

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

BLM

Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

NOV 16 2005

000-ARTSOM

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OMB No. 1004-0136
Expires November 30, 2000

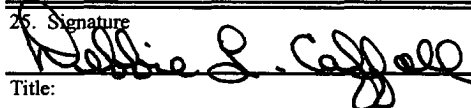
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-14983
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Not Applicable
2. Name of Operator Yates Petroleum Corporation (25575)		7. If Unit or CA Agreement, Name and No. 12575
3A. Address 105 South Fourth Street Artesia, New Mexico 88210	3b. Phone No. (include area code) (505) 748-1471 9745	8. Lease Name and Well No. Monaghan "QY" Federal #16
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 660' FNL and 1980' FEL, Unit B At proposed prod. Zone same as above		9. API Well No. 30-005-63787
14. Distance in miles and direction from nearest town or post office* Approximately twenty-five (25) miles northeast of Roswell, New Mexico		10. Field and Pool, or Exploratory Wildcat Precambrian
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 2560	11. Sec., T., R., M., or Blk, and Survey or Area Section 21, T5S-R24E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 5230'	12. County or Parish Chaves County
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3988' GL	22. Approximate date work will start* ASAP	13. State NM
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 an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office. | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) Debbie L. Caffall	Date 9/20/2005
Title: Regulatory Technician / Land Department		
Approved by (Signature) /S/LARRY D. BRAY	Name (Printed/Typed) /S/LARRY D. BRAY	Date NOV 14 2005
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

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

District II
811 South First, 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 August 15, 2000

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 APT Number		2 Pool Code		3 Pool Name Wildcat PreCambrian	
4 Property Code		5 Property Name Monaghan QY Federal			6 Well Number 16
7 OGRID No. 025575		8 Operator Name Yates Petroleum Corporation			9 Elevation 3988

10 Surface Location

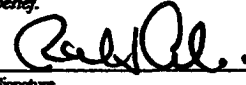
UL or lot no. B	Section 21	Township 5S	Range 24E	Lot Ida	Feet from the 660	North/South line North	Feet from the 1980	East/West line East	County Chaves
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres 320.00	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

6	NM-14983	660'	1980'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Robert Asher Printed Name Regulatory Agent Title 09/08/2003 Date
				18 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. REFER TO ORIGINAL PLAT Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

DISTRICT I
P.O. Box 1900, Hobbs, NM 88240

DISTRICT II
P.O. Drawer 100, Artesia, NM 88210

DISTRICT III
1000 Elie Brancie Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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 Wildcat PreCambrian
Property Code	Property Name MONAGHAN "QY" FEDERAL	Well Number 16
OCRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3988

Surface Location

UL or lot No. B	Section 21	Township 5S	Range 24E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 1980	East/West line EAST	County CHAVES
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres 320.00	Joint or Infill	Consolidation Code	Order No.
---------------------------	-----------------	--------------------	-----------

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

<p>NM-14983</p>				<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein to true and complete to the best of my knowledge and belief.</p> <p><i>Pat Perez</i> Signature Pat Perez Printed Name Regulatory Agent Title 7/12/01 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>1/12/2000 Date Surveyed Signature of Surveyor Professional Surveyor H. SCHILLER JONES NEW MEXICO 3640 Certificate No. H. Schiller Jones RLS 3640 MONAGHAN 16 DISK 22 GENERAL SURVEYING COMPANY</p>

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

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

well file
Form C-144
March 12, 2004

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@ypcnm.com

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

Facility or well name: Monaghan QY Federal #16 API #: 30-005-63433 U/L or Qtr/Qtr NWNE Sec 21 T 5S R 24E

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

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: 10/28/2004

Printed Name/Title Robert Asher/Regulatory Agent

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.

