

C15F

Form 3160-3
(August 1999)



N.M. Oil Cons. Div.
1301 W. 1st St.
Albuquerque, NM 87102

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
NM-82904

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.
11974

8. Lease Name and Well No.
Adeline ALN Federal #5

9. API Well No.
30-015-32012

10. Field and Pool, or Exploratory
Wildcat Delaware

11. Sec., T., R., M., or Blk. and Survey or Area
Section 6, T24S-R31E

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 *Sand Dunes: Delaware South*

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 **330' FNL & 990' FWL**
At proposed prod. Zone **UNIT D** **Same**

14. Distance in miles and direction from nearest town or post office*
Approximately 24 miles northeast of Loving, New Mexico. **R-111-P-POTASH**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
990'

16. No. of Acres in lease
640

17. Spacing Unit dedicated to this well
**42.15
40 NW/NW**

18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft.
1000'

19. Proposed Depth
8200'

20. BLM/BIA Bond No. on file
585997

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3403'

22. Approximate date work will start*
ASAP

23. Estimated duration
35 days

24. Attachments

Carlsbad 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. | 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 <i>Cy Cowan</i>	Name (Printed/Typed) Cy Cowan	Date 7/19/01
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Title:
Regulatory Agent

Approved by (Signature) /S/ RICHARD A. WHITLEY	Name (Printed/Typed) /S/ RICHARD A. WHITLEY	Date SEP 20 2001
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Title ASSOC. STATE DIRECTOR	Office NM STATE OFFICE
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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)

DECLARED WATER BASIN
CEMENT BEHIND THE 15 1/2"
CASING MUST BE 15 1/2"

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

5 1/2" casing must be circulated OK

RECEIVED

2001 AUG -1 PM 1:05

BUREAU OF LAND MGMT
ROSWELL OFFICE

NM STATE OFFICE

GENERAL SURVEYING COMPANY

YATES PETROLEUM CORPORATION
Adeline "ALN" Federal #5
 330' FNL & 990' FWL
 Sec. 6-T24S-R31E
 Eddy County, New Mexico

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

Rustler	477'
Top of Salt	863'
Base of Salt	3950'
Bell Canyon	4150'
Cherry Canyon	5129'
Brushy Canyon	6810'
Bone Spring Lime	8010'
TD	8200'

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

Water: Approx 150'
 Oil or Gas: Canyon 5129' and Bone Spring 8150'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3000 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)

WITNESS	<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
	17 1/2"	13 3/8"	48#	H-40	ST&C	0-550'	550'
	11"	8 5/8"	32#	J-55	ST&C	0-4100'	4100'
	7 7/8"	5 1/2"	17#	J-55	LT&C	0-100'	100'
	7 7/8"	5 1/2"	15.5#	L-80	LT&C	100'-6900'	6800'
	7 7/8"	5 1/2"	17#	J-55	LT&C	6900'-8200'	1300'

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

B. CEMENTING PROGRAM:

Surface casing: 250 sx Lite (YLD 1.96 WT.12.5) Tail in w/ 200 sx Class "C" + 2% CaCl₂ (YLD 1.34 WT 14.8).

WITNESS

Intermediate Casing: 700 sx Lite (YLD 2.5 WT 11.9); Tail in w/ 250 sx "C" w/ 2% CaCl₂ (YLD 1.34 WT. 14.8)

Production Casing: (TOC 3700') Lead w/400 sx Lite (YLD 2.0 WT 12.0) Tail in w/300 sx Super "H" (Yld 1.67 Wt 13.4). *Surface*

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-550'	FW/Native Mud	8.6-9.2	28-36	N/C
550'-4100'	Brine	10.0-10.2	28	N/C
4100'-6500'	Cut Brine	8.6-9.1	28	N/C
6500'-8200'	Cut Brine/Starch	8.6-9.1	28-32	<15cc

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: CNL/LDT TD to casing; GR w/CNL to Surface; DLL x/RXO TD to casing.

