

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

Form 3160-3
(April 2004)

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

FEB 26 2008

OCD-ARTESIA

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

| | | |
|---|--|--|
| 1a Type of Work <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER | | 5 Lease Serial No NM-106906 |
| 1b Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone | | 6 If Indian, Allottee or Tribe Name Not Applicable |
| 2 Name of Operator Yates Petroleum Corporation 25575 | | 7 If Other than Agreement Name and No Not Applicable |
| 3a Address 105 South Fourth Street, Artesia New Mexico 88210 | | 8 Lease Name and Well No. Applesauce AZR Federal #1 |
| 3b Phone No (include area code) (575) 748-1471 | | 9 API Well No. 30-005-64014 |
| 4 Location of well (Report location clearly and in accordance with any State requirements *) At surface ROSSELL CONTROLLED WATER BASIN 500' FNL and 990' FWL, Unit D At proposed prod zone same as above | | 10 Field and Pool, or Exploratory WC Granite |
| 11 Sec, T, R, M, or Blk And Survey or Area Section 25, T11S-R27E | | 12 County or Parish Chaves |
| 14 Distance in miles and direction from the nearest town or post office* Approximately 25 miles northeast of Roswell, New Mexico | | 13 State NM |
| 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 1040.00 | 17 Spacing Unit dedicated to this well 320 N/2 |
| 18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. | 19 Proposed Depth 6865' | 20 BLM/ BIA Bond No. on file Nationwide Bond #NMB000434 |
| 21 Elevations (Show whether DF, RT, GR, etc.) 3754' | 22 Approximate date work will start* ASAP | 23 Estimated duration 30 Days |
| 24 Attachments | | |

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

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by existing bond on file(see item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO 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 officer. |

| | | |
|--|--|---------------------|
| 25. Signature | Name (Printed/ Typed) Debbie L. Caffall | Date 10/18/2007 |
| Title Regulatory Agent | | |
| Approved By (Signature) (Orig. Sgd.) Jerry Dutchover | Name (Printed/ Typed) (Orig. Sgd.) Jerry Dutchover | Date FEB 21 2008 |
| Title Acting Assistant Field Manager, Lands And Minerals | | |
| Office ROSSELL FIELD OFFICE | | |
| APPROVED FOR 2 YEARS | | |

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to cc operations thereon

Conditions of approval, if any, are attached.

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 page 2) Previously attached

C-102 attached

C-144 attached

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

S

ENTERED
ON 2/21/08
18

ENTERED
RBDMS
18

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

FEB 26 2008
OCD-ARTESIA

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-------------------------------------|---|---------------------------------------|
| ¹ API Number | ² Pool Code 96542 | ³ Pool Name Wc; Granite |
| ⁴ Property Code 28987 | ⁵ Property Name Applesauce AZR Federal | ⁶ Well Number 1 |
| ⁷ OGRID No. 025575 | ⁸ Operator Name Yates Petroleum Corporation | ⁹ Elevation 3754' |

¹⁰ Surface Location

| | | | | | | | | | |
|--------------------|---------------|-----------------|--------------|---------|-----------------------|---------------------------|-----------------------|------------------------|------------------|
| UL or lot no. D | Section 25 | Township 11S | Range 27E | Lot Idn | Feet from the 500' | North/South line North | Feet from the 990' | East/West line West | County Chavez |
|--------------------|---------------|-----------------|--------------|---------|-----------------------|---------------------------|-----------------------|------------------------|------------------|

¹¹ 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 |
| ¹² Dedicated Acres 320 N/2 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ 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.

| | | | | | |
|-------------------------------|--|--|--|-----------|---|
| ¹⁶ 500' 990' | | | | NM-106906 | ¹⁷ OPERATOR CERTIFICATION <i>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</i> Signature Date 9/21/07 Debbie L. Caffall Regulatory Agent Printed Name |
| | | | | | |
| | | | | | |
| | | | | | ¹⁸ SURVEYOR CERTIFICATION <i>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.</i> Date of Survey Signature and Seal of Professional Surveyor: REFER TO ORIGINAL PLAT Certificate Number |
| | | | | | |

**# MEXICO OIL CONSERVATION COMPANY
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-101
Effective 1-1-84

All distances must be from the outer boundaries of the Section.

