

N.M. Oil Cons. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

S

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

MAY - 7 2008  
OCD-ARTESIA

0  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM-100552</b>
b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>Not Applicable</b>
2. Name of Operator <b>Yates Petroleum Corporation</b>		7. If Unit or CA Agreement, Name and No. <b>Not Applicable</b>
3A. Address <b>105 South Fourth Street Artesia, New Mexico 88210</b>	3b. Phone No. (include area code) <b>(575) 748-1471</b>	8. Lease Name and Well No. <b>Carthel BGT Federal #2</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>1980' FNL and 1980' FEL</b> At proposed prod. Zone <b>same as above ROSWELL CONTROLLED WATER BASIN</b>		9. API Well No. <b>30-005-64021</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately twelve (12) miles north of Loco Hills, NM</b>		10. Field and Pool, or Exploratory <b>Undesignated Sulimar; Queen</b>
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) <b>900'</b>	16. No. of Acres in lease <b>480</b>	11. Sec., T., R., M., or Blk, and Survey or Area <b>Section 23, T15S-R29E</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft <b>1200'</b>	19. Proposed Depth <b>2000'</b>	12. County or Parish <b>Chaves County</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc ) <b>3933'</b>		13. State <b>New Mexico</b>
22. Approximate date work will start* <b>ASAP</b>		17. Spacing Unit dedicated to this well <b>40 Acres - SWNE</b>
23. Estimated duration <b>45 Days</b>		20. BLM/BIA Bond No. on file <b>NMB000434</b>

24. Attachments

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

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).  |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office |

25. Signature <i>Debbie L. Caffall</i>	Name (Printed/Typed) <b>Debbie L. Caffall</b>	Date <b>2/6/2008</b>
Title <b>Regulatory Agent / Land Department - debbiec@ypcnm.com</b>		
Approved by (Signature) <i>/s/ Angel Mayes</i>	Name (Printed/Typed) <b>/s/ Angel Mayes</b>	Date <b>MAY 02 2008</b>
Title <b>Assistant Field Manager, Lands And Minerals</b>	Office <b>ROSWELL FIELD OFFICE</b>	<b>APPROVED FOR 2 YEARS</b>

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 conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

C-144 Attached

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS ATTACHED

RECEIVED

Accepted for record - NMOCD

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1201 W. Grand Avenue, Artesia, NM 88910

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

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 12, 2005

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 57830	Pool Name Undesignated Sulimar; Queen
Property Code 34992	Property Name CARTEL "BGT" FEDERAL	Well Number 2
OGED No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3933'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	23	15 S	29 E		1980	NORTH	1980	EAST	CHAVES

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				
<table border="1"> <tr> <td>Dedicated Acres 40 acres SWNE</td> <td>Joint or Infill</td> <td>Consolidation Code</td> <td>Order No.</td> </tr> </table>										Dedicated Acres 40 acres SWNE	Joint or Infill	Consolidation Code	Order No.
Dedicated Acres 40 acres SWNE	Joint or Infill	Consolidation Code	Order No.										

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

<p><b>SURFACE LOCATION</b> Lat - N33°00'11.98" Long - W103°59'49.47" SPC- N.: 728912.049 E.: 644422.632 (NAD-83)</p> <p>NM-100552</p> <p>3929.3 3929.8</p> <p>3932.4 3939.3</p> <p>1980'</p> <p>NM-0556543</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>2/05/2008</p> <p><i>Debbie L. Caffall</i></p> <p>Signature Date</p> <p>Debbie L. Caffall</p> <p>Printed Name</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JANUARY 19, 2008</p> <p>Date Surveyed</p> <p><i>Gary L. Jones</i></p> <p>Signature of Surveyor</p> <p>Professional Seal</p> <p>7977</p> <p>No. 05056</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>

**YATES PETROLEUM CORPORATION**  
**Carthel BGT Federal #2**  
1980' FNL and 1980' FEL, Unit G (SWNE)  
Section 23-T15S-R29E  
Chaves County, New Mexico

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

Rustler	325'
Salado-Salt	375'
Tansil	1000'
Yates	1145'
Seven Rivers	1295'
Queen	1900'
TD	2000'

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

Water: 150' +/-

Oil or Gas: Queen

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 2000# 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>
12 1/4"	13 3/8"	24.0#	J-55	ST&C	0-350'	350'
7 7/8"	5 1/2"	15.5 #	J-55	LT&C	0-2000'	2000'

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

WITNESS

B. CEMENTING PROGRAM:

Surface Casing: 225sx C with 2% CaCl<sub>2</sub> (YLD 1.32). Cement circulated to surface.

Production Casing: 525sx C (YLD 1.32). Cement circulated to surface

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-350'	Fresh Water Gel	8.4-8.6	32-34	N/C
350' – 2000'	Brine Water	10.00 – 10.00	28-28	N/C

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

6. EVALUATION PROGRAM:

Samples: 10' Samples from Surface Casing to TD  
 Logging: Platform Express/CNL/LDT/NGT TD to Surface Casing;  
 CNL/GR TD-Surface; DLL/MSFL TD-Surface Casing; BHC  
 SONIC TD-Surface Casing.  
 Coring: None anticipated.  
 DST's: None anticipated.  
 Mudlogging: Yes

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

Anticipated BHP:

From: 0'	TO: 350'	Anticipated Max. BHP: 157 PSI
From: 350'	TO: 2000'	Anticipated Max. BHP: 1040 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

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

Maximum Bottom Hole Temperature: 80 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 40 days.

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**YATES PETROLEUM CORPORATION**  
**Carthel BGT Federal #2**  
1980' FNL and 1980' FEL, Unit G (SWNE)  
Section 23-T15S-R29E  
Chaves 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-A3" is a portion of the BLM map and plats showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximately 12 miles north of Loco Hills, New Mexico and the route to the location is indicated in red (County Road 217/Hagerman Cutoff) and green (existing lease road, NM-110307 off lease) and continuing on existing lease road (on lease NM100552) for a total of 0.06 of a mile from County Road 217/Hagerman Cutoff. The road will end at a dry hole marker (Carthel BGT Federal #1).