Coring: None Anticipated.

DST's: As warranted.

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

Anticipated BHP:

From: 0	TO: 550'	Anticipated Max.	BHP: 400	PSI
From: 550'	TO: 4100'	Anticipated Max.	BHP: 1790	PSI
From: 4100'	TO: 8200'	Anticipated Max.	BHP: 4100	PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None

Maximum Bottom Hole Temperature: 198 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 20 days to drill the well with completion taking another 15 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
Yates Petroleum Corporation
Adeline "ALN" Federal #5
330' FNL & 990' FWL
Sec. 6-T24S-R31E
Eddy 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 23 miles northwest of Loving, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Carlsbad on Highway 285 to Highway 31. Go east on Highway 31 to Highway 128 (Jal Highway). Go approximately 12 miles to County Road 787 (Twin Wells Road). Turn south and go approximately 2.8 miles to a cattleguard on the county road. Cross the cattleguard and immediately turn west on a two track road. The new road will start here going west.

2. PLANNED ACCESS ROAD.

- A. The proposed new access will be approximately 0.3 of a mile west then will turn south and go approx. 400' to the southeast corner of the drilling pad. The road will lie in a to west then south 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 one side. Traffic turnouts may 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 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 fresh 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 closest 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:** Amend the surface use plan to include the following, one 3" SDR Poly surface flowline and one (1) three phase 640 volt raptor proof powerline from this well to the Adeline ALN Federal Com. #1. See attached plat.

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 and will face to the north.
- 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:** Federal surface, Administered by the Bureau of Land Management, Carlsbad, 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

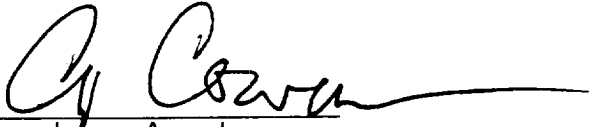
- B. Through Drilling Operations,
Completions and Production:

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.

7/19/01


Regulatory Agent

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



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88201
TELEPHONE (505) 748-1000

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

July 30, 2001

Attention: Mr. John Purcell, Chief Mining Engineer
IMC Carlsbad Potash Company
P.O. Box 71
Carlsbad, New Mexico 88221-0071

RE: Adeline ALN Federal #5
Township 24 South, Range 31 East
Section 6: 330' FNL & 990' FWL
Eddy County, New Mexico

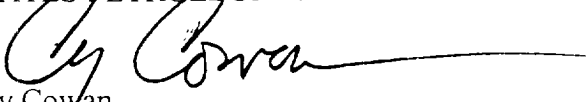
Dear Mr. Purcell:

Yates Petroleum Corporation wishes to place the captioned well on our list for future drilling operations. We are planning to drill this well to a total depth of 8,200' or 100' below the base of the Delaware Formation. We have been advised that your company is the owner of certain potash leases in this area. Therefore, we respectfully request that you waive any objections you may have to this proposed well location and so indicate by signing and returning one copy of this letter in the enclosed envelope.

Your favorable consideration of this request will be greatly appreciated. Thank you.

Very truly yours,

YATES PETROLEUM CORPORATION


Cy Cowan
Regulatory Agent

☐ NO OBJECTION OFFERED
IMC Potash Company

By: _____

Title: _____

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Postage	\$	Postmark: Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To: IMC - John Purcell
Street, Apt. No., or PO Box No.: P.O. Box 71
City, State, ZIP+4: Carlsbad, NM 88221-0071

