

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APR 05 2005

APPLICATION FOR PERMIT TO DRILL OR REENTER

OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.
NM-108454

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

Mystery AYM Federal #2

9. API Well No.

30-015-34060

10. Field and Pool, or Exploratory

Comet Valley Morrow

11. Sec., T., R., M., or Bk. and Survey or Area

Section 33, T20S-R25E

12. County or Parish

Eddy County

13. State

NM

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

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

1150' FSL and 1980' FEL

At proposed prod. Zone

Same

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

Approximately 16 miles northwest of Carlsbad, New Mexico.

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

1150'

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

S/2

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

.6 of mile

19. Proposed Depth

10000'

20. BLM/BIA Bond No. on file

585997

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

3686' GL

22. Approximate date work will start*

ASAP

23. Estimated duration

45 days

24. Attachments

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

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the
SUPO shall be filed with the appropriate Forest Service Office.

4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification. **Carlsbad Controlled Water Basin**

6. Such other site specific information and/or plans as may be required by the
authorized office.

25. Signature

Name (Printed/Typed)

Date

Cy Cowan

2/9/05

Regulatory Agent

Regulatory Agent

Approved by (Signature)

/s/ Tony J. Herrell

Name (Printed/Typed)

/s/ Tony J. Herrell

Date **APR 04 2005**

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

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

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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)

Witness Surface &
Intermediate Casing

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

State of New Mexico
Energy Minerals and Natural Resources

Form C-144
March 12, 2004

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

For drilling and production facilities, submit to
appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe
office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

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) 748-1471

e-mail address: _____

Address: 105 South Fourth Street, Artesia, NM 88210

Facility or well name: Mystery AYM Federal #2 API #: 30-015-34060 U/L or Qtr/Qtr O Sec 33 T 20S R 25E

County: Eddy Latitude N.32 31'33.4" Longitude E.104 29'15.2" NAD: 1927 X 1983 ☐ Surface Owner Federal X State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 20,000 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)

0

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)

0

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)

0

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: 2/9/05

Printed Name/Title Cy Cowan, Regulatory Agent

Signature Cy Cowan

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.

Approval APR 11 2005

Date: _____

Printed Name/Title Field Rep ID

Signature [Signature]

II

Flint, Artesia, NM 88210

CT III

to Brazos Rd., Aztec, NM 87410

TRICT IV

0 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
			Morrow
Property Code	Property Name		Well Number
	MYSTERY "AYM" FEDERAL		2
OGRID No.	Operator Name		Elevation
025575	YATES PETROLEUM CORPORATION		3686

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	33	20S	25E		1150	SOUTH	1980	EAST	EDDY

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.			
320									

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

<p>NM-108454</p> <p>N.32°31'33.4" W.104°29'15.2" N.555045.4 E.452625.1 (NAD-27)</p> <p>3661 3672 3679 3707 1150' 1980'</p>		<h3>OPERATOR CERTIFICATION</h3> <p>I hereby certify the the information contained herein to true and complete to the best of my knowledge and belief.</p> <p><i>Cy Cowan</i></p> <p>Signature</p> <p>Cy Cowan</p> <p>Printed Name</p> <p>Regulatory Agent</p> <p>Title</p> <p>February 9, 2005</p> <p>Date</p>	
		<h3>SURVEYOR CERTIFICATION</h3> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>1/28/2005</p> <p>Date Surveyed</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Hersch Jones</i></p> <p>Hersch Jones</p> <p>Certificate No. Hersch Jones RLS 3640</p> <p>MYSTERY</p> <p>PROPERTY SURVEYING COMPANY</p>	

0 330' 660' 990' 1650' 1980' 2310' 2310' 1980' 1650' 990' 660' 330' 0'

YATES PETROLEUM CORPORATION
Mystery AYM Federal #2
1150' FSL and 1980' FEL
Section 33, T20S-R25E
Eddy County, New Mexico

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

San Andres	955'	Strawn	8855'
Glorietta	2615'	Atoka	9195'
Upper Yeso	2785'	Upper Morrow	9525'
2 nd Bone Spring Lime	4900'	Middle Morrow	9595'
3rd Bone Spring Lime	6615'	Lower Morrow	9775'
Wolfcamp	6380'	Base of Morrow	9860'
Cisco Canyon	7555'	TD	10000'