App

Date: NOV 5 2004

Printed Name/Title

Signature

YATES PETROLEUM CORPORATION
Monaghan "QY" Fed. #16
660' FNL and 1980' FEL
Section 21,-T5S-R24E
Chaves County, New Mexico

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

San Andres	590'
Glorieta	1425'
Yeso	1550'
Tubb	2920'
Abo	3495'
Wolfcamp	4345'
Basement	5130'
TD	5230'

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

Water: 150'-200'
Oil or Gas: All potential zones.

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>
14 3/4"	11 3/4"	42#	H-40	ST&C	0-900'
11	8 5/8"*	24#	J-55	ST&C	0-1500'
7 7/8"	5 1/2"	15.5#	J-55	ST&C	0-5230'

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

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8
2. Yates Petroleum Corporation requests that a variance be granted in requiring the casing and BOPE to be tested to 2000 PSI to testing the casing and BOPE to 1000 PSI. The rig pumps will be used to test the casing and BOPE. Rig pumps used in this area cannot safely test above 1000 PSI. We would have to go to the greater expense of hiring an independent service to do the testing. Also, the maximum shut-in bottom hole pressure is 1100 PSI. Pressure at the surface is much less. Most of the time the Abo formation requires treatment before it flows.

A. CEMENTING PROGRAM:

Surface Casing: 200 sx Lite "C" (YLD 2.0 WT 12.5). Tail in with 200 sx "C"
+ 2% CaCL2 (YLD 1.32 WT 15.6).

Intermediate Casing: 250 sx Lite (YLD 2.0 WT 12.0) Tail with 200 sx Class C+2%
CACL2 (YLD 1.32 WT 14.8)

Production Casing: 350 sx Super "C" (YLD 1.67 WT 13.0). TOC 3100'.

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	8.4 - 9.0	29	N/C
1500'-3470'	Brine	10 -10.2	28	N/C
3470'-5230'	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 TD –Surf csg; with GR/CNL 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: 5230'	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
YATES PETROLEUM CORPORATION
Monaghan "QY" Fed. #16
660' FNL and 1980' FEL
Section 21,-T5S-R24E
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:

Drive North of Roswell on HWY 285 approx. 25 miles to Dona Ana Road & turn right. Drive approx. 10.5 miles (approx. 1000' past cattleguard & Stancel Corrals) to lease road on the left (North) side (Myco Sign on Road) Turn left & follow road past Stancel #1 location continue on road past Stancel #2. Follow road to the right – past Frank "SR" Com. #1 & past Huggins Fed. #1 – continue on rd. approx. 0.2 of a mile & turn left (West) at intersection & drive approx. 0.1 of a mile & turn left (SW) on lease road at intersection. Follow road south approx. 1 mile & turn right at intersection. Drive approx. 0.2 of a mile & turn left (South). Just before Grynberg 16 #2 well. Drive south approx. 0.2 of a mile to the Monaghan "QY" Fed. #4 where the access road is staked on the left (East) side of the road going east approx. 1000' to the southwest corner of the location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 1000' in length from the point of origin to the southwest corner of the drilling pad. The road will lie in a west to east direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. 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 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:

Yates Petroleum Corporation wishes to run a 1100' on lease 2" X-42 buried steel natural gas pipeline to connect the Monaghan "QY" Fed. #16 well and tie into existing pipeline connection the Monaghan "QY" Fed. #4

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 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:

Shannon Kaiser
Buna Jean Glenn
P.O. Box 56
Pep, NM 88126
An Agreement has been reached with the landowner
Concerning surface use in drilling this well.

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:
Robert Asher, Permit 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

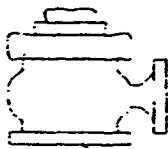
14. CERTIFICATION:

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.