PS Form 3800, January 2001 See Reverse for Instructions

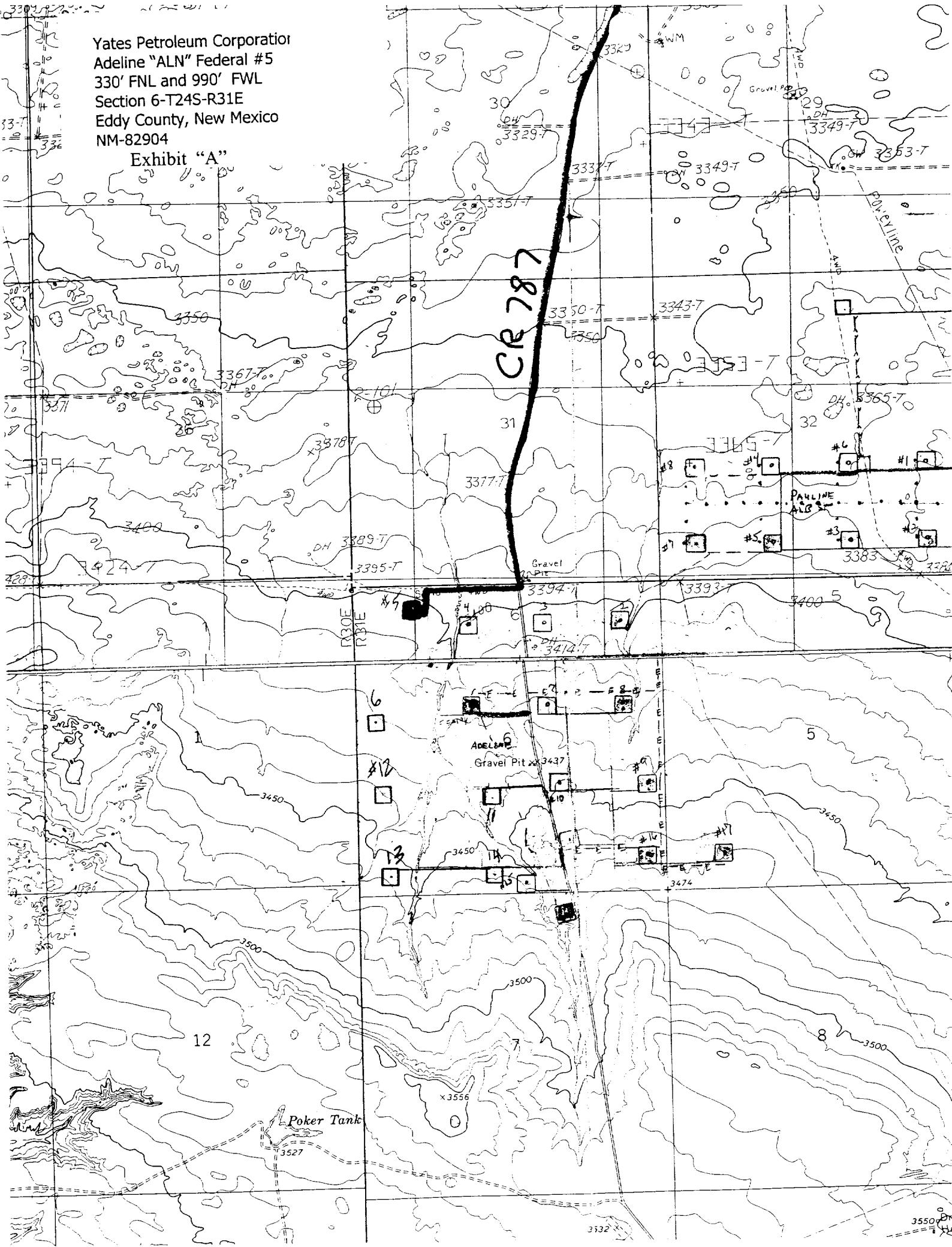
☐ OBJECTION OFFERED
IMC Potash Company

By: _____

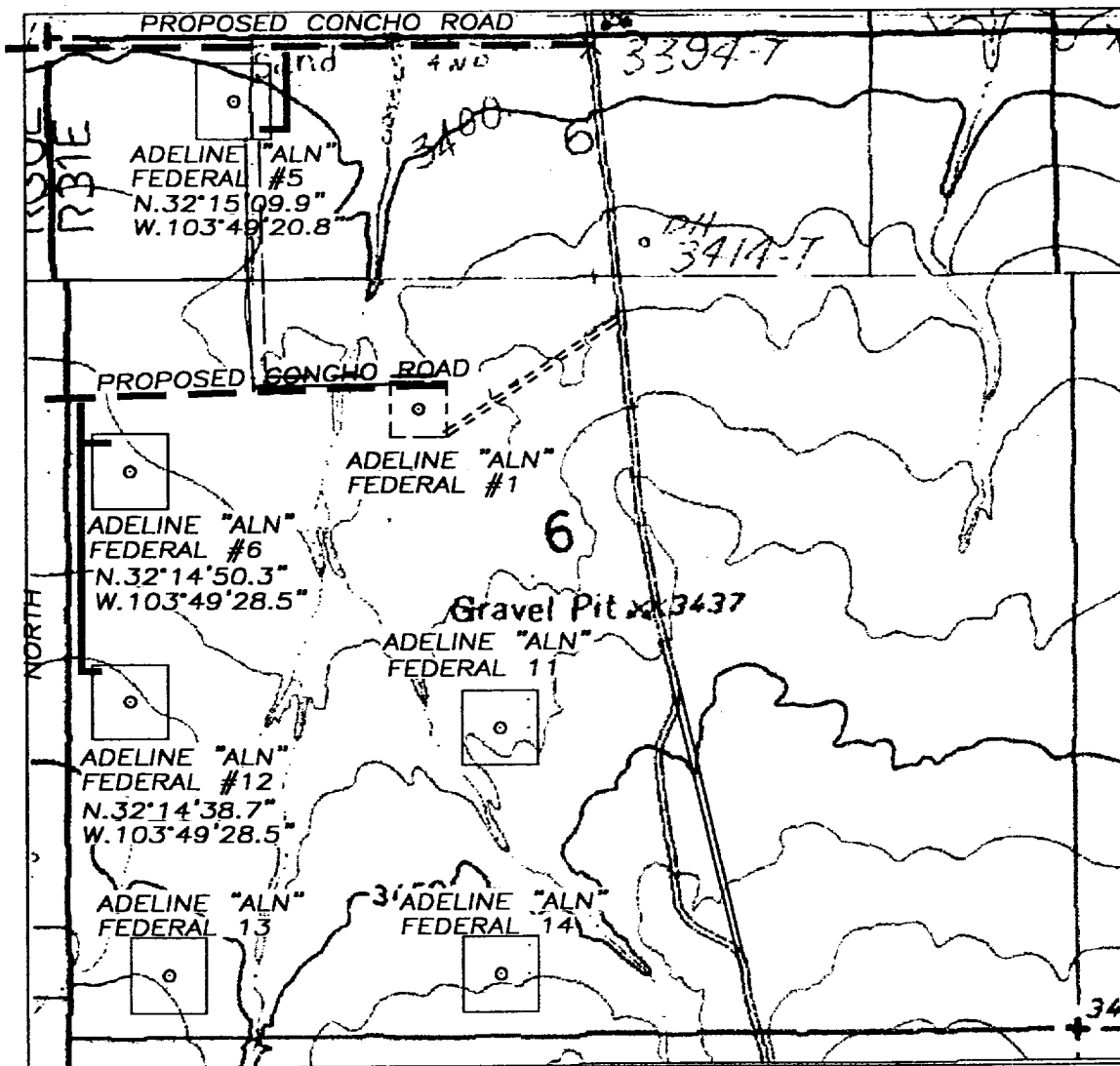
Title: _____

Yates Petroleum Corporation
Adeline "ALN" Federal #5
330' FNL and 990' FWL
Section 6-T24S-R31E
Eddy County, New Mexico
NM-82904

Exhibit "A"



SECTION 6, TOWNSHIP 24 SOUTH, RANGE 31 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



———— Flowline
 - - - - - Powerline

Ancillary Facilities
 to be included
 with APB.

