

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

YATES PETROLEUM CORPORATION

3. ADDRESS AND TELEPHONE NO.

105 South Fourth Street, Artesia, New Mexico 88210 (505) 748-1471

4. LOCATION OF WELL (Report location clearly and in accordance with requirements.)

At surface

1379' FNL and 259' FEL

At proposed prod. zone

1379' FNL and 660' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

Approximately 30 miles northwest of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

16. NO. OF ACRES IN LEASE

660.09

17. NO. OF ACRES ASSIGNED TO THIS WELL

160

19. PROPOSED DEPTH

8700'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4364' GR

22. APPROX. DATE WORK WILL START

ASAP

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	350'	WITNESS Circulated
12 1/4"	9 5/8"	36#	2650'	WITNESS Circulated
8 3/4"	7"	23# & 26#	TD	As Warranted TOC at 7000' (500' above the top of Wolfcamp).

Yates Petroleum Corporation proposes to drill and test the Canyon and intermediate formations. Approximately 350' of surface casing will be set and cement circulated to shut off gravel and cavings. Approximately 2650' of intermediate casing will be set and cement circulated. If commercial, production casing will be run and cemented with adequate cover, perforated and stimulated as needed for production.

MUD PROGRAM: 0-350' FW Spud Mud; 350'-7400' FW; 7400'-7800' Cut Brine; 7800'-TD SW Gel/Starch.

BOPE PROGRAM: BOPE will be installed on the 9 5/8" casing and tested daily for operational.

THIS WELL IS TO BE DRILLED AS A DIRECTIONAL WELL, COPY OF THE SCIENTIFIC DRILLING PLANNING REPORT IS ATTACHED.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

Posted 10/1
N/L & ART
4-10-98

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present production and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24.

SIGNED Ken B. Boyd TITLE Landman DATE March 20, 1998

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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:

(ORIG. SGD.) LES BABYAK

APPROVED BY Acting TITLE ON MINERALS DATE 4-8-98

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

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

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 Indian Basin Upper Penn Associated
Property Code	Property Name BRANNIGAN "ANF" FEDERAL	Well Number 6
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 4364

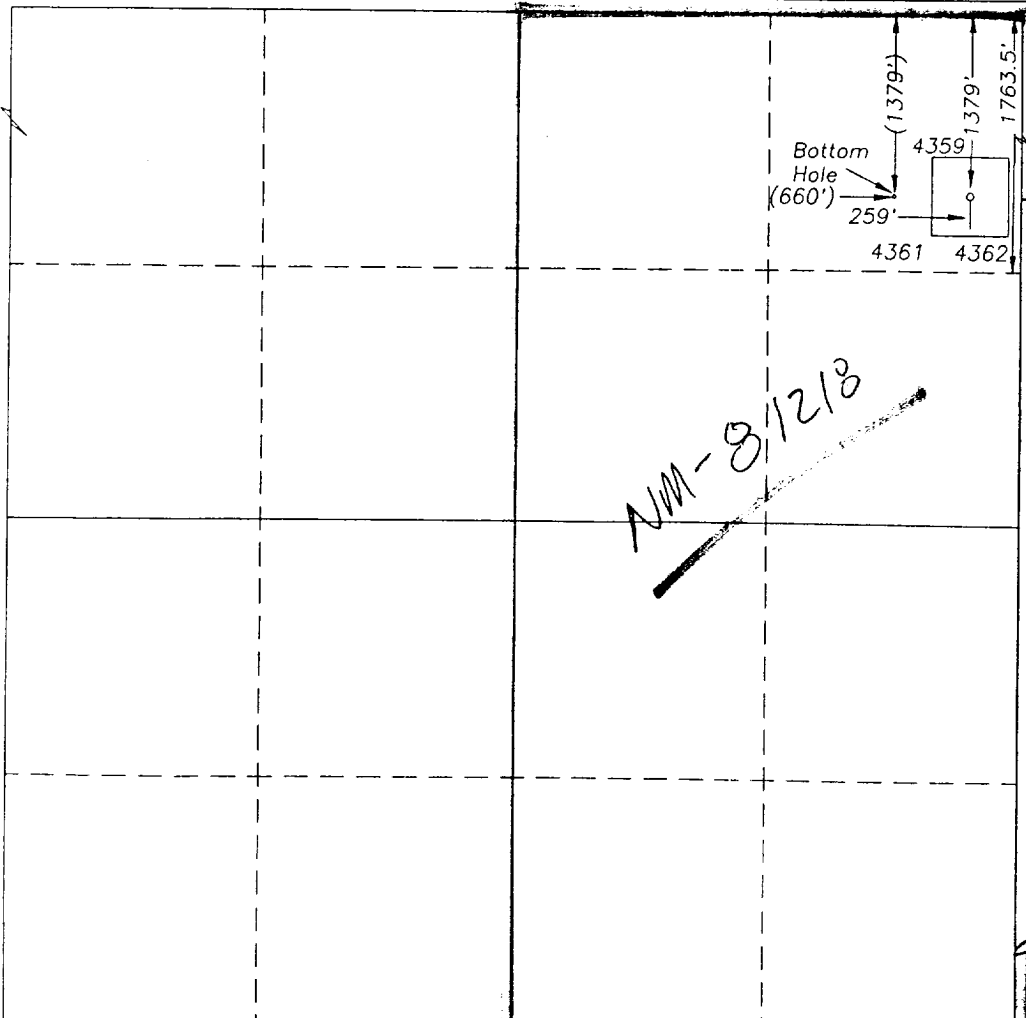
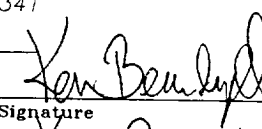
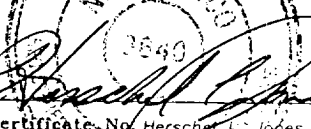
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	6	22S	24E		1379	NORTH	259	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
A	6	22S	24E		1379	NORTH	660	EAST	EDDY
Dedicated Acres 320	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

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. 4341  Signature Ken Beardemphl Printed Name hand man Title 3-16-98 Date
	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. 3/10/98 Date Surveyed  Signature Professional Surveyor Certificate No. Herscher L. Jones RLS 3640 BRANNIGAN & SONS GENERAL SURVEYING COMPANY

**YATES PETROLEUM CORPORATION
BRANNIGAN "ANF" FEDERAL #6
SURFACE: 1379' FNL AND 259' FEL
BOTTOM HOLE: 1379'FNL AND 660' FEL
Section 6, T19S-R24E
Eddy County, New Mexico**

H2S Drilling Operations Plan

Personnel employed at the rig site shall receive training in H2S detection, safe drilling procedures and contingency plans. H2S safety equipment shall be installed and functional 3 days or 500 feet prior to encountering known or probable H2S zone at 3200' feet.

