

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator
Yates Petroleum Corporation 25575

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

3b. Phone No. (include area code)
(505) 748-1471

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface **NENW 660' FNL and 1980' FWL**
At proposed prod. Zone **Same as above**

14. Distance in miles and direction from nearest town or post office*
Approximately twenty-eight (28) miles northeast of Roswell, New Mexico

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

16. No. of Acres in lease
160

17. Spacing Unit dedicated to this well
320 acres-N/2

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

19. Proposed Depth
5335

20. BLM/BIA Bond No. on file
NMB000434

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3881' GL

22. Approximate date work will start*

ASAP

23. Estimated duration

30 days

24. Attachments

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

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

25. Signature
Debbie L. Caffall
Regulatory Agent

Name (Printed/Typed)
Debbie L. Caffall

Date
12/4/2006

Regulatory Agent

Approved by (Signature)
/S/LARRY D. BRAY

Name (Printed/Typed)
/S/LARRY D. BRAY

Date
JAN 04 2007

Title
**Assistant Field Manager,
Lands And Minerals**

Office
ROSWELL FIELD OFFICE

APPROVED FOR 1 YEAR

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)

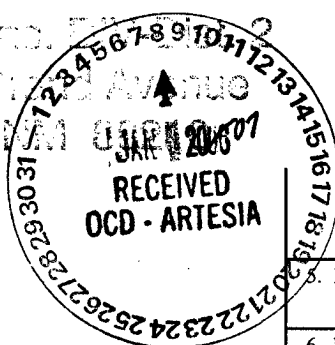
Previously Approved

C-144 attached

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

If earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.

N.M. Oil & Gas
1301 W. 12th Avenue
Artesia, NM 88210



OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.

NM-10263

6. If Indian, Allottee or Tribe Name
Not Applicable

7. If Unit or CA Agreement, Name and No.
Not Applicable

8. Lease Name and Well No.
Thomas LN Federal Com #12 (30956)

9. API Well No.
30-005-63889

10. Field and Pool, or Exploratory
Wildcat, Pre-Cambrian

11. Sec., T., R., M., or Blk, and Survey or Area
Section 14, T6S-R25E, Mer NMP

12. County or Parish

Chaves County

13. State

NM

Alamosa, NM 88210

 DISTRICT III
 El Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT
 DISTRICT IV
 2040 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96542	Pool Name Wildcat; Precambrian
Property Code	Property Name THOMAS "LN" FEDERAL COM.	Well Number 12
OGRID No.	Operator Name YATES PETROLEUM CORPORATION	Elevation 3881

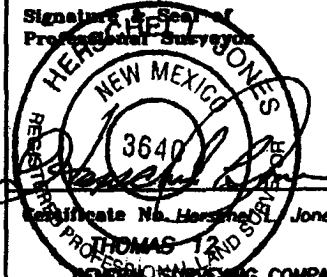
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	14	6S	25E		660	NORTH	1980	WEST	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
Dedicated Acres	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

NM-10223 1980' 3879 3878 3880 3876 N.33°48'02.7" W.104°22'24.6"	NM-14755 660' 660' Powers "Oh" Fed. #4	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature: <u>Pat Perry</u> Printed Name: _____ Title: _____ Date: _____
1980' Thomas "LN" Fed. #3		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 Surveyed: 10/10/2002 Signature & Seal of Professional Surveyor: 

YATES PETROLEUM CORPORATION
Thomas "LN" Federal Com. #12
660' FNL and 1980' FWL
Section 14-T6S-R25E
Chaves County, New Mexico

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

San Andres	585'	Abo	3710'
Glorieta	1535'	Wolfcamp	4340'
Yeso	1630'	Basement-Granite	5235'
Tubb	3070'	TD	5335'

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

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

3. Pressure Control Equipment: BOPE will be installed on the 11 3/4" 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>
14 3/4"	11 3/4"	42#	H-40	ST&C	0-900'	900'
11"	8 5/8" *	24#	J-55	ST&C	0-1500'	1500'
7 7/8"	5 1/2"	15.5#	J-55	ST&C	0-5335'	5335'

* 8 5/8" will only be set if lost circulation is encountered.

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

WITNESS

B. CEMENTING PROGRAM:

Surface Casing: Cement with 200 sx Lite "C" (YLD 2.0 WT 12.5). Tail in with 200 sx Class C + 2%"C" + 2% CaCl₂ (YLD 1.33 WT 15.6).

Intermediate Casing: 250 sx class C + 2% CaCLW (YLD 2.0 WT 12.0). Tail in with 200sx + 2% CaCl₂ (YLD 1.32 WT 14.8).

Production Casing: 350 sx Super C (YLD 1.67 WT 13.0). TOC 3200'.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-900'	FW GEL/Paper/LCM	8.6-9.0	32-36	N/C
900'-1500'	Cut Brine	8.6-9.0	29	N/C
1500'-3680'	Brine	10.0-10.2	28	N/C
3680'-TD	Salt Gel/Starch/Oil/LCM	9.0-9.8	34-45	<10 cc

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

6. EVALUATION PROGRAM:

Samples: 10' samples out from under surface casing.

Logging: Platform Express, CNL/LDT W/NGT to TD to surface casing, w/ GR/CNL TD to surface, DLL/MSFL TD to surface casing, BHC Sonic TD to surface casing.

Coring: Sidewall

DST's: None

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

Anticipated BHP:

From: 0	TO: 900'	Anticipated Max. BHP: 375 PSI
From: 900'	TO: 5335'	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 15 days to drill the well with completion taking another 15 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Thomas "LN" Federal Com. #12
660' FNL and 1980' FWL
Section 14-T6S-R25E
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 well site is located approximately 28 miles northeast of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Drive north of Roswell on Highway 285 for approx 24 miles to Dona Ana Road. Turn right on Dona Ana and drive approx. 9.8 miles to the pipeline road. Turn right and drive approx. 3.7 miles to the lease road on the right (across from the S. Alkali "LK" #1 location). Turn right and drive approx. 0.6 of a mile to lease road on the right (at Teckla #2 location). Turn right (west) on road and drive approx. 0.8 of a mile to lease road on right. Turn right and drive approx. 0.1 of a mile where the access road is staked on the left going west to the SE corner of the location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 500' in length from the point of origin to the southwest corner of the drilling pad.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on both sides. No traffic turnout 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 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, possibly in Roswell, and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

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, which may be required.

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: Yates Petroleum Corporation wishes to run a on lease 2" X-42 buried steel natural gas pipeline to connect the Thomas "LN" Federal Com. #12 well and tie into existing pipeline connection to the Thomas "LN" Federal #3 well.

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.

Thomas "LN" Federal Com. #12
Page 3

11. SURFACE OWNERSHIP: The location is Private Surface, owned by: Corn Brothers, Inc., Box 1141, Dunlap Route, Roswell, NM, 88210.

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.

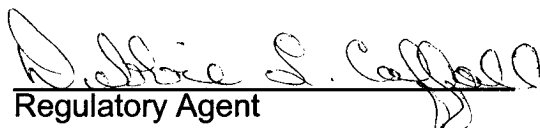
13. OPERATOR'S REPRESENTATIVE:

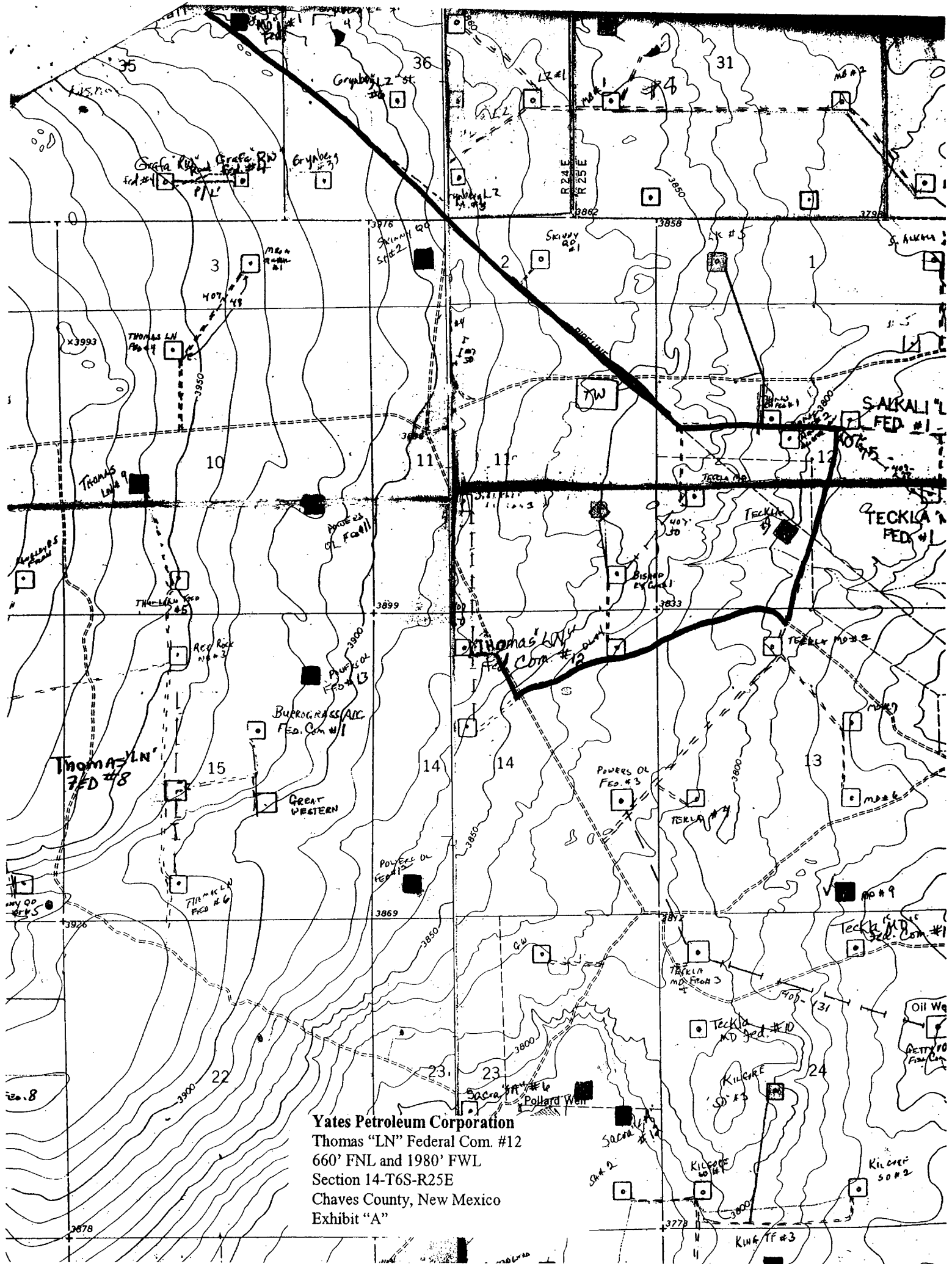
- | | |
|--|---|
| A. Through A.P.D. Approval:
Debbie Caffall, Regulatory Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471 | B. Through Drilling, Completions & Prod.
Pinson McWhorter, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471 |
|--|---|

14. CERTIFICATION:

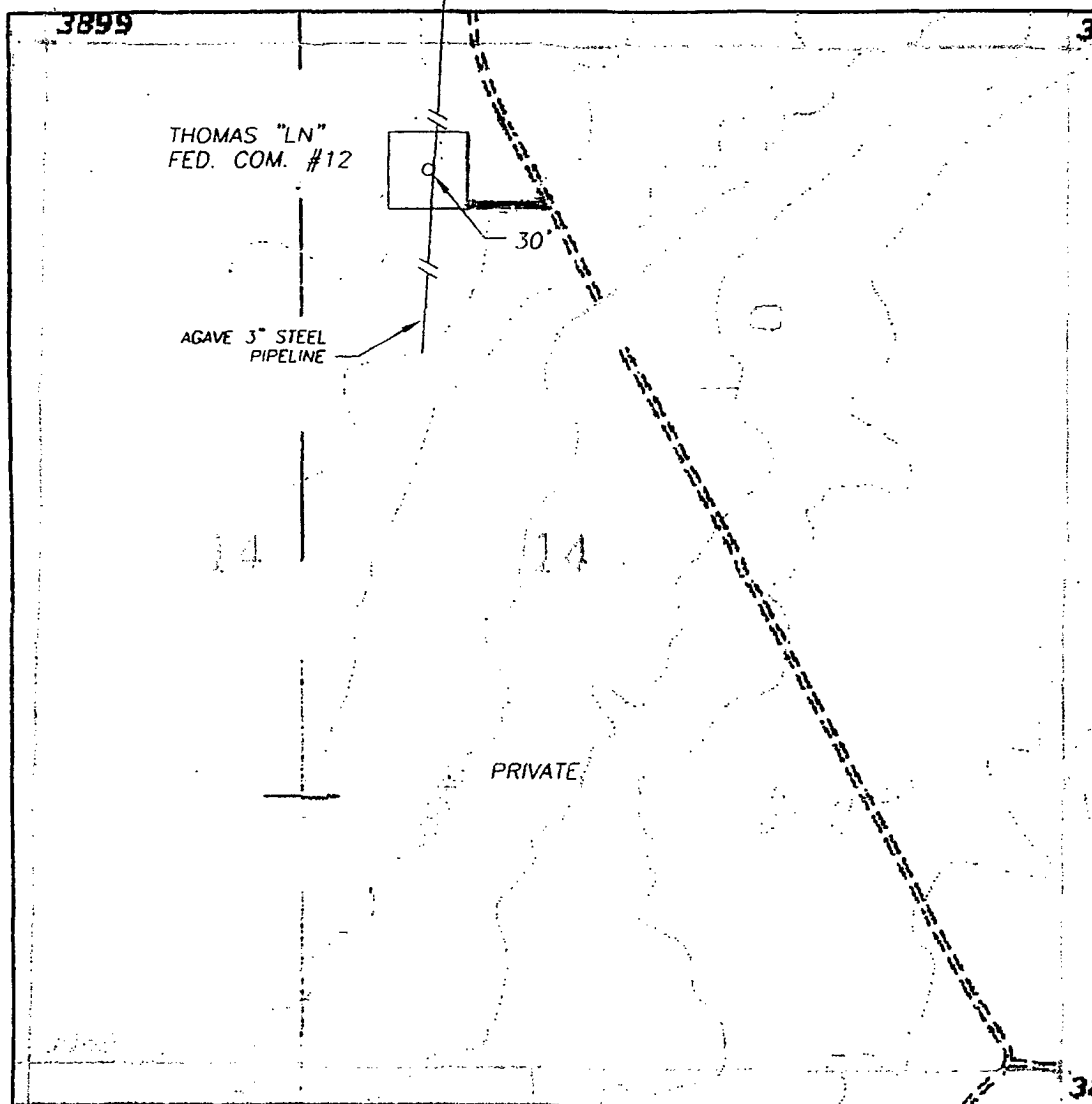
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

12/04/06


Regulatory Agent



14, TOWNSHIP 6 S. RANGE 25 EAST, NMPM, CHAV. COUNTY, NEW MEXICO.



Yates Petroleum Corporation
 Thomas "LN" Federal Com. #12
 660' FNL and 1980' FWL
 Section 14-T6S-R25E
 Chaves County, New Mexico
 Exhibit "A-1"

1000' 0 1000' 2000'
 Scale 1" = 1000'

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

HERSCHEL E. JONES R.L.S. No. 3640

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

YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES THOMAS "LN" FEDERAL COM. #12 WELL, LOCATED IN SECTION 14, TOWNSHIP 6 SOUTH, RANGE 25 EAST, NMPM, CHAVES COUNTY, NEW MEXICO.

Survey Date: 10/10/2002	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 10/11/02	Scale 1" = 1000' THOMAS 12

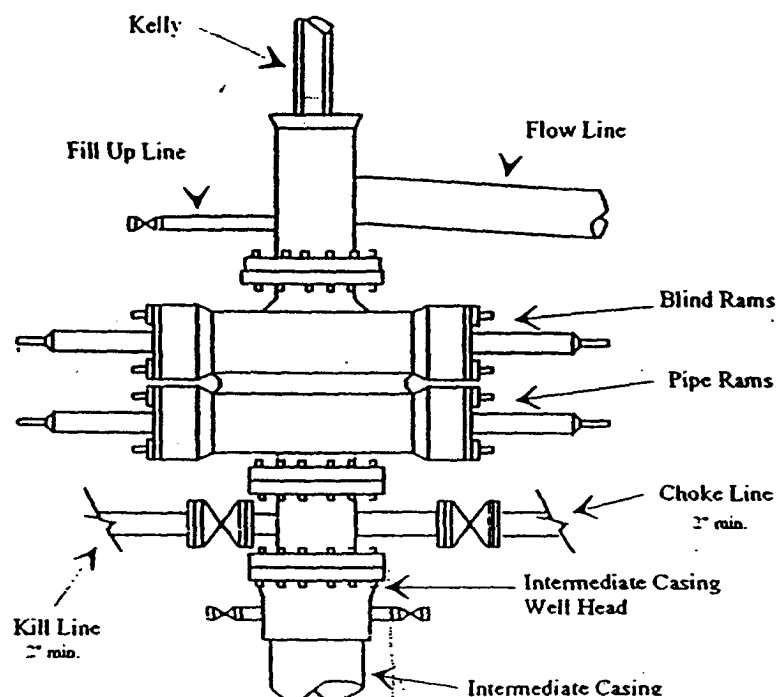
Yates Petroleum Corporation

BOP-2

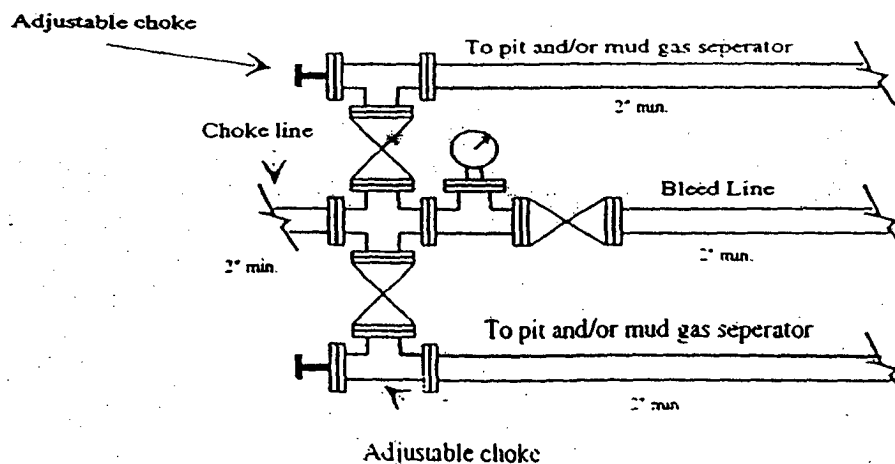
Typical 2,000 psi Pressure System Schematic