**DIRECTIONS:**

DRIVE EAST OF ARTESIA ON U.S. HIGHWAY 82 FOR APPROX. 22.4 MILES TO LOCO HILLS, NM, TURN LEFT (NORTH) ONTO COUNTY ROAD 217/HAGERMAN CUT OFF, CONTINUE NORTH FOR APPROX. 11.4 MILES, THERE WILL BE A LEASE ROAD ON THE LEFT TURN LEFT (WEST) AND CONTINUE ON EXISTING LEASE ROAD FOR APPROXIMATELY .06 OF A MILE THE ROAD WILL END AT A DRY HOLE MARKER (CARTHEL BGT FEDERAL #1) THE NEW ROAD WILL START HERE AT THE SOUTHWEST CORNER AND TRAVEL IN A NORTHERLY Slight East DIRECTION FOR APPROXIMATELY 1347 FEET TO THE SOUTHWEST CORNER OF THE PROPOSED LOCATION.

**2. PLANNED ACCESS ROAD:**

- A. The new road will start at the southwest corner of the dry hole pad and travel in a northerly slight east direction for approximately 1347 feet to the southwest corner of the proposed location.  
The new access road is on lease all on federal lands.
- B. The new road will be 15 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 both sides. No traffic turnouts will be needed.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

**3. LOCATION OF EXISTING WELL:**

- A. There is no drilling activity within a one-mile radius of the well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

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

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A-A3.

6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits that may be required.

7. METHODS OF HANDLING WASTE DISPOSAL:

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

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

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

10. PLANS FOR RESTORATION:

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

11. SURFACE OWNERSHIP:

Federal Surface: Administered by Bureau of Land Management  
Roswell Field Office  
Federal Minerals: Administered by Bureau of Land Management  
Roswell Field Office

12. OTHER INFORMATION:

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

CERTIFICATION  
YATES PETROLEUM CORPORATION  
**Carthel BGT Federal Com. # 2**

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

Executed this 6<sup>th</sup> day of February, 2008.

Printed Name Debbie L. Caffall

Signature Debbie L. Caffall

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4376

E-mail (optional) debbiec@ypcnm.com

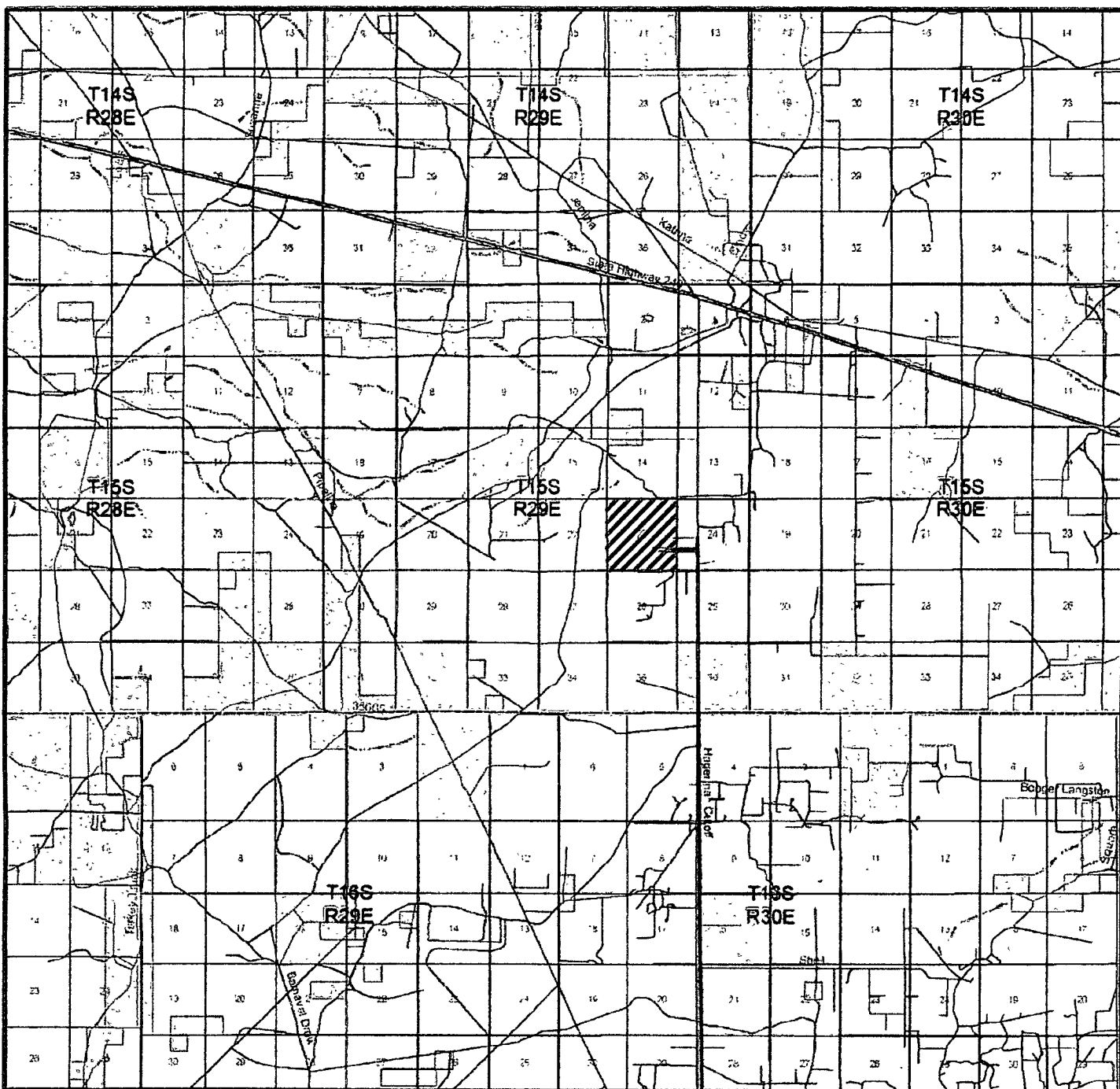
Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

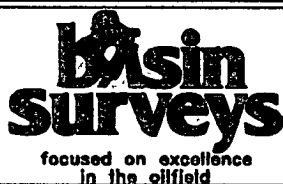
Telephone (if different from above) 575-748-4221

E-mail (optional) \_\_\_\_\_





**CARTHEL "BGT" FEDERAL #2**  
 Located at 1980' FNL AND 1980' FEL  
 Section 23, Township 15 South, Range 29 East,  
 N.M.P.M., Chaves County, New Mexico.



