

C/SF

N. M. Oil Cons. Division  
811 S. 1ST ST.  
ARTESIA, NM 88210-2834

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

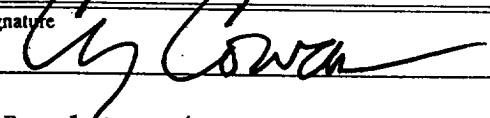
APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-33944
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator YATES PETROLEUM CORPORATION		7. If Unit or CA Agreement, Name and No. 12437
3a. Address 105 South Fourth St., Artesia, NM		8. Lease Name and Well No. Shelly Federal #2
3b. Phone No. (include area code) 505-748-1471		9. API Well No. 30 #005 63412
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 660' FSL & 1980' FEL At proposed prod. zone Same as above UNIT 0		10. Field and Pool, or Exploratory Wildcat Percambrian
11. Sec., T., R., M., or Blk. and Survey or Area Section 23-T9S-R24E		12. County or Parish Chaves County
13. State NM		14. Distance in miles and direction from nearest town or post office* ROSWELL CONTROLLED WATER BASIN
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of Acres in lease 800.00	17. Spacing Unit dedicated to this well S/2 320.00
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 5085'	20. BLM/BIA Bond No. on file 585997
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3572' GL	22. Approximate date work will start* ASAP	23. Estimated duration 15 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:

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

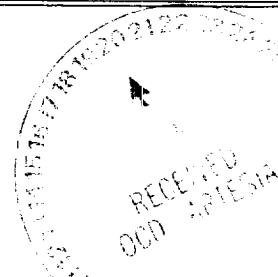
25. Signature 	Name (Printed/Typed) Cy Cowan	Date 6-16-00
Title Regulatory Agent		
Approved by (Signature) /S/LARRY D. BRAY	Name (Printed/Typed) Larry D. Bray	Date AUG 17 2001
Title Assistant Field Manager, Lands And Minerals	Office Roswell Field Office	

Application approval does not warrant or certify the 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)



☐ **AMENDED REPORT**

# WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
			Wildcat Percambrian
Property Code	Property Name		Well Number
	SHELLY FEDERAL		2
OGRID No.	Operator Name		Elevation
025575	YATES PETROLEUM CORPORATION		3572

### Surface Location

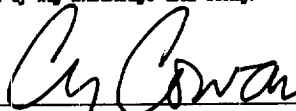
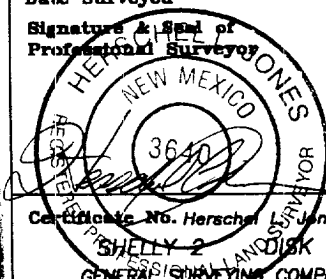
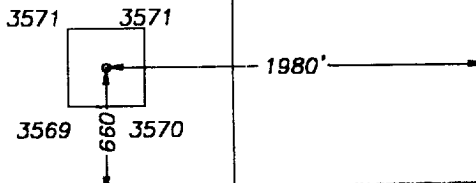
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	23	9S	24E		660	SOUTH	1980	EAST	CHAVES

## Bottom Hole Location If Different From Surface

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

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

				<b>OPERATOR CERTIFICATION</b>  <i>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</i>   _____ Signature Cy Cowan _____ Printed Name Regulatory Agent _____ Title 6-7-00 _____ Date
				<b>SURVEYOR CERTIFICATION</b>  <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  5/30/2000 _____ Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. Herschel Jones RLS 3640 SHelly 2 DISK 29 GENERAL SURVEYING COMPANY
NM-33944				
				

**YATES PETROLEUM CORPORATION  
SHELLY FEDERAL #2  
660' FSL AND 1980' FEL  
Section 23,-T9S-R24E  
Chaves County, New Mexico**

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

San Andres	625'
Glorieta	1260'
Yeso	1385'
Tubb	2810'
Abo	3550'
Basement Granite	4985'
TD	5085'

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

Water:	200'-300'
Oil or Gas:	3550' to 5085'

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 2000# BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New)