Double Ram Preventer Stack

Yates Petroleum Corporation
Thomas "LN" Federal Com. #12
660' FNL and 1980' FWL
Section 14-T6S-R25E
Chaves County, New Mexico
Exhibit "B"



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

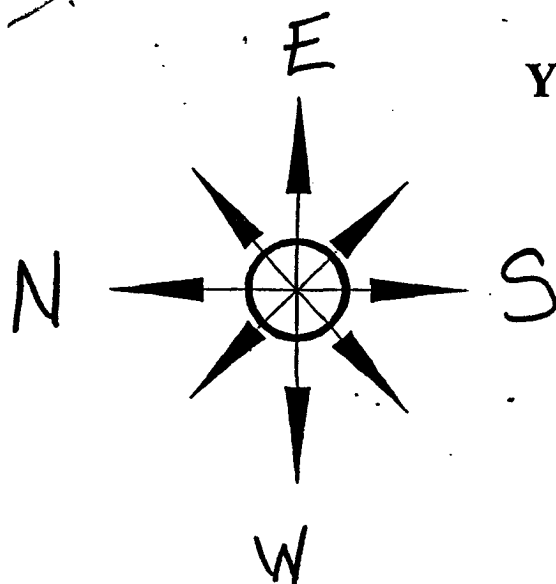


PB - L1

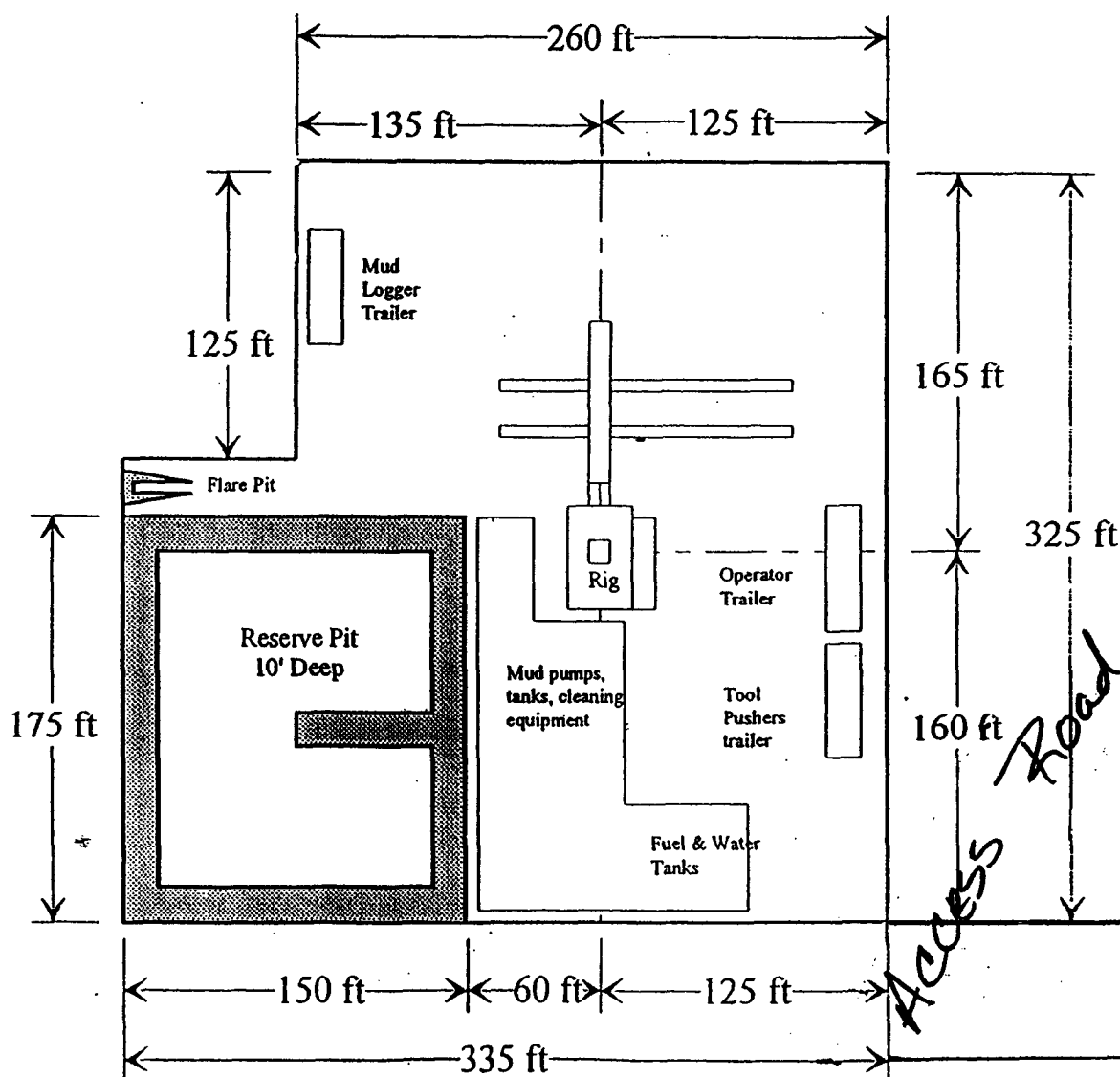
Yates Petroleum Corporation

Location Layout for Permian Basin

Up to 12,000'

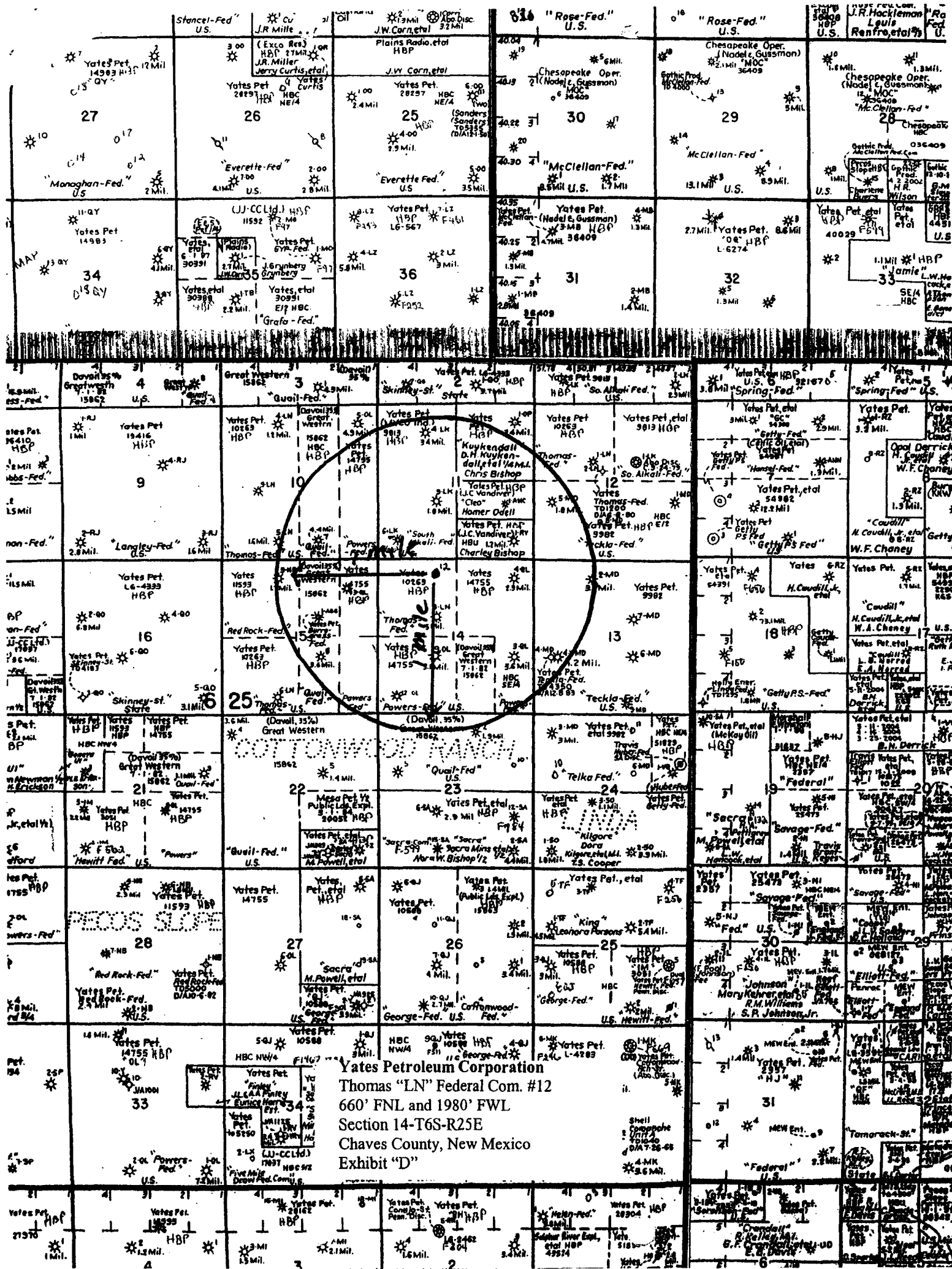


Yates Petroleum Corporation
Thomas "LN" Federal Com. #12
660' FNL and 1980' FWL
Section 14-T6S-R25E
Chaves County, New Mexico
Exhibit "C"



