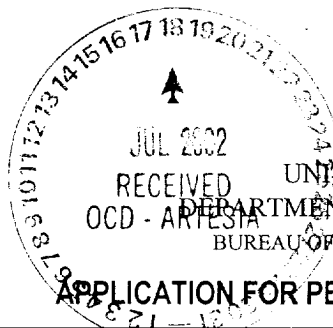


N.M. Oil Cons. Div-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

C/S/

Form 3160-3
(August 1999)



0
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.

NM-2359

6. If Indian, Allottee or Tribe Name

Not Applicable

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

12759 Not Applicable

8. Lease Name and Well No.

Sorenson "IB" Federal #5

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator **25575 Undes.**

Yates Petroleum Corporation Cottonwood Ranch, Penn (G)

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

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

9. API Well No.

30-005-63496

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

At surface **1000' FSL and 660' FWL, Unit M**
At proposed prod. Zone **same as above**

10. Field and Pool, or Exploratory

Wildeat Precambrian

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

Section 6, T7S-R26E

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

Approximately thirty (30) miles northeast of Roswell, New Mexico

12. County or Parish

Chaves County

13. State

NM

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

470.08

17. Spacing Unit dedicated to this well

320 S/2

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

19. Proposed Depth

5270'

20. BLM/BIA Bond No. on file

NM-2811

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

3689' GL

22. Approximate date work will start*

ASAP

23. Estimated duration

30 Days

24. Attachment **ROSWell CONTROLLED WATER BASIN**

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 **Clifton R. May**
Title: **Regulatory Agent**

Name (Printed/Typed)
Clifton R. May

Date
3/12/02

Approved by (Signature)
(ORIG. SGD.) ARMANDO A. LOPEZ

Name (Printed/Typed)
(ORIG. SGD.) ARMANDO A. LOPEZ

Date
JUL 17 2002

Title **Acting 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)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

RECEIVED

2002 MAR 13 PM 2:41

BUREAU OF LAND MANAGEMENT
ROSWELL OFFICE

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

Revised March 17, 1959
Instruction on back
appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		Wildcat Precambrian
Property Code	Property Name	Well Number
	SORENSEN "IB" FEDERAL	5
OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORPORATION	3689

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	6	7S	26E		1000	SOUTH	660	WEST	CHAVES

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									

				<p>OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><u>Clifton R. May</u> Signature</p> <p><u>Clifton R. May</u> Printed Name</p> <p><u>Regulatory Agent</u> Title</p> <p><u>3/12/02</u> Date</p>
				<p>SURVEYOR CERTIFICATION</p> <p><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></p> <p><u>2/13/2002</u> Date Surveyed</p>
<p>N.33°43'56.3" W.104°20'35.7"</p>	<p>NM-2359</p>			<p><u>HERSCHEL JONES</u> Signature of Professional Surveyor</p> <p><u>3640</u> Certificate No.</p> <p><u>HERSCHEL JONES</u> Professional Surveyor</p> <p><u>GENERAL SURVEYING COMPANY</u></p>

- YATES PETROLEUM CORPORATION
Sorenson "IB" Federal #5
 1000' FSL and 660' FWL
 Section 6-T7S-R26E
 Chaves County, New Mexico

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

San Andres	475'
Glorieta	1475'
Yeso	1625'
Tubb	3050'
Abo	3675'
Wolfcamp	4460'
Cisco	4940'
Penn Clastics	5020'
Basement - Granite	5120'
TD	5270'

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	0-5270'

WITNESS

*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 2200 PSI and it normally requires treatment to flow. Shut-in pressure at the surface would be less than 1000 PSI. We feel that a 1000 psi test will demonstrate that the BOPE is functioning properly and in the unlikely event of a gas in flux that the BOPE would be sufficient to control the well.

B. CEMENTING PROGRAM:

Surface Casing: 350 sx Lite "C" (YLD 2.0 WT 12.5). Tail in with 200 sx "C"
+ 2% CaCL₂ (YLD 1.32 WT 15.6).