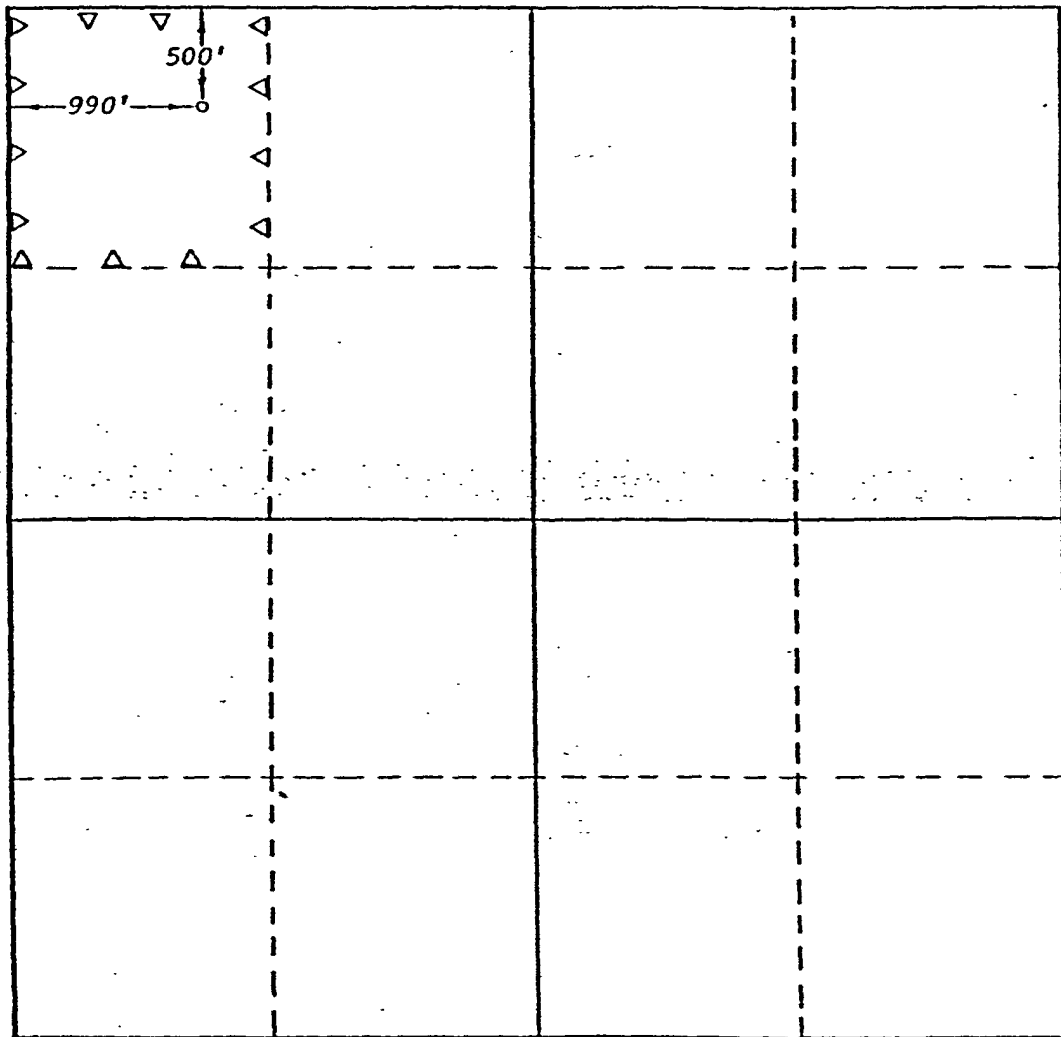
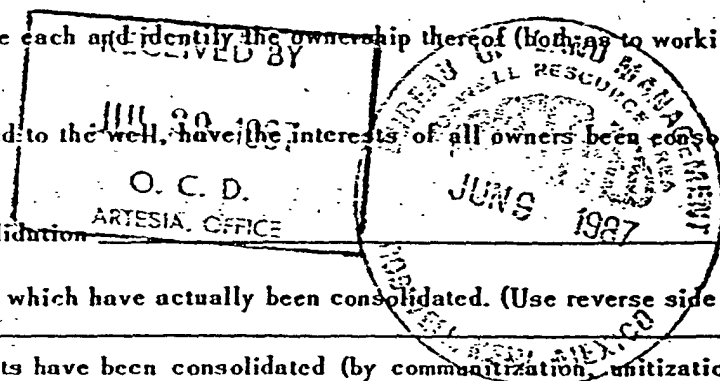
| | | | | | |
|--|---------------------------------------|----------------------------|--|-------------------------|---------------------------------|
| Operator MAXUS EXPLORATION CO. | | | Lease Federal-New Kumet Fed. | | Well No. 1-68860 |
| Unit Letter D | Section 25 | Township 11-S | Range 27-E | County Chaves | |
| Actual Footage Location of Well: | | | | | |
| 500 | | feet from the North | | line and 990 | |
| feet from the | | West | | line | |
| Ground Level Elev. 3754' | Producing Formation Permian | | Pool W. West Subsurface | | Dedicated Acreage 4.5 |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests 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 interests, has been approved by the Commission.



CERTIFICATION

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

James M. Pachulski
Name _____

James M. Pachulski
Position **Sr. Environmental & Regulation Engineer**

Company
Maxus Exploration Company

Date
June 5, 1987

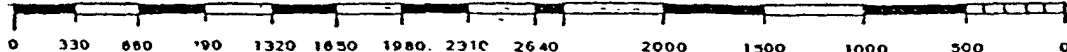
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
June 1, 1987

Registered Professional Engineer and/or Land Surveyor

Gary D. Basure
Certificate No. _____

6689



YATES PETROLEUM CORPORATION
Applesauce "AZR" Federal #1
500' FNL and 990' FWL
Section 25-T11S-R27E
Chaves County, New Mexico

Yates Petroleum Corporation plans to re-enter this well originally drilled by Maxus Exploration Company as the Newkumet Federal #1 and abandoned August 25, 1987. Yates' plan is to re-enter the well with a pulling unit to drill out the cement plug in the 9 5/8" casing and in the 7 7/8" open hole down to the original TD of 6,865'. The hole will be circulated clean then a string of 4 1/2" casing will be run to TD and cemented to 4000' +/- . The well will be completed with a pulling unit and the formations to be completed will probably be the Penn Sand at 6,600', the Cisco at 6,310' or the Wolfcamp at 6,090'.

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

| | | |
|---------------|-------|---------|
| San Andres | 1483' | Oil Pay |
| Glorieta | 2680' | |
| Tubb | 4147' | |
| Abo | 4921' | Gas Pay |
| Wolfcamp | 5243' | Gas Pay |
| Penn | 6353' | |
| Mississippian | 6600' | |
| Devonian | 6800' | Gas Pay |
| TD | 6865' | |

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

Water: 150'-500'
Oil or Gas: All potential zones.

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> |
|------------------|--------------------|---------------|--------------|-----------------|-----------------|
| 17 1/2" | 13 3/8" | 48# | H-40 | ST&C | 0-389' |
| 12 1/4" | 8 5/8" | 24# | K-55 | ST&C | 0-1840' |
| 7 7/8" | 4 1/2" | 11.60# | N-80 | LT&C | 0-6865' |

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

A. CEMENTING PROGRAM:

Surface Casing: 420 sx in place

Intermediate Casing: 580 sx in place – intermediate casing cement shall extend upward a minimum of 500 feet above the uppermost perforation.