Distance from Well
Head to Reserve Pit
will vary between rigs

The above dimension
should be a maximum



District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio 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

Is pit or below-grade tank covered by a "general plan"? Yes ☒ CheckBox1

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@vpcnm.com
Address: 104 South 4th Street, Artesia, New Mexico 88210
Facility or well name: Thomas LN Federal Com. #12 API #: U/L or Qtr/Qtr NENW Sec 14 T 6S R 25E
County: Chaves Latitude Longitude NAD: 1927 ☐ 1983 ☐ Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Volume <u> </u> bbl	Volume: <u> </u> bbl Type of fluid: <u> </u> Construction material: <u> </u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. <u> </u>
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	

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.

NOV 5 2004

Date:

Printed Name/Title

Signature [Signature]

EXHIBIT A

OPERATOR: Yates Petroleum Corporation

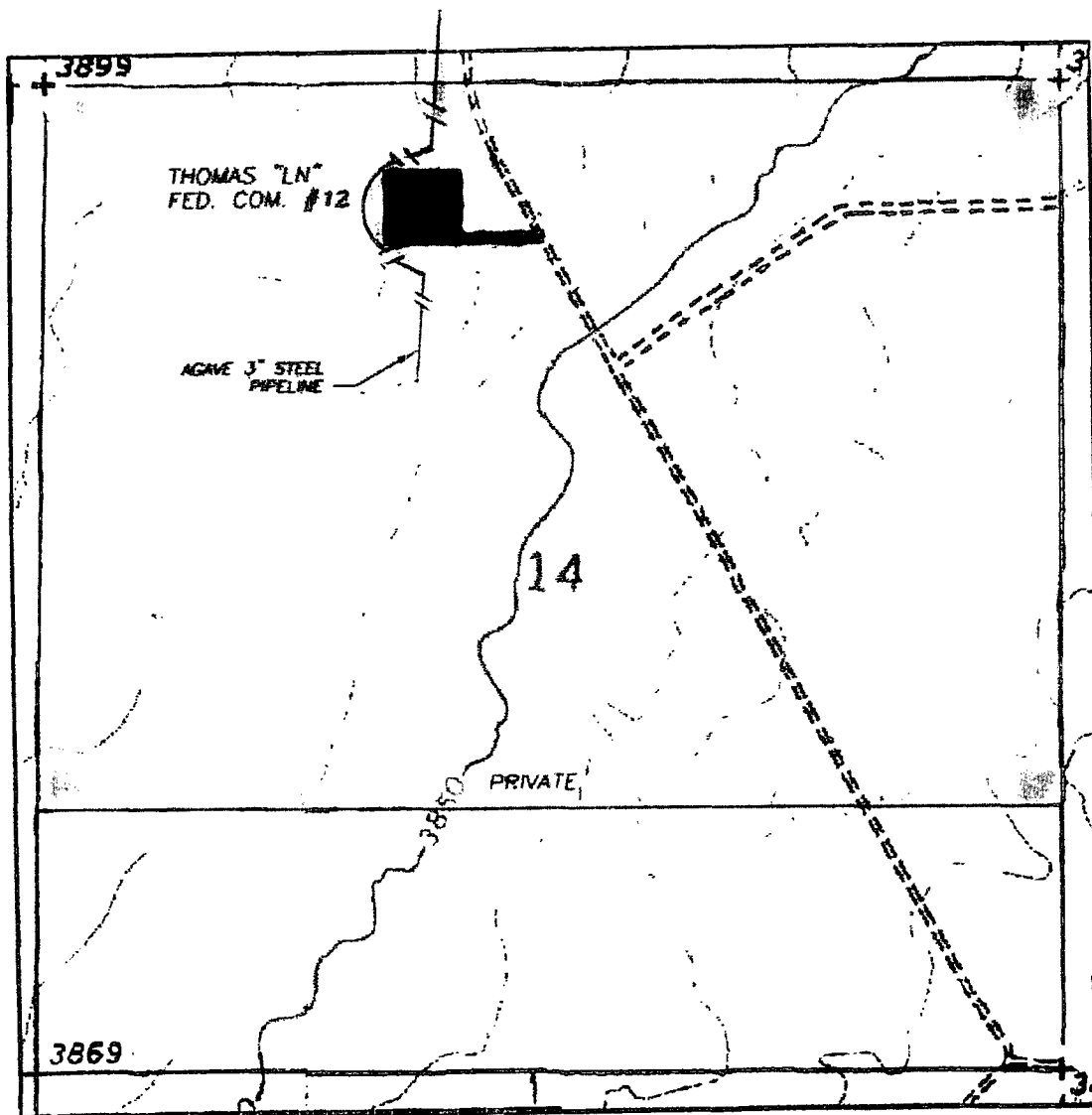
LEASE NO: NM-10263

WELL NAME & NO.: Thomas "LN" Federal Com. #12

LOCATION: Section 14 T. 6 S., R. 25 E., N.M.P.M.

QUARTER/QUARTER & FOOTAGE: NE $\frac{1}{4}$ NW $\frac{1}{4}$ - 660' FNL & 1980' FWL

COUNTY: Chaves County, New Mexico





United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

EXHIBIT B

1 of 8 pages

WELL DRILLING REQUIREMENTS

OPERATORS NAME: Yates Petroleum Corporation LEASE NO.: NM-10263
WELL NAME & NO: Thomas "LN" Federal Com. #12
QUARTER/QUARTER & FOOTAGE: NE $\frac{1}{4}$ NW $\frac{1}{4}$ - 660' FNL & 1980' FWL
LOCATION: Section 14, T. 6 S., R. 25 E., NMPM
COUNTY: Chaves County, New Mexico

I. GENERAL PROVISIONS:

- A. The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).
- B. The operator shall hereafter be identified as the holder in these requirements. The Authorized Officer is the person who approves the Well Drilling Requirements.

II. WELL PAD CONSTRUCTION REQUIREMENTS:

- A. The BLM shall administer compliance and monitor construction of the access road and well pad. Notify Richard G. Hill at least 3 working days (72 Hours) prior to commencing construction of the access road and/or well pad. Roswell Field Office number (505) 627-0247.
- B. Prior to commencing construction of the access road, well pad, or other associated developments, the holder shall provide the dirt contractor with a copy of the approved APD signature page, a copy of the location map (EXHIBIT A), a copy of pages 1 & 2 from the Well Drilling Requirements (EXHIBIT B), and a copy of the Permanent Resource Road Requirements (EXHIBIT D).
- C. Prior to commencing construction of the well pad, the holder shall REMOVE THE EXISTING PIPELINE FROM THE WELL PAD AND CONSTRUCT THE PIPELINE TO THE WEST SIDE OF THE WELL PAD. THE PIPELINE SHALL BE PLACED AT A SAFE DISTANCE FROM THE WELL PAD. THE SEGMENT OF PIPELINE THAT IS REMOVED SHALL BE BURIED 36 INCHES. SEE EXHIBIT A.
- D. The holder shall stockpile the topsoil from the surface of the well pad for reclamation purposes. The topsoil on the Thomas "LN" Federal Com. #12 well pad is approximate 6 inches in depth. Approximately 800 cubic yards of topsoil shall be stockpiled on the Southwest corner of the well pad, opposite the reserve pit. Upon reclamation of the well pad, the topsoil stockpile shall be redistributed over the disturbed areas. See Well Drilling Requirements - VI. Seeding Requirements - for reclamation of the well pad.
- E. **Reserve Pit Requirements:**
 - 1. The reserve pit shall be constructed 175' X 150' on the **North** side of the well pad.
 - 2. The plastic lining that is used to line the reserve pit shall be at least 9 mil in thickness and have a bursting strength of 170 PSI. Upon reclamation of the reserve pit, any exposed plastic lining shall be removed and properly disposed of before the reserve pit is backfilled.
 - 3. The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