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

Water: 200' - 300'
Oil or Gas: All potential zones

3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and rated for 5000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

- 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>Thread</u>	<u>Interval</u>	<u>Length</u>	
17 1/2"	13 3/8"	48#	H-40	ST&C	0-400'	400'	WITNESS
12 1/4"	9 5/8"	36#	J-55	ST&C	0-3450'	3450'	WITNESS
8 3/4"	5 1/2"	15.5#+17#	J-55+L80	LT&C	0-10000'	10000'	

Yates Petroleum Corporation requests a variance to install a rotating head on the surface casing strings when intermediate casing will be set. If a BOP system is required then we wish to install a 2M system and receive a variance to test the system to 1000# using the rig pumps. The test will be held for 30 minutes on each system component. Components to be tested include pipe rams, blind rams, and annular preventer.

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

B. CEMENTING PROGRAM:

Surface casing: 450 sx 'C' + 2% CaCl₂(YLD 1.34 WT 14.8).

Intermediate casing: 1100 sx Lite C (Yld 1.98 WT 12.5) Tail in w/200 sx
Class C (YLD 1.34 WT 14.8).

Production Casing: TOC 3000', Lead w/ 750 sx Lite 'C' (YLD 1.95 WT 12.5)
Tail in w/ 775 sx Super 'C' Modified (YLD 1.57 WT 13.2).

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
Spud to 400'	FW/Spud Mud	8.4-8.6	34-36	N/C
400'-3500'	Fresh Water	8.4	28	N/C
3500'-6800'	Cut Brine	8.7-9.0	28	N/C
6800'-7755'	Cut Brine	9.0-9.3	28	N/C
7755'-8800'	Cut Brine	9.3-9.6	34	N/C
8800'-10000'	SW/Gel/Starch/4%-6% KCL	9.6-9.8	30-32	<6 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' out from under intermediate casing to TD.

Logging: Platform Express/HALS/NGT/FMI.

Coring: None anticipated.

DST's: Possible from Wolfcamp to TD.

7. Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP:

From: 0 TO 400'	Anticipated Max. BHP: 180	PSI
From: 400' TO 3500'	Anticipated Max. BHP: 1550	PSI
From: 3500' TO 10000'	Anticipated Max. BHP: 5100	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H₂S Zones Anticipated: None

Maximum Bottom Hole Temperature: 189° F

8. ANTICIPATED STARTING DATE:

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

13. OPERATOR'S REPRESENTATIVE

A. Through A.P.D. Approval:

Cy Cowan, Regulatory Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

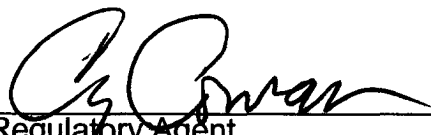
B. Through Drilling Operations,
Completions and Production:

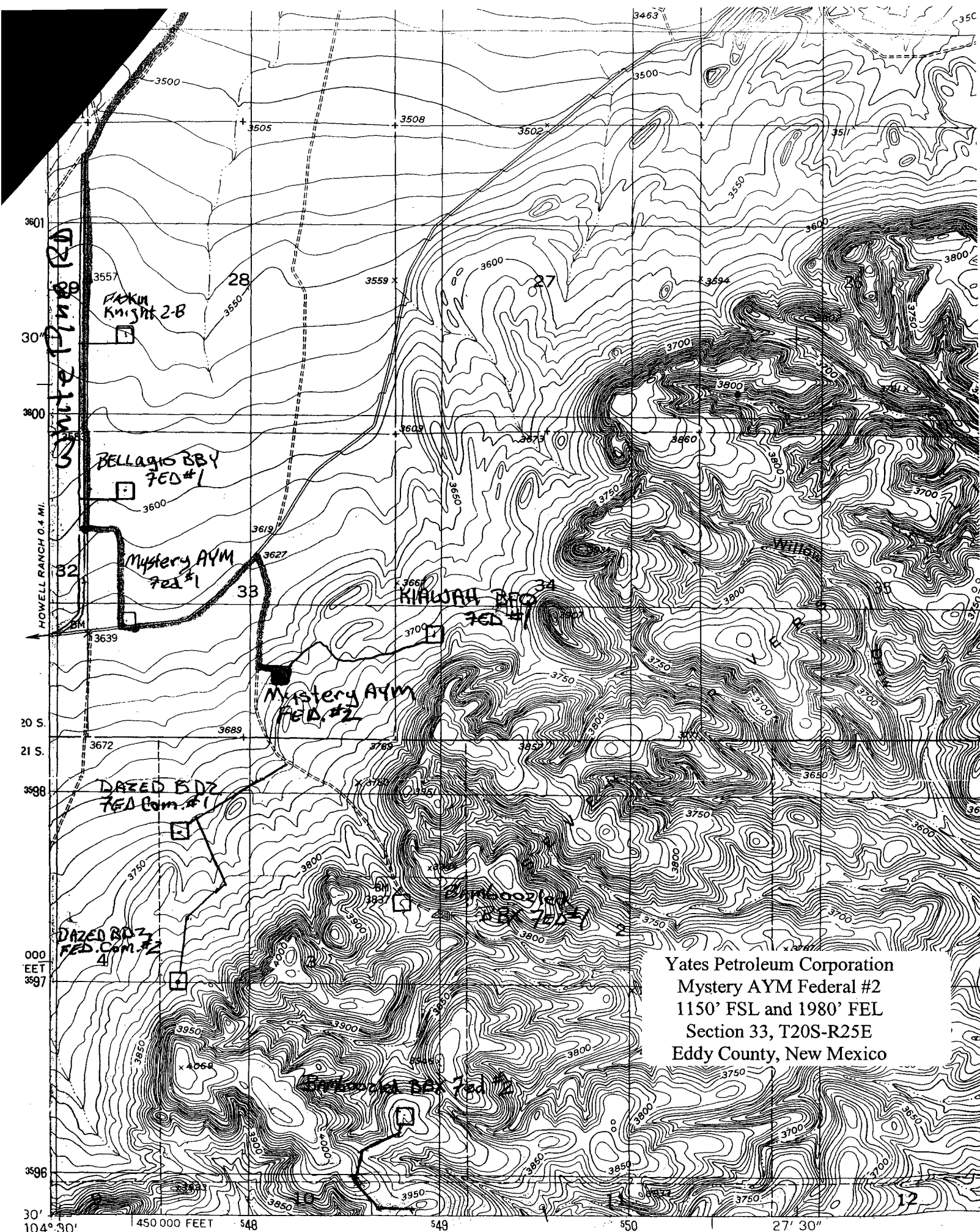
Pinson McWhorter, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

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.