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

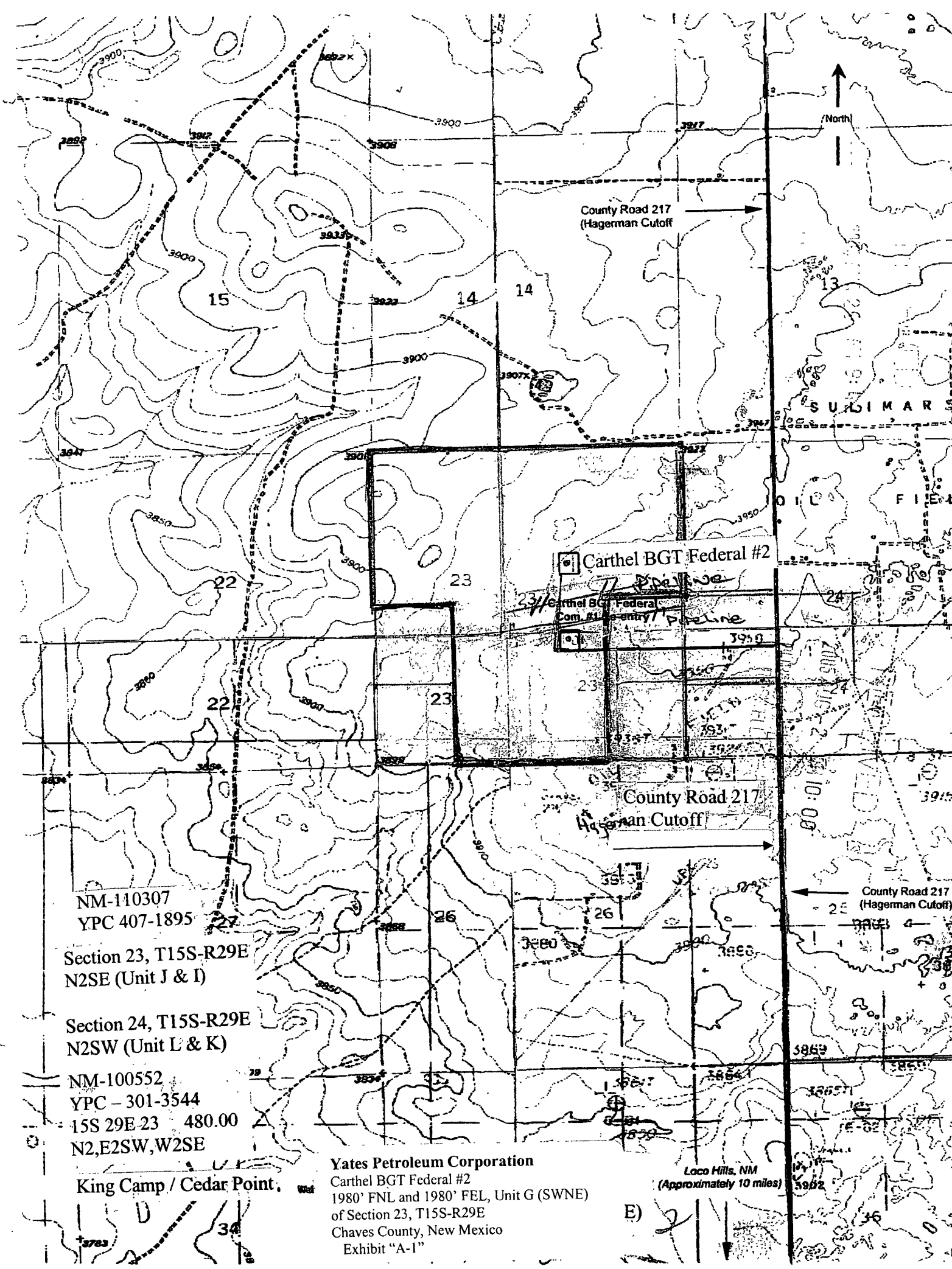
W.O. Number: JMS 19056TR

Survey Date: 01-19-2007

Scale: 1" = 2 MILES

Date: 01-21-2008

Yates Petroleum Corporation  
 Carthel BGT Federal #2  
 1980' FNL and 1980' FEL, Unit G (SWNE)  
 of Section 23, T15S-R29E  
 Chaves County, New Mexico  
 Exhibit "A"



NM-110307  
YPC 407-1895

Section 23, T15S-R29E  
N2SE (Unit J & I)

Section 24, T15S-R29E  
N2SW (Unit L & K)

NM-100552  
YPC - 301-3544  
15S 29E 23 480.00  
N2,E2SW,W2SE

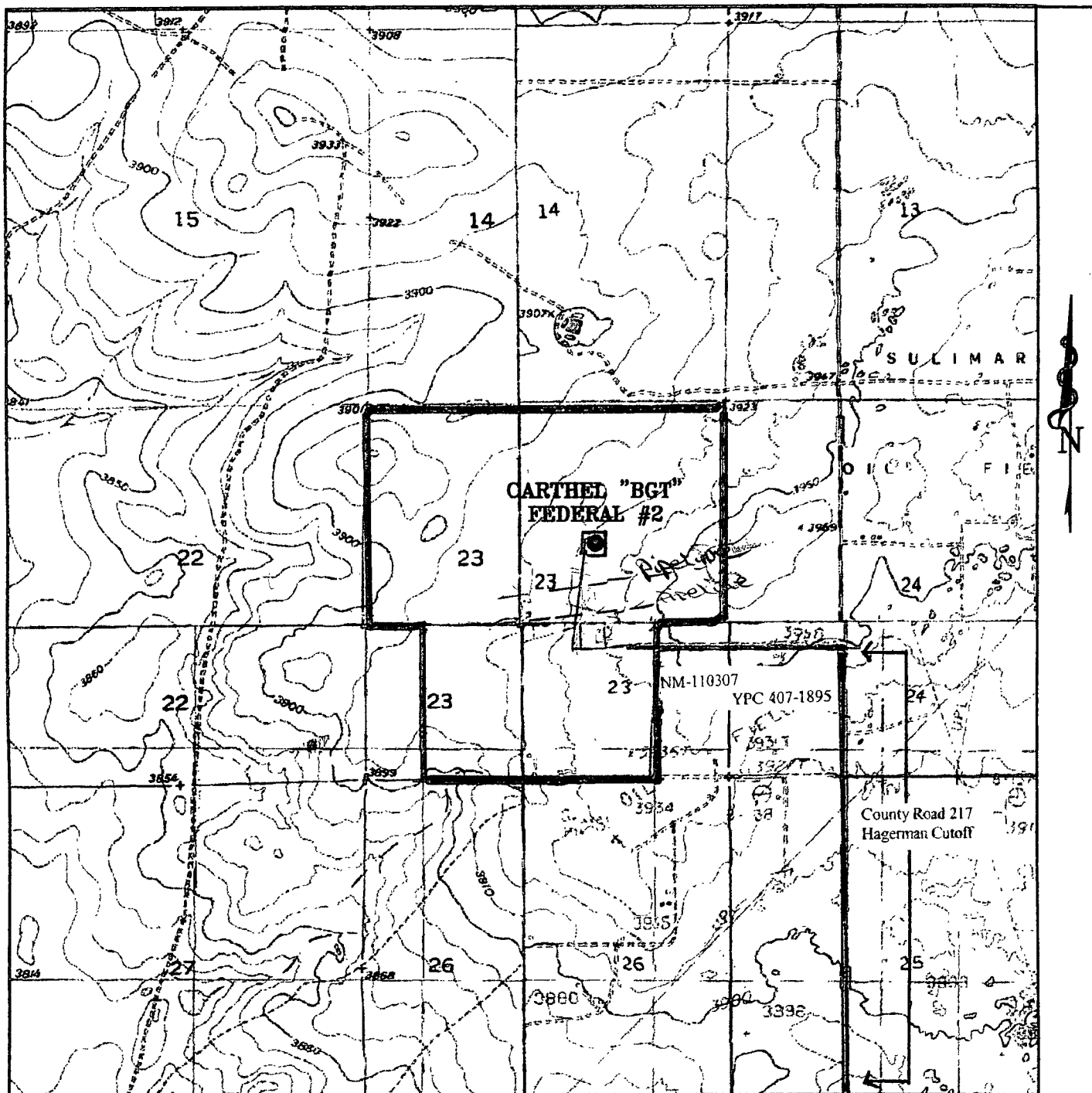
King Camp / Cedar Point.