WITNESS

Intermediate Casing: 400 sx Lite (YLD 2.0 WT 12.0). Tail in with 250 sx Class C+2%
CaCL₂ (YLD 1.32 WT 14.8).

Production Casing: 500 sx Pecos Valley Lite (YLD 1.34 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 - 9.6	32-36	N/C
900'-3680'	Cut Brine/Brine	9.0 - 10.2	28	N/C
3680'-5270'	Salt Gel/Starch	9.3 - 10.2	32-40	<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' 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: 5280'	Anticipated Max. BHP: 2200 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
Sorenson "IB" Federal #5
1000' FSL and 660' FWL
Section 6-T7S-R26E
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 25 miles northeast of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Roswell, NM on Highway 285 to Red Bluff Road. Turn east on Red Bluff Rd. and go approx. 12.2 miles to Cottonwood Rd. Go left on Cottonwood Road for 2.1 miles and the new road will start here and go to the SE corner of the pad. Turn north and go approx. 3.3 miles. The new road will start here and go west to the SE corner of the pad.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 200' in length from the point of origin to the southeast corner of the drilling pad. The road will lie in a northeast to southwest 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 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 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 landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: None

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- 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: Private Surface
Michael Hillman
Hillman Family Trust
HCR Box 1108-A
Roswell, NM 88202-2148

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.

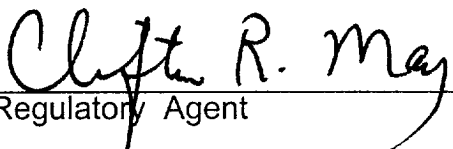
13. OPERATOR'S REPRESENTATIVE:

- | | |
|--|---|
| A. Through A.P.D. Approval:
Clifton R. May, 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.