Submitted with the APD is a well site diagram showing:

- 1) Drilling rig orientation, location of flare pit.
- 2) Prevailing wind direction.
- 3) Location of access road.

Primary briefing area will be established 150' from wellbore and up wind of prevailing wind direction. Secondary briefing area will be established 180 degrees from primary briefing area.

A H2S warning sign will be posted at the entrance of the location. Depending on conditions, a green, yellow, or red flag will be displayed.

Green - Normal conditions

Yellow - Potential danger

Red - Danger H2S present

Wind indicators will be placed on location at strategic, highly visible areas. H2S monitors (a minimum of three) will be positioned on location for best coverage and response. H2S concentrations of 10 ppm will trigger a flashing light and 20 ppm will trigger an audible siren.

H2S breathing equipment will consist of:

- 1) 30 minute "pressure demand" type working unit for each member of rig crew on location.
- 2) 5 minute escape packs for each crew member.
- 3) Trailer with a "cascade air system: to facilitate working in a H2S environment for time period greater than 30 minutes.

BRANNIGAN "ANF" FEDERAL #6

Page 2

Breathing equipment will be stored in weather proof cases or facilities. They will be inspected and maintained weekly.

The mud system will be designed to minimize or eliminate the escape of H₂S at the rig floor. This will be accomplished through the use of proper mud weight, proper pH control of the drilling fluid and the use of H₂S scavengers in the drilling fluid. A mud gas separator will be utilized when H₂S is present in the mud.

Drilling experience has shown that wells in developmental areas, (i.e. Dagger Draw, Livingston Ridge Delaware, and Lusk Delaware) are normally pressured and don't experience either H₂S kicks or loss of returns. Due to these circumstances, we request exceptions to the rule requiring flare line with remote lighter and choke manifold with minimum of one remote choke. This equipment would be provided on exploratory wells or wells with the known potential for H₂S kicks. Additionally, a SO₂ monitor would be positioned near the flare line, and a rotating head utilized.

The drill string, casing, tubing, wellhead, blowout preventers and associated lines and valves will be suitable for anticipated H₂S encounters.

Radio and or mobile telephone communication will be available on site. Mobile telephone communication will be available in company vehicles.

Drill stem testing to be performed with a minimum number of essential people on location. They will be those necessary to safely conduct the test. If H₂S is encountered during a drill stem test, essential personnel will mask up and determine H₂S concentration. The recovery will then be reversed to flare pit. Pulling of test tools will be conducted in a safe manner.

Scientific Drilling Planning Report

Brannigan PL6

Company: Yates Petroleum
 Field: Indian Basin Canyon
 Site: Eddy Co., New Mexico
 Well: Brannigan ANE Federal #5
 Wellpath: WNW Kick

Date: 3/19/1998 Time: 09:13:27 Page: 1
 Co-ordinate (NE) Reference: Site: Eddy Co., New Mexico, True North
 Vertical (TYD) Reference: SITE 0.0 above Mean Sea Level
 Section (VS) Reference: Site (0.0E, 0.0N, 272.6Az)
 Plan: Plan #1

Field: Indian Basin Canyon

Local Coordinate Reference:

Site Centre

Location of Field Centre:

N/A

Field Centre Map Easting:

m

Field Centre Map Northing:

m

Direction of Local North:

True

From Projection & Zone: US State Plane Coordinate System 1927
 Texas, Central Zone

4. Section: Clarke - 1856

Local Vertical Reference:

Wellpath Datum

Site Datum: Mean Sea Level

Geomagnetic Model:

IGRF95

Site: Eddy Co., New Mexico

Site Elevation: m
 Site Elevation: ft

Latitude
 Longitude

Site Azimuth: 0.0 deg
 Site Azimuth: 0.0 deg

Site Elevation Reference: SITE 0.0 ft above Mean Sea Level

4. Section: ANE Federal #5

Site Elevation: 0.0 ft +N-S Map Easting: 0.00 m
 Site Elevation: 0.0 ft +E-W Map Northing: 0.00 m

Site Elevation: 0.0 ft +N-S
 Site Elevation: 0.0 ft +E-W

Site Azimuth: 272.57 deg

Date Composed: 3/19/1998

Version: 1

Locked: No

Well Section Information

MD ft	Incl deg	Azimuth deg	TYD ft	+N-S ft	+E-W ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg	Target
6700.0	0.00	272.57	6700.0	0.0	0.0	0.00	0.00	0.00	0.00	
6702.0	0.00	272.57	6702.0	0.0	0.0	0.00	0.00	0.00	0.00	
6705.7	0.00	272.57	6705.7	0.0	0.0	0.00	0.00	0.00	0.00	
7680.5	15.00	272.57	7681.3	5.8	-128.3	1.52	1.52	0.00	0.00	
8747.2	15.00	272.57	8700.0	18.0	-401.0	0.00	0.00	0.00	0.00	TD

Section 1: Straight MD Part 1 Hold

MD ft	Incl deg	Azimuth deg	TYD ft	+N-S ft	+E-W ft	VS ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg
6700.0	0.00	272.57	6700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
6702.0	0.00	272.57	6702.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

Section 2: Slant Part 1 Hold

MD ft	Incl deg	Azimuth deg	TYD ft	+N-S ft	+E-W ft	VS ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg
6705.7	0.00	272.57	6705.7	0.0	0.0	0.0	0.00	0.00	0.00	0.00