Yates Petroleum Corporation  
Carthel BGT Federal #2  
1980' FNL and 1980' FEL, Unit G (SWNE)  
of Section 23, T15S-R29E  
Chaves County, New Mexico  
Exhibit "A-1"

Loco Hills, NM  
(Approximately 10 miles)

E)

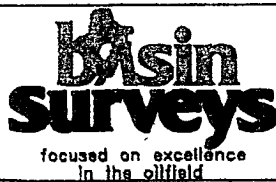
# Exhibit A1



## CARTHEL "BGT" FEDERAL #2

County Road 217  
Hagerman Cutoff

Located at 1980' FNL AND 1980' FEL  
Section 23, Township 15 South, Range 29 East,  
N.M.P.M., Chaves County, New Mexico.



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

W.O. Number: 19056T

Survey Date: 01-19-2008

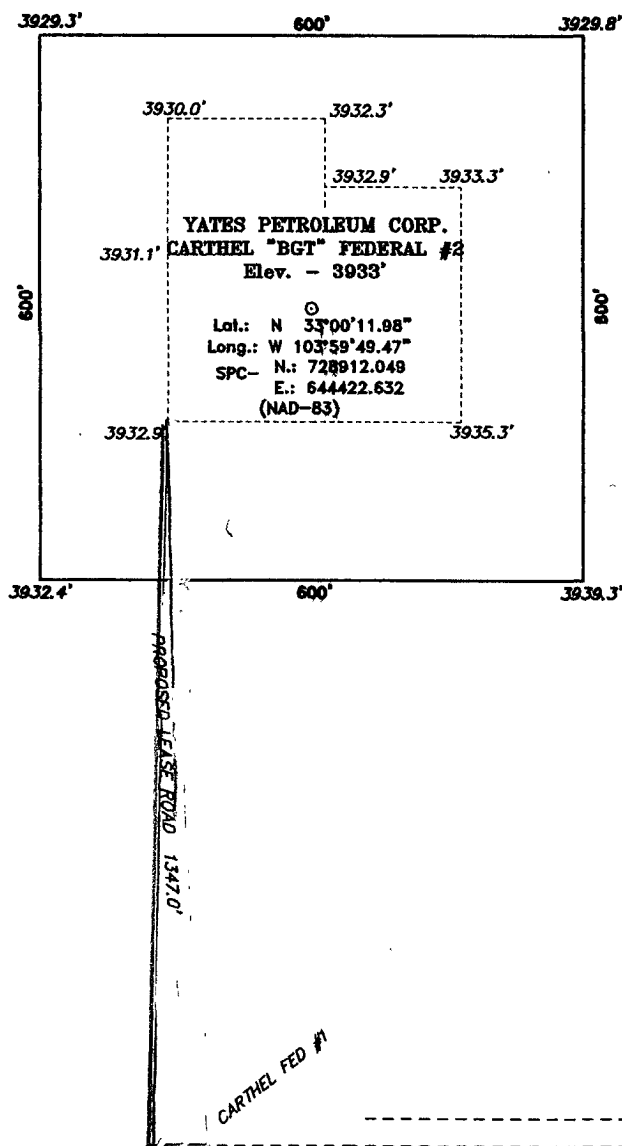
Scale: 1" = 2000'

Date: 01-21-2008

## Yates Petroleum Corporation

Carthel BGT Federal #2  
1980' FNL and 1980' FEL, Unit G (SWNE)  
of Section 23, T15S-R29E  
Chaves County, New Mexico  
Exhibit "A-2"

**SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.,  
CHAVES COUNTY, NEW MEXICO.**



DRIVE EAST OF ARTESIA ON U.S. HIGHWAY 82 FOR APPROX. 22.4 MILES TO LOCO HILLS, NM, TURN LEFT (NORTH) ONTO COUNTY ROAD 217/HAGERMAN CUT OFF, CONTINUE NORTH FOR APPROX. 11.4 MILES, THERE WILL BE A LEASE ROAD ON THE LEFT TURN LEFT (WEST) AND CONTINUE ON EXISTING LEASE ROAD FOR APPROXIMATELY .06 OF A MILE THE ROAD WILL END AT A DRY HOLE MARKER (CARTEL BGT FEDERAL #1) THE NEW ROAD WILL START HERE AT THE SOUTHWEST CORNER AND TRAVEL IN A NORTHERLY Slight East DIRECTION FOR APPROXIMATELY 1347 FEET TO THE SOUTHWEST CORNER OF THE PROPOSED LOCATION.