3/12/02


Regulatory Agent

YATES PETROLEUM CORPORATION

Sorenson "IB" Federal #5

1000' FSL & 660" FWL

Section 6-T7S-R26E

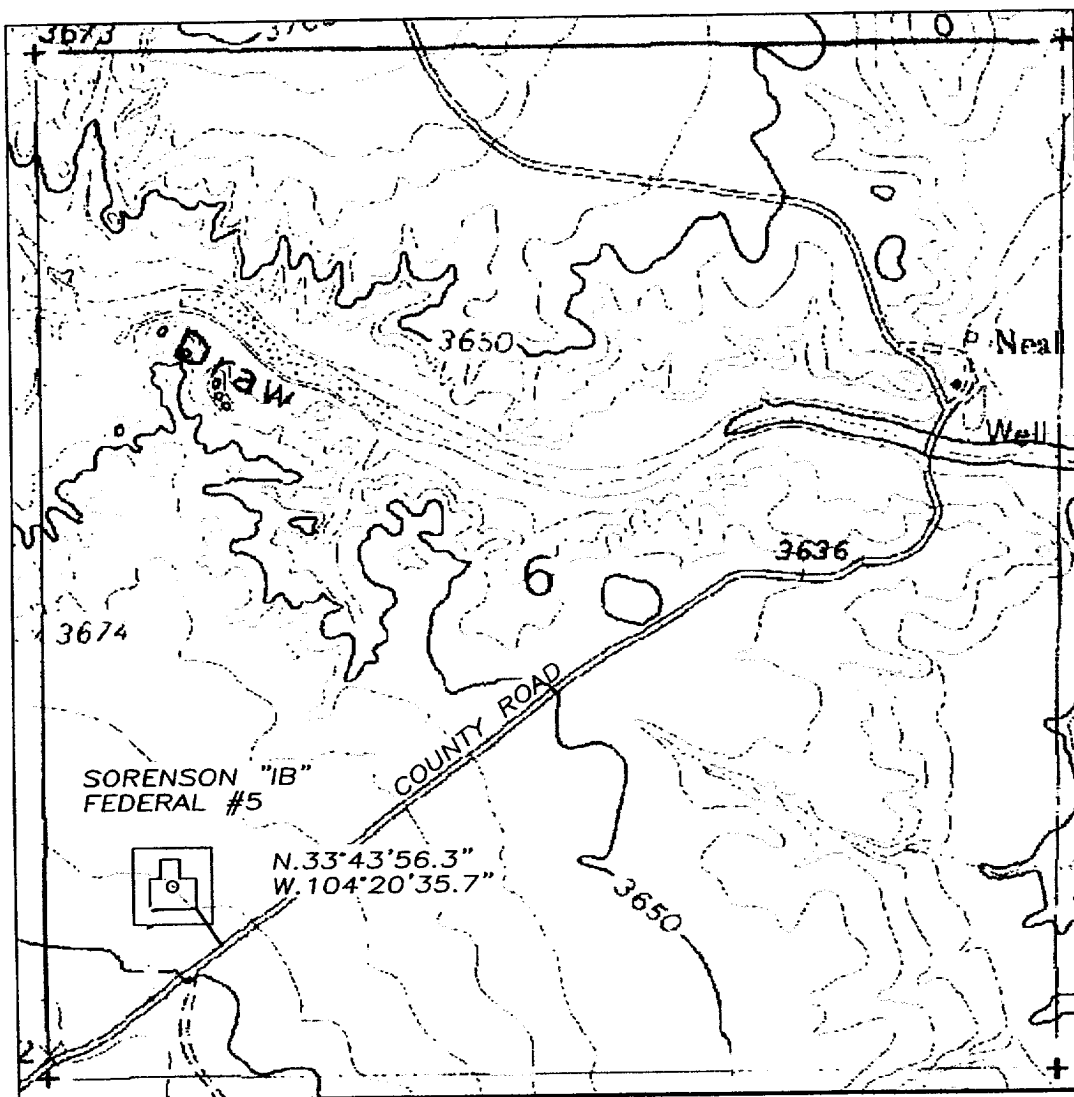
Chaves County, New Mexico

Lease No. NM-2359

Cottonwood Road

Yates Petroleum Corporation
Sorenson "IB" Federal #5
1000' FSL & 660" FWL
Section 6-T7S-R26E
Chaves County, New Mexico
Exhibit "A"

EIGHTMILE DRAW QUADRANGLE



Yates Petroleum Corporation
 Sorenson "IB" Federal #5
 1000' FSL & 660' FWL
 Section 6-T7S-R26E
 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.

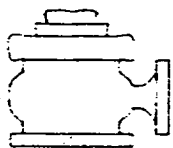
[Signature]
 HERSCHEL L. JONES, P.L.S. No. 3640

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

YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES SORENSON
 "IB" FEDERAL #5 LOCATED IN SECTION 6,
 TOWNSHIP 7 SOUTH, RANGE 26 EAST, NMPM,
 CHAVES COUNTY, NEW MEXICO.

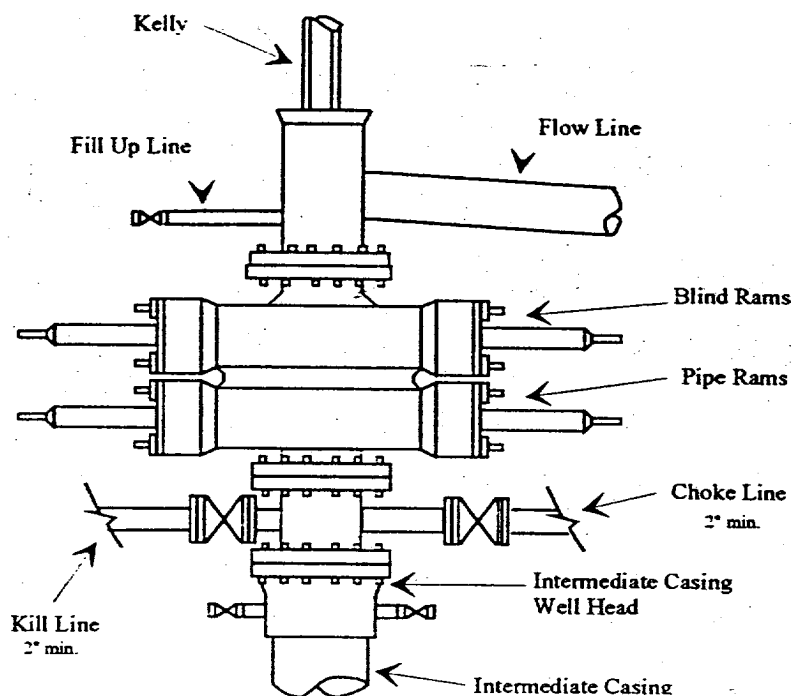
Survey Date: 2/13/2002	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 2/14/02	Scale 1" = 1000' SORNESON 5