Production Casing: 1,000 sx.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

This well will be drilled with a brine system.

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: 10' samples out from under surface casing.

Logging: CNL/LDT, W/NGT TD-Surf csg; with CNL/GR up to Surf; DLL/MS
FL TD-Surf csg; BHC Sonic TD-SURF CSG

Coring: None

DST's: As warranted.

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

Anticipated BHP:

| | | |
|------------|-----------|--------------------------------|
| From: 0 | TO: 900' | Anticipated Max. BHP: 375 PSI |
| From: 900' | TO: 6865' | Anticipated Max. BHP: 2500 PSI |

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 110 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 25 days to drill the well with completion taking another 20 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
Applesauce "AZR" Federal #1
500' FNL and 990' FWL
Section 25-T11S-R27E
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 is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 25 miles northeast of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Roswell on Highway 380 approx. 16 miles to Aleut Road. Turn right (South) and drive approx. 5.9 miles on main rd. (Continue south past Rock House Ranch sign.) Turn left (East) on lease road in front of Cooper Cattle Company sign and gate. Drive East approximately 0.8 of a mile (past dirt pit). Continue East at intersection. Drive approx. 0.6 of a mile to gate. Pass gate and drive on road approx. 0.7 of a mile to the Southwest corner of the location.

2. PLANNED ACCESS ROAD:

No new access road needed since there is an existing road to the location.

3. LOCATION OF EXISTING WELL:

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

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIALS:

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

7. METHODS OF HANDLING WASTE DISPOSAL:

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

8. ANCILLARY FACILITIES: 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.

10. PLANS FOR RESTORATION:

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

11. SURFACE OWNERSHIP: Thomas S. Cooper
Las Cruces, New Mexico

A surface agreement has been reached with Mr. Cooper

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.

13. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:
Debbie L. Caffall, Permit Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (575) 748-1471

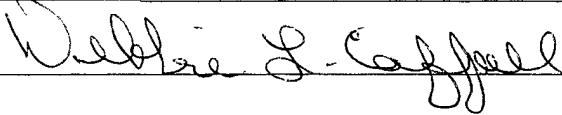
B. Through Drilling, Completions & Prod.
Ray Stall, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (575) 748-1471

CERTIFICATION
YATES PETROLEUM CORPORATION
Applesauce AZR Federal #1

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 18th day of October, 2007.

Printed Name Debbie L. Caffall

Signature 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4376

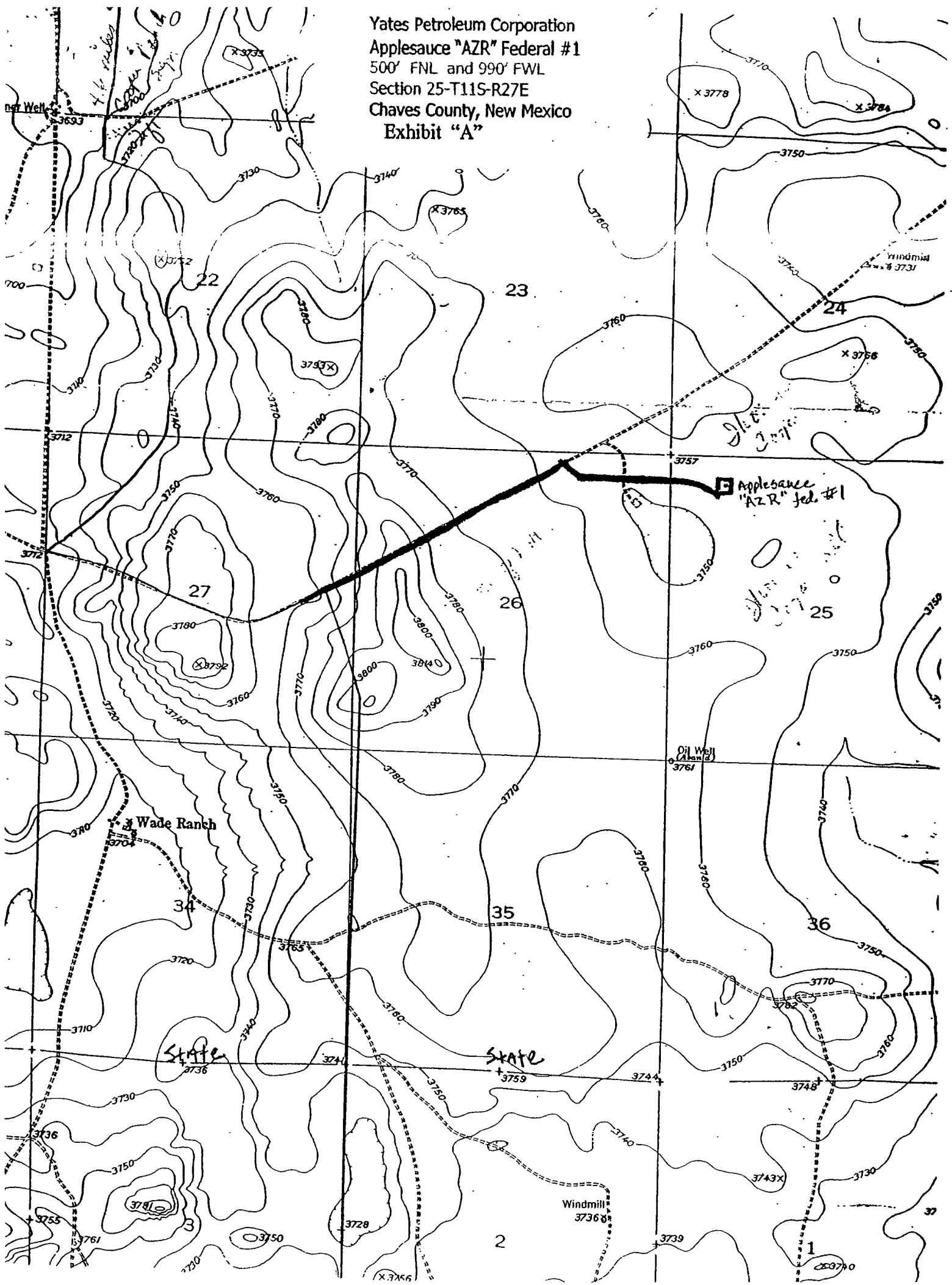
Field Representative (if not above signatory) Jim Krogman