**Yates Petroleum Corporation**  
Carthel BGT Federal #2  
1980' FNL and 1980' FEL, Unit G (SWNE)  
of Section 23, T15S-R29E  
Chaves County, New Mexico  
Exhibit "A-3"

100



SCALE: 1" = 100'

**YATES PETROLEUM CORP.**

REF: CARTEL "BGT" FEDERAL #2 / WELL PAD TOPO

THE CARTEL "BGT" FEDERAL #2 LOCATED 1980'  
FROM THE NORTH LINE AND 1980' FROM THE EAST LINE OF  
SECTION 23, TOWNSHIP 15 SOUTH, RANGE 29 EAST,  
N.M.P.M., CHAVES COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 19056

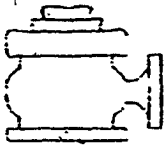
Drawn By: J. M. SMALL

Date: 01-21-2008

Disk: 19056W JMS

Survey Date: 01-19-2008

Sheet 1 of 1 Sheets



# Yates Petroleum Corporation

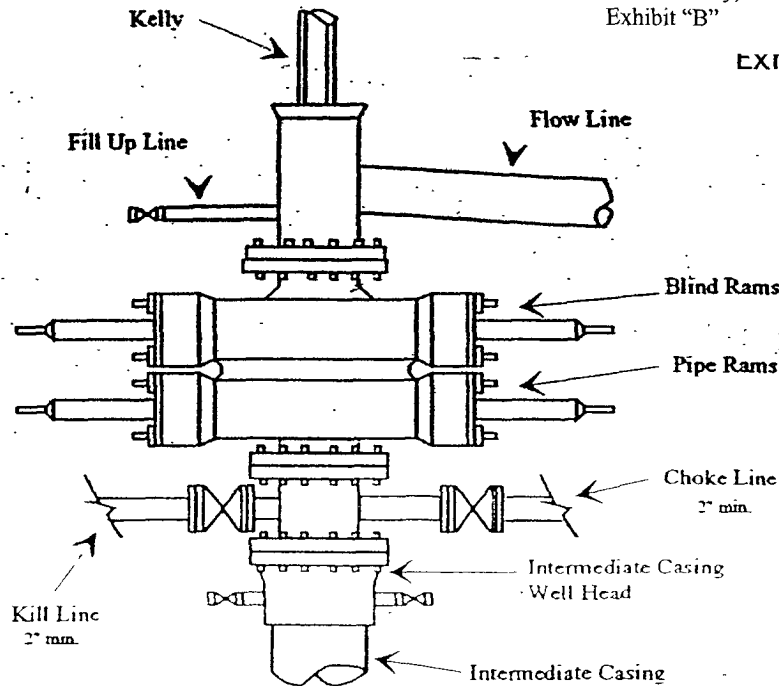
BOP-2

## Typical 2,000 psi Pressure System Schematic

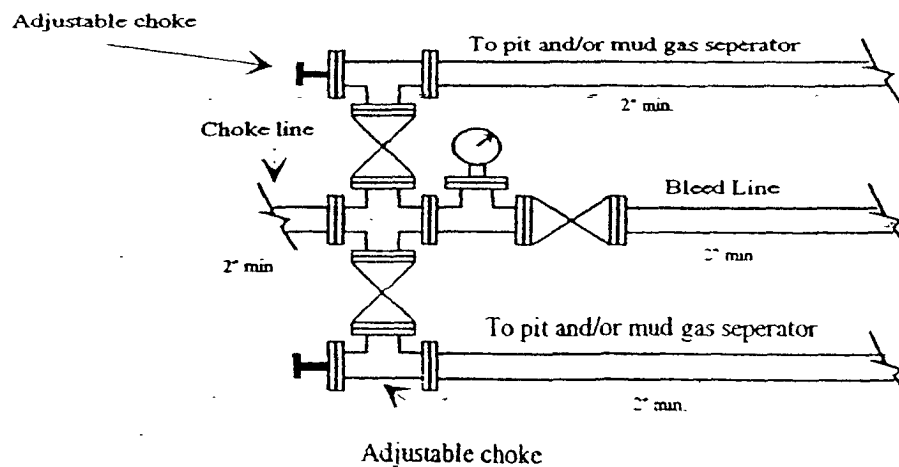
### Double Ram Preventer Stack

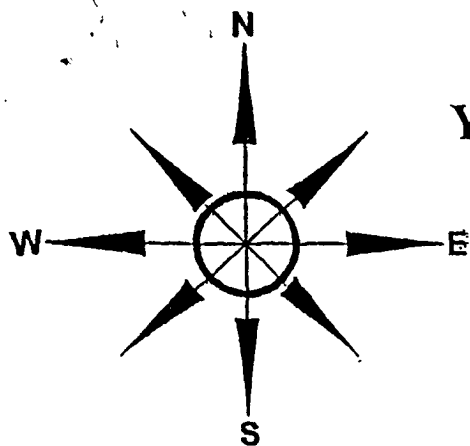
Yates Petroleum Corporation  
Carthel BGT Federal #2  
1980' FNL and 1980' FEL, Unit G (SWNE)  
of Section 23, T15S-R29E  
Chaves County, New Mexico  
Exhibit "B"