Yates Petroleum Corporation

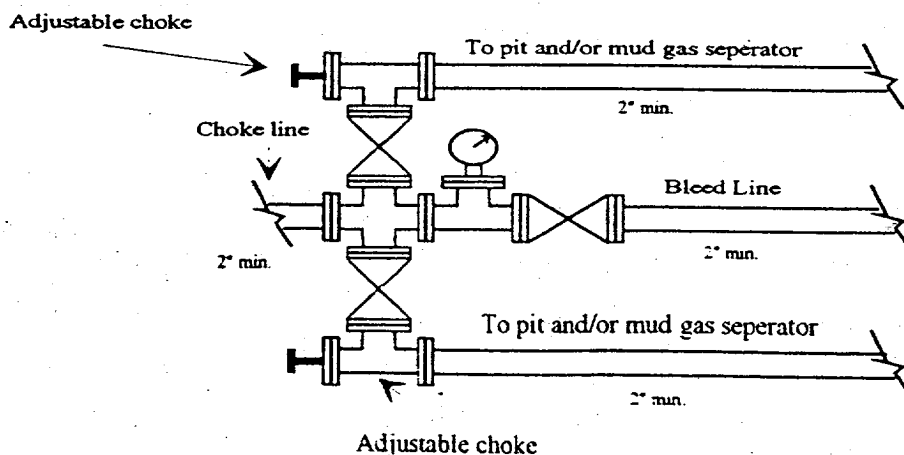
BOP-2

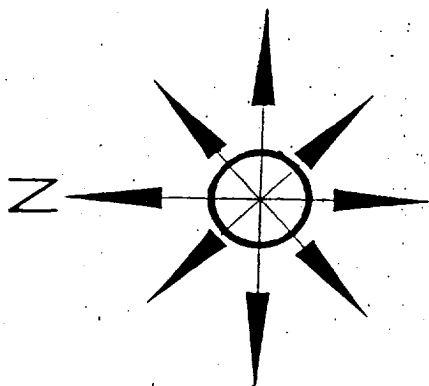
Typical 2,000 psi Pressure System Schematic Double Ram Preventer Stack



Yates Petroleum Corporation
Sorenson "IB" Federal #5
1000' FSL & 660' FWL
Section 6-T7S-R26E
Chaves County, New Mexico
Exhibit "B"