Address (if different from above) Same

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

E-mail (optional) debbiec@ypcnm.com

Yates Petroleum Corporation
Applesauce "AZR" Federal #1
500' FNL and 990' FWL
Section 25-T11S-R27E
Chaves County, New Mexico
Exhibit "A"

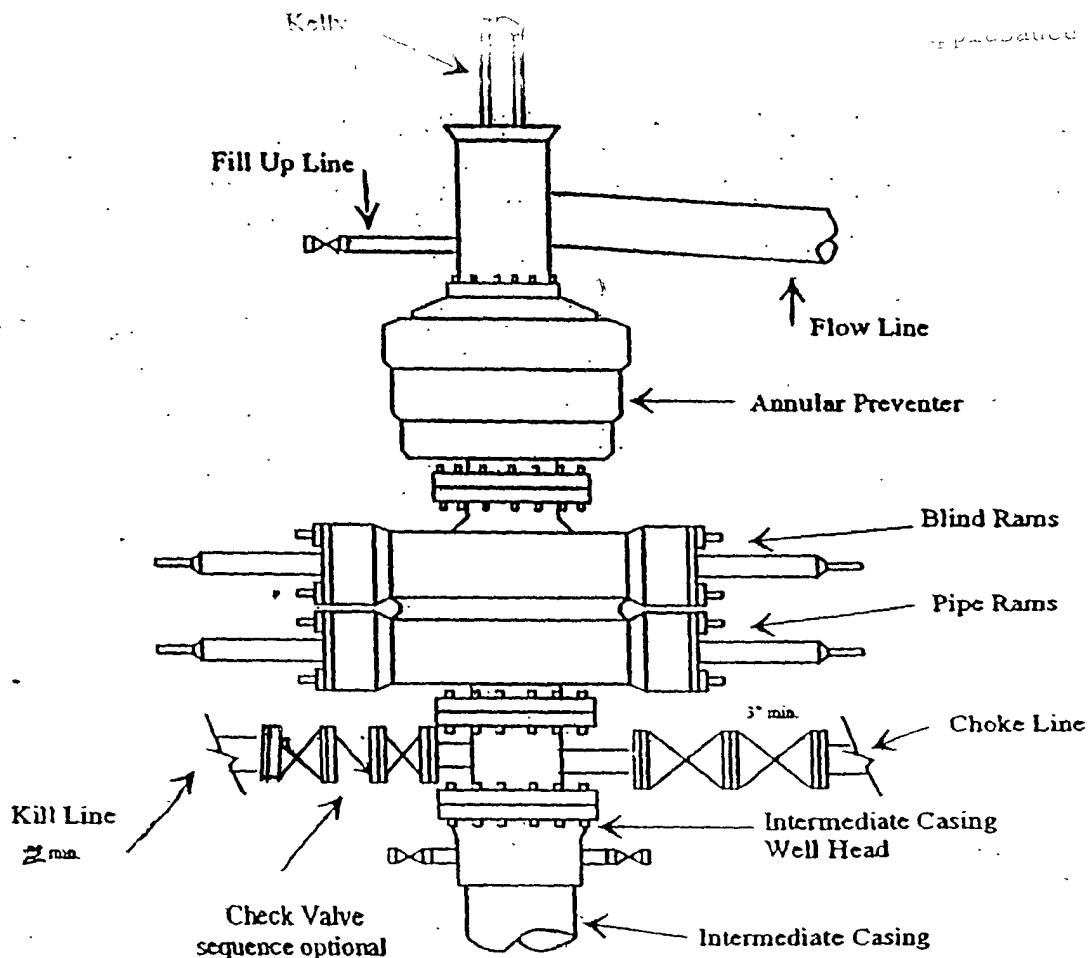




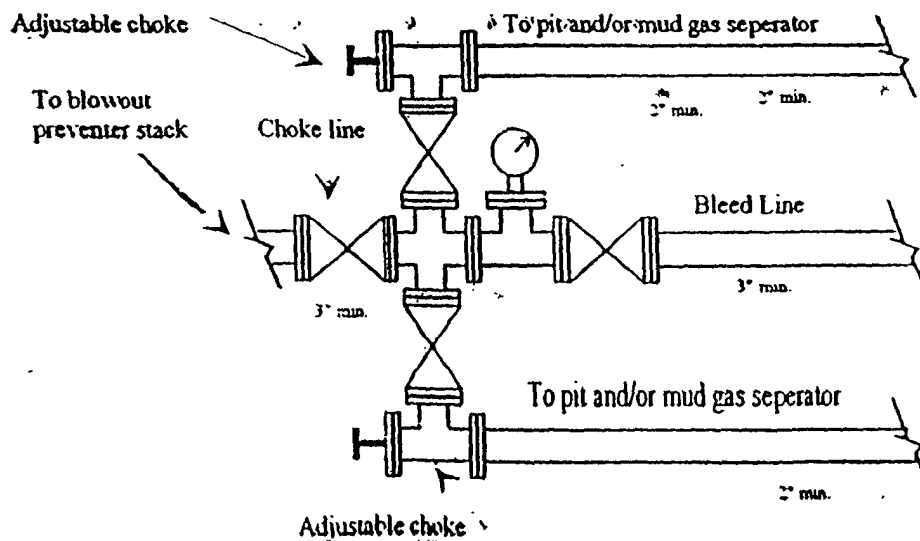
