

7/15-11-118

OCD Hobbs

HOBBS OCD

JUL 16 2013

Form 3160-3  
(August 2008)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

FORM APPROVED  
OMB NO. 1004-0137  
Expires: July 31, 2010

1a. Type of Work: ☒ DRILL ☐ REENTER  
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone  
2. Name of Operator

5. Lease Serial No  
NM-90  
6. If Indian, Allottee or Tribe Name  
N/A  
7. If Unit or CA Agreement, Name and No.  
N/A  
8. Lease Name and Well No.  
Amazing BAZ Federal #4H  
9. API Well No.

Yates Petroleum Corporation  
3a. Address  
105 South Fourth Street, Artesia, NM 88210  
3b. Phone No. (include area code)  
575-748-1471

30-025-41271  
10. Field and Pool, or Exploratory  
Livingston Ridge, Delaware, SE  
11. Sec., T., R., M., or Blk. And Survey or Area  
Section 30, T22S-R32E

4. Location of well (Report location clearly and in accordance with any State requirements. \*)  
At surface  
330' FSL and 1450' FEL, Unit O Surface Hole Location  
At proposed prod. zone  
330' FNL and 1980' FEL, Unit B Bottom Hole Location

14. Distance in miles and direction from the nearest town or post office\*  
Approximately thirty eight (38) miles west & north of Jal, New Mexico  
12. County or Parish  
Lea County  
13. State  
NM

|                                                                                                                               |                                               |                                                         |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------|
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)<br>330' | 16. No. of acres in lease<br>1760.00          | 17. Spacing Unit dedicated to this well<br>160 Acres    |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.<br>1004.7'         | 19. Proposed Depth<br>TVD-8,476' TMD 12,897'  | BLM/ BIA Bond No. on file<br>NATIONWIDE BOND #NMB000434 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>3542'                                                                  | 22. Approximate date work will start*<br>ASAP | 23. Estimated duration<br>45 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 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 must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/ or plans as may be required by the BLM         |

25. Signature  Cy Cowan Date 1/19/2012  
Title Land Regulatory Agent

Approved By (Signature) /s/ James Stovall Name (Printed/ Typed) Title FIELD MANAGER Office CARLSBAD FIELD OFFICE Date JUL 15 2013

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 cc operations thereon.  
Conditions of approval, if any, are attached.

**APPROVAL FOR TWO YEARS**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and wilfully 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.

Pre-Carlsbad Controlled Water Basin

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

KZ  
07/18/13  
APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED  
JUL 24 2013

# YATES PETROLEUM CORPORATION

## Amazing BAZ Federal #4-H

330' FSL and 1450' FEL, SHL

330' FNL & 1980' FEL, BHL

Section 30, T22S-R32E

Lea County, New Mexico

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

|                          |             |
|--------------------------|-------------|
| Rustler                  | 800'        |
| Top of Salt              | 950'        |
| Bottom of Salt           | 4345'       |
| Bell Canyon              | 4650'       |
| Cherry Canyon            | 5542'       |
| Brushy Canyon            | 6835'       |
| Brushy Horizontal Target | 8756'---MD  |
| TD                       | 12897'---MD |

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

Water: 250' to 500'

Oil or Gas: 5542', 6835' & 8756'

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13 3/8" casing and the 9 5/8" casing. The BOP and related BOPE shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17. Pressure tests to 3000 PSI and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers 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)

| Hole Size | Casing Size | Wt./Ft | Grade  | Coupling | Interval                    | Length |
|-----------|-------------|--------|--------|----------|-----------------------------|--------|
| 17 1/2"   | 13 3/8"     | 48#    | J-55   | ST&C     | 0-825' 880                  | 825'   |
| 12 1/4"   | 9 5/8"      | 40#    | HCK-55 | LT&C     | 0-100'                      | 100'   |
| 12 1/4"   | 9 5/8"      | 36#    | K-55   | LT&C     | 100'-3200'                  | 3100'  |
| 12 1/4"   | 9 5/8"      | 40#    | HCK-55 | LT&C     | 3200'-4450' 4500 1250' 1300 | 1250'  |
| 8 3/4"    | 5 1/2"      | 17#    | P-110  | LT&C     | 0'-8025'                    | 8025'  |
| 8 1/2"    | 5 1/2"      | 17#    | P-110  | Buttress | 8025'-12897'                | 4872'  |

This well will be drilled vertically to 8025'. Well will then be kick off at 8025' and directionally drilled at 12 degrees per 100' with a 8 3/4" to 8756' TVD (8476' TVD). ~~If hole conditions dictate, 7" casing will be set and cemented. A 6 1/8" hole will then be drilled to 12897' MD (8476') where 4 1/2" casing will be set and cemented.~~ If 7" casing is not set then the hole will be reduced to 8 1/2" and drilled to 12897' MD (8476' TVD) where 5 1/2"

contingency deleted per attorney to PS on 1/23/2012

TMA

casing will be set and cemented. A DV cementer tool will be set at approximately 7500'. Cement will be placed from TD to approximately 3950'. Penetration point of the producing zone will be encountered at 821' FSL & 1695' FEL, Section 30-22S-32E. Deepest TVD in this well will be 8476' in the lateral.

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

B. CEMENTING PROGRAM:

SURFACE CASING: 435 sacks of 35:65:6PzC (Wt. 12.50 Yld. 2.00). Designed with 100% excess. Cement circulated to surface.

INTERMEDIATE: 1255 sacks of 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail w/210 sacks Class "C" + CaCl<sub>2</sub> (Wt. 14.80 Yld. 1.34). Designed with 100% excess. Cement circulated to surface.

PODUCTION CASING: Will be done in two stages with DV Tool set at 7500'.

1<sup>st</sup> Stage: Lead with 214 sacks of 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail in 1000 sacks of Pecos ViLt with D112 0.4%; D151 22.5 lb/sack; D174 1.5 lb/sack, D177 0.01 lb/sack; D800 0.6 lb/sack and D46 0.15 lb/sack (Wt. 13.00 Yld. 1.41). Designed with 30% excess. Top of cement approximately 7500'.

