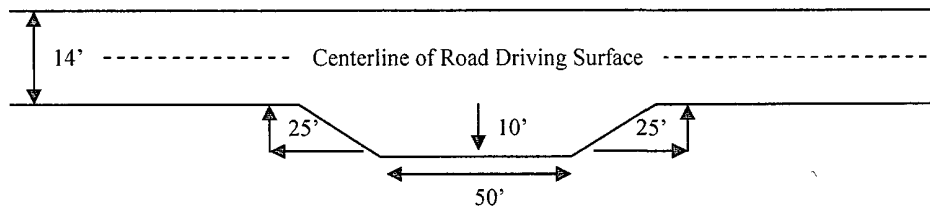
##### **Ditching**

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**

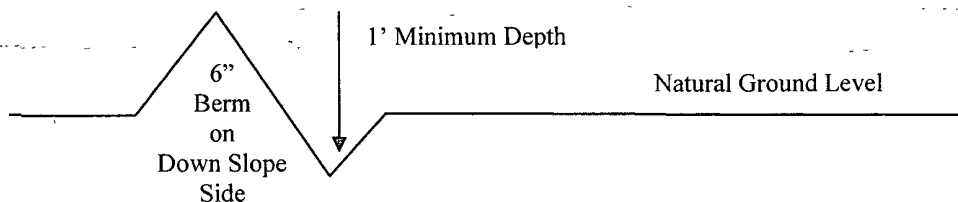


## Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing 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.

**Typical Turnout Plan**

SHOULDER      TURNOUT 10'      TRANSITION      25'      50'      25'      TRANSITION

FULL TURNOUT WIDTH

TURNOUTS SHALL BE CONSTRUCTED ON ALL SINGLE LANE ROADS ON ALL BLIND CURVES WITH ADDITIONAL TURNOUTS AS NEEDED TO KEEP SPACING BELOW 1000 FEET.

**EMBANKMENT SECTION**

TOP WIDTH  
2' CROWN

NATURAL GROUND

HEIGHT OF FILL AT SHOULDER	EMBANKMENT SLOPE
0' - 2'	2:1
ABOVE 2'	2.1

**SIDE HILL SECTION**

THE DEPTH OF MEASURED FROM THE BOTTOM OF THE DITCH

3:1 COMMON  
3:1 COMMON  
3:1 COMMON  
3:1 COMMON

NATURAL GROUND

ROAD TYPE	CROWN
EARTH SURFACE	24 - 36 FT / 7 FT
AGGREGATE SURFACE	36 - 48 FT / 7 FT
PAVED SURFACE	48 - 60 FT / 7 FT

**CUT SLOPE ROUNDING**

NATURAL GROUND

TOP WIDTH  
2' CROWN

NATURAL GROUND

**Typical Outslope Section**

NATURAL GROUND LINE

BACK SLOPE

FILL SLOPE

TRAVEL SURFACE  
(SLOPE 2 - 4%)

**Typical Inslope Section**

NATURAL GROUND LINE

BACK SLOPE

FILL SLOPE

TRAVEL SURFACE  
(SLOPE 2 - 4%)

## VII. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

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

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

☒ **Eddy County**

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

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### B. CASING

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

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

**Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string.**

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

**Possible lost circulation in Delaware & Bone Spring Formations  
Possible H2O flows in Castile, Salado, Delaware & Bone Spring**

1. The 13-3/8 inch surface casing shall be set at approximately 900 feet (in the lower portion of 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 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 8-5/8 inch intermediate casing is:  
☒ Cement to surface. If cement does not circulate see B.1.a-d above.
3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - a. **First stage to DV tool, cement shall:**  
☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
  - b. **Second stage above DV tool, cement shall:**  
☒ Cement should tie-back at least **200** feet into previous casing string.  
**Operator shall provide method of verification.**
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

### C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. The appropriate BLM office shall be notified a minimum of **4 hours** in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
  - e. **The variance for testing of the BOP/BOPE on the surface casing is not approved since MASP for the next hole is approximately 1300 psi.**

### D. DRILL STEM TEST

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

LB 5/28/08

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

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

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

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

#### **Containment Structures**

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

#### **Painting Requirement**

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

## **IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE**

### **A. INTERIM RECLAMATION**

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

### **B. RESERVE PIT CLOSURE**

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

## Seed Mixture 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.