Scientific Drilling Planning Report

Company: Yates Petroleum Date: 3/19/1998 Time: 09:13:27 Page: 2
 Field: Indian Basin Canyon Co-ordinate (N) Reference: Site: Eddy Co., New Mexico, True North
 Area: Eddy Co., New Mexico Vertical (I.V.D.) Reference: SITE 0.0 above Mean Sea Level
 Well: Branigan ANF Federal #6 Section (VS) Reference: Site (ODE: ODN 272.6A)
 Wellbore: WTW 106K Plan: Plan #1

Section 3: Slant Part 2 Build 1.52

MD ft	Incl deg	Azimuth deg	I.V.D. ft	+N/S ft	+E/W ft	VS ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg
6900.0	1.44	272.57	6900.0	0.1	-1.2	1.2	1.52	1.52	0.00	0.00
7000.0	1.44	272.57	6990.9	0.2	-5.0	5.0	1.52	1.52	0.00	0.00
7100.0	1.44	272.57	7080.7	0.5	-11.5	11.5	1.52	1.52	0.00	0.00
7200.0	1.44	272.57	7170.5	0.9	-20.6	20.6	1.52	1.52	0.00	0.00
7300.0	1.44	272.57	7260.3	1.5	-32.3	32.4	1.52	1.52	0.00	0.00
7400.0	1.44	272.57	7350.1	2.1	-46.7	46.8	1.52	1.52	0.00	0.00
7500.0	1.44	272.57	7440.1	2.9	-63.7	63.8	1.52	1.52	0.00	0.00
7600.0	1.44	272.57	7530.1	3.7	-83.3	83.4	1.52	1.52	0.00	0.00
7700.0	1.44	272.57	7620.5	4.7	-105.5	105.6	1.52	1.52	0.00	0.00
7800.0	1.44	272.57	7711.3	5.8	-128.3	128.4	1.52	1.52	0.00	0.00

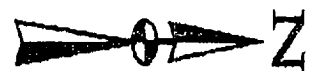
Section 4: Slant Part 3 Build 1.52

MD ft	Incl deg	Azimuth deg	I.V.D. ft	+N/S ft	+E/W ft	VS ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg
7700.0	15.00	272.57	7688.5	5.8	-130.2	130.4	0.00	0.00	0.00	0.00
7800.0	15.00	272.57	7785.1	7.0	-156.1	156.3	0.00	0.00	0.00	0.00
7900.0	15.00	272.57	7881.7	8.2	-182.0	182.1	0.00	0.00	0.00	0.00
8000.0	15.00	272.57	7978.3	9.3	-207.8	208.0	0.00	0.00	0.00	0.00
8100.0	15.00	272.57	8074.9	10.5	-233.7	233.9	0.00	0.00	0.00	0.00
8200.0	15.00	272.57	8171.5	11.6	-259.5	259.8	0.00	0.00	0.00	0.00
8300.0	15.00	272.57	8268.1	12.8	-285.4	285.7	0.00	0.00	0.00	0.00
8400.0	15.00	272.57	8364.7	14.0	-311.2	311.5	0.00	0.00	0.00	0.00
8500.0	15.00	272.57	8461.3	15.1	-337.1	337.4	0.00	0.00	0.00	0.00
8600.0	15.00	272.57	8557.8	16.3	-362.9	363.3	0.00	0.00	0.00	0.00
8700.0	15.00	272.57	8654.4	17.5	-388.8	389.2	0.00	0.00	0.00	0.00
8747.2	15.00	272.57	8700.0	18.0	-401.0	401.4	0.00	0.00	0.00	0.00