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





Yates Petroleum Corporation

Sorenson "IB" Federal #5

1000' FSL & 660" FWL

Section 6-T7S-R26E

Chaves County, New Mexico

Lease No. NM-2359

Yates Petroleum Corporation

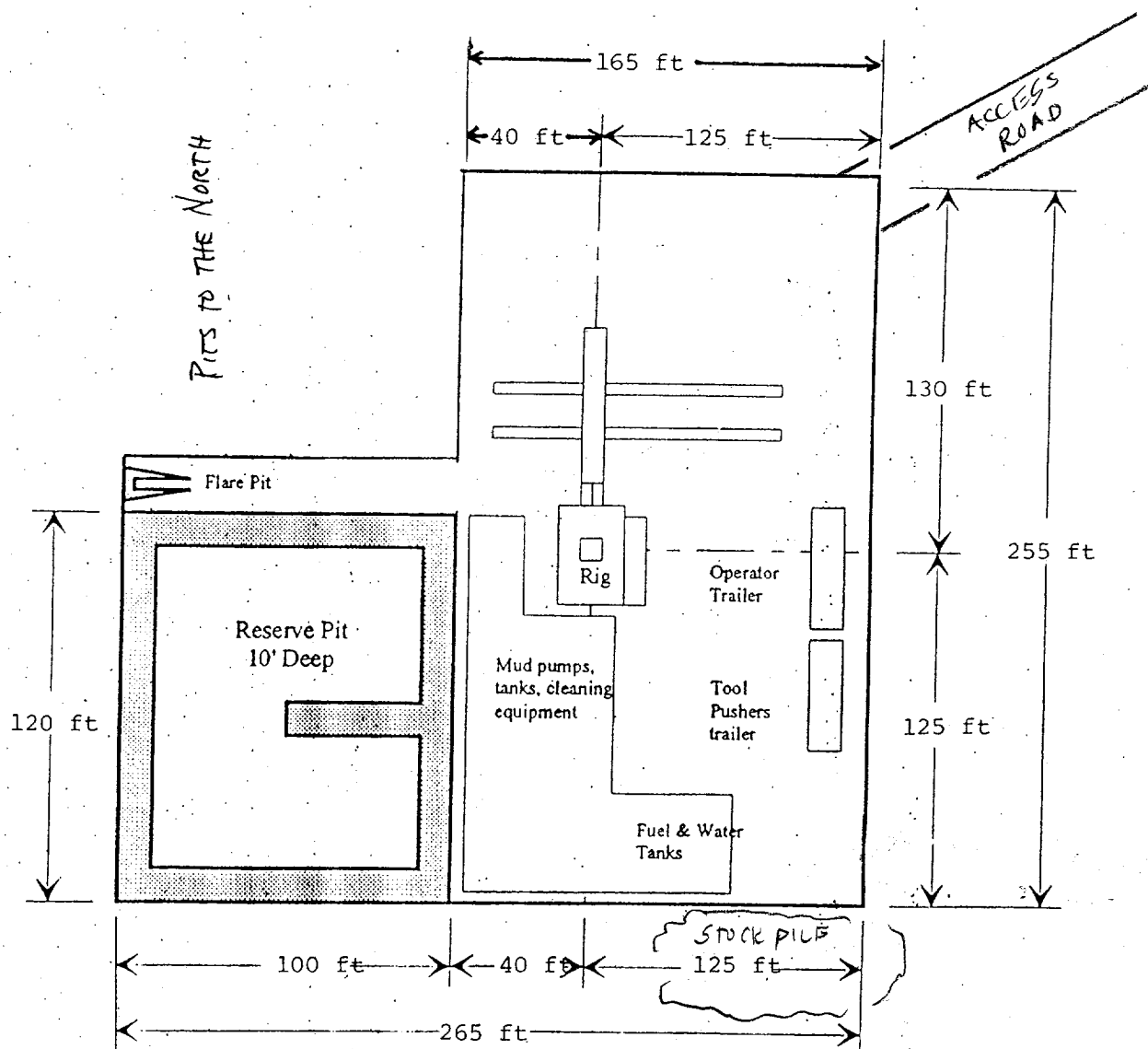
Sorenson "IB" Federal #5

1000' FSL & 660" FWL

Section 6-T7S-R26E

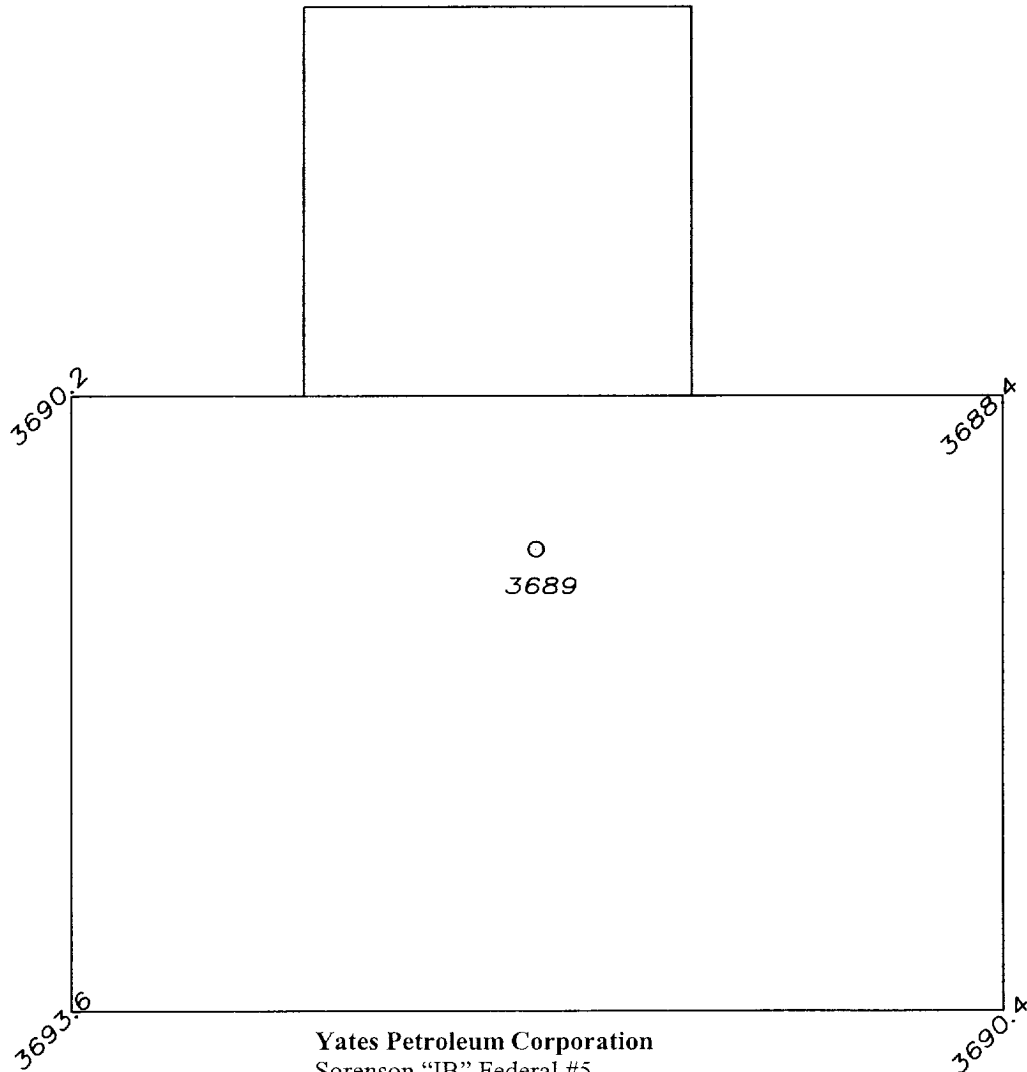
Chaves County, New Mexico

Exhibit "C"



Distance from Well
Head to Reserve Pit
will vary between rigs

YATES PETROLEUM CORPORATION SORENSON "IB" FEDERAL #5
1000'/S & 660'/W, SECTION 6, TOWNSHIP 7 SOUTH, RANGE 26 EAST, NMPM, CHAVES
COUNTY, NEW MEXICO.



Yates Petroleum Corporation
Sorenson "IB" Federal #5
1000' FSL & 660' FWL
Section 6-T7S-R26E
Chaves County, New Mexico
Exhibit "C-1"

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.