WELL DRILLING REQUIREMENTS

2 of 8 pages

4. The reserve pit shall be constructed so as not to leak, break, or allow discharge of drilling muds. Under no circumstances will the reserve pit be cut to drain drilling muds on the terrain.
5. The reserve pit shall not be located in any natural drainage.
6. The reserve pit shall be equipped to deter entry by birds, bats, other wildlife, and livestock, if the reserve pit contains any oil and/or toxic fluids.
7. Drilling muds shall be properly disposed of before the reserve pit is reclaimed. Drilling muds can be allowed to evaporate in the reserve pit or be removed and transported to an authorized disposal site.
8. Dumping of junk or trash into the reserve pit is not allowed. Junk or trash shall be removed from within the reserve pit before the reserve pit is reclaimed. **Junk or trash shall not be buried in the reserve pit.**
9. Reserve Pit Reclamation:
 - a. Upon reclamation of the reserve pit, the impervious, reinforced, synthetic or fabricated 12 mil in thickness liner shall be used to encapsulate the reserve pit cuttings.
 - b. The dried cuttings in the reserve pit shall be buried a minimum depth of three (3) feet below ground level.
 - c. The reserve pit area shall be covered with a three (3) feet minimum cap of clean soil or like material that is capable of supporting native plant growth. Once the reserve pit contents have been capped, the cap shall not be disturbed without NMOCD approval.
 - d. Should the cuttings in the reserve pit not meet the three (3) feet below ground level depth, the excess contents shall be removed from the reserve pit until the required minimum depth of three (3) feet below ground level requirement has been met. The excess cuttings shall be removed from the well location and shall be properly disposed of at an authorized disposal site.
 - e. Contact Richard G. Hill, three days before commencing the reserve pit reclamation.

F. Federal Mineral Materials Pit Requirements:

1. Caliche, gravel, or other related materials from new or existing pits on Federal mineral estate shall not be taken without prior approval from the authorized officer. Contact Jerry Dutchover at (505) 627 -0236.
2. Payment for any Federal mineral materials that will be used to surface the access road and the well pad is required prior to removal of the mineral materials.
3. Mineral Materials extracted during construction of the reserve pit may be used for development of the pad and access road as needed, for the Thomas "LN" Federal Com. #12 gas well only. Removal of any additional material on location must be purchased from BLM prior to removal of any material.
 - a. An optional mineral material pit may be constructed within the archaeologically cleared area. The mineral material removed in the process can be used for pad and access road construction. However, a mineral material sales contract must be purchased from the BLM prior to removal of any material.

G. Well Pad Surfacing Requirement:

The well pad shall be surfaced with 6 inches of compacted caliche, gravel, or other approved surfacing material. The well pad shall be surfaced prior to drilling operations. See **Permanent Resource Road Requirements - EXHIBIT D - requirement #4, for road surfacing.**

H. Cave Requirements:

1. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities shall immediately cease. Contact Larry Bray at (505) 627-0250.
2. The BLM Authorized Officer will, within 24 hours of notification in "A" above, conduct an on-the-ground field inspection for karst. At the field inspection the authorized field inspector will authorize or suggest mitigating measures to lessen the damage to the karst environment. A verbal order to proceed or stop the operation will be issued at that time.

III. DRILLING OPERATION REQUIREMENTS:**A. GENERAL DRILLING REQUIREMENTS:**

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272, in sufficient time for a representative to witness:

A. Spudding B. Cementing casing: 11¼ inch 8% inch 5½ inch C. BOP tests

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. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

B. CASING:

1. The 11¼ inch surface casing shall be set at 900' and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 8% inch intermediate casing if run is with sufficient amount of cement bring it up at least 200 above shoe.

3. The minimum required fill of cement behind the 5½ inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost perforation.

C. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 11¼ inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- A. The results of the test shall be reported to the appropriate BLM office.
- B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- C. Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- D. BOPE shall be tested before drilling into the Wolfcamp formation.

D. DRILLING MUD:

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

- A. Recording pit level indicator to indicate volume gains and losses.
- B. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- C. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

IV. DOWN HOLE ABANDONMENT REQUIREMENTS:

A. If the well is a dry hole and will be plugged, approval of the proposed plugging program may be obtained orally. However, oral approval must be confirmed in writing by immediately filing a Sundry Notice And Report On Wells (Form 3160-5) "**Notice of Intention to Abandon**", and submitting an original and five (5) copies to the Roswell Field Office. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where plugs are to be placed, type of plug, type of plugging mud, etc..

B. If the well is not drilled, please notify the BLM so that an official release can be approved.

V. SURFACE RECLAMATION/RESTORATION REQUIREMENTS:

A. When the well is abandoned the "**Notice of Intention to Abandon**" (Form 3160-5) could also be used by the holder as the initial report for the surface reclamation/restoration of the access road and well pad. Upon receipt of the "NOI" the Authorized Officer shall provide the holder with the specific requirements for the reclamation/restoration of the access road and well pad.

B. **Subsequent Report Of Abandonment:** The holder shall submit a second report on Form 3160-5, Sundry Notice and Report On Wells, the original and five (5) copies to the Roswell Field Office, pertaining to the reclamation/restoration of the access road and well pad. The holder shall demonstrate that the surface reclamation/restoration requirements have been complied with. The holder shall specify that the reclamation work accomplished the restoration of the disturbed areas to as near the original surface condition the land was in prior to construction of the access road and well pad.

C. **Final Abandonment Notice:** The holder shall submit a third report on Form 3160-5, Sundry Notice and Report On Wells, the original and five (5) copies to the Roswell Field Office, that will ascertain that all surface reclamation/restoration requirements have finally been completed and that the access road and well pad are ready for final inspection. The holder shall specify that the surface has been reclaimed in accordance with federal regulations and request final approval of the access road and well pad.

D. The holder shall comply with all the surface reclamation/restoration required by the Authorized Officer pertaining to the reclamation/restoration of the access road and well pad. Liability under bond shall be retained until surface reclamation/restoration of the access road and well pad has been completed to the satisfaction of the Authorized Officer.

E. **Upon abandonment of this well, the surface material (caliche/gravel) shall be removed from the well pad and access road.** The removal of surface material shall be done with the minimal amount of mixing of the caliche or gravel material with the in place subsurface soils. The removed surface material (caliche/gravel) can be used for maintenance on existing roads within the immediate vicinity of other operational federal wells, or hauled of to a federal mineral material pit. The Authorized Officer shall be notified by the Holder for the proper disposal of the surfacing material from the well pad and access road.

F. On private estate land the restoration procedures on the reclamation of the access road and well pad shall be accomplished in accordance with the Private Surface Land Owner concurrence.

VI. SEEDING REQUIREMENTS:

WELL DRILLING REQUIREMENTS

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- A. The stockpile of topsoil shall be spread over the well pad to cultivate a seed bed. The holder shall not mix the topsoil with the reserve pit area soil. The mixing of the soils will render the conservation of the topsoil for reclamation purposes pointless, if the topsoil is contaminated with the reserve pit mud soils.
- B. The reclaimed area(s) shall be seeded with the seed mixture that was determined by the Roswell Field Office for the Desired Plant Community on this well site.
- C. The same seed mixture shall be used on the reclaimed access road; See **PERMANENT RESOURCE ROAD REQUIREMENT #12**.
- D. The planting of the seed shall be done in accordance with the following seeding requirements:

1. **The access road and well pad shall be ripped a minimum of 16 inches deep.** The topsoil soil shall be plowed under with soil turning equipment and the plowed surface shall be disked before seeding. Seed shall be planted using a drill equipped planter with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. Smaller/heavier seed has a tendency to drop to the bottom of the drill and is planted first, the holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled.

2. The holder shall seed all the disturbed areas with the DPC seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed per acre, (Pounds of pure live seed per acre: pounds of seed X percent purity X percent germination = pounds pure live seed). There shall be no primary or secondary noxious weeds in the seed mixture.

In accordance with State law(s) the seed should be tested for purity and viability within nine (9) months prior to sell. Commercial seed shall be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and the certified seed tag shall be made available for inspection by the Authorized Officer.

3. Desired Plant Community seed mixture to be planted in pounds of pure live seed per acre:

Common Name And Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Blue grama, var. Lovington	(<i>Bouteloua gracilis</i>)	4.00 Lbs.
Sideoats grama, Var. Vaughn or El Reno	(<i>Bouteloua curtipendula</i>)	1.00 Lb.
Sand dropseed	(<i>Sporobolus cryptandrus</i>)	0.50 Lb.
Vine mesquite	(<i>Panicum obtusum</i>)	1.00 Lb.
Plains bristlegrass	(<i>Setaria macrostachya</i>)	1.00 Lb.
Indian blanketflower	(<i>Gaillardia aristata</i>)	0.50 Lb.
Desert or Scarlet Globemallow	(<i>Sphaeralcea ambigua</i> or <i>S. coccinea</i>)	<u>1.00 Lbs.</u>
TOTAL POUNDS OF PURE LIVE SEED PER ACRE4		9.00 Lbs.

If one species is not available, increase ALL others proportionately. Certified Weed Free Seed. A minimum of 4 species is required, including 1 forb species.

WELL DRILLING REQUIREMENTS

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E. The recommended time to seed is from June 15th through September 15th. The optimum seeding time is in mid-July. Successive seeding should be done either late in the fall (Sept. 15th - Nov. 15th, before freeze up) or early as possible the following spring to take advantage of available ground moisture. However, the holder may seed immediately after completing surface abandonment requirements.