Yates Petroleum Corporation

BOP-3

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



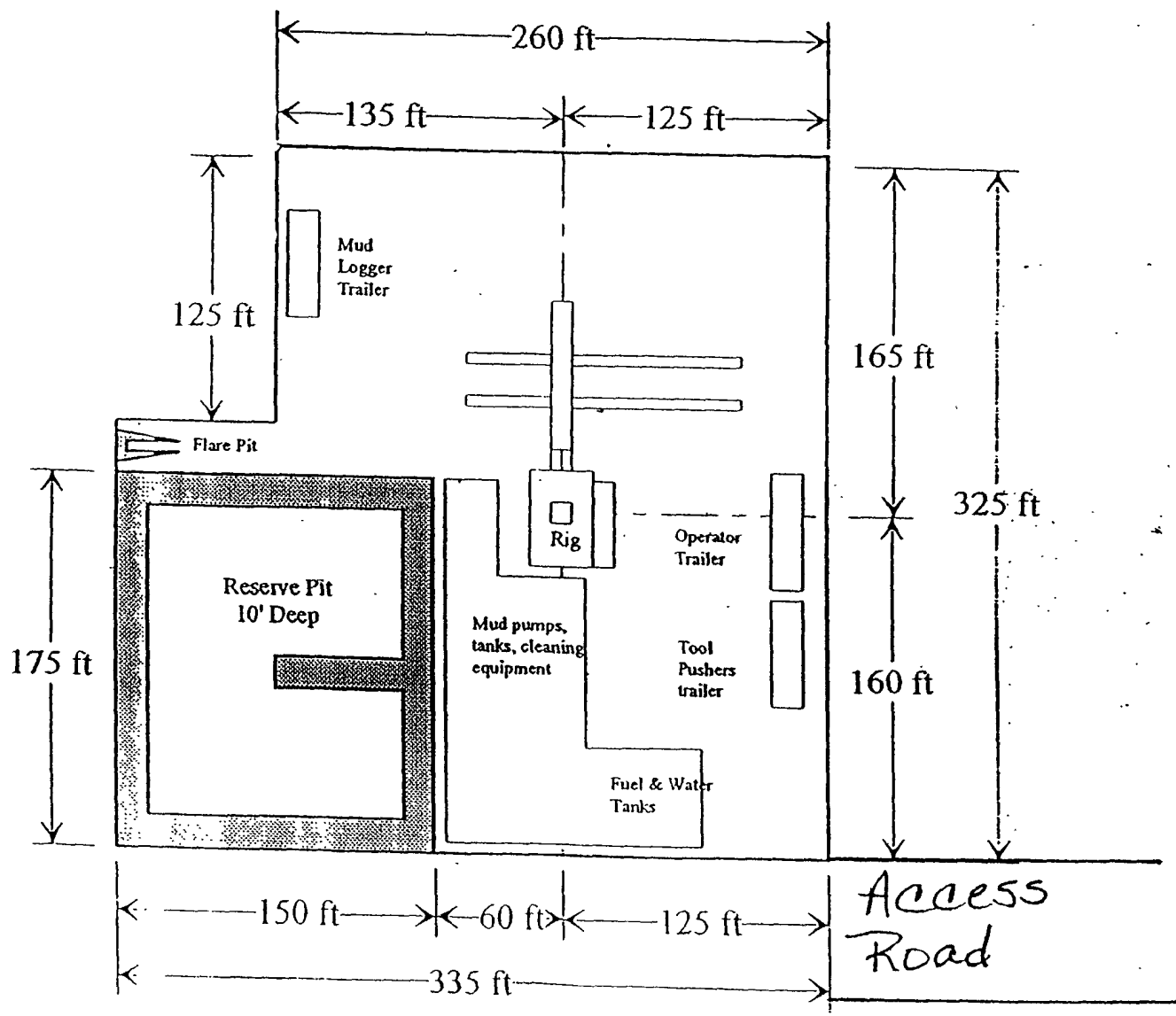
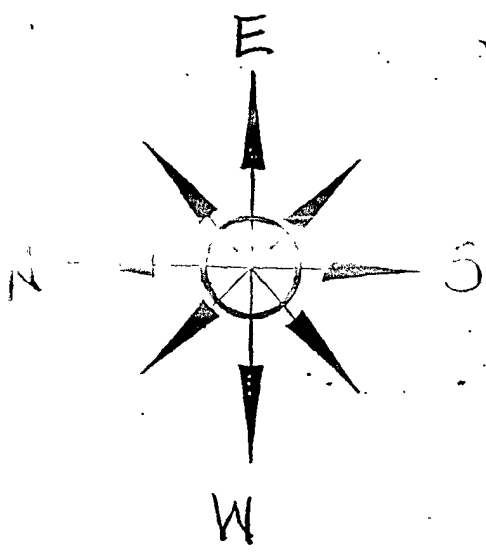
Typical 3,000 psi choke manifold assembly with at least these minimum features



Yates Petroleum Corporation

Location Layout for Permian Basin
Up to 12,000'