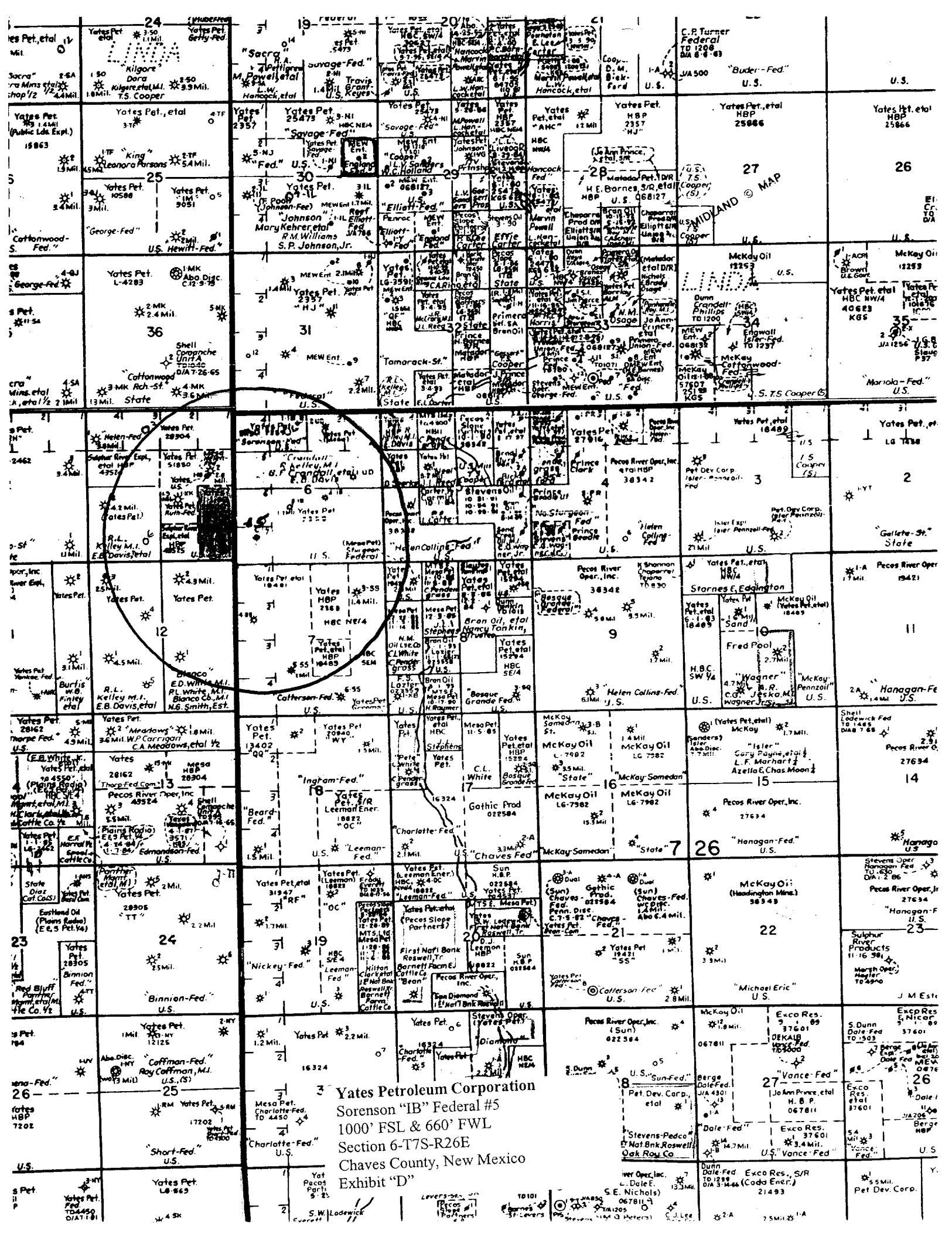
REGISTERED PROFESSIONAL LAND SURVEYOR
3640
HERSCHEL L. JONES No. 3640

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

YATES PETROLEUM CORP.

WELL PAD PLAN VIEW ON THE YATES SORENSON
"IB" FEDERAL #5 LOCATED 1000'/S AND 660'/W
OF SECTION 6, TOWNSHIP 7 SOUTH, RANGE 26
EAST, NMPM, CHAVES COUNTY, NEW MEXICO.

Survey Date: 2/13/2002	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 2/14/02	Scale 1" = 50' SORENSON5



Yates Petroleum Corporation
Sorenson "IB" Federal #5
1000' FSL & 660' FWL
Section 6-T7S-R26E
Chaves County, New Mexico
Exhibit "D"