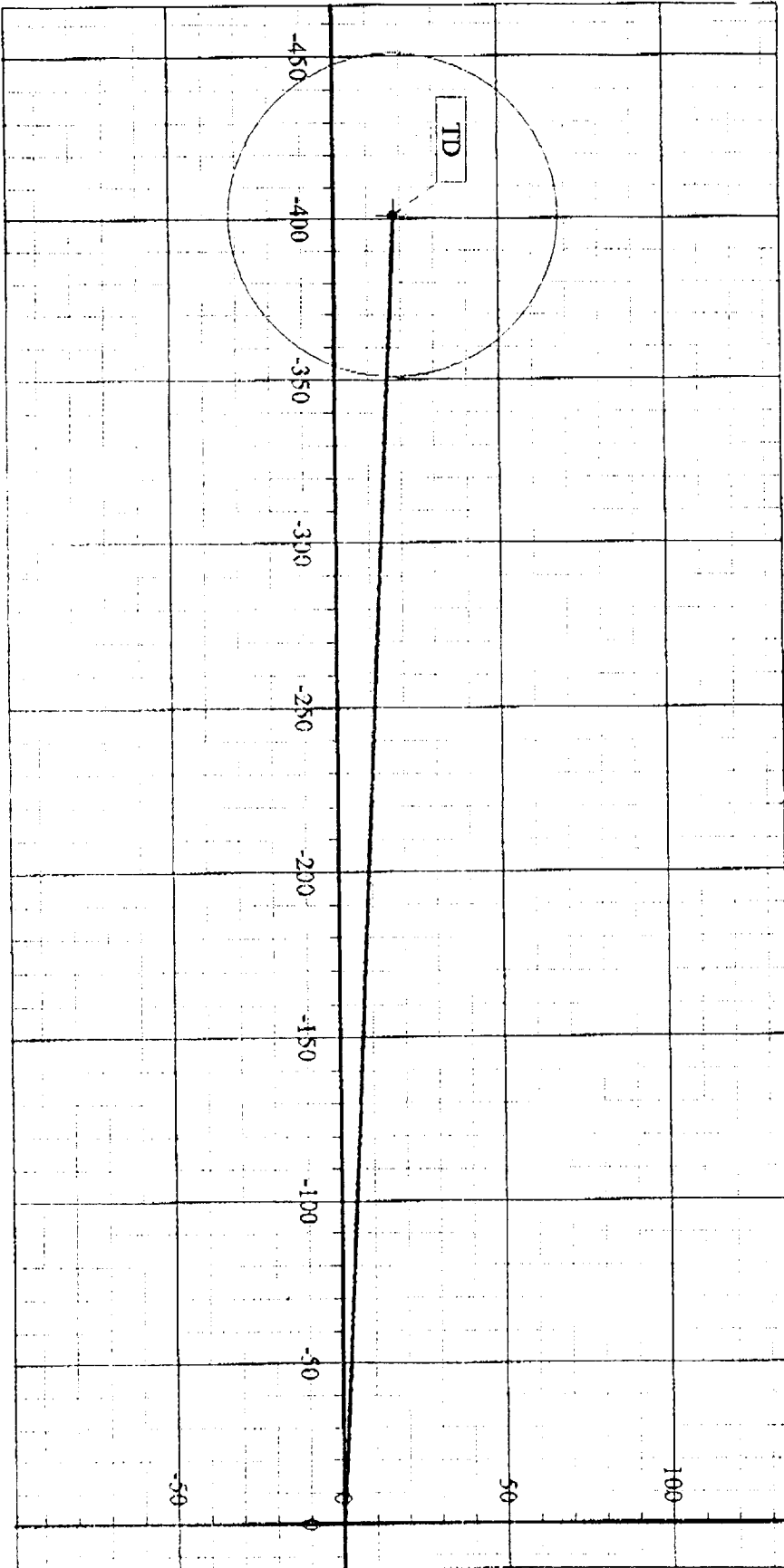


**Scientific
Drilling**

Yates Petroleum
Field: Indian Basin Canyon
Site: Eddy Co., New Mexico
Well: Branigan ANF Federal #6
Wellpath: WNW Kick
Plan: Plan #1



aa(-)/North(+) [50ft/in]

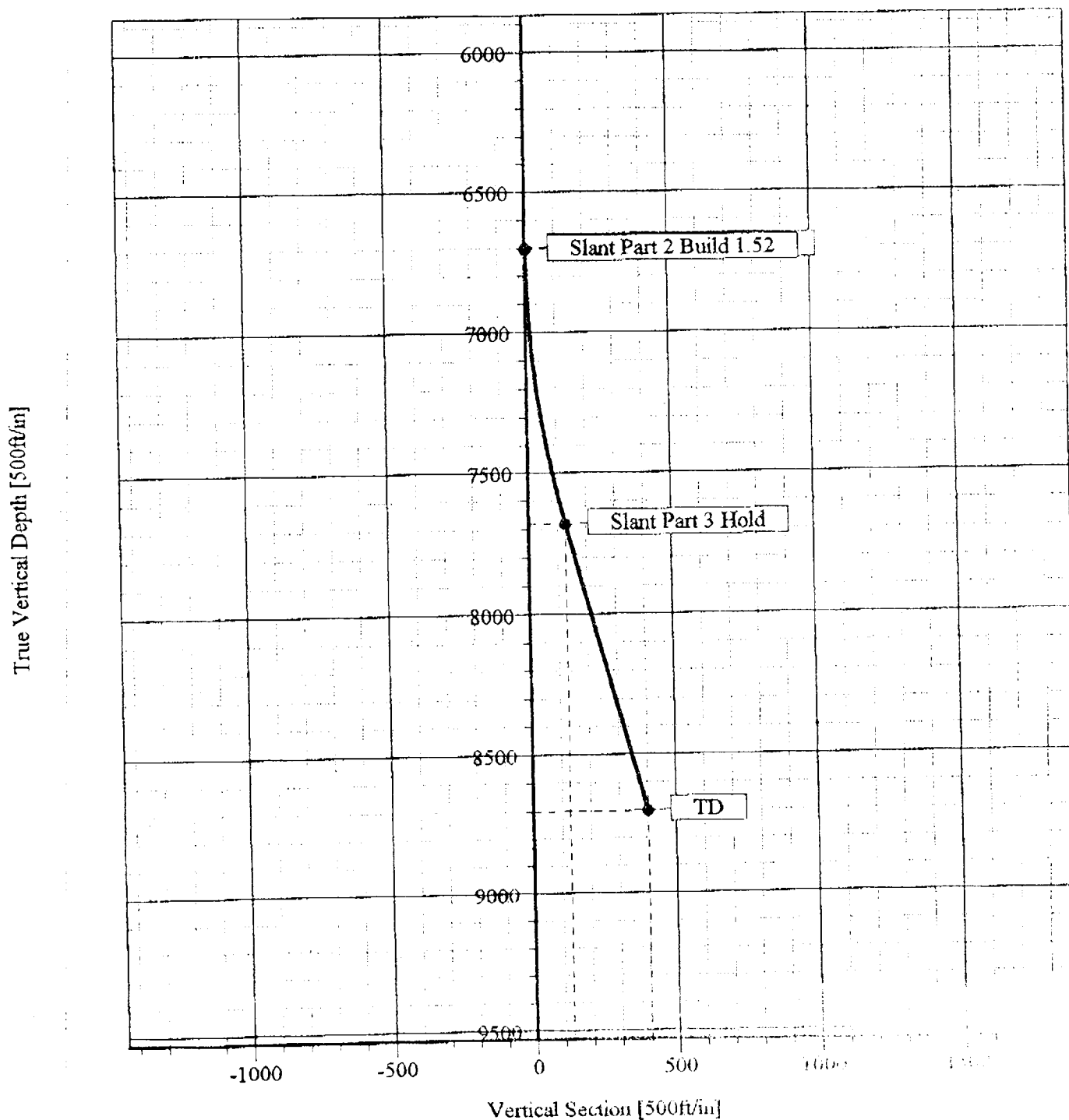


Well Path (ft)