See  
COA

2<sup>nd</sup> Stage: 470 sacks 35:65:6PzC (Wt. 12.50 Yld 2.00). Tail with 200 sacks of Pecos ViLt with D112 0.4%; D151 22.5 lb/sack; D174 1.5 lb/sack, D177 0.01 lb/sack; D800 0.6 lb/sack and D46 0.15 lb/sack (Wt. 13.00 Yld. 1.41). Designed with 30% excess. Top of cement approximately 3950'.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

| Interval                   | Type                        | Weight        | Viscosity | Fluid Loss |
|----------------------------|-----------------------------|---------------|-----------|------------|
| 0-825' <sup>880</sup>      | Fresh Water                 | 8.60 – 9.20   | 28-32     | N/C        |
| 825'-4450' <sup>4500</sup> | Brine Water                 | 10.00 – 10.20 | 28-30     | N/C        |
| 4450'-8756'                | Cut Brine                   | 9.00– 9.20    | 30-32     | N/C        |
| 8756'-12897'               | Cut Brine (lateral section) | 9.00-9.20     | 32-34     | <12        |

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: See COA

Samples: 30' Samples to 5000'—10' samples 5000' to TD.

Logging: Platform Express/HALS/CMR

Coring: None Anticipated

DST's: Any tests will be based on the recommendations of the well site geologist.

Mudloggers: From surface casing to TD.

## Amazing BAZ Federal #4-H

### Page 3

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

Anticipated BHP:

|             |           |                       |          |
|-------------|-----------|-----------------------|----------|
| From: 0     | TO: 825'  | Anticipated Max. BHP: | 395PSI   |
| From: 825'  | TO: 4450' | Anticipated Max. BHP: | 2360 PSI |
| From: 4450' | TO: 8476' | Anticipated Max BHP:  | 4055 PSI |

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

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 60 days to drill the well with completion taking another 20 days.



Project: Lea County  
 Site: Amazing BAZ Federal  
 Well: #4H  
 Wellbore: OH  
 Plan: Plan #3 (#4H/OH)



Azimuths to Grid North  
 True North: -0.33°  
 Magnetic North: 7.24°

Magnetic Field  
 Strength: 48659.2snT  
 Dip Angle: 60.30°  
 Date: 1/18/2012  
 Model: IGRF200510

# PATHFINDER®

A Schlumberger Company

West(-)/East(+) (200 usft/in)

PROJECT DETAILS: Lea County  
 Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: New Mexico Eastern Zone  
 System Datum: Mean Sea Level  
 Local North: Grid

### WELL DETAILS: #4H

Ground Elevation: 3542.0  
 RKB Elevation: KB = 26.5 @ 3568.5usft (Patriot 5)  
 Rig Name: Patriot 5

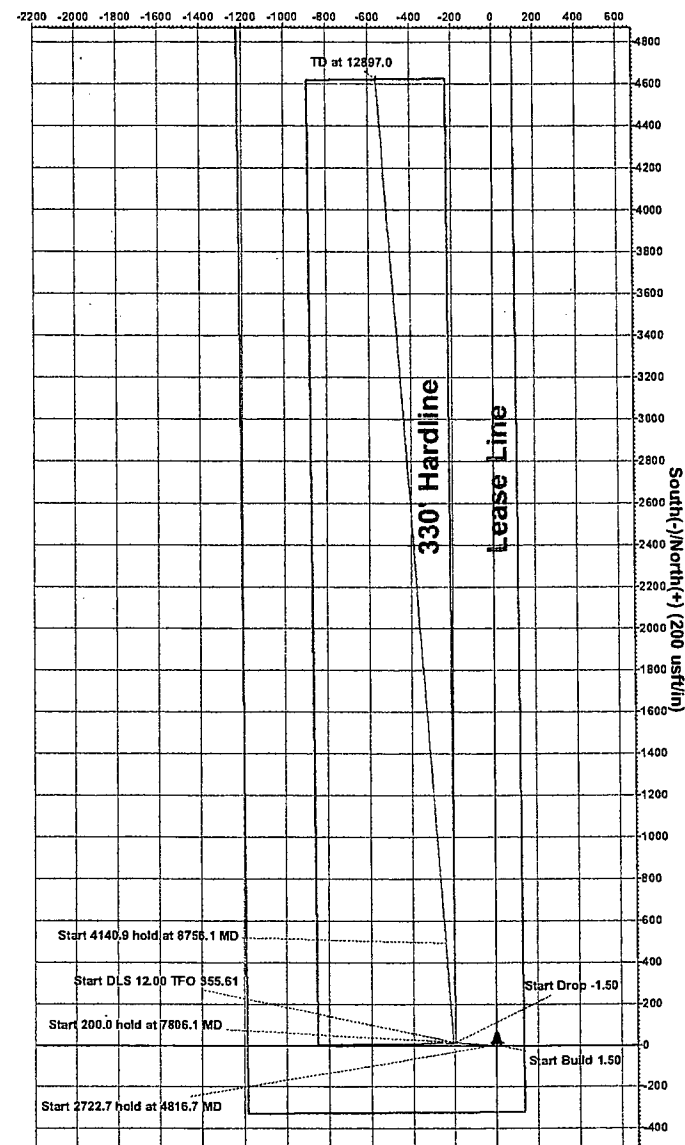
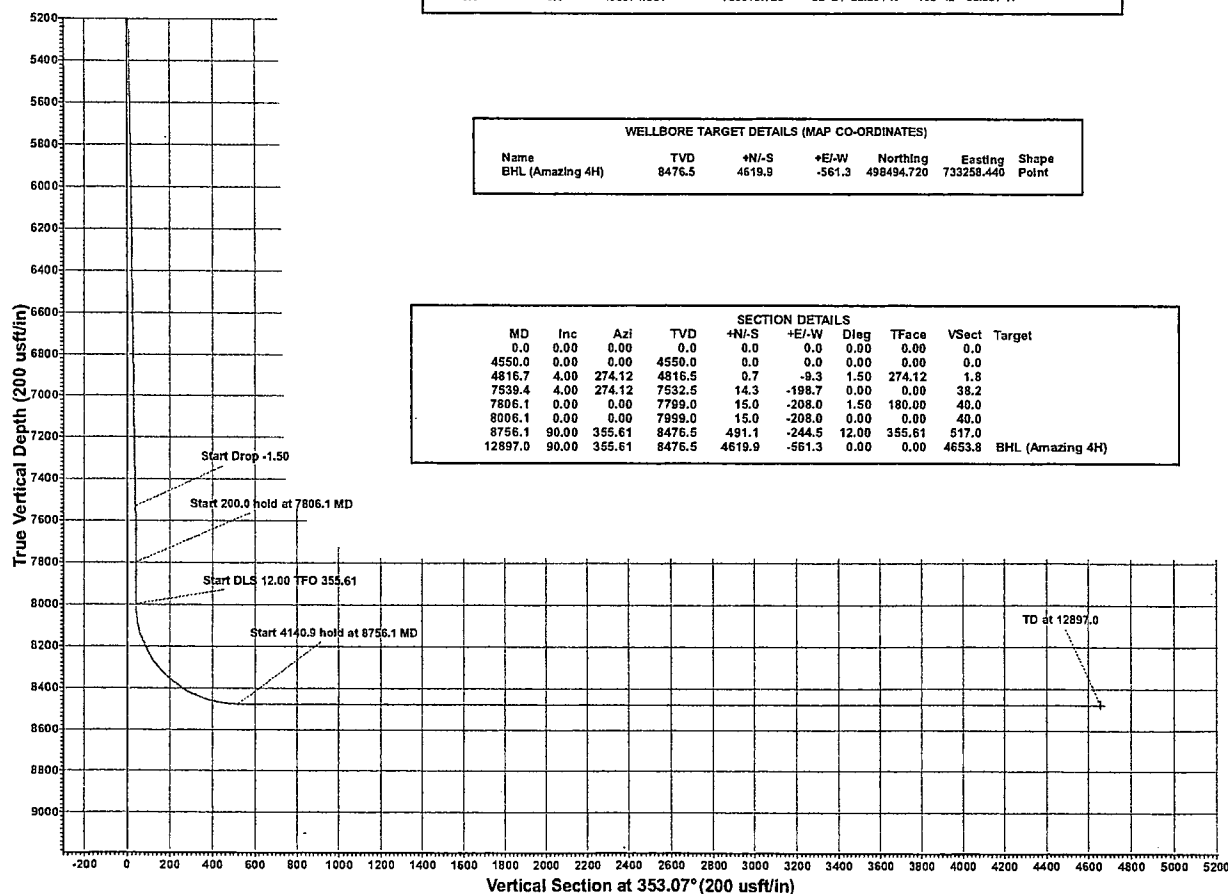
| +N/-S | +E/-W | Northing   | Easting    | Latitude       | Longitude        | Slot |
|-------|-------|------------|------------|----------------|------------------|------|
| 0.0   | 0.0   | 493874.851 | 733619.728 | 32°21'22.29" N | 103°42'35.337" W |      |

### WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

| Name             | TVD    | +N/-S  | +E/-W  | Northing   | Easting    | Shape |
|------------------|--------|--------|--------|------------|------------|-------|
| BHL (Amazing 4H) | 8476.5 | 4619.9 | -561.3 | 498494.720 | 733258.440 | Point |

### SECTION DETAILS

| MD      | Inc   | Azi    | TVD    | +N/-S  | +E/-W  | Dleg  | TFace  | VSect  | Target           |
|---------|-------|--------|--------|--------|--------|-------|--------|--------|------------------|
| 0.0     | 0.00  | 0.00   | 0.0    | 0.0    | 0.0    | 0.00  | 0.00   | 0.0    |                  |
| 4550.0  | 0.00  | 0.00   | 4550.0 | 0.0    | 0.0    | 0.00  | 0.00   | 0.0    |                  |
| 4816.7  | 4.00  | 274.12 | 4816.5 | 0.7    | -9.3   | 1.50  | 274.12 | 1.8    |                  |
| 7539.4  | 4.00  | 274.12 | 7532.5 | 14.3   | -198.7 | 0.00  | 0.00   | 38.2   |                  |
| 7806.1  | 0.00  | 0.00   | 7799.0 | 15.0   | -208.0 | 1.50  | 180.00 | 40.0   |                  |
| 8006.1  | 0.00  | 0.00   | 7999.0 | 15.0   | -208.0 | 0.00  | 0.00   | 40.0   |                  |
| 8756.1  | 90.00 | 355.61 | 8476.5 | 491.1  | -244.5 | 12.00 | 355.61 | 517.0  |                  |
| 12897.0 | 90.00 | 355.61 | 8476.5 | 4619.9 | -561.3 | 0.00  | 0.00   | 4653.8 | BHL (Amazing 4H) |



Plan: Plan #3 (#4H/OH)

Created By: Sam Biffle Date: 15:25, January 18 2012

Checked: \_\_\_\_\_ Date: \_\_\_\_\_

View this file in  
 AutoCAD  
 2012  
 1/18/2012  
 15:25



Pathfinder  
PathfinderX & Y Report

**PATHFINDER**  
A Schlumberger Company

|           |                       |                              |                                    |
|-----------|-----------------------|------------------------------|------------------------------------|
| Company:  | Yates Petroleum Corp. | Local Co-ordinate Reference: | Well #4H                           |
| Project:  | Lea County            | TVD Reference:               | KB = 26.5 @ 3568.5usft (Patriot 5) |
| Site:     | Amazing BAZ Federal   | MD Reference:                | KB = 26.5 @ 3568.5usft (Patriot 5) |
| Well:     | #4H                   | North Reference:             | Grid                               |
| Wellbore: | OH                    | Survey Calculation Method:   | Minimum Curvature                  |
| Design:   | Plan #3               | Database:                    | EDM 5000.1 Single User Db          |

|                     |                           |
|---------------------|---------------------------|
| Project: Lea County |                           |
| Map System:         | US State Plane 1983       |
| Geo Datum:          | North American Datum 1983 |
| Map Zone:           | New Mexico Eastern Zone   |
| System Datum:       | Mean Sea Level            |