F. The seeding of the disturbed areas shall be repeated until a vegetation thicket is established on the access road and well pad. The Authorized Officer shall make the determination when the revegetation growth on the disturbed areas is satisfactory.

G. The holder shall be responsible for the establishment of vegetation on the access road and well pad. Evaluation of vegetation growth will not be made before the completion of the first growing season after seeding. The Authorized Officer reserves the right to require reseeding at a specific time if seed does not germinate after one growing season. Waiver of this requirement would be considered if diligent attempts to revegetate the disturbed areas have failed and the Authorized Officer determines that further attempts to replant the access road and well pad is futile.

H. Contact Randy Legler at (505) 627-0215 to witness the seeding operations, two (2) days prior to seeding the disturbed areas.

VII. Invasive and Noxious Weeds Requirement:

A. The holder shall be held responsible should the establishment of noxious weeds begin to grow on the access road and well pad. Evaluation of growth of the noxious weeds shall be made upon discovery. Weed control will be required on the disturbed land resulting from this action, which includes the roads, pads and associated pipelines and on adjacent land affected by the establishment of weeds due to this action.

B. The holder shall insure that the equipment and/or vehicles that will be used to construct the access road and/or well pad are not polluted with invasive and noxious weed seeds. Transporting of invasive and noxious weed seeds could occur if the equipment and/or vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds and the probability that the equipment and/or vehicles are carriers of noxious weed seed from the conduct of previous projects in noxious weed infested areas, the Authorized Officer shall require that the equipment and vehicles be cleaned with either high pressure water or air prior to construction, maintenance and administration of the access roads, well pad, and resulting well.

VIII. ON LEASE - WELL REQUIREMENTS:

A. The holder shall post signs identifying the location permitted herein with the requirements contained in Onshore Oil and Gas Order #1 and 43 CFR 3162.6.

B. The following data is required on the well sign that shall be posted in a conspicuous place on the well pad. The communitization agreement number shall be posted on the well sign. The sign shall be kept up with current identification and shall be legible for as long as the well is in existence:

Operator Name: Yates Petroleum Corporation
Well Name & No.: Thomas "LN" Federal Com. #12
Lease No.: NM-10263
Footage: 660' FNL & 1980' FWL
Location: Section 14, T. 6 S., R. 25 E.

C. UPON ABANDONMENT OF THE WELL, THE SAME INFORMATION SHALL BE INSCRIBED ON THE DRY HOLE MARKER WITH A BEADED WELD.

D. The approval of the APD does not in any way imply or grant approval of any on-lease, off-lease, or off-unit action(s). It is the responsibility of the holder to obtain other approval(s) such as rights-of-way from the Roswell Field Office or other agencies, including private surface landowner(s).

E. All vehicles, including caterpillar track-type tractors, motor graders, off-highway trucks and any other type of motorized equipment that is used in the construction of the access road and well pad shall be confined to the area(s) herein approved. The drilling rig that is used to drill the well shall also be confined to the approved area(s).

F. Containment Structure Requirement:

1. A containment structure or earthen dike shall be constructed and maintained around all storage facilities/batteries. The containment structure or earthen dike shall surround the storage facilities/batteries.
2. The containment structure or earthen dike shall be constructed two (2) feet high around the facilities/batteries (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum).
3. The perimeter of the containment structure or earthen dike can be constructed substantial larger for greater holding capacity of the contents of the largest tank.
4. The containment structure or earthen dike shall be constructed so that in case of a spill the structure can contain the entire contents of the largest tank, plus 24 hour production, within the containment structure or earthen dike, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

G. Well Completion Requirement:

If the well is completed, all areas of the well pad not necessary for operations shall be reclaimed to resemble the original contours of the surrounding terrain. Cut-and-fill slopes shall be re-contoured and reduced to a slope of 3:1 or less.

H. Painting Requirement:

All above-ground structures (e.g.: meter houses, tanks, above ground pipelines, and related appurtenance, etc.) not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee.

WELL DRILLING REQUIREMENTS

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The color selected for painting all the well facilities is **Olive Drab**, Supplemental Chart Number **18-0622 TPX**.

I. Fence Requirement:

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

J. Open-vent Exhaust Stack Requirements:

1. All open-vent exhaust stacks associated with heater-treater, separators and dehydrator units shall be modified to prevent birds and bats from entering them and to the extent practical to discourage perching and nesting.
2. New production equipment installed on federal leases after November 1st, 1993, shall have the open-vent exhaust stacks constructed to prevent the entry of birds and bats and to the extent practical, to discourage perching, and nesting.

IX. SPECIAL REQUIREMENT(S):

A. Split Estate:

1. On private estate land the restoration procedures on the reclamation of the access road and well pad shall be accomplished in accordance with the Private Surface Land Owner concurrence. If the surface land owner does not retain the access road and/or well pad for his ranch operations, upon abandonment of this well, the surface material (caliche/gravel) shall be removed from the access road and well pad.



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

EXHIBIT C

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CONDITIONS OF APPROVAL

OPERATOR: Yates Petroleum Corporation

LEASE NO: NM-10263

WELL NAME & NO.: Thomas "LN" Federal Com. #12

LOCATION: Section 14 T. 6 S., R. 25 E., N.M.P.M.

QUARTER/QUARTER & FOOTAGE: NE $\frac{1}{4}$ NW $\frac{1}{4}$ - 660' FNL & 1980' FWL

COUNTY: Chaves County, New Mexico

GENERAL CONDITIONS OF APPROVAL:

1. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Conditions Of Approval.
2. The holder shall indemnify the United States against any liability for damage to life or property arising from occupancy or use of public lands under this authorization.
3. The holder shall have surface use approval prior to any construction work on change(s) or modification(s) to the access road and/or well pad. The holder shall submit (Form 3160-5), Sundry Notice and Report On Wells, an original plus one (1) copy to the Roswell Field Office, stating the basis for any changes to previously approved plans. Prior to any revised construction the holder shall have an approved Sundry Notice and Report On Wells or written authorization to proceed with the change in plans ratified by the Authorized Officer.
4. **Weed Control:**
 - A. The holder shall be held responsible if noxious weeds become established within the area. Evaluation of the growth of noxious weeds shall be made upon discovery. Weed control will be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipelines, and adjacent land affected by the establishment of weeds due to this action. The holder is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.
 - B. The holder shall insure that the equipment and or vehicles that will be used to construct, maintain and administer the access roads, well pad and resulting well are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds, the Authorized Officer shall require that the equipment and vehicles be cleaned with either high pressure water or air prior to construction, maintenance and administration of the access roads, well pad, and resulting well.

5. Hazardous Substances:

a. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act Of 1976, as amended (15 U.S.C. 2601, *et. seg.*) with regard to any toxic substances that are used, generated by or stored on the project/pipeline route or on facilities authorized. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

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

6. Undesirable Events:

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

7. Archaeological, Paleontology, and Historical Sites:

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

b. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of the project work, the holder shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The holder or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes. Any unauthorized collection or disturbance of cultural resources may result in a shutdown order by the Authorized Officer.

8. Sanitation:

The holder shall be responsible for maintaining the site in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

9. **Open-top Tanks:** Any open-top tank containing oil and/or toxic fluids shall be covered with netting or equipped to prevent birds, bats, and other wildlife from entering the open-top tank.

10. **Other:** None



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BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

EXHIBIT D

1 of 7 pages

PERMANENT RESOURCE ROAD REQUIREMENTS

Operator: Yates Petroleum Corporation
BLM Serial Number: NM-10263
Well Name & NO.: Thomas "LN" Federal Com. #12
Location: Section 14, T. 6 S., R. 25 E.
660' FNL & 1980' FWL, Chaves County, N.M.

The holder agrees to comply with the following requirements:

1. GENERAL REQUIREMENTS:

- A. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Permanent Resource Road Requirements.
- B. The holder shall minimize any disturbance to structures on public domain surface. Damages caused to any structure during road construction operations shall be promptly repaired by the holder. Functional use of any structure shall be maintained at all times. The holder shall make a documented good-faith effort to contact the owner prior to disturbing any structure.
- C. When necessary to pass through an existing fence line, the fence shall be braced on both sides of the passageway prior to cutting and the fence shall be promptly repaired to at least it's former state or to a higher standard than it was previously constructed.
- D. A professional engineer shall design the access road if the road grade exceeds 10 percent slope.

2. INGRESS AND EGRESS:

The access road shall be constructed to access the well pad on the **Southeast** corner of the well pad to comply with the planned access road route.

3. ROAD TRAVELWAY WIDTH:

The travelway of the road shall be constructed 14 feet wide. The maximum width of surface disturbance shall not exceed 30 feet of road construction. The specified travelway width is 14 feet for all road travelway surfaces unless the Authorized Officer approves a different width.

4. SURFACING:

Beginning from the dedicated road, the entire length of the access road travelway shall be surfaced prior to drilling operations.