	<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
WITNESS	12 1/4"	8 5/8"	24#	J55	ST&C	0-900'	900'
	7 7/8"	4 1/2"	15.5#	J55	ST&C	0-5085'	5085'

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.80
2. A 2,000 psi BOP will be nipped up on the 8 5/8" casing and tested to 500 psi. YPC requests a variance be granted in requiring the casing and BOPE to be tested to 2000 psi to testing the casing and BOPE to 500 psi. The rig pumps will be used to test the casing and BOPE. Rig pumps used in this area cannot safely test above 500 psi. We would have to go to the greater expense of hiring an independent service company to do the testing. Also, the bottom hole pressure in this field is proven to be near 500 psi due to depletion. A shut in surface pressure would be less than 500 psi. The Abo formation usually requires stimulation before it flows. We feel that a 500 psi test will demonstrate that the BOPE is functioning properly, and in the unlikely event of a gas influx that the BOPE would be sufficient to control the well."

## Shelly Federal #2

### Page 2

#### B. CEMENTING PROGRAM:

Surface casing: Cement with 250 sx Lite "C" (YLD 2.0, WT. 12.5). Tail in with 200 sx "C" + 2% CaCl<sub>2</sub> (YLD 1.33, WT. 14.8).

Production Casing: TOC 2800'. Cement with 300 sx "C" Plus additives (YLD 1.69 WT 13.0).

#### 5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
Spud - 900'	FW Gel/Paper/LCM	8.6-9.6	32-36	N/C
900' - 3370'	Cut Brine/Brine	9.0-10.2	28	N/C
3370'- TD	Salt Gel/Starch/Oil/LCM	9.0-9.8	34-45	<10cc

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 surface casing to TD.

Logging: Platform Express: CNL/LDT with NGT TD-to surface; GR/CNL to surface; DLL/MSFL TD-surface casing; BHC Sonic TD-surface casing.

Coring: None anticipated.

DST's: None anticipated.

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

Anticipated BHP:

From: 0 To: 900' 975' Anticipated Max. BHP: 400 PSI  
From: 900' To: TD Anticipated Max. BHP: 2400 PSI

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: None

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

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**  
**Shelly Federal #2**  
**660' FSL & 1980' FEL**  
**Section 23,T9S-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 21 miles northeast of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

**DIRECTIONS:**

From the over pass in Roswell, go east on Highway 70 for 3 miles. Turn north on Capitan Road and go approximately 0.4 of a mile to a fork in the road with Capitan Road and two track road going north. Take the two track and go approximately 300' to start of the new road.

**2. PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately 300' in length from the point of origin to the southwest corner of the drilling pad. The road will lie in a southwest to Northeast 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. The new road will be bladed with drainage on both sides. No traffic turnouts will be built.
- D. The route of the roads in the area are 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 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:

The dirt contractor will be responsible for finding any surfacing materials needed and will obtain any permits that may be needed for construction.

7. METHODS OF HANDLING WASTE DISPOSAL:

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

8. ANCILLARY FACILITIES: None

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, and the access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' x 400' area has been staked and flagged.
- D. Pad will be rotated with the pits to the north.

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: Federal surface administered by Bureau of Land Management, Roswell, New Mexico.

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:

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:

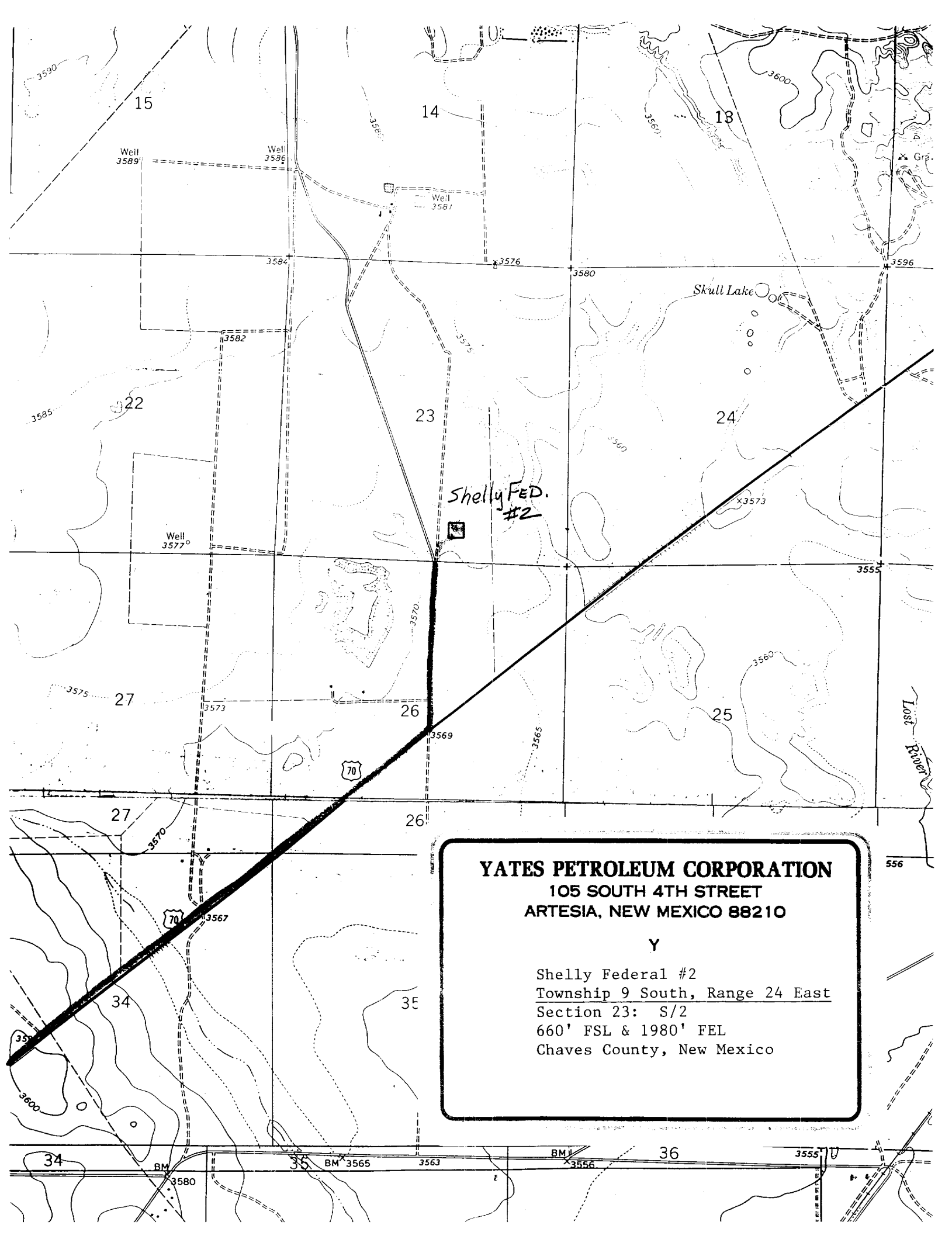
Brian Collins, Operations Manager  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

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.