|                       |          |                     |             |      |                   |                   |
|-----------------------|----------|---------------------|-------------|------|-------------------|-------------------|
| Site                  |          | Amazing BAZ Federal |             |      |                   |                   |
| Site Position:        |          | Northing:           | 493,874.851 | usft | Latitude:         | 32° 21' 22.291 N  |
| From:                 | Map      | Easting:            | 733,819.728 | usft | Longitude:        | 103° 42' 35.937 W |
| Position Uncertainty: | 0.0 usft | Slot Radius:        | 13-3/16     | "    | Grid Convergence: | 0.33 °            |

|                      |          |          |                     |                  |               |                   |
|----------------------|----------|----------|---------------------|------------------|---------------|-------------------|
| Well:                | #4H      |          |                     |                  |               |                   |
| Well Position        | +N/-S    | 0.0 usft | Northing:           | 493,874.851 usft | Latitude:     | 32° 21' 22.291 N  |
|                      | +E/-W    | 0.0 usft | Easting:            | 733,819.728 usft | Longitude:    | 103° 42' 35.937 W |
| Position Uncertainty | 0.0 usft |          | Wellhead Elevation: | usft             | Ground Level: | 3,542.0 usft      |

|           |            |             |                    |                  |                        |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | OH         |             |                    |                  |                        |
| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip/Angle<br>(°) | Field Strength<br>(nT) |
|           | IGRF200510 | 1/18/2012   | 7.58               | 60.30            | 48,659                 |

|                   |                  |         |        |                   |
|-------------------|------------------|---------|--------|-------------------|
| Design:           |                  | Plan #3 |        |                   |
| Audit Notes:      |                  |         |        |                   |
| Version:          |                  | Phase:  | PLAN   | Tie On Depth: 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S   | +E/-W  | Direction         |
|                   | (usft)           | (usft)  | (usft) | (°)               |
|                   | 0.0              | 0.0     | 0.0    | 353.07            |

|                     |              |                   |           |                |
|---------------------|--------------|-------------------|-----------|----------------|
| Survey Tool Program |              | Date 1/18/2012    |           |                |
| From<br>(usft)      | To<br>(usft) | Survey (Wellbore) | Tool Name | Description    |
| 0.0                 | 12,896.5     | Plan #3 (OH)      | MWD       | MWD - Standard |



Pathfinder  
PathfinderX & Y Report

**PATHFINDER**  
A Schlumberger Company

|           |                       |                              |                                    |
|-----------|-----------------------|------------------------------|------------------------------------|
| Company:  | Yates Petroleum Corp. | Local Co-ordinate Reference: | Well #4H                           |
| Project:  | Lea County            | TVD Reference:               | KB = 26.5 @ 3568.5usft (Patriot 5) |
| Site:     | Amazing BAZ Federal   | MD Reference:                | KB = 26.5 @ 3568.5usft (Patriot 5) |
| Well:     | #4H                   | North Reference:             | Grid                               |
| Wellbore: | OH                    | Survey Calculation Method:   | Minimum Curvature                  |
| Design:   | Plan #3               | Database:                    | EDM 5000.1 Single User Db          |

| Planned Survey |            |                      |               |                 |               |               |                  |                       |                    |                   |  |
|----------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|-----------------------|--------------------|-------------------|--|
| MD<br>(usft)   | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | D Leg.<br>(#/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 0.0            | 0.00       | 0.00                 | 0.0           | -3,568.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 100.0          | 0.00       | 0.00                 | 100.0         | -3,468.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 200.0          | 0.00       | 0.00                 | 200.0         | -3,368.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 300.0          | 0.00       | 0.00                 | 300.0         | -3,268.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 400.0          | 0.00       | 0.00                 | 400.0         | -3,168.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 500.0          | 0.00       | 0.00                 | 500.0         | -3,068.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 600.0          | 0.00       | 0.00                 | 600.0         | -2,968.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 700.0          | 0.00       | 0.00                 | 700.0         | -2,868.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 800.0          | 0.00       | 0.00                 | 800.0         | -2,768.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 900.0          | 0.00       | 0.00                 | 900.0         | -2,668.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,000.0        | 0.00       | 0.00                 | 1,000.0       | -2,568.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,100.0        | 0.00       | 0.00                 | 1,100.0       | -2,468.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,200.0        | 0.00       | 0.00                 | 1,200.0       | -2,368.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,300.0        | 0.00       | 0.00                 | 1,300.0       | -2,268.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,400.0        | 0.00       | 0.00                 | 1,400.0       | -2,168.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,500.0        | 0.00       | 0.00                 | 1,500.0       | -2,068.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,600.0        | 0.00       | 0.00                 | 1,600.0       | -1,968.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,700.0        | 0.00       | 0.00                 | 1,700.0       | -1,868.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,800.0        | 0.00       | 0.00                 | 1,800.0       | -1,768.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 1,900.0        | 0.00       | 0.00                 | 1,900.0       | -1,668.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 2,000.0        | 0.00       | 0.00                 | 2,000.0       | -1,568.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 2,100.0        | 0.00       | 0.00                 | 2,100.0       | -1,468.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 2,200.0        | 0.00       | 0.00                 | 2,200.0       | -1,368.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 2,300.0        | 0.00       | 0.00                 | 2,300.0       | -1,268.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 2,400.0        | 0.00       | 0.00                 | 2,400.0       | -1,168.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 2,500.0        | 0.00       | 0.00                 | 2,500.0       | -1,068.5        | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |
| 2,600.0        | 0.00       | 0.00                 | 2,600.0       | -968.5          | 0.0           | 0.0           | 0.0              | 0.00                  | 493,874.85         | 733,819.73        |  |



# Pathfinder PathfinderX & Y Report

**PATHFINDER**  
A Schlumberger Company

Company: Yates Petroleum Corp.  
Project: Lea County  
Site: Amazing BAZ Federal  
Well: #4H  
Wellbore: OH  
Design: Plan #3

Local Co-ordinate Reference:  
TVD Reference:  
MD Reference:  
North Reference:  
Survey Calculation Method:  
Database:

Well #4H  
KB = 26.5 @ 3568.5usft (Patriot 5)  
KB = 26.5 @ 3568.5usft (Patriot 5)  
Grid  
Minimum Curvature  
EDM 5000.1 Single User Db

| Planned Survey |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
|----------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|--|
| MD<br>(usft)   | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 2,700.0        | 0.00       | 0.00                 | 2,700.0       | -868.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 2,800.0        | 0.00       | 0.00                 | 2,800.0       | -768.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 2,900.0        | 0.00       | 0.00                 | 2,900.0       | -668.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,000.0        | 0.00       | 0.00                 | 3,000.0       | -568.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,100.0        | 0.00       | 0.00                 | 3,100.0       | -468.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,200.0        | 0.00       | 0.00                 | 3,200.0       | -368.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,300.0        | 0.00       | 0.00                 | 3,300.0       | -268.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,400.0        | 0.00       | 0.00                 | 3,400.0       | -168.5          | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,500.0        | 0.00       | 0.00                 | 3,500.0       | -68.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,600.0        | 0.00       | 0.00                 | 3,600.0       | 31.5            | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,700.0        | 0.00       | 0.00                 | 3,700.0       | 131.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,800.0        | 0.00       | 0.00                 | 3,800.0       | 231.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 3,900.0        | 0.00       | 0.00                 | 3,900.0       | 331.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,000.0        | 0.00       | 0.00                 | 4,000.0       | 431.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,100.0        | 0.00       | 0.00                 | 4,100.0       | 531.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,200.0        | 0.00       | 0.00                 | 4,200.0       | 631.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,300.0        | 0.00       | 0.00                 | 4,300.0       | 731.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,400.0        | 0.00       | 0.00                 | 4,400.0       | 831.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,500.0        | 0.00       | 0.00                 | 4,500.0       | 931.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,550.0        | 0.00       | 0.00                 | 4,550.0       | 981.5           | 0.0           | 0.0           | 0.0              | 0.00                | 493,874.85         | 733,819.73        |  |
| 4,600.0        | 0.75       | 274.12               | 4,600.0       | 1,031.5         | 0.0           | -0.3          | 0.1              | 1.50                | 493,874.87         | 733,819.40        |  |
| 4,700.0        | 2.25       | 274.12               | 4,700.0       | 1,131.5         | 0.2           | -2.9          | 0.6              | 1.50                | 493,875.06         | 733,816.79        |  |
| 4,800.0        | 3.75       | 274.12               | 4,799.8       | 1,231.3         | 0.6           | -8.2          | 1.6              | 1.50                | 493,875.44         | 733,811.57        |  |
| 4,816.7        | 4.00       | 274.12               | 4,816.5       | 1,248.0         | 0.7           | -9.3          | 1.8              | 1.50                | 493,875.52         | 733,810.45        |  |
| 4,900.0        | 4.00       | 274.12               | 4,899.6       | 1,331.1         | 1.1           | -15.1         | 2.9              | 0.00                | 493,875.94         | 733,804.65        |  |
| 5,000.0        | 4.00       | 274.12               | 4,999.3       | 1,430.8         | 1.6           | -22.0         | 4.2              | 0.00                | 493,876.44         | 733,797.69        |  |
| 5,100.0        | 4.00       | 274.12               | 5,099.1       | 1,530.6         | 2.1           | -29.0         | 5.6              | 0.00                | 493,876.94         | 733,790.73        |  |





# Pathfinder

PathfinderX & Y Report

**PATHFINDER**  
A Schlumberger Company

|                  |                       |                                     |                                    |
|------------------|-----------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Yates Petroleum Corp. | <b>Local Co-ordinate Reference:</b> | Well #4H                           |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 26.5 @ 3568.5usft (Patriot 5) |
| <b>Site:</b>     | Amazing BAZ Federal   | <b>MD Reference:</b>                | KB = 26.5 @ 3568.5usft (Patriot 5) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                               |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Design:</b>   | Plan #3               | <b>Database:</b>                    | EDM 5000.1 Single User Db          |