The access road travelway shall be surfaced with caliche or gravel material. If other surfacing material is used, the new type of material shall be approved by the Authorized Officer. The travelway of the road shall be surfaced with **caliche** material. The caliche material shall be compacted to a minimum thickness of **6** inches for the entire length of the travelway surface on the access road. The width of surfacing shall not be less than 14 feet of travelway surface. Prior to using any mineral materials from an existing federal pit, authorization must first be obtained from the Authorized Officer.

5. CROWNING AND DITCHING:

Crowning with materials on site and ditching on one side of the road, on the uphill side, shall be required. The road cross section shall conform to the cross section diagrams in Figure 1 (attached page 6). Where conditions dictate, ditching is required on both sides of the road. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road).

6. DRAINAGE:

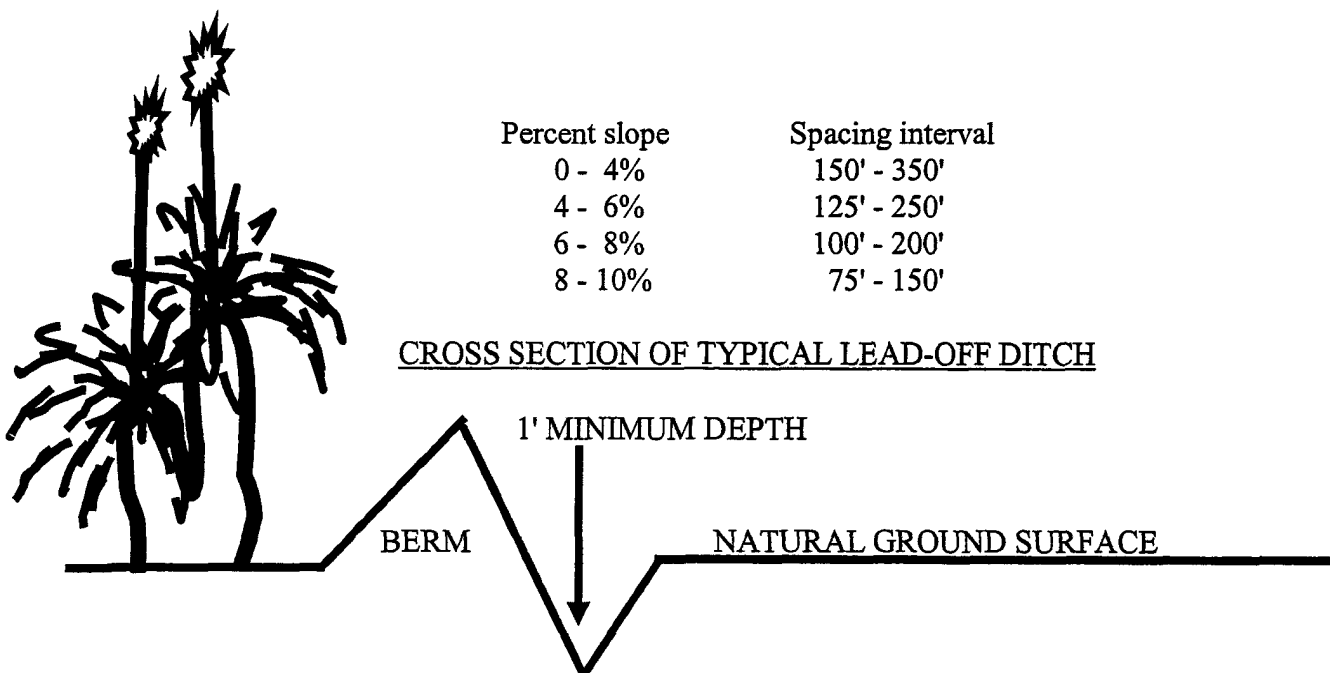
A. Drainage control shall be ensured over the entire road through the construction of ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings.

B. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

PERCENT SLOPE AND SPACING INTERVALS FOR LEAD-OFF DITCHES:

Percent slope	Spacing interval
0 - 4%	150' - 350'
4 - 6%	125' - 250'
6 - 8%	100' - 200'
8 - 10%	75' - 150'

CROSS SECTION OF TYPICAL LEAD-OFF DITCH



C. 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.

D. On road slopes exceeding 2%, water flow shall drain water into an adjacent lead-off ditch. Water flow drainage location and spacing shall be determined by the following formula:

FORMULA FOR SPACING INTERVAL OF LEAD-OFF DITCHES:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Ex. 4% slope: spacing interval = $\frac{400}{4} + 100 = 200$ feet

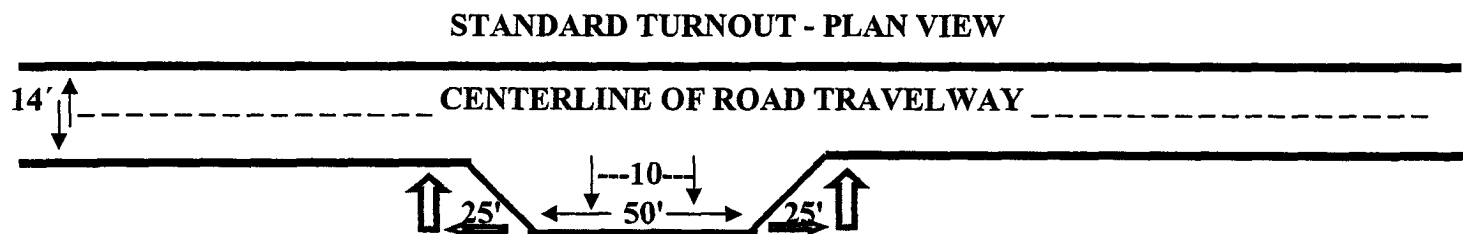
7. CULVERT INSTALLATION: No culverts are required on this road.

Culvert pipes shall be used where ravines, arroyo gullies, and deep waterway channel flows are crossed by the access road construction route. The culvert(s) shall not be less than XX inches in diameter (minimum 18 inch culvert). The location for the culvert installation is designated on the attached map - **EXHIBIT A**. (A culvert pipe installation diagram shall be attached to this requirement when a culvert is required to be installed, see EXHIBIT - X).

8. TURNOUTS:

No Turnouts Are Required On This Road.

Vehicle turnouts shall be constructed on all single lane roads (unless the Authorized Officer determines that the turnouts are not required). Turnouts shall be intervisible and shall be constructed on all blind curves with additional turnouts as needed to keep spacing below 1000 feet. Turnouts shall conform to the following diagram:



9. CATTLEGUARDS: NONE REQUIRED

The existing cattleguard(s) on the access road shall be replaced if they are damaged from heavy vehicular traffic use and the Authorized Officer determines that a new cattleguard shall be installed where the existing in place cattleguard(s) have deteriorated beyond practical use. The holder shall be held responsible for the condition of the existing in place cattleguard(s) that are utilized for vehicular traffic use on lease operations by the holder.

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads, (exceeding H-20 loading,) are anticipated. (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

(A cattleguard installation diagram shall be attached to this stipulation when a cattleguard is required to be installed - see EXHIBIT X - DIAGRAM A & B).

10. MAINTENANCE:

A. The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, cattleguard maintenance, surfacing, and weed control.

B. The holder shall cooperate with other authorized users in maintenance of the road(s). Failure of the holder to share maintenance costs in dollars, equipment, materials, and manpower proportionate to the holders use with other authorized users may be adequate grounds to terminate the road use. The determination as to whether maintenance expenditures have been withheld by the holder and the decision to terminate the road use shall be at the discretion of the Authorized Officer. Upon request, the Authorized Officer shall be provided with copies of any maintenance agreements entered into by the holder.

11. PUBLIC ACCESS:

A Public access on this road shall not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands shall not be locked or closed to public use unless closure is absolutely necessary and is authorized in writing by the Authorized Officer.

12. ROAD REHABILITATION REQUIREMENTS:

A. **Upon Private Surface Land Owner concurrence the surface material (caliche/gravel) on the access road shall be removed.** Removal activities shall limit the mixing of surfacing material with underlying soils. After the surfacing material has been removed, the access road and location shall be ripped a minimum of 10 inches deep. The removed material can be used on existing roads in need of maintenance, or hauled to a material pit for disposal. If the material is to be used on a county road or hauled to a material pit, contact the BLM Authorized Officer at (505) 627-0272 for possible additional requirements. All culverts and other road structures shall be removed. All over-burden material shall be replaced in the cut areas, ditches, lead-off ditches, and any other excavated earthwork shall be back filled. The road shall be recontoured to as near it's original topography, as possible. An earthen berm shall be constructed at the entrance of the road to prevent vehicular traffic on the reclaimed road.

B. An earthen berm shall be constructed at the entrance of the road to prevent vehicular traffic on the reclaimed road.

SEE EXHIBIT B - WELL DRILLING REQUIREMENTS - VI. SEEDING REQUIREMENTS - FOR THE DESIRED PLANT COMMUNITY SEED MIXTURE THAT SHALL BE USED ON THE RECLAIMED ACCESS ROAD.