6/16/00

  
Regulatory Agent



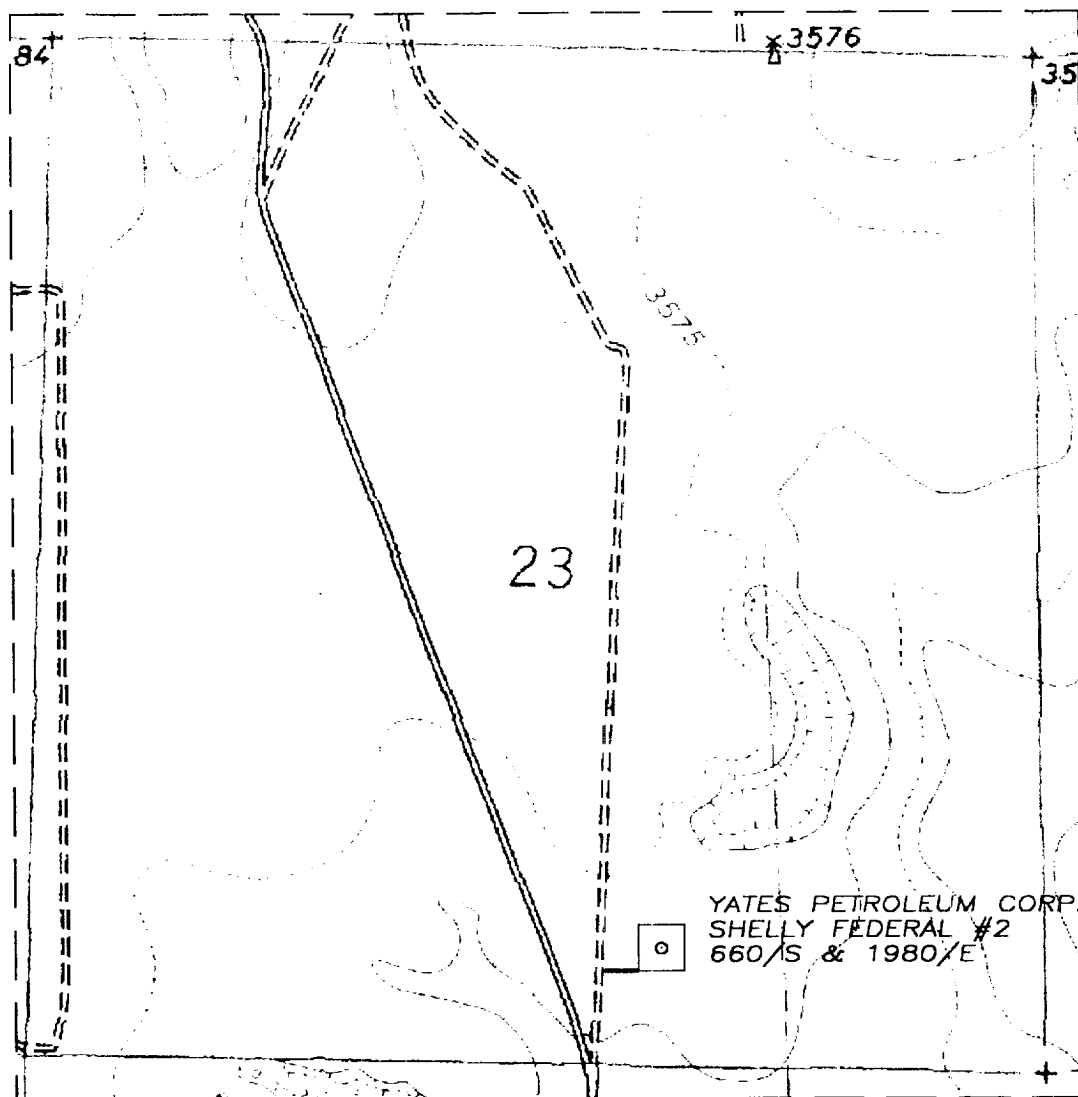
**YATES PETROLEUM CORPORATION**  
105 SOUTH 4TH STREET  
ARTESIA, NEW MEXICO 88210

**Y**

Shelly Federal #2  
Township 9 South, Range 24 East  
Section 23: S/2  
660' FSL & 1980' FEL  
Chaves County, New Mexico



YATES PETROLEUM CORPORATION SHELLY FEDERAL #2, 660/S & 1980/E  
SECTION 23, TOWNSHIP 9 SOUTH, RANGE 24 EAST, NMPM, CHAVES COUNTY, NEW MEXICO.