EXHIBIT D



Typical 2,000 psi choke manifold assembly with at least these minimum features



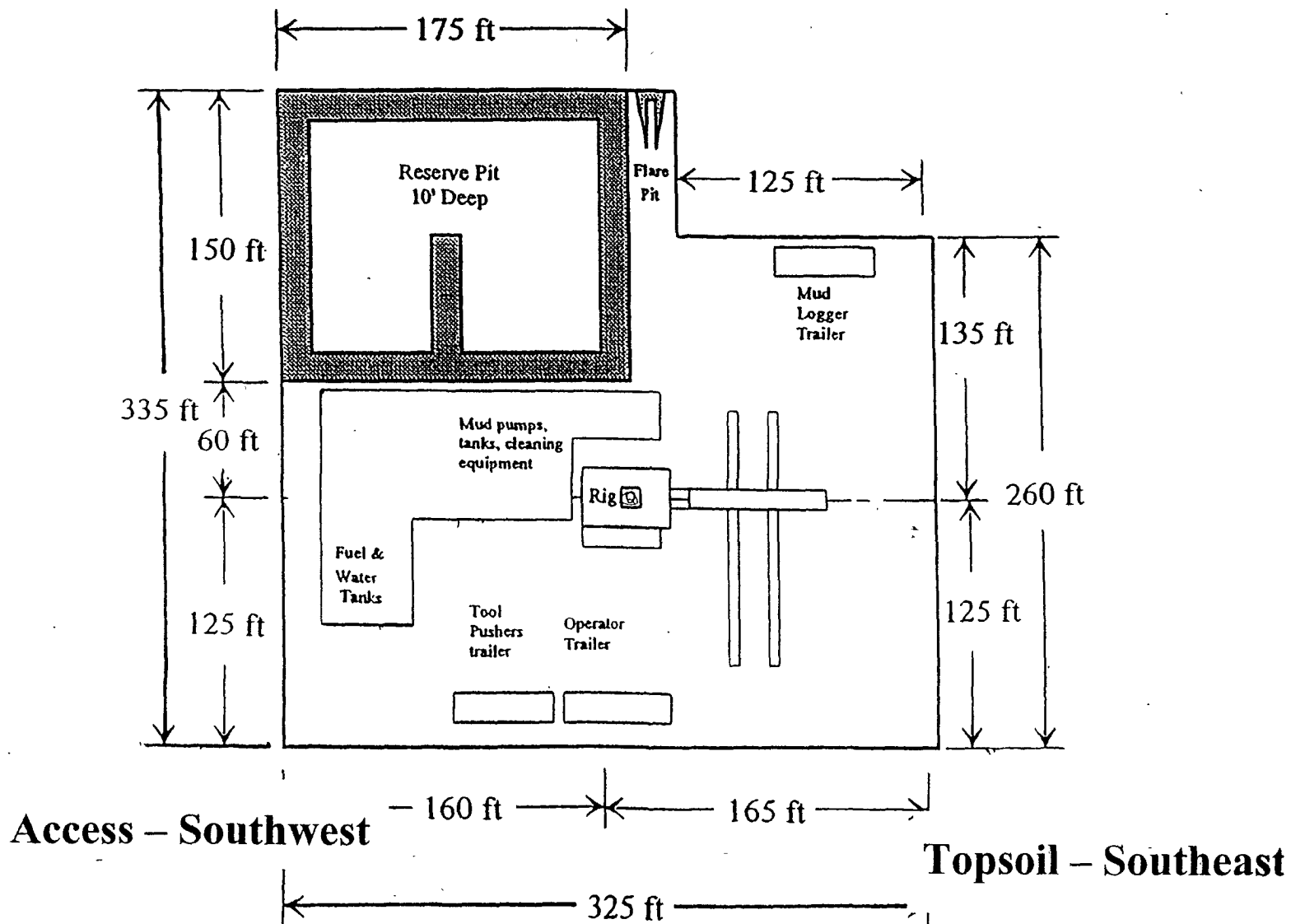


**Yates Petroleum Corporation**  
 Location Layout for Permian Basin  
 Up to 12,000'

PB - L1

Not - To - Scale

Pits - North



**Distance from Well Head to Reserve Pit will vary between rigs.**

**The above dimension should be a maximum.**

Yates Petroleum Corporation  
 Carthel BGT Federal #2  
 1980' FNL and 1980' FEL, Unit G (SWNE)  
 of Section 23, T15S-R29E  
 Chaves County, New Mexico  
 Exhibit "C"

Exhibit D

DOUBLE  
UNIT  
NIPYON OGGILOPER

Yates Petroleum Corporation  
Carthel BGT Federal #2  
1980' FNL & 1980' FEL  
Section 23-T15S-R29E  
Chaves County, New Mexico

Yates Petroleum Corporation  
Carthel BGT Federal #2  
1980' FNL and 1980' FEL, Unit G (SWNE)  
of Section 23, T15S-R29E  
Chaves County, New Mexico  
Exhibit "D"

EDDY East

R 30 E

- CO<sub>2</sub>
- Wild
- Local
- Abar

# EXHIBIT A

OPERATORS NAME: Yates Petroleum Corporation

LEASE NO.: NM-100552

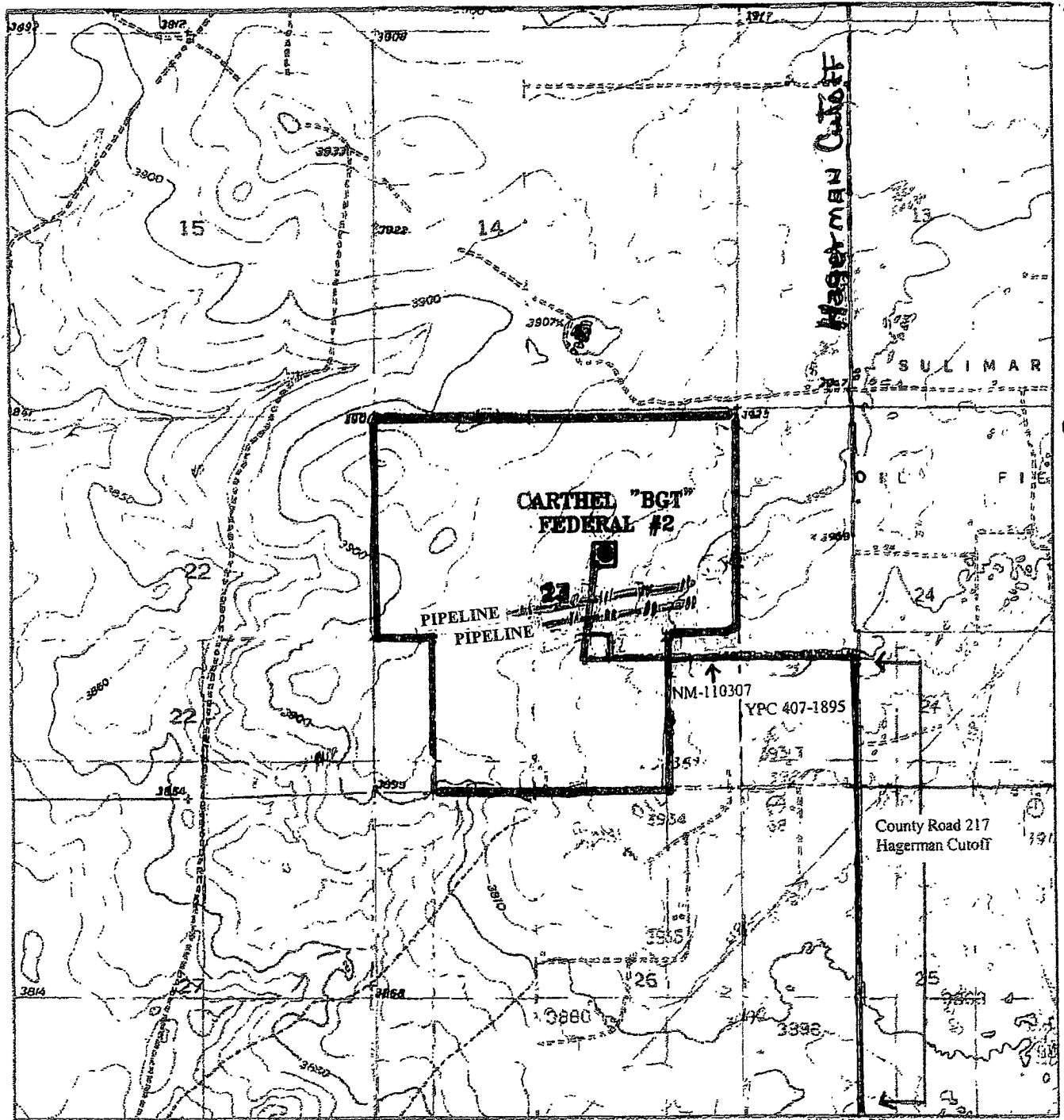
WELL NAME & NO: Carthel "BGT" Federal #2