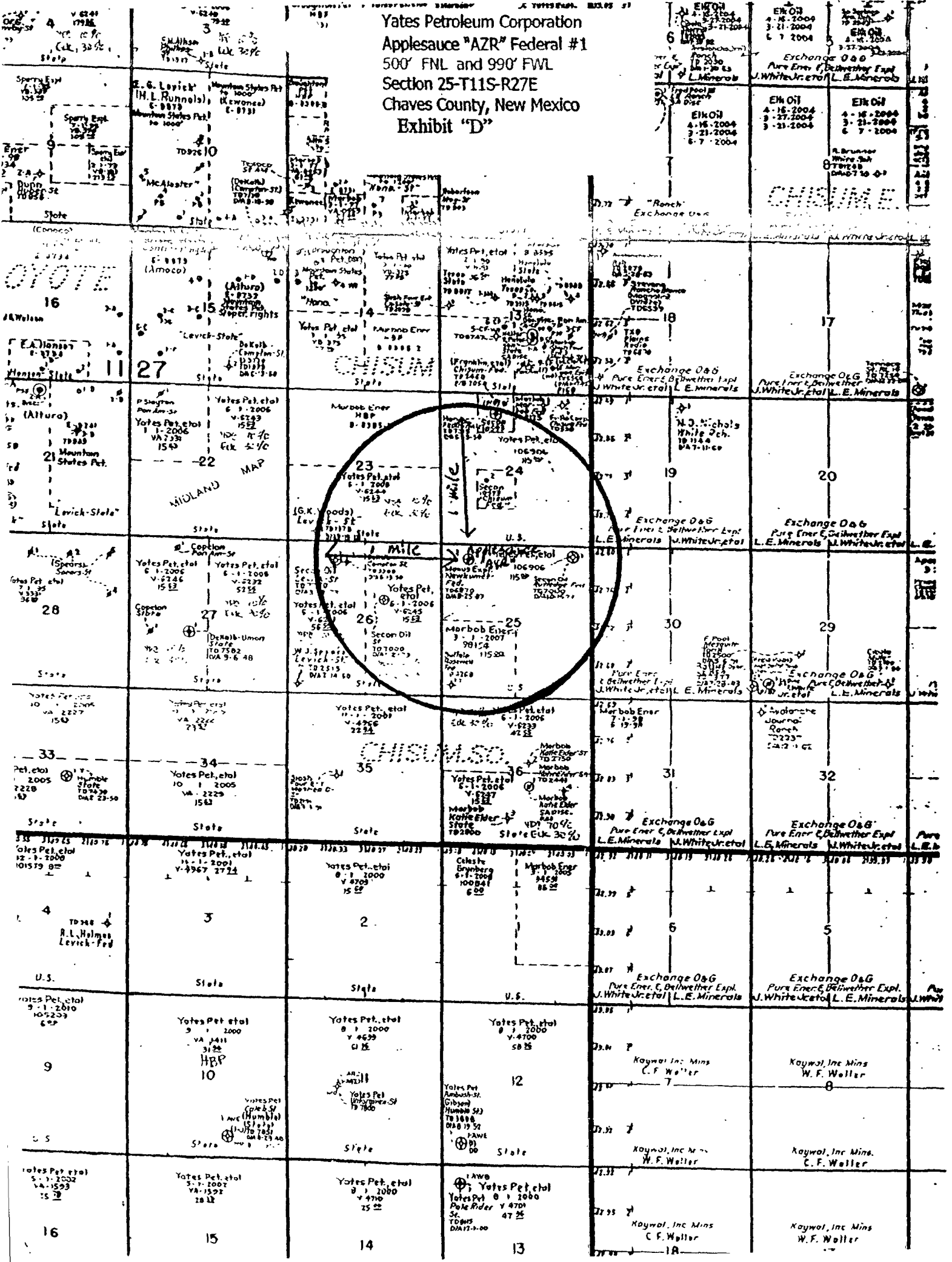
Yates Petroleum Corporation
Applesauce "AZR" Federal #1
500' FNL and 990' FWL
Section 25-T11S-R27E
Chaves County, New Mexico
Exhibit "C"



Distance from Well
Head to Reserve Pit
will vary between rigs

The above dimension
should be a maximum

Yates Petroleum Corporation
Applesauce "AZR" Federal #1
500' FNL and 990' FWL
Section 25-T11S-R27E
Chaves County, New Mexico
Exhibit "D"



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

State of New Mexico
Energy Minerals and Natural Resources

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

WF
Form C-144
March 12, 2004
For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

105 South Fourth Street, Artesia, NM 88210

Pit or Below-Grade Tank Registration or Closure

☒ Check Box

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

Operator: Yates Petroleum Corporation Telephone: 505-748-4376 e-mail address: debbiec@ypcnm.com

Address: 104 South 4th Street, Artesia, New Mexico 88210

Facility or well name: Applesauce AZR Federal #1 API #: 30-005-62532 U/L or Qtr/Qtr NWNW Sec 25 T 11S R 27E

County: Chaves Latitude _____ Longitude _____ NAD 1927 ☐ 1983 ☐ Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐
Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume _____ bbl

Below-grade tank

Volume: _____ bbl Type of fluid: _____

Construction material: _____

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

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet

(10 points)

100 feet or more

(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes

(20 points)

No

(0 points)

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses)

Less than 200 feet

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more

(0 points)

Ranking Score (Total Points)

0

RECEIVED

NOV 01 2004

OCD-ARTESIA

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

onsite ☐ offsite ☐ If offsite, name of facility _____ (3) Attach a general description of remedial action taken including remediation start date and end

date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

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

Date: 10/29/2004

Printed Name/Title Robert Asher/Regulatory Agent

Signature [Signature]

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

Approved: NOV - 8 2004

Date: _____

Printed Name/Title [Signature]

Signature [Signature]

YATES PETROLEUM CORPORATION
Applesauce AZR Federal #1 Re-Entry
500' FNL & 990' FWL, Unit D
Section 25, T11S-R27E
Chaves County, New Mexico
Lease #NM-106906

EXHIBIT "A"