C. The seed and any fertilizer involved shall be broadcast over the road bed with a spreader, than harrowed to cover the seed. Use of a seed drill planter to plant is acceptable. Appropriate measures shall be taken to ensure that the seed/fertilizer mixture is evenly and uniformly applied. There shall be no primary or secondary noxious weeds in the seed mixture. In accordance with State law(s) the seed should be tested for purity and viability within nine (9) months prior to sell. Commercial seed shall be either certified or registered and the seed mixture container shall be tagged in accordance with State law(s). The seed mixture tag shall be made available to the Authorized Officer for inspection. The seeding shall be repeated until a satisfactory vegetation thicket is established and this determination shall be made by the Authorized Officer. Evaluation of plant growth will not be made before the first growing season.

D. Seeding shall be done between June 15th through September 15th. However, the holder can seed the road immediately after preparing the road bed.

E. The Authorized Officer reserves the right to require reseeding at a specific time if seed does not germinate after one (1) growing season. Waiver of this requirement would be considered if diligent attempts to revegetate the road has repeatedly failed and the Authorized Officer determines that further attempts to revegetate the road would be futile.

F. Contact Randy Legler at (505) 627-0215 to witness the seeding operations two (2) days before the start of the seeding process.

13. SPECIAL REQUIREMENT(S): NONE

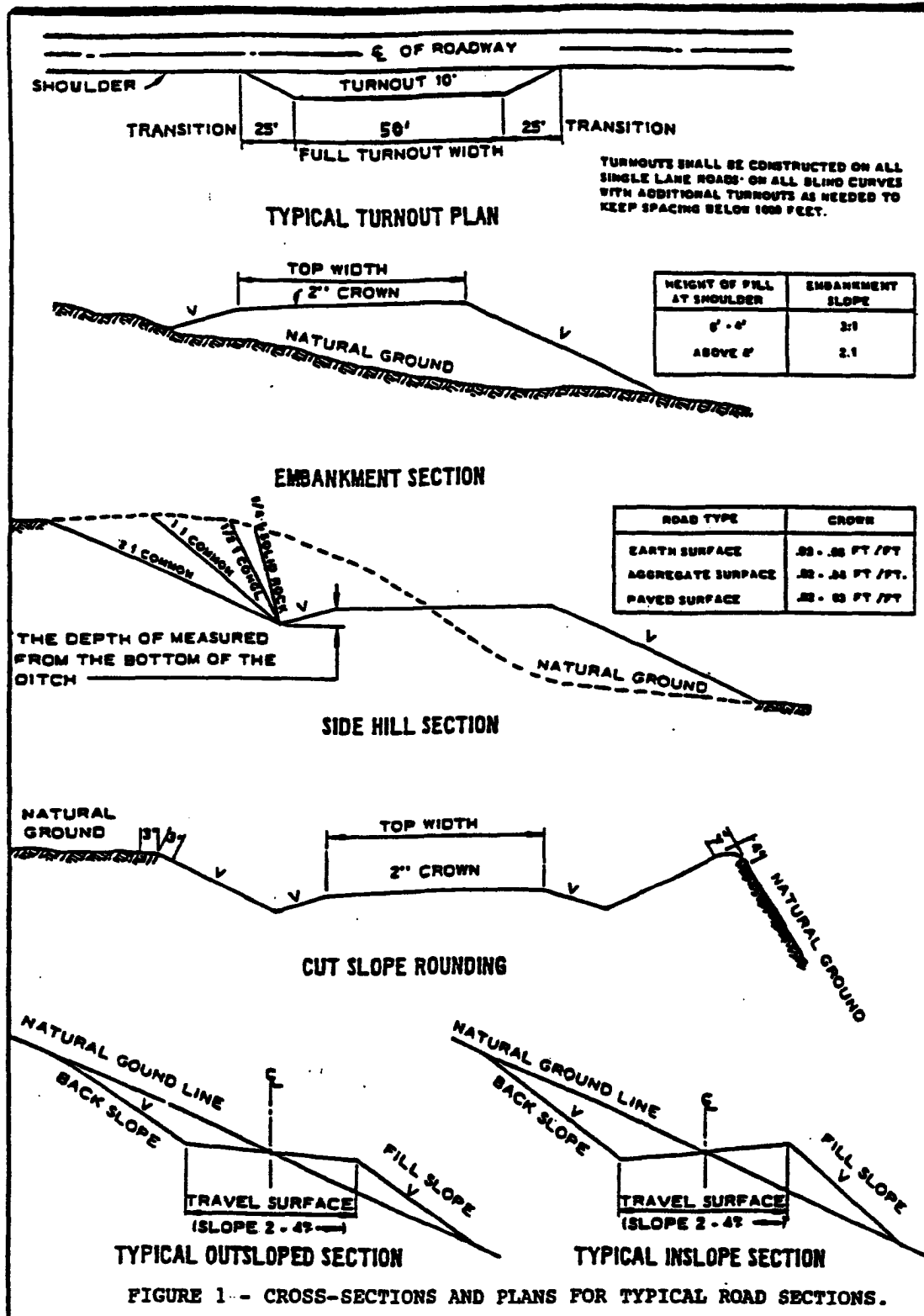


EXHIBIT A

OPERATOR: Yates Petroleum Corporation

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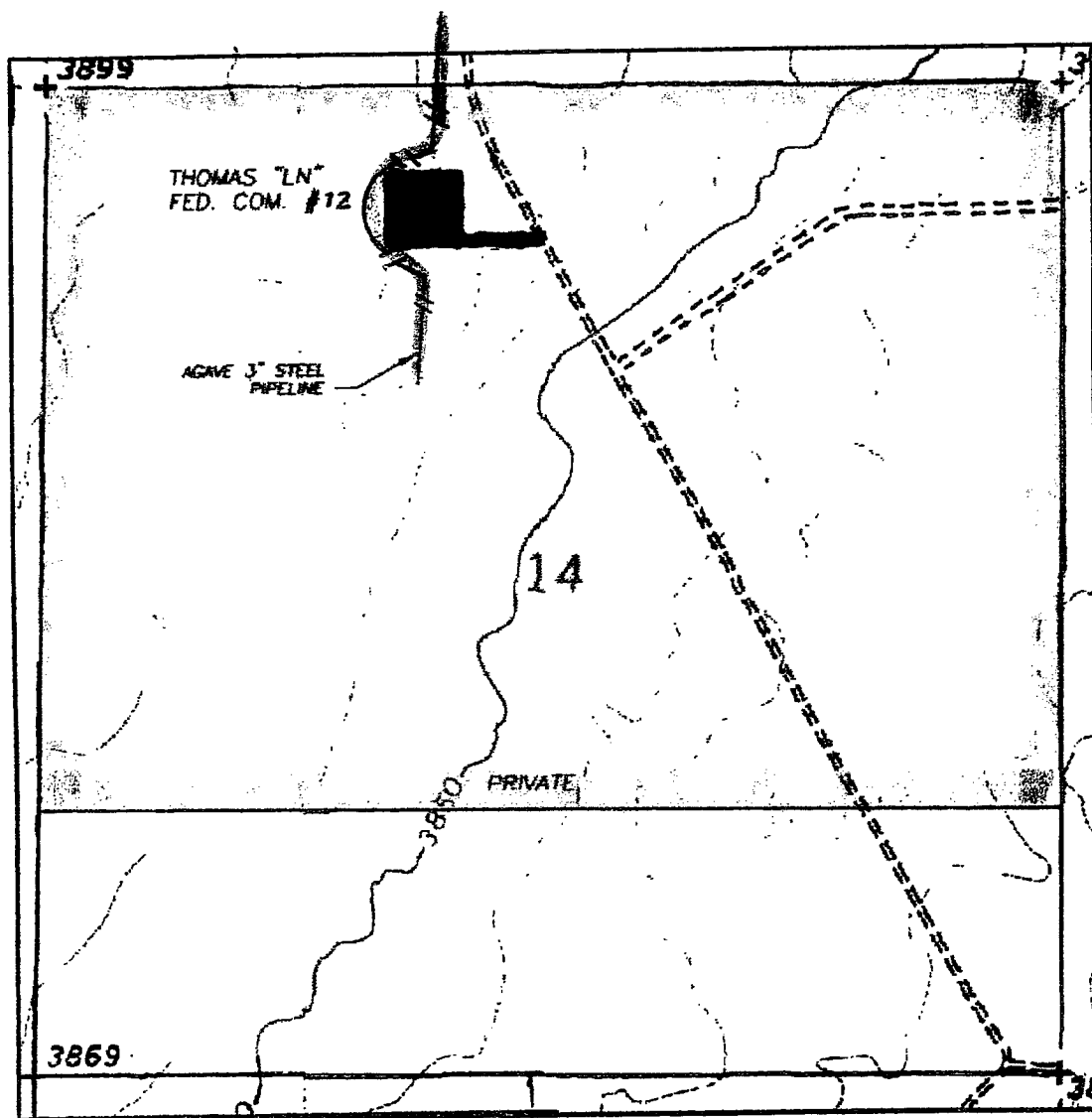
LEASE NO: NM-10263

WELL NAME & NO.: Thomas "LN" Federal Com. #12

LOCATION: Section 14 T. 6 S., R. 25 E., N.M.P.M.

QUARTER/QUARTER & FOOTAGE: NE $\frac{1}{4}$ NW $\frac{1}{4}$ - 660' FNL & 1980' FWL

COUNTY: Chaves County, New Mexico



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