SURFACE HOLE FOOTAGE: 1980' FNL & 1980' FEL

LOCATION: Section 23, T. 15 S., R. 29 E., NMPM

COUNTY: Chaves County, New Mexico

3/27/2008





## **PECOS DISTRICT - RFO CONDITIONS OF APPROVAL**

3/27/08

OPERATORS NAME: Yates Petroleum Corporation  
LEASE NO.: NM-100552  
WELL NAME & NO: Carthel "BGT" Federal #2  
SURFACE HOLE FOOTAGE: 1980' FNL & 1980' FEL  
LOCATION: Section 23, T. 15 S., R. 29 E., NMPM  
COUNTY: Chaves County, New Mexico

### **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.

### **I. 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).

### **II. 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.

### **III. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). 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.

### **IV. CONSTRUCTION**

#### **A. NOTIFICATION:**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 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 Application for Permit to Drill and Conditions of Approval 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. The topsoil shall be stockpiled in the southeast side of the well pad.

#### **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 Roswell Field Office at (505) 627-0236.

#### **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 need.

#### **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.

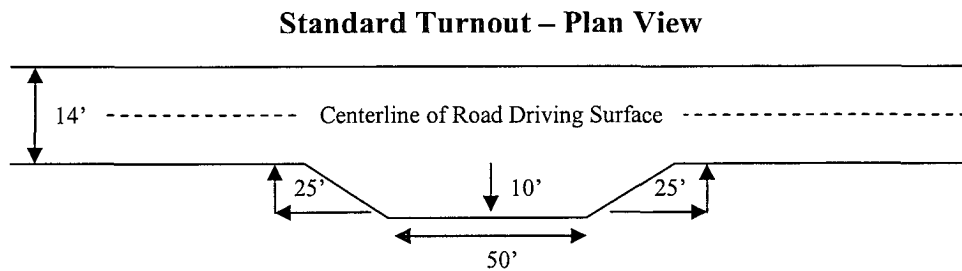
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing 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.

## Turnouts

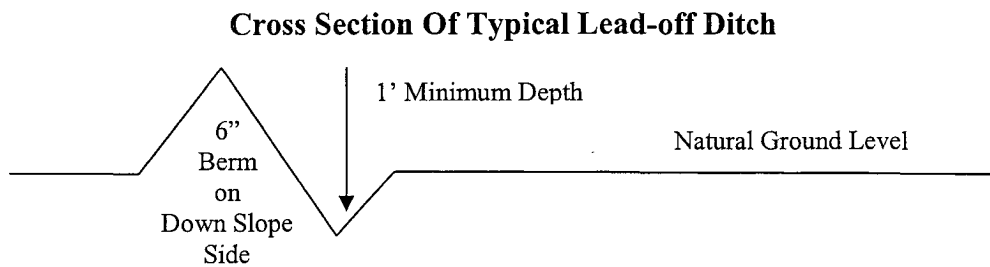
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



## 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.



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:

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

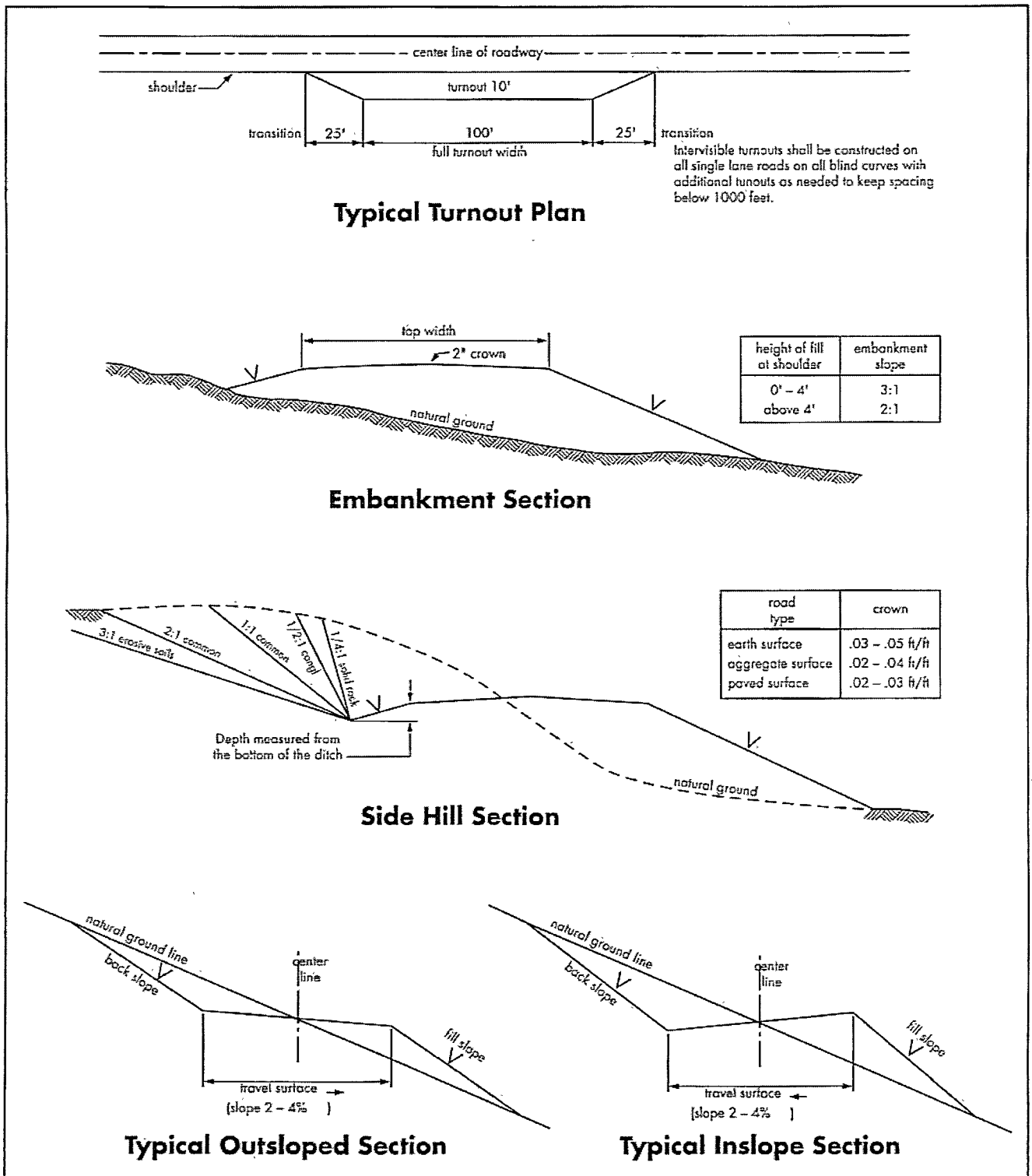
### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