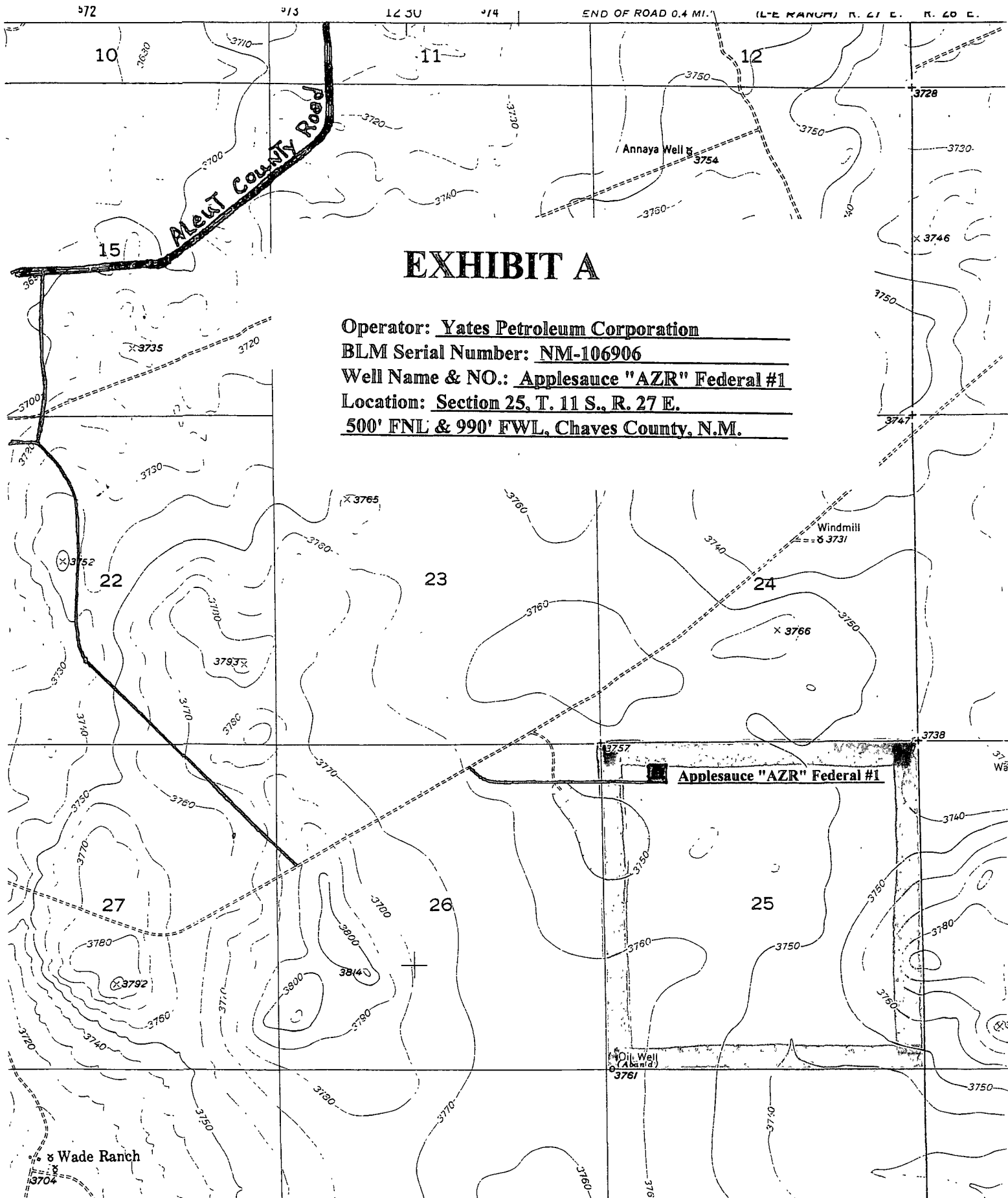


EXHIBIT A

Operator: Yates Petroleum Corporation
BLM Serial Number: NM-106906
Well Name & NO.: Applesauce "AZR" Federal #1
Location: Section 25, T. 11 S., R. 27 E.
500' FNL & 990' FWL, Chaves County, N.M.

PECOS DISTRICT - RFO

CONDITIONS OF APPROVAL

OPERATORS NAME: Yates Petroleum Corporation
LEASE NO.: NM-106906
WELL NAME & NO: Applesauce "AZR" Federal #1
SURFACE HOLE FOOTAGE: 500' FNL & 990' FWL
LOCATION: Section 25, T. 11 S., R. 27 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:

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

C. RESERVE PITS:

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

The reserve pit shall be constructed 175' X 150' on the NORTH side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the 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.

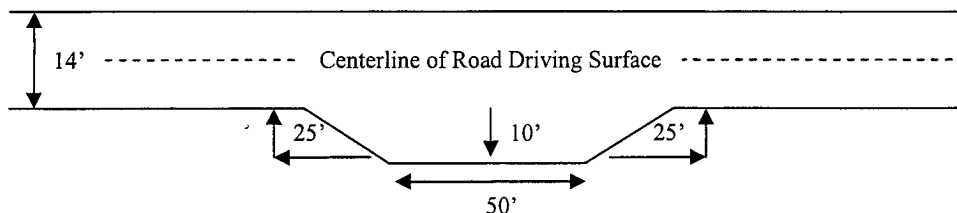
Crowning

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:

Standard Turnout – Plan View

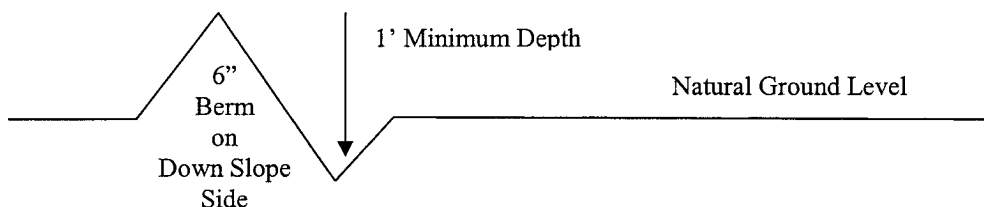


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section Of 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:

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

Cattleguards

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.