Debbie S. Gaffall Regulatory Technician

for Robert Asher
Regulatory Agent

09/20/2005

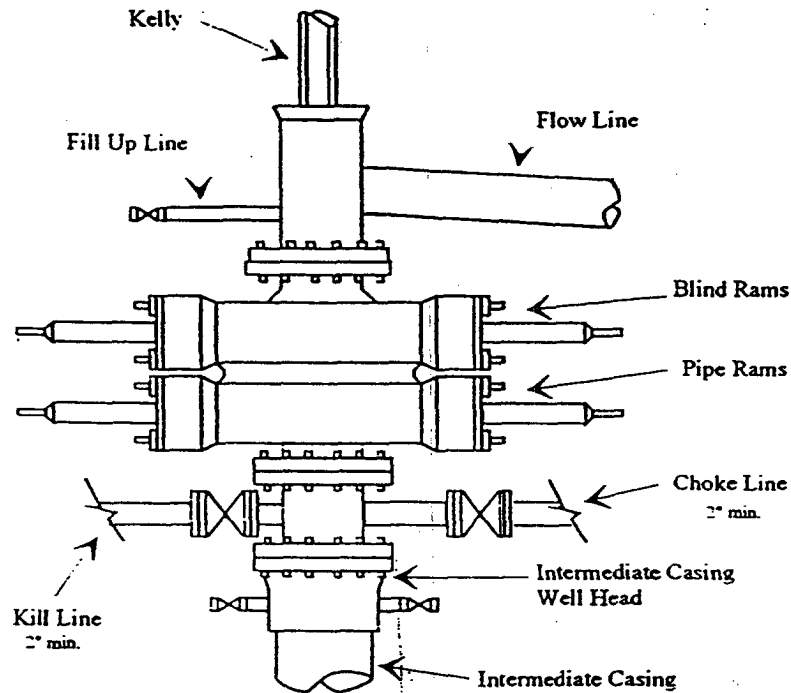


Yates Petroleum Corporation

BOP-2

Typical 2,000 psi Pressure System Schematic Double Ram Preventer Stack

Yates Petroleum Corporation
Monaghan "QY" Federal #16
660' FNL and 1980' FEL
Section 21-T5S-R24E
Chaves County, New Mexico
NM-14983
Exhibit "B"