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 L. Jones
 HERSCHEL L. 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 ADELINE
 "ALN" FEDERAL #5, 6, & 12 WELLS LOCATED IN
 SECTION 6, TOWNSHIP 24 SOUTH, RANGE 31
 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

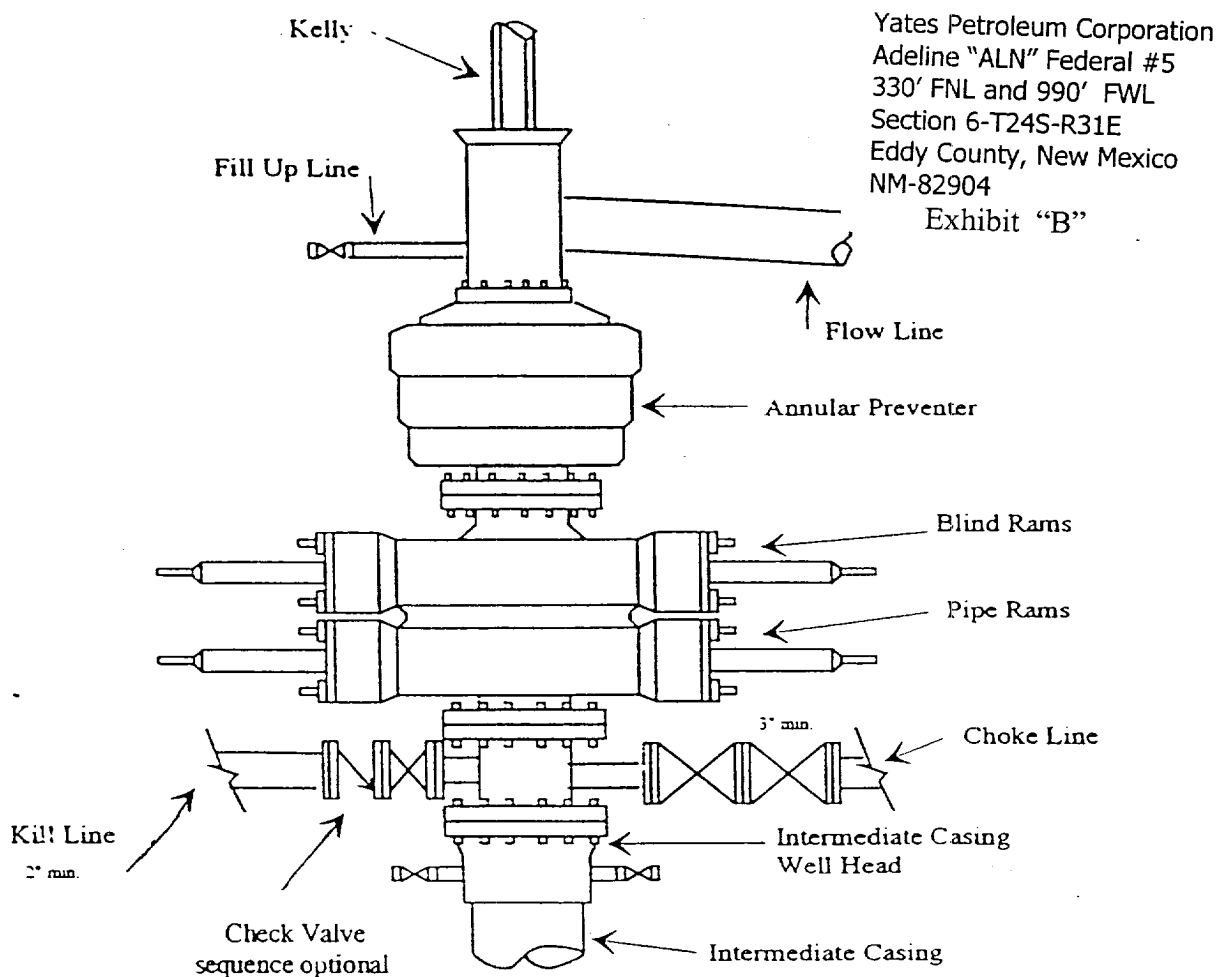
Survey Date: 7/11/2001	Sheet 1 of 1 Sheets
Drawn By: Ed Blavina	W.O. Number
Date: 7/11/01	Scale 1" = 1000' ADELINE