Scientific
Drilling

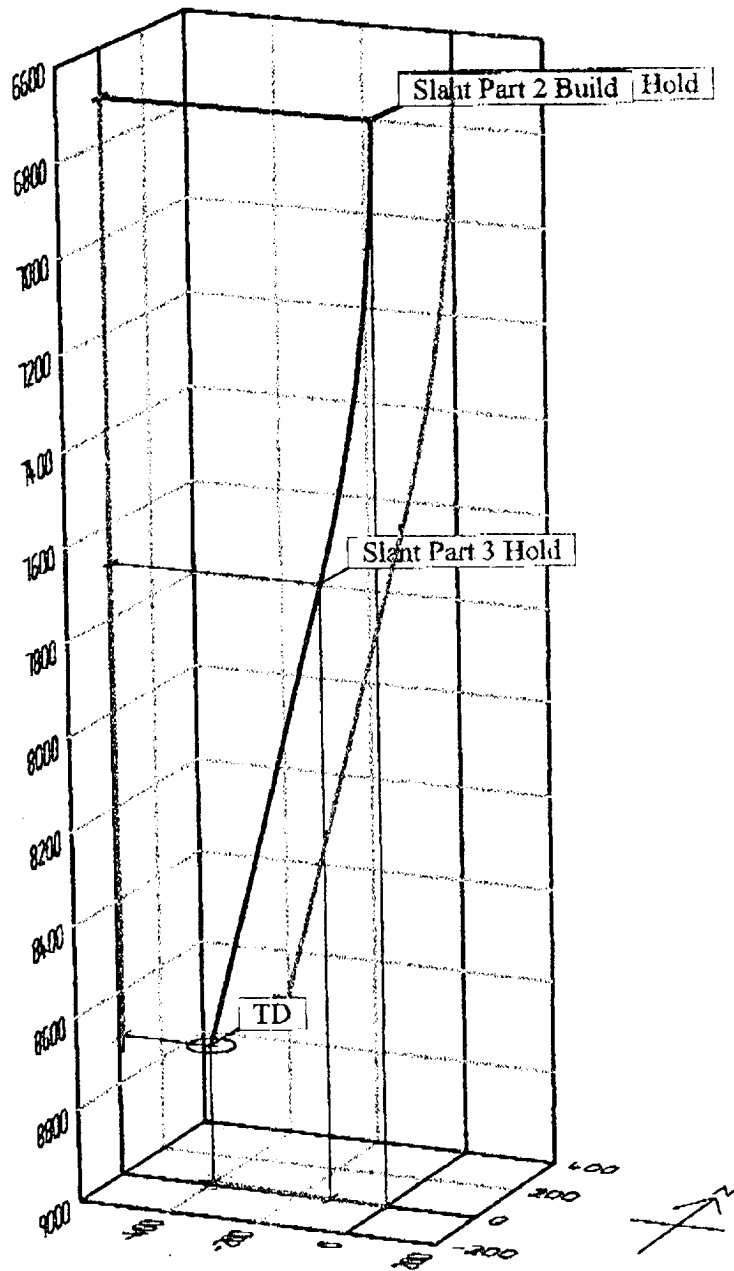
Yates Petroleum
Field: Indian Basin Canyon
Site: Eddy Co., New Mexico
Well: Brannigan ANF Federal #6
Wellpath: WNW Kick
Plan: Plan #1





Scientific
Drilling

Yates Petroleum
Field: Indian Basin Canyon
Site: Eddy Co., New Mexico
Well: Brannigan ANF Federal #6
Wellpath: WNW Kick
Plan: Plan #1



YATES PETROLEUM CORPORATION
Brannigan "ANF" Federal #6
Surface: 1379' FNL & 259' FEL
Bottom Hole: 1379' FNL & 660' FEL
Sec. 6-T22S-R24E
Eddy County, New Mexico

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

San Andres	1380'
Glorietta	2600'
Bone Springs	3130'
Wolf Camp	7550'
Canyon	7890'
TD	8700'

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 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)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-350'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-2650'
8 3/4"	7.0"	26#	J-55	LT&C	0-900'
8 3/4"	7.0"	23#	J-55	LT&C	900'-5300'
8 3/4"	7.0"	26#	J-55	LT&C	5300'-7300'
8 3/4"	7.0"	26#	N-80	LT&C	7300'-8700'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 2.0

B. Cementing Program:

Surface casing: 400 sacks class 'C' with 2% CaCL₂, (YLD 1.32 WT 14.8) cement circulated to surface.

Intermediate Casing: 200 sacks 'H' + 12% Thixad + additives (YLD 1.56 WT 14.6)
550 sx 35:65 Poz C (YLD 2.0 WT 12.5) tail in with 200 sx 'C'
+ 2% CaCL₂ (YLD 1.32 WT 14.6). Cement circulated to surface.

Production Casing: TOC at 7000' (500' above the Wolfcamp).
350 sx Super "C" Modified (YLD 1.63 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>
0-350'	FW Spud Mud	8.3-8.6	32-36	N/C
350'-2650'	FW	8.4	28	N/C
2650'-7400'	FW	8.4	28	N/C
7400'-7800'	Cut Brine	8.9-9.6	28	N/C
7800'-TD	SW Gel/Starch	8.9-9.6	32-38	< 12cc

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, DLL w/RXO.

Coring: None

DST's: As warranted.

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE AND POTENTIAL HAZARDS:

Anticipated BHP:

From: 0	TO: 350'	Anticipated Max. BHP: < 150 PSI
From: 350'	TO: 2650'	Anticipated Max. BHP: < 1150 PSI
From: 2650'	TO: 8600'	Anticipated Max. BHP: < 4300 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H₂S Zones Anticipated: Possible Canyon

Maximum Bottom Hole Temperature: 150 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
Brannigan "ANF" Federal #6
Surface: 1379' FNL & 259' FEL
Bottom Hole: 1379' FNSL & 660' FEL
Sec. 6-T22S-R24E
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 30 miles Northwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go north of Carlsbad on highway 285 for 12.5 miles to highway 137. Turn west and go 14 miles to a caliche road and turn east. Stay on main on caliche road, up the hill; at the top of the hill turn north and go approximately 1.5 miles to the location.

2. PLANNED ACCESS ROAD None needed

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 closest pit and obtain any material 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:

- A. Flowline to follow existing corridor right of way to the Brannigan Tank Battery. See plat on map. Flowline will be on lease.

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 600' x 600' 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: 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.

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report dated March 13, 1998, NMCRIS No. 60128 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:

Ken Beardemphl, Landman
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

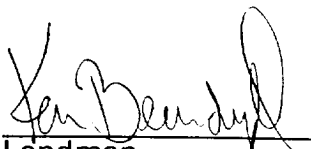
- B. Through Drilling Operations,
Completions and Production:

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.