### **Pipeline Protection Requirement**

A. Precautionary measures shall be taken by the operator during construction of the access road to protect two (2) existing pipeline(s) that the access road will cross over (**See map - EXHIBIT A**). An earthen berm; 2 feet high by 3 feet wide and 14 feet across the access road travelway (**2' X 3' X 14'**), shall be constructed over each of the existing pipeline(s). The operator shall be held responsible for any damage to the existing pipeline(s). If the either pipeline is ruptured and/or damaged the operator shall immediately cease construction operations and repair the pipeline(s). The operator shall be held liable for any unsafe construction operations that threaten human life and/or cause the destruction of equipment.

**Figure 1 – Cross Sections and Plans For Typical Road Sections**



## **V. DRILLING**

### **A. DRILLING OPERATIONS REQUIREMENTS**

1. Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201, 24 hour at (575) 627-0205.
2. The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:
  - a. Spudding well
  - b. Setting and/or Cementing of all casing strings
  - c. BOPE tests
3. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated 500 feet prior to drilling into the N/A formation.
4. 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.
5. When floor controls are required, (3M or Greater) 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.
6. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface. The logs shall be run at a speed which allows the logs to be legible and no faster than manufactures of the logging tools recommended speed. (R-111-P area only)

### **B. CASING**

1. The 13 3/8 inch surface casing shall be set at 350 feet and must be set above the top of the salt and casing 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 compression 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 compression strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

2. The minimum required fill of cement behind the 5 1/2 inch intermediate casing is to circulate to surface. If cement does not circulate see B.1.a-d above.

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.

5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

### **C. PRESSURE CONTROL**

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

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) psi.

a. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

b. The tests shall be done by an independent service company.

c. The results of the test shall be reported to the appropriate BLM office.

d. 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.

e. 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.

### **D. DRILL STEM TEST (optional)**

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

## **VI. PRODUCTION**

### **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, Olive Drab, Munsell Soil Color Chart 18-0622 TPX.

# **VII. 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.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, 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**

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.

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

## PECOS DISTRICT SEED MIX FOR:

The following soil or soil associations may represent these ecological sites: Alama-Poquita, Alama-Reeves, Anthony sandy loam, Berino, Blakeney-Ima, Cacique, Dona Ana, Glendale-Harkey, Harkey sandy loam, Karro loam, Kermit-Berino fine sand, Mobeetie fine sandy loam, Pajarito-Bluepoint, Poquita, Potter-Simona complex, Sharvana-Redona, Simona, Simona-Bippus complex, Sotim-Berino, Sotim-Simona association, moderately undulating, Tonuco loamy sand, Vinton

Ecological Site: Shallow Sand SD-3 and Sandy SD-3

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Black grama	( <i>Bouteloua eriopoda</i> )	3.00 lbs.
or Blue grama,	( <i>Bouteloua gracilis</i> )	
Sideoats grama	( <i>Bouteloua curtipendula</i> )	2.00 lbs.
Sand dropseed	( <i>Sporobolus cryptandrus</i> )	1.50 lbs.
or Mesa dropseed	( <i>S. flexuosus</i> )	
or Spike dropseed	( <i>S. contractus</i> )	
Desert or Scarlet	( <i>Sphaeralcea ambigua</i> )	1.00 lb.
Globemallow or	( <i>S. coccinea</i> )	
Croton	( <i>Croton</i> spp.)	<u>1.00 lb.</u>
TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE		8..50 lbs.

Certified Weed Free Seed. If one species is not available increase all others proportionately. Use no less than 4 species, including 1 forb. No less than 8.5 pounds lbs per acre shall be applied.

## VIII. 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.

## IX. SEASONAL DRILLING REQUIREMENT:

### A. Lesser Prairie Chicken Stipulation:

The Roswell Approved Resource Management Plan and Record Of Decision addresses the preservation of the Lesser Prairie Chicken wildlife habitat. In cooperation with NMDGF, the RFO shall also consider the preservation of the North Bluit Lesser Prairie Chicken Management Area.

1. There shall be no earthmoving construction activities, well exploratory and/or developmental drilling, well completion, plugging and abandonment activities, **between March 15<sup>th</sup> through June 15<sup>th</sup>**, of each year. During that period, other activities, including the operation and maintenance of oil and gas facilities, will not be allowed between **3:00 A.M. and 9:00 A.M.**

To the extent practicable, activities occurring for a short period of time may be conducted so long as they do not commence until after **9:00 A.M.** Any deviation from this stipulation must be approved in writing by the Roswell Field Office Manager or the appropriate Authorized Officer.

2. All motors or engines that produce high noise levels shall have mufflers installed that effectively reduce excessive noise levels within prairie chicken habitat. High noise levels produced by motors or engines shall be reduced and muffled so as not to exceed **75 db** measured at 30 feet from the source of the noise.

3. Upon abandonment of the well, reclamation activities can be conducted between **March 15<sup>th</sup> through June 15<sup>th</sup>**, so long as reclamation work shall not be conducted between the hours of **3:00 AM to 9:00 AM.** Any deviation from this requirement shall require prior approval by the Authorized Officer.

4. In an emergency situation, the Authorized Officer can allow a pit to be constructed for the purpose of collecting crude oil for removal. To prevent wildlife from entering the pit, netting of adequate size to deter access by wildlife shall cover the pit until it is no longer a threat to wildlife, and the pit is reclaimed.