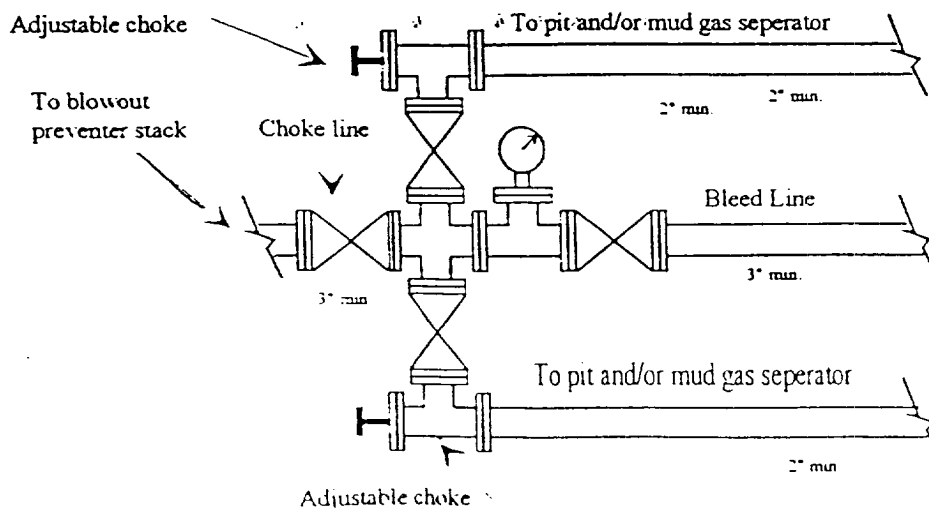
Yates Petroleum Corporation

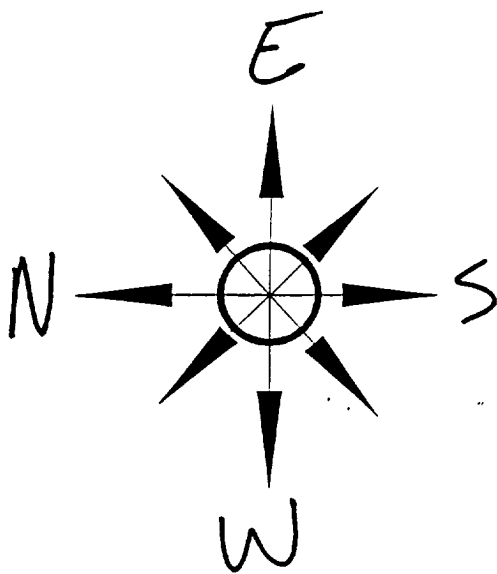
BOP-3

Typical 3,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