| Planned Survey |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
|----------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|--|
| MD<br>(usft)   | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 5,200.0        | 4.00       | 274.12               | 5,198.8       | 1,630.3         | 2.6           | -36.0         | 6.9              | 0.00                | 493,877.44         | 733,783.78        |  |
| 5,300.0        | 4.00       | 274.12               | 5,298.6       | 1,730.1         | 3.1           | -42.9         | 8.2              | 0.00                | 493,877.95         | 733,776.82        |  |
| 5,400.0        | 4.00       | 274.12               | 5,398.4       | 1,829.9         | 3.6           | -49.9         | 9.6              | 0.00                | 493,878.45         | 733,769.86        |  |
| 5,500.0        | 4.00       | 274.12               | 5,498.1       | 1,929.6         | 4.1           | -56.8         | 10.9             | 0.00                | 493,878.95         | 733,762.90        |  |
| 5,600.0        | 4.00       | 274.12               | 5,597.9       | 2,029.4         | 4.6           | -63.8         | 12.3             | 0.00                | 493,879.45         | 733,755.95        |  |
| 5,700.0        | 4.00       | 274.12               | 5,697.6       | 2,129.1         | 5.1           | -70.7         | 13.6             | 0.00                | 493,879.95         | 733,748.99        |  |
| 5,800.0        | 4.00       | 274.12               | 5,797.4       | 2,228.9         | 5.6           | -77.7         | 14.9             | 0.00                | 493,880.45         | 733,742.03        |  |
| 5,900.0        | 4.00       | 274.12               | 5,897.1       | 2,328.6         | 6.1           | -84.7         | 16.3             | 0.00                | 493,880.96         | 733,735.07        |  |
| 6,000.0        | 4.00       | 274.12               | 5,996.9       | 2,428.4         | 6.6           | -91.6         | 17.6             | 0.00                | 493,881.46         | 733,728.11        |  |
| 6,100.0        | 4.00       | 274.12               | 6,096.7       | 2,528.2         | 7.1           | -98.6         | 18.9             | 0.00                | 493,881.96         | 733,721.16        |  |
| 6,200.0        | 4.00       | 274.12               | 6,196.4       | 2,627.9         | 7.6           | -105.5        | 20.3             | 0.00                | 493,882.46         | 733,714.20        |  |
| 6,300.0        | 4.00       | 274.12               | 6,296.2       | 2,727.7         | 8.1           | -112.5        | 21.6             | 0.00                | 493,882.96         | 733,707.24        |  |
| 6,400.0        | 4.00       | 274.12               | 6,395.9       | 2,827.4         | 8.6           | -119.4        | 23.0             | 0.00                | 493,883.46         | 733,700.28        |  |
| 6,500.0        | 4.00       | 274.12               | 6,495.7       | 2,927.2         | 9.1           | -126.4        | 24.3             | 0.00                | 493,883.97         | 733,693.33        |  |
| 6,600.0        | 4.00       | 274.12               | 6,595.4       | 3,026.9         | 9.6           | -133.4        | 25.6             | 0.00                | 493,884.47         | 733,686.37        |  |
| 6,700.0        | 4.00       | 274.12               | 6,695.2       | 3,126.7         | 10.1          | -140.3        | 27.0             | 0.00                | 493,884.97         | 733,679.41        |  |
| 6,800.0        | 4.00       | 274.12               | 6,795.0       | 3,226.5         | 10.6          | -147.3        | 28.3             | 0.00                | 493,885.47         | 733,672.45        |  |
| 6,900.0        | 4.00       | 274.12               | 6,894.7       | 3,326.2         | 11.1          | -154.2        | 29.6             | 0.00                | 493,885.97         | 733,665.50        |  |
| 7,000.0        | 4.00       | 274.12               | 6,994.5       | 3,426.0         | 11.6          | -161.2        | 31.0             | 0.00                | 493,886.48         | 733,658.54        |  |
| 7,100.0        | 4.00       | 274.12               | 7,094.2       | 3,525.7         | 12.1          | -168.1        | 32.3             | 0.00                | 493,886.98         | 733,651.58        |  |
| 7,200.0        | 4.00       | 274.12               | 7,194.0       | 3,625.5         | 12.6          | -175.1        | 33.7             | 0.00                | 493,887.48         | 733,644.62        |  |
| 7,300.0        | 4.00       | 274.12               | 7,293.7       | 3,725.2         | 13.1          | -182.1        | 35.0             | 0.00                | 493,887.98         | 733,637.67        |  |
| 7,400.0        | 4.00       | 274.12               | 7,393.5       | 3,825.0         | 13.6          | -189.0        | 36.3             | 0.00                | 493,888.48         | 733,630.71        |  |
| 7,500.0        | 4.00       | 274.12               | 7,493.2       | 3,924.7         | 14.1          | -196.0        | 37.7             | 0.00                | 493,888.98         | 733,623.75        |  |
| 7,539.4        | 4.00       | 274.12               | 7,532.5       | 3,964.0         | 14.3          | -198.7        | 38.2             | 0.00                | 493,889.18         | 733,621.01        |  |
| 7,600.0        | 3.09       | 274.12               | 7,593.0       | 4,024.5         | 14.6          | -202.5        | 38.9             | 1.50                | 493,889.45         | 733,617.27        |  |
| 7,700.0        | 1.59       | 274.12               | 7,692.9       | 4,124.4         | 14.9          | -206.5        | 39.7             | 1.50                | 493,889.75         | 733,613.20        |  |



# Pathfinder

PathfinderX & Y Report

**PATHFINDER**  
A Schlumberger Company

|                  |                       |                                     |                                    |
|------------------|-----------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Yates Petroleum Corp. | <b>Local Co-ordinate Reference:</b> | Well #4H                           |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 26.5 @ 3568.5usft (Patriot 5) |
| <b>Site:</b>     | Amazing BAZ Federal   | <b>MD Reference:</b>                | KB = 26.5 @ 3568.5usft (Patriot 5) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                               |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Design:</b>   | Plan #3               | <b>Database:</b>                    | EDM 5000.1 Single User Db          |