3/20/98

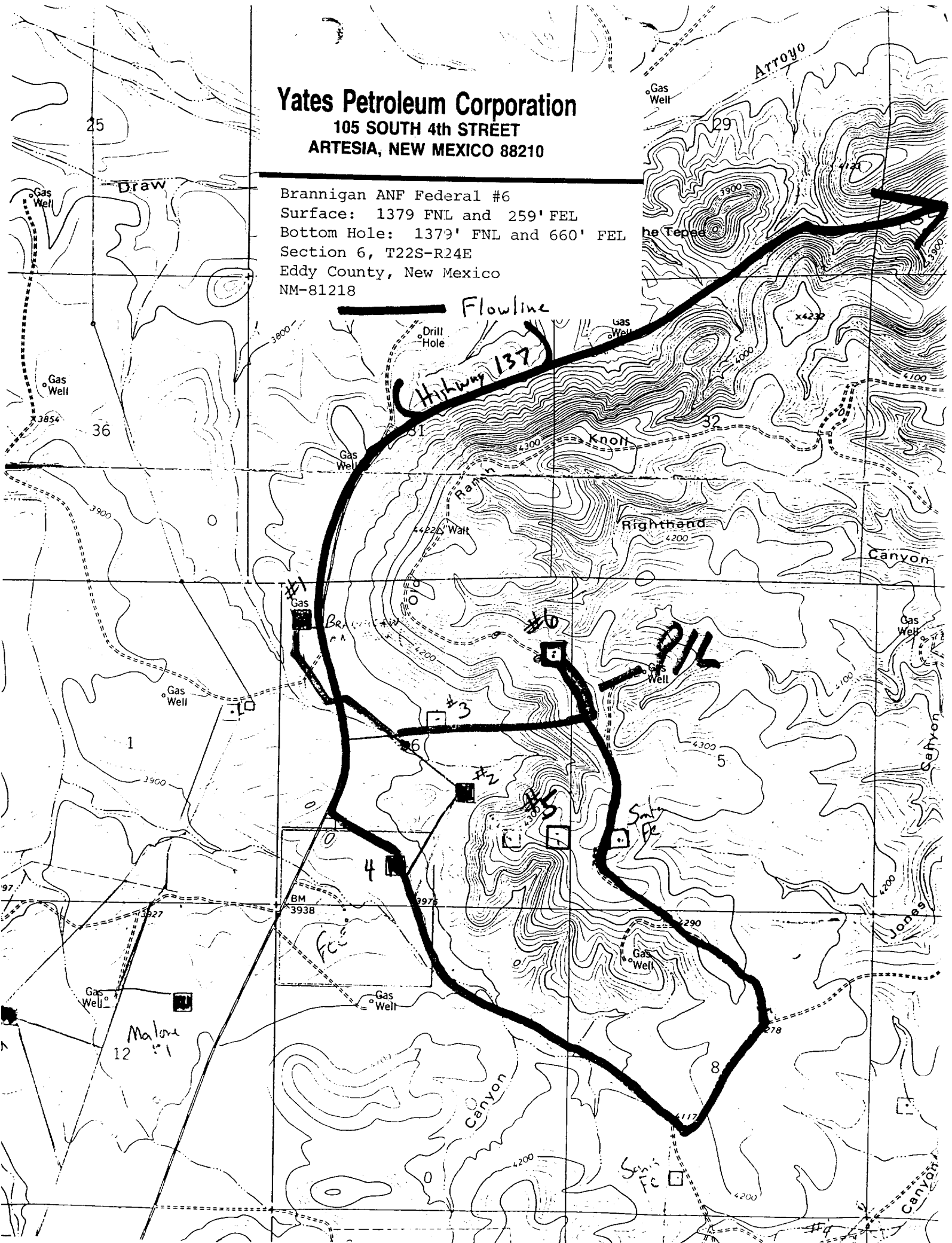


Landman

Yates Petroleum Corporation

105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

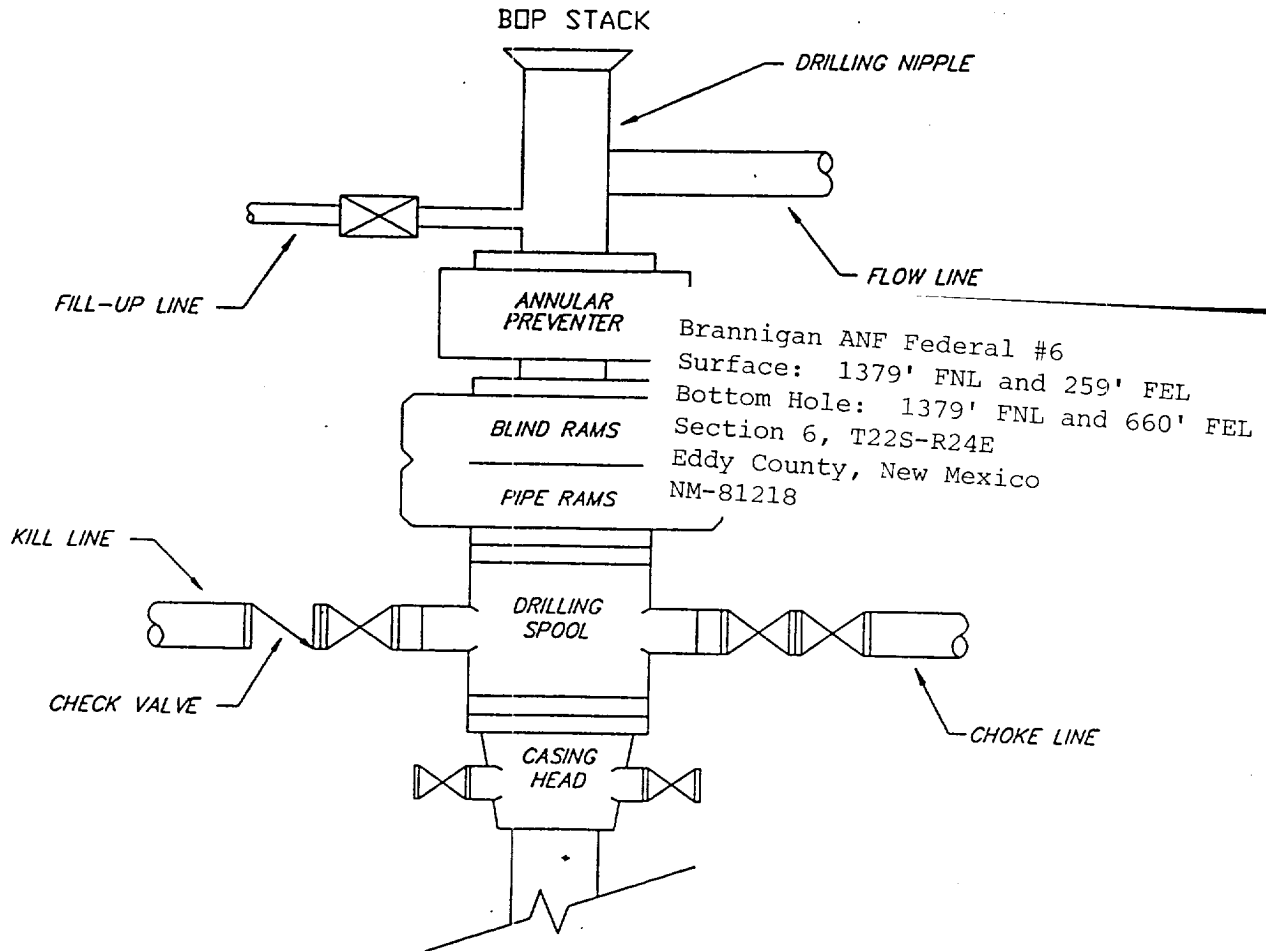
Brannigan ANF Federal #6
Surface: 1379' FNL and 259' FEL
Bottom Hole: 1379' FNL and 660' FEL
Section 6, T22S-R24E
Eddy County, New Mexico
NM-81218