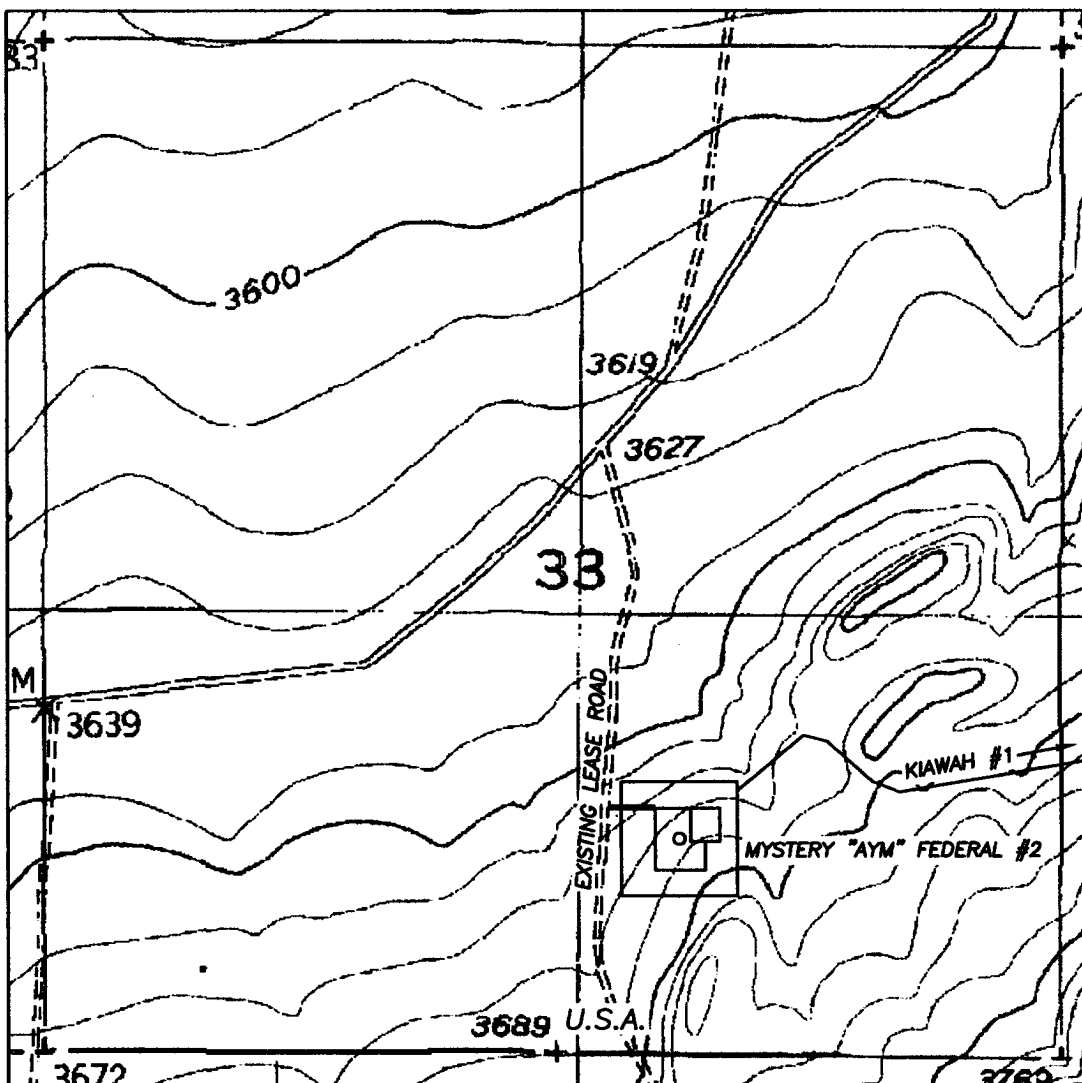
2/9/05


Regulatory Agent



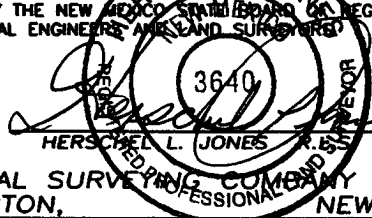
Yates Petroleum Corporation
Mystery AYM Federal #2
1150' FSL and 1980' FEL
Section 33, T20S-R25E
Eddy County, New Mexico

33, TOWNSHIP 20 SOUTH, RANGE 25 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



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

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

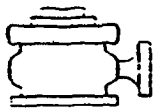


GENERAL SURVEYING COMPANY P.O. BOX 1928
LOVINGTON, NEW MEXICO 88260

YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES MYSTERY "AYM" FEDERAL #2 WELL, LOCATED IN SECTION 33, TOWNSHIP 20 SOUTH, RANGE 25 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