| Planned Survey |            |                      |               |                 |               |               |                  |                     |                    |                   |  |
|----------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|---------------------|--------------------|-------------------|--|
| MD<br>(usft)   | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(%/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 7,806.1        | 0.00       | 0.00                 | 7,799.0       | 4,230.5         | 15.0          | -208.0        | 40.0             | 1.50                | 493,889.85         | 733,611.73        |  |
| 7,900.0        | 0.00       | 0.00                 | 7,892.9       | 4,324.4         | 15.0          | -208.0        | 40.0             | 0.00                | 493,889.85         | 733,611.73        |  |
| 8,006.1        | 0.00       | 0.00                 | 7,999.0       | 4,430.5         | 15.0          | -208.0        | 40.0             | 0.00                | 493,889.85         | 733,611.73        |  |
| 8,025.0        | 2.27       | 355.61               | 8,017.9       | 4,449.4         | 15.4          | -208.0        | 40.4             | 12.00               | 493,890.23         | 733,611.70        |  |
| 8,050.0        | 5.27       | 355.61               | 8,042.9       | 4,474.4         | 17.0          | -208.2        | 42.0             | 12.00               | 493,891.86         | 733,611.57        |  |
| 8,075.0        | 8.27       | 355.61               | 8,067.7       | 4,499.2         | 20.0          | -208.4        | 44.9             | 12.00               | 493,894.80         | 733,611.35        |  |
| 8,100.0        | 11.27      | 355.61               | 8,092.3       | 4,523.8         | 24.2          | -208.7        | 49.2             | 12.00               | 493,899.03         | 733,611.02        |  |
| 8,125.0        | 14.27      | 355.61               | 8,116.7       | 4,548.2         | 29.7          | -209.1        | 54.7             | 12.00               | 493,904.54         | 733,610.60        |  |
| 8,150.0        | 17.27      | 355.61               | 8,140.8       | 4,572.3         | 36.5          | -209.6        | 61.5             | 12.00               | 493,911.32         | 733,610.08        |  |
| 8,175.0        | 20.27      | 355.61               | 8,164.4       | 4,595.9         | 44.5          | -210.3        | 69.5             | 12.00               | 493,919.34         | 733,609.47        |  |
| 8,200.0        | 23.27      | 355.61               | 8,187.6       | 4,619.1         | 53.7          | -211.0        | 78.8             | 12.00               | 493,928.58         | 733,608.76        |  |
| 8,225.0        | 26.27      | 355.61               | 8,210.3       | 4,641.8         | 64.2          | -211.8        | 89.2             | 12.00               | 493,939.03         | 733,607.96        |  |
| 8,250.0        | 29.27      | 355.61               | 8,232.5       | 4,664.0         | 75.8          | -212.7        | 100.9            | 12.00               | 493,950.64         | 733,607.06        |  |
| 8,275.0        | 32.27      | 355.61               | 8,253.9       | 4,685.4         | 88.5          | -213.6        | 113.7            | 12.00               | 493,963.39         | 733,606.09        |  |
| 8,300.0        | 35.27      | 355.61               | 8,274.7       | 4,706.2         | 102.4         | -214.7        | 127.5            | 12.00               | 493,977.25         | 733,605.02        |  |
| 8,325.0        | 38.27      | 355.61               | 8,294.7       | 4,726.2         | 117.3         | -215.8        | 142.5            | 12.00               | 493,992.17         | 733,603.88        |  |
| 8,350.0        | 41.27      | 355.61               | 8,314.0       | 4,745.5         | 133.3         | -217.1        | 158.5            | 12.00               | 494,008.11         | 733,602.65        |  |
| 8,375.0        | 44.27      | 355.61               | 8,332.3       | 4,763.8         | 150.2         | -218.4        | 175.4            | 12.00               | 494,025.04         | 733,601.36        |  |
| 8,400.0        | 47.27      | 355.61               | 8,349.7       | 4,781.2         | 168.0         | -219.7        | 193.3            | 12.00               | 494,042.90         | 733,599.99        |  |
| 8,425.0        | 50.27      | 355.61               | 8,366.2       | 4,797.7         | 186.8         | -221.2        | 212.1            | 12.00               | 494,061.64         | 733,598.55        |  |
| 8,450.0        | 53.27      | 355.61               | 8,381.7       | 4,813.2         | 206.4         | -222.7        | 231.7            | 12.00               | 494,081.22         | 733,597.05        |  |
| 8,475.0        | 56.27      | 355.61               | 8,396.1       | 4,827.6         | 226.7         | -224.2        | 252.1            | 12.00               | 494,101.58         | 733,595.48        |  |
| 8,500.0        | 59.27      | 355.61               | 8,409.4       | 4,840.9         | 247.8         | -225.9        | 273.2            | 12.00               | 494,122.67         | 733,593.87        |  |
| 8,525.0        | 62.27      | 355.61               | 8,421.6       | 4,853.1         | 269.6         | -227.5        | 295.0            | 12.00               | 494,144.42         | 733,592.20        |  |
| 8,550.0        | 65.27      | 355.61               | 8,432.7       | 4,864.2         | 291.9         | -229.2        | 317.4            | 12.00               | 494,166.77         | 733,590.48        |  |
| 8,575.0        | 68.27      | 355.61               | 8,442.5       | 4,874.0         | 314.8         | -231.0        | 340.4            | 12.00               | 494,189.68         | 733,588.73        |  |
| 8,600.0        | 71.27      | 355.61               | 8,451.2       | 4,882.7         | 338.2         | -232.8        | 363.8            | 12.00               | 494,213.06         | 733,586.93        |  |



# Pathfinder PathfinderX & Y Report

**PATHFINDER**  
A Schlumberger Company

|                  |                       |                                     |                                    |
|------------------|-----------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>  | Yates Petroleum Corp. | <b>Local Co-ordinate Reference:</b> | Well #4H                           |
| <b>Project:</b>  | Lea County            | <b>TVD Reference:</b>               | KB = 26.5 @ 3568.5usft (Patriot 5) |
| <b>Site:</b>     | Amazing BAZ Federal   | <b>MD Reference:</b>                | KB = 26.5 @ 3568.5usft (Patriot 5) |
| <b>Well:</b>     | #4H                   | <b>North Reference:</b>             | Grid                               |
| <b>Wellbore:</b> | OH                    | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Design:</b>   | Plan #3               | <b>Database:</b>                    | EDM 5000.1 Single User Db          |