50' 0 50' 100'  
Scale 1" = 50'

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 L. JONES, P.L.S. No. 3640

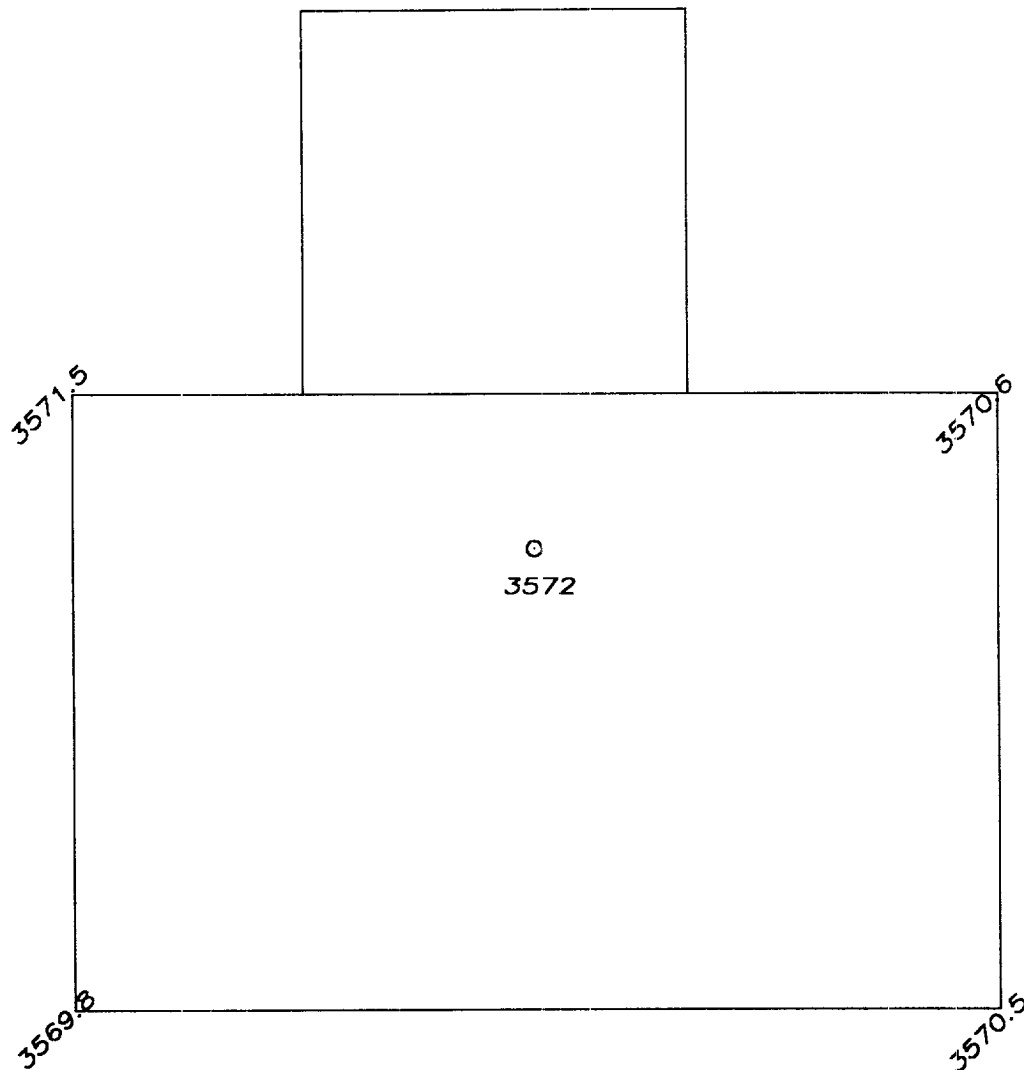
GENERAL SURVEYING COMPANY P.O. BOX 1928  
LOVINGTON, NEW MEXICO 88260

YATES PETROLEUM CORP.

YATES SHELLY FEDERAL #2 LOCATED 660/S  
AND 1980/E OF SECTION 23, TOWNSHIP 9  
SOUTH, RANGE 24 EAST, NMPM, CHAVES  
COUNTY, NEW MEXICO.

Survey Date: 5/30/2000	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 5/30/00	Scale 1" = 50' SHELLY 2

YATES PETROLEUM CORPORATION SHELLY FEDERAL #2, 660/S & 1980/E  
SECTION 23, TOWNSHIP 9 SOUTH, RANGE 24 EAST, NMPM, CHAVES COUNTY, NEW MEXICO.