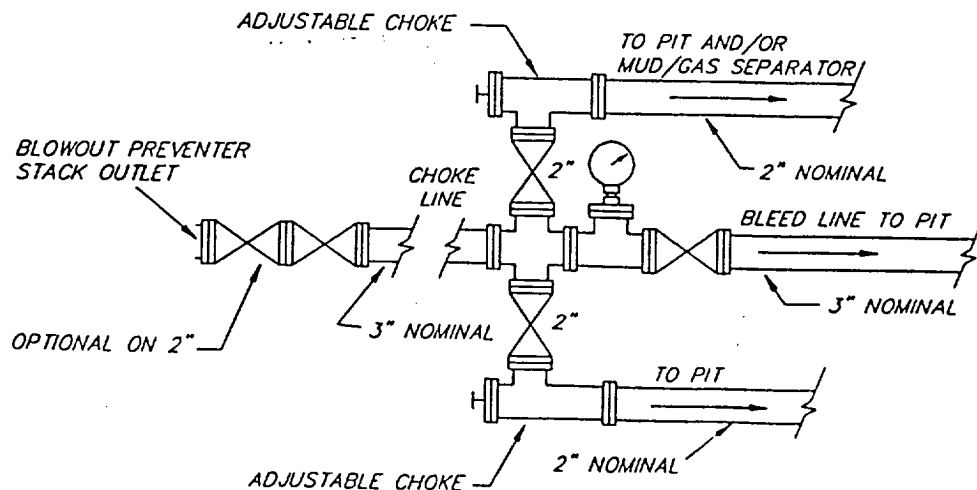
ates Petroleum Corporation

105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

TYPICAL 3,000 p.s.i. BLOWOUT PREVENTER SCHEMATIC

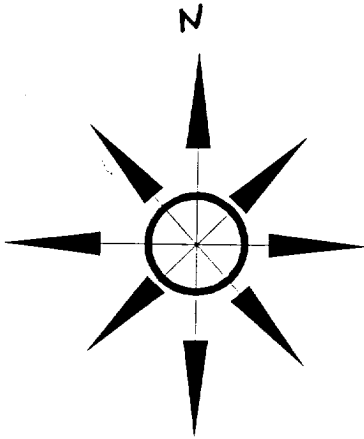


TYPICAL 3,000 p.s.i. CHOKE MANIFOLD SCHEMATIC

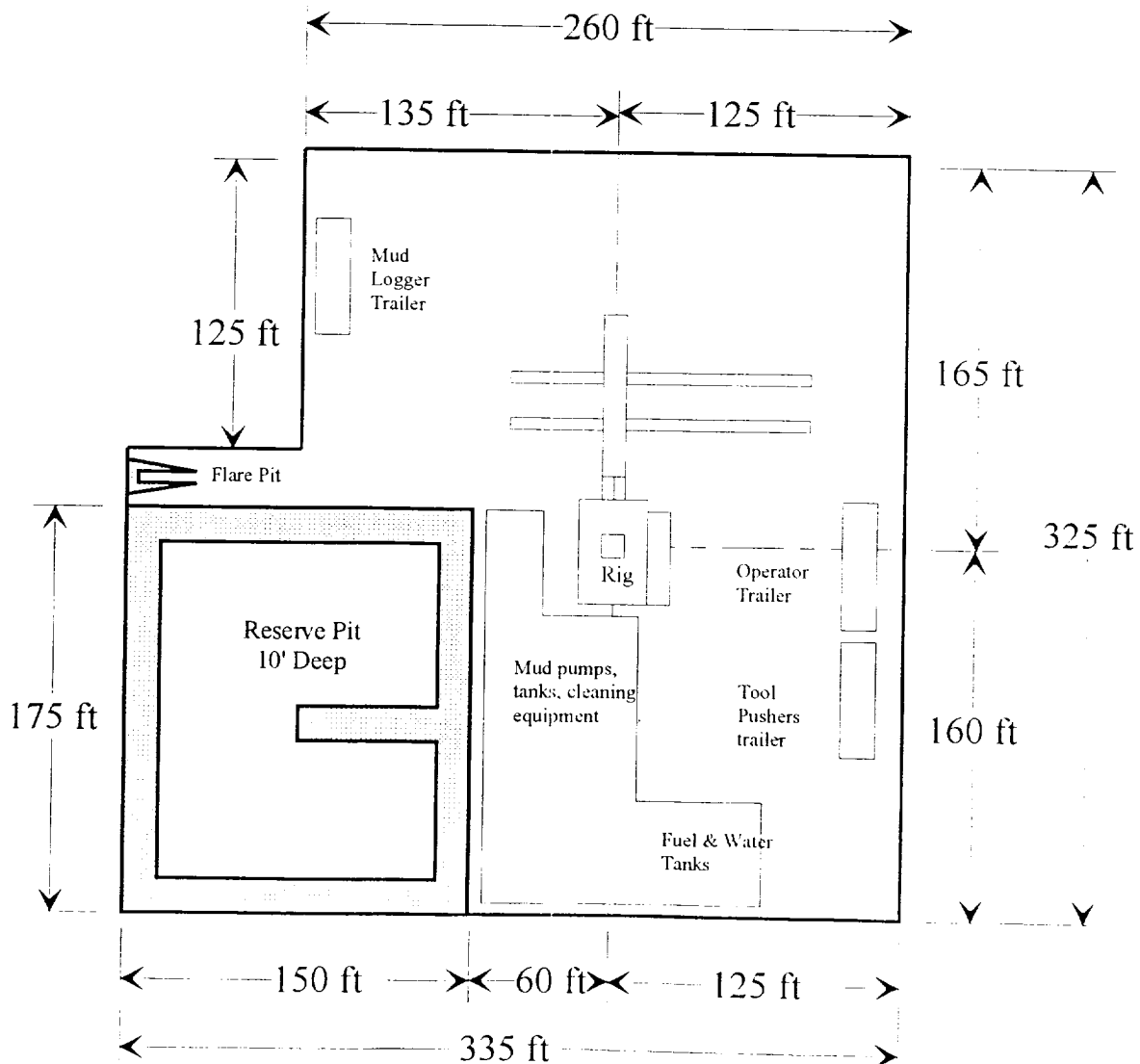


Yates Petroleum Corporation