Typical 3,000 psi choke manifold assembly with at least these minimum features





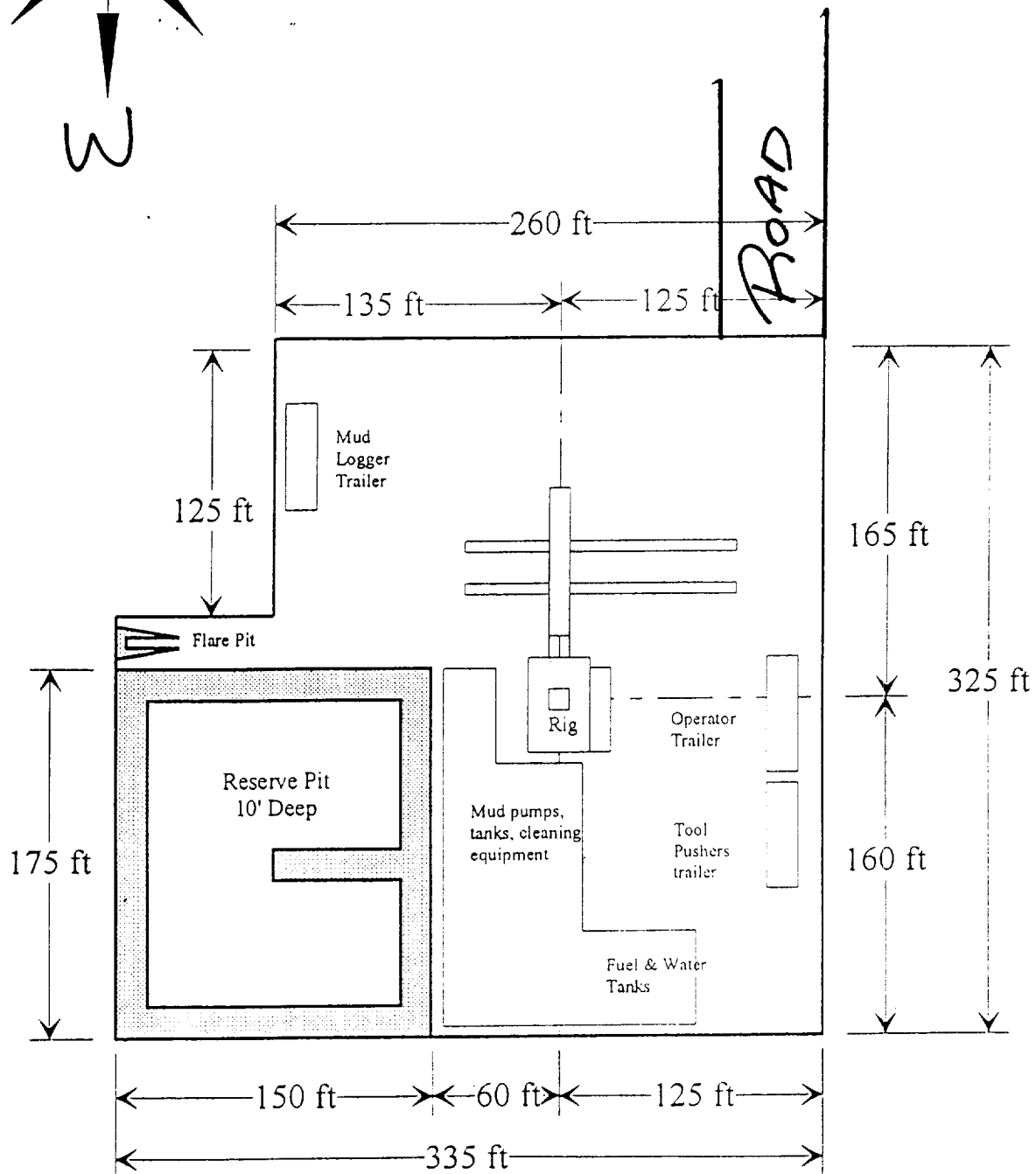
Yates Petroleum Corporation

Location Layout for Permian Basin
Up to 12,000'