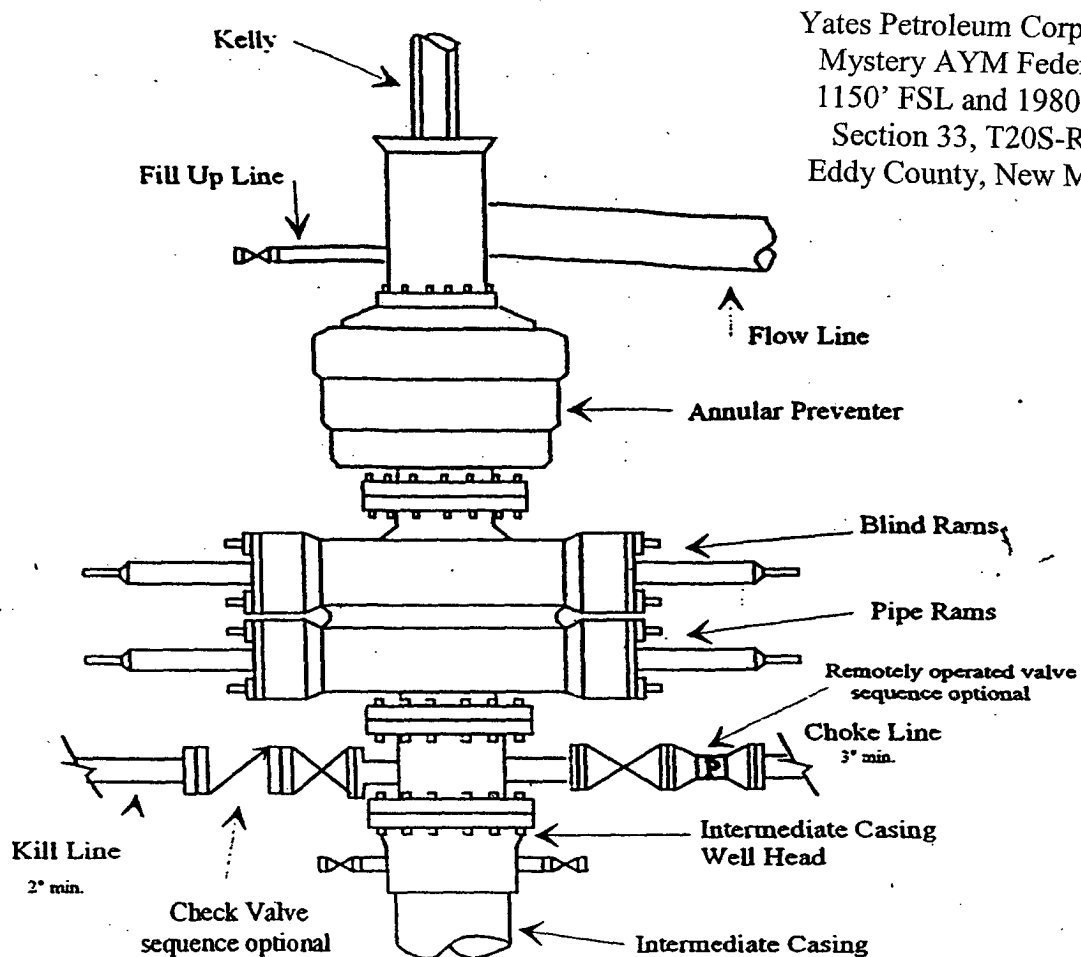
Survey Date: 1/28/2005	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 1/29/05	Scale 1" = 1000' MYSTERY 2



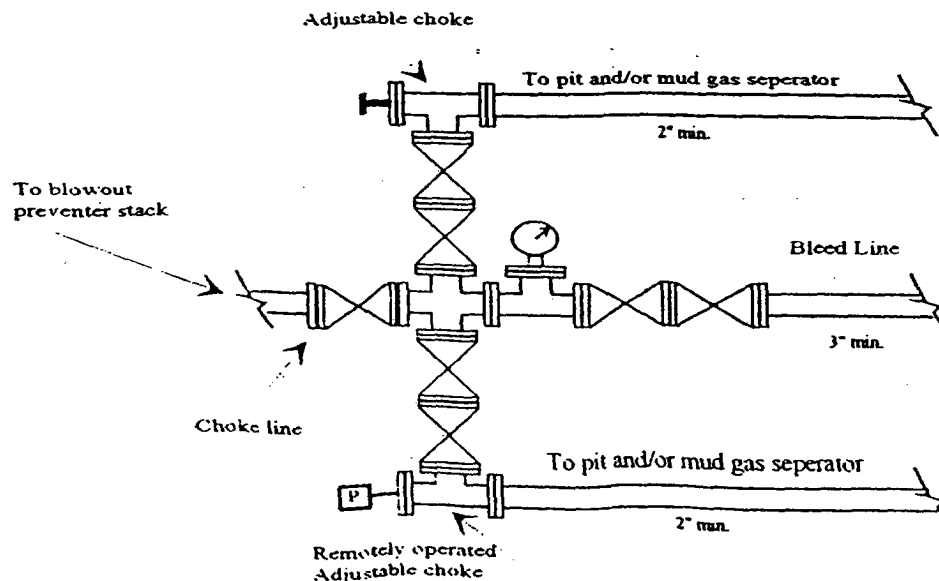
Yates Petroleum Corporation

BOP-4

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



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



MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

February 10, 2005

To: Bryan Arant
From: Cy Cowan

Re: Yates Petroleum Corporation
Mystery AYM Federal #2
H2S Contingency Plan

Sources at Yates Petroleum Corporation have relayed information to me that they believe there will not be enough H2S found from the surface through the Morrow Formation to meet the OCD's minimum requirements for the submission of a contingency plan per Rule 118.

Thank you,

YATES PETROLEUM CORPORATION

Cy Cowan
Regulatory Agent