50' 0 50' 100'  
Scale 1" = 50'

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THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY  
DIRECTION AND THE PLAN 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 L. JONES R.L.S. No. 3640

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

YATES PETROLEUM CORP.

WELL PAD PLAN VIEW ON THE YATES SHELLY  
FEDERAL #2 LOCATED 660/S AND 1980/E OF  
SECTION 23, TOWNSHIP 9 SOUTH, RANGE 24  
EAST, NMPM, CHAVES COUNTY, NEW MEXICO.

Survey Date: 5/30/2000	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 5/30/00	Scale 1" = 50' SHELLY 2

# YATES PETROLEUM CORPORATION

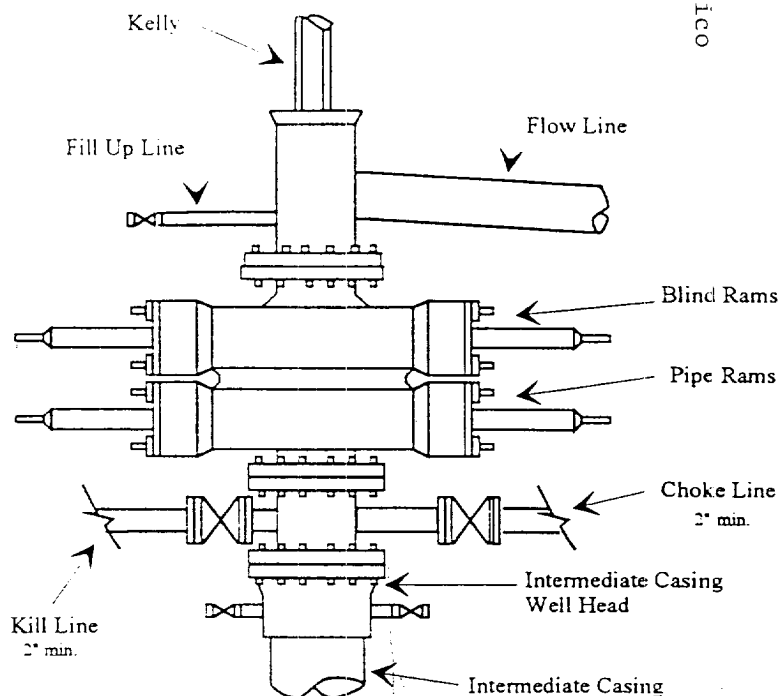
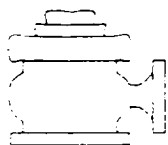
105 SOUTH 4TH STREET  
ARTESIA, NEW MEXICO 88210

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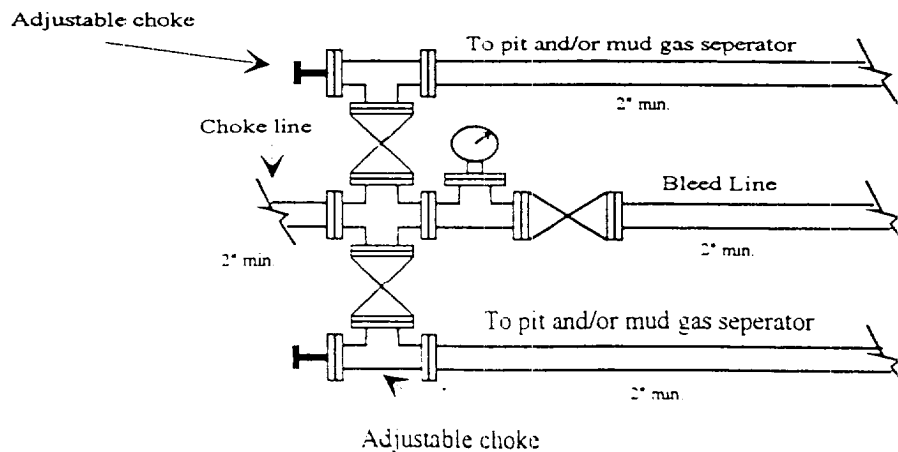
Shelly Federal #2  
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## Yates Petroleum Corporation

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



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



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