105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

PB - L1

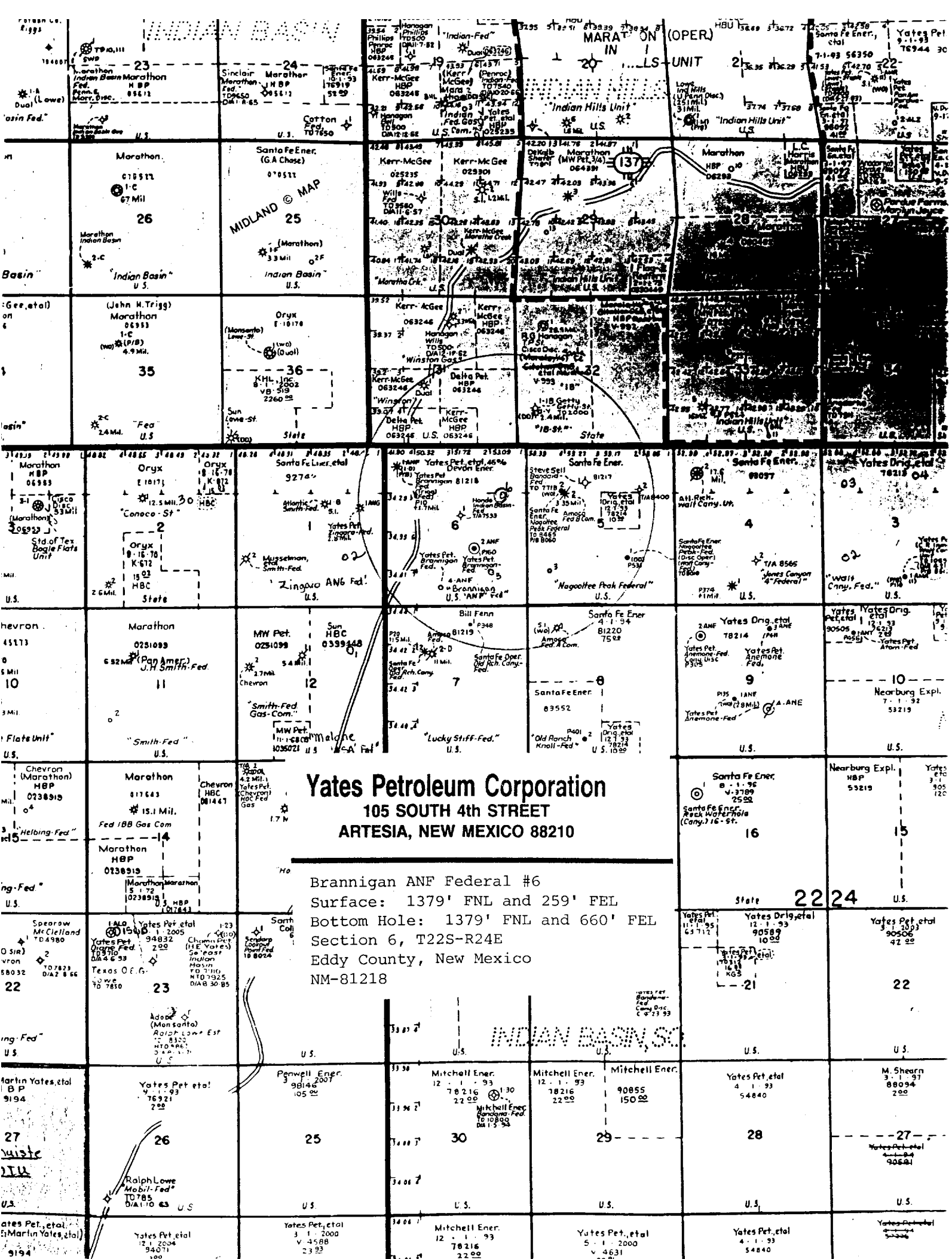


Brannigan ANF Federal #6
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Distance from Well Head to Reserve Pit will vary between rigs

The above dimension should be a maximum



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