PB - L1

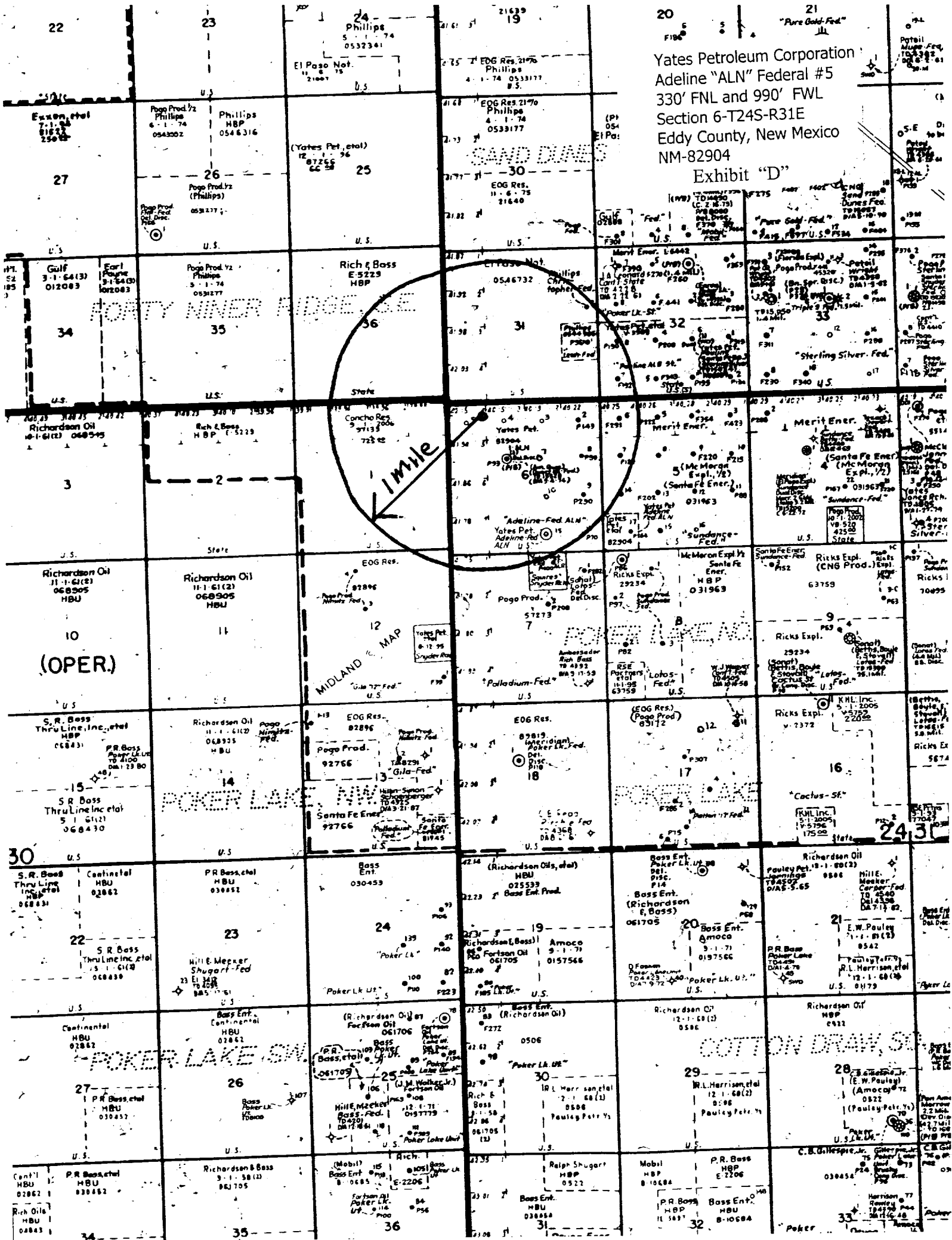
Yates Petroleum Corporation
Adeline "ALN" Federal #5
330' FNL and 990' FWL
Section 6-T24S-R31E
Eddy County, New Mexico
NM-82904

Exhibit "C"



Distance from Well Head to Reserve Pit will vary between rigs

The above dimension should be a maximum



Yates Petroleum Corporation
Adeline "ALN" Federal #5
330' FNL and 990' FWL
Section 6-T24S-R31E
Eddy County, New Mexico
NM-82904
Exhibit "D"