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

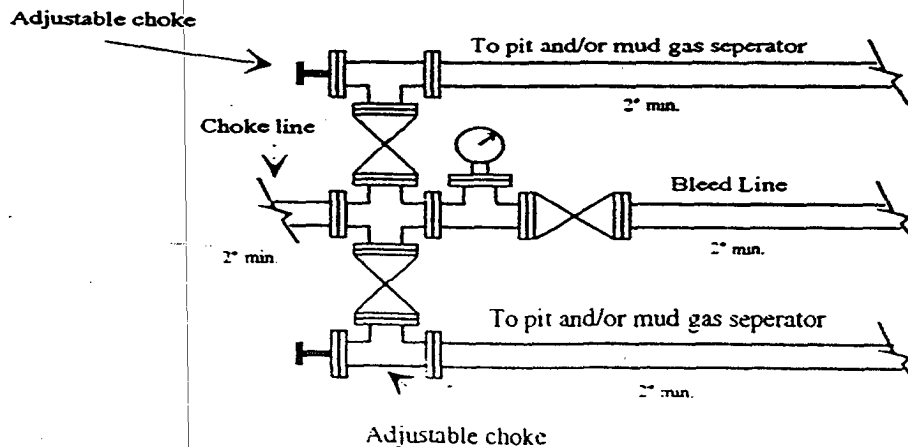


EXHIBIT A

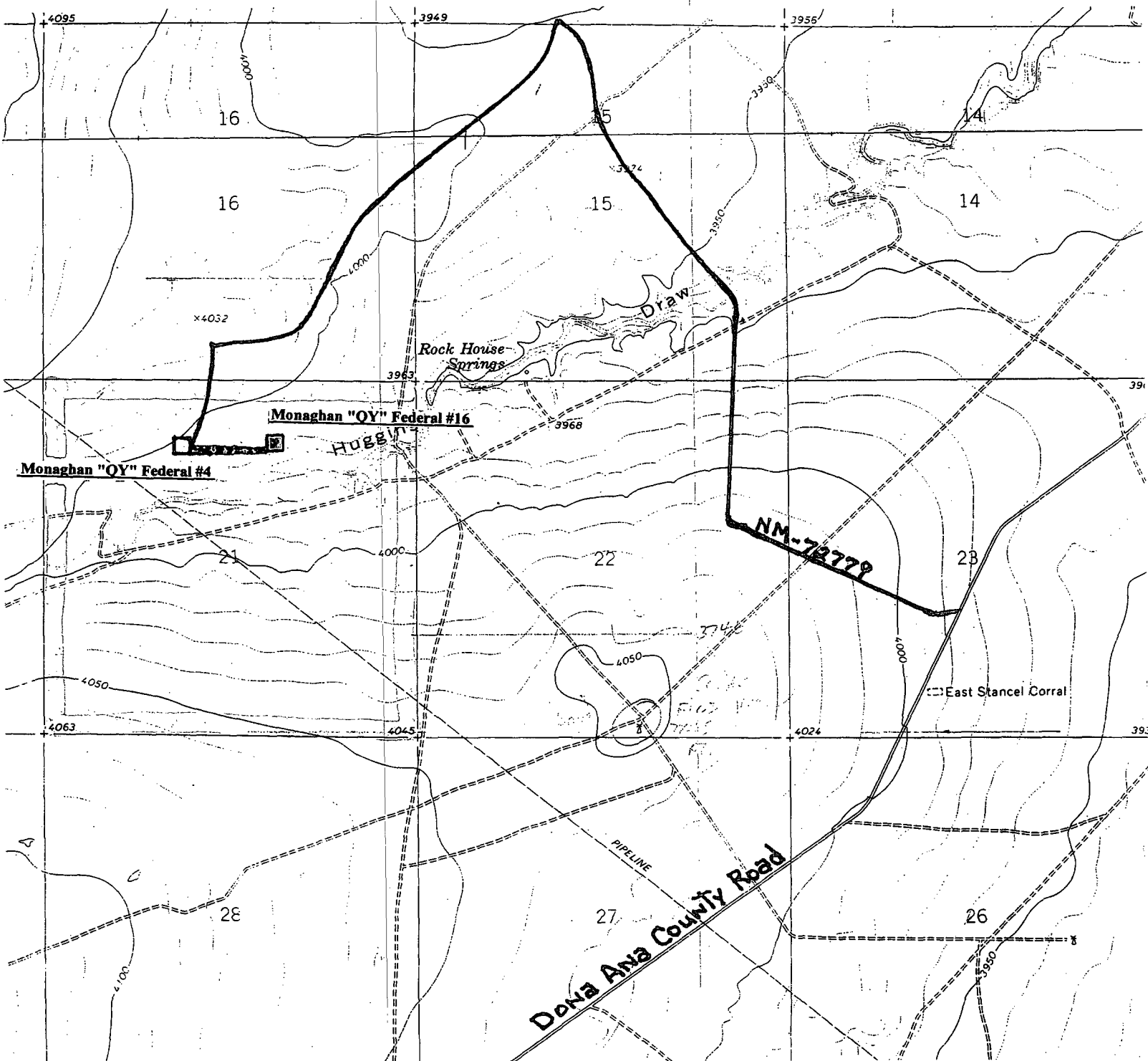
Operator: Yates Petroleum Corporation

BLM Serial Number: NM-14983

Well Name & NO.: Monaghan "QY" Federal #16

Location: Section 21, T. 5 S., R. 24 E.

660' FNL & 1980' FEL, Chaves County, N.M.



WELL DRILLING REQUIREMENTS

3 of 5 pages

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 8¾ 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.

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 8¾ 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 200 feet above the Glorieta formation.

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.

C. 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.