Fence Requirement

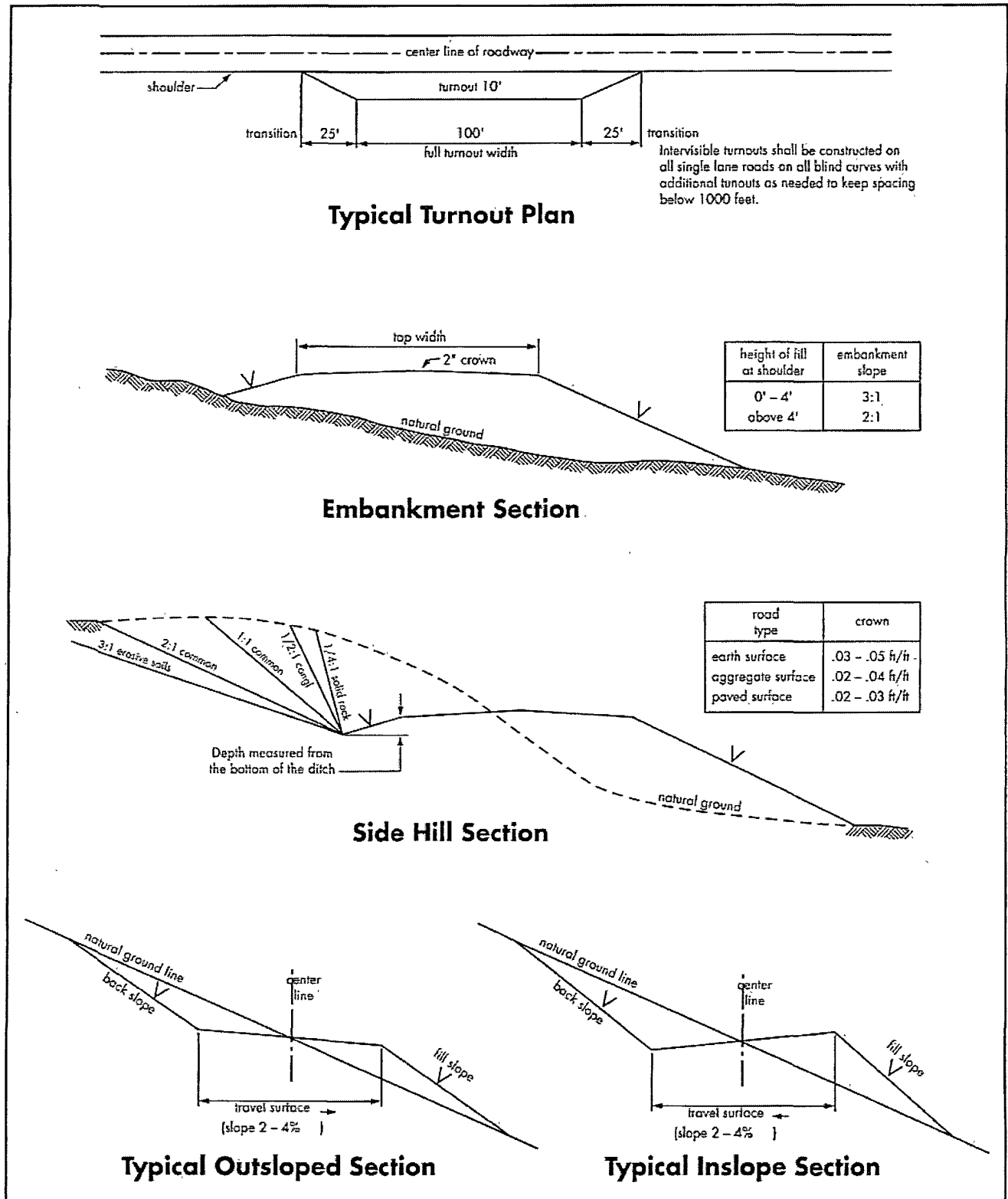
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



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 (H₂S) Drilling Plan is not required for this wellbore.
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 exist and is set at 389 ft and is cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds 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 8 5/8 inch intermediate casing exist and is set at 1840 ft. and circulated to surface. If cement does not circulate see B.1.a-d above.

3. The minimum required fill of cement behind the 4 1/2 inch production casing is to set TOC at least 500 ft above any potential bearing H-C formations.

- a. If cement does not circulate, contact the appropriate BLM office for approval of remedial action.
- b. If cement is required to tie-back into previous casing string, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2,000 psi.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8 5/8 intermediate casing shoe shall be 3,000 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.
- f. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

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:

| | |
|--|-----------------|
| SAND BLUESTEM, var. Woodard (<u>Andropogon hallii</u>) | 2.0 Lbs. |
| LITTLE BLUESTEM var. Pastura (<u>Andropogon scoparius</u>) | 1.0 Lb. |
| SIDEOTES GRAMA (<u>Bouteloua curtipendula</u>) | 1.5 Lbs. |
| var. Vaughn or El Reno | |
| SAND DROPSEED (<u>Sporobolus cryptandrus</u>) | 0.33 Lb. |
| PLAINS BRISTLEGRASS (<u>Setaria macrostachya</u>) | 2.0 Lbs. |
| DESERT or SCARLET (<u>Sphaeralcea ambigua</u> or | |
| GLOBEMALLOW <u>S. coccinea</u>) | 0.67 Lb. |
| BUCKWHEAT (<u>Eriogonnum spp.</u>) | <u>1.5 Lbs.</u> |
| Pure live seed per acre = | 9.0 Lbs. |

Certified Weed Free Seed. If one species is not available, increase ALL others proportionately. Use No Less than 4 species, including one forb. No less than 9.00 pounds pls 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.

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 agreements.