| Planned Survey |            |                      |               |                 |               |               |                  |                      |                    |                   |  |
|----------------|------------|----------------------|---------------|-----------------|---------------|---------------|------------------|----------------------|--------------------|-------------------|--|
| MD<br>(usft)   | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | D Leg<br>(%/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 8,625.0        | 74.27      | 355.61               | 8,458.6       | 4,890.1         | 362.0         | -234.6        | 387.7            | 12.00                | 494,236.87         | 733,585.10        |  |
| 8,650.0        | 77.27      | 355.61               | 8,464.7       | 4,896.2         | 386.2         | -236.5        | 411.9            | 12.00                | 494,261.03         | 733,583.25        |  |
| 8,675.0        | 80.27      | 355.61               | 8,469.6       | 4,901.1         | 410.6         | -238.4        | 436.4            | 12.00                | 494,285.48         | 733,581.38        |  |
| 8,700.0        | 83.27      | 355.61               | 8,473.2       | 4,904.7         | 435.3         | -240.2        | 461.1            | 12.00                | 494,310.14         | 733,579.48        |  |
| 8,725.0        | 86.27      | 355.61               | 8,475.5       | 4,907.0         | 460.1         | -242.1        | 486.0            | 12.00                | 494,334.96         | 733,577.58        |  |
| 8,750.0        | 89.27      | 355.61               | 8,476.4       | 4,907.9         | 485.0         | -244.1        | 510.9            | 12.00                | 494,359.87         | 733,575.67        |  |
| 8,756.1        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 491.1         | -244.5        | 517.0            | 12.00                | 494,365.91         | 733,575.20        |  |
| 8,800.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 534.9         | -247.9        | 560.9            | 0.00                 | 494,409.72         | 733,571.84        |  |
| 8,900.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 634.6         | -255.5        | 660.8            | 0.00                 | 494,509.43         | 733,564.19        |  |
| 9,000.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 734.3         | -263.2        | 760.7            | 0.00                 | 494,609.14         | 733,556.54        |  |
| 9,100.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 834.0         | -270.8        | 860.6            | 0.00                 | 494,708.84         | 733,548.89        |  |
| 9,200.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 933.7         | -278.5        | 960.5            | 0.00                 | 494,808.55         | 733,541.24        |  |
| 9,300.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,033.4       | -286.1        | 1,060.4          | 0.00                 | 494,908.26         | 733,533.60        |  |
| 9,400.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,133.1       | -293.8        | 1,160.3          | 0.00                 | 495,007.96         | 733,525.95        |  |
| 9,500.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,232.8       | -301.4        | 1,260.2          | 0.00                 | 495,107.67         | 733,518.30        |  |
| 9,600.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,332.5       | -309.1        | 1,360.1          | 0.00                 | 495,207.38         | 733,510.65        |  |
| 9,700.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,432.2       | -316.7        | 1,460.0          | 0.00                 | 495,307.09         | 733,503.00        |  |
| 9,800.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,531.9       | -324.4        | 1,559.9          | 0.00                 | 495,406.79         | 733,495.35        |  |
| 9,900.0        | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,631.6       | -332.0        | 1,659.8          | 0.00                 | 495,506.50         | 733,487.70        |  |
| 10,000.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,731.4       | -339.7        | 1,759.7          | 0.00                 | 495,606.21         | 733,480.05        |  |
| 10,100.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,831.1       | -347.3        | 1,859.6          | 0.00                 | 495,705.91         | 733,472.40        |  |
| 10,200.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 1,930.8       | -355.0        | 1,959.5          | 0.00                 | 495,805.62         | 733,464.75        |  |
| 10,300.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,030.5       | -362.6        | 2,059.4          | 0.00                 | 495,905.33         | 733,457.10        |  |
| 10,400.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,130.2       | -370.3        | 2,159.3          | 0.00                 | 496,005.03         | 733,449.45        |  |
| 10,500.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,229.9       | -377.9        | 2,259.2          | 0.00                 | 496,104.74         | 733,441.80        |  |
| 10,600.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,329.6       | -385.6        | 2,359.1          | 0.00                 | 496,204.45         | 733,434.15        |  |
| 10,700.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,429.3       | -393.2        | 2,459.0          | 0.00                 | 496,304.16         | 733,426.50        |  |



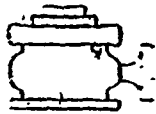
Pathfinder  
PathfinderX & Y Report

**PATHFINDER**  
A Schlumberger Company

|           |                       |                              |                                    |
|-----------|-----------------------|------------------------------|------------------------------------|
| Company:  | Yates Petroleum Corp. | Local Co-ordinate Reference: | Well #4H                           |
| Project:  | Lea County            | TVD Reference:               | KB = 26.5 @ 3568.5usft (Patriot 5) |
| Site:     | Amazing BAZ Federal   | MD Reference:                | KB = 26.5 @ 3568.5usft (Patriot 5) |
| Well:     | #4H                   | North Reference:             | Grid                               |
| Wellbore: | OH                    | Survey Calculation Method:   | Minimum Curvature                  |
| Design:   | Plan #3               | Database:                    | EDM 5000.1 Single User Db          |

| Planned Survey |            |                      |               |                 |               |               |                 |                      |                    |                   |  |
|----------------|------------|----------------------|---------------|-----------------|---------------|---------------|-----------------|----------------------|--------------------|-------------------|--|
| MD<br>(usft)   | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | TVDSS<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V-Sec<br>(usft) | DLeg<br>(ft/100usft) | Northing<br>(usft) | Easting<br>(usft) |  |
| 10,800.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,529.0       | -400.9        | 2,558.9         | 0.00                 | 496,403.86         | 733,418.85        |  |
| 10,900.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,628.7       | -408.5        | 2,658.8         | 0.00                 | 496,503.57         | 733,411.20        |  |
| 11,000.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,728.4       | -416.2        | 2,758.7         | 0.00                 | 496,603.28         | 733,403.55        |  |
| 11,100.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,828.1       | -423.8        | 2,858.6         | 0.00                 | 496,702.98         | 733,395.90        |  |
| 11,200.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 2,927.8       | -431.5        | 2,958.5         | 0.00                 | 496,802.69         | 733,388.25        |  |
| 11,300.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,027.5       | -439.1        | 3,058.4         | 0.00                 | 496,902.40         | 733,380.60        |  |
| 11,400.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,127.3       | -446.8        | 3,158.3         | 0.00                 | 497,002.10         | 733,372.95        |  |
| 11,500.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,227.0       | -454.4        | 3,258.2         | 0.00                 | 497,101.81         | 733,365.30        |  |
| 11,600.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,326.7       | -462.1        | 3,358.1         | 0.00                 | 497,201.52         | 733,357.66        |  |
| 11,700.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,426.4       | -469.7        | 3,458.0         | 0.00                 | 497,301.23         | 733,350.01        |  |
| 11,800.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,526.1       | -477.4        | 3,557.9         | 0.00                 | 497,400.93         | 733,342.36        |  |
| 11,900.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,625.8       | -485.0        | 3,657.8         | 0.00                 | 497,500.64         | 733,334.71        |  |
| 12,000.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,725.5       | -492.7        | 3,757.7         | 0.00                 | 497,600.35         | 733,327.06        |  |
| 12,100.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,825.2       | -500.3        | 3,857.6         | 0.00                 | 497,700.05         | 733,319.41        |  |
| 12,200.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 3,924.9       | -508.0        | 3,957.5         | 0.00                 | 497,799.76         | 733,311.76        |  |
| 12,300.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 4,024.6       | -515.6        | 4,057.4         | 0.00                 | 497,899.47         | 733,304.11        |  |
| 12,400.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 4,124.3       | -523.3        | 4,157.3         | 0.00                 | 497,999.17         | 733,296.46        |  |
| 12,500.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 4,224.0       | -530.9        | 4,257.2         | 0.00                 | 498,098.88         | 733,288.81        |  |
| 12,600.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 4,323.7       | -538.6        | 4,357.1         | 0.00                 | 498,198.59         | 733,281.16        |  |
| 12,700.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 4,423.4       | -546.2        | 4,457.0         | 0.00                 | 498,298.29         | 733,273.51        |  |
| 12,800.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 4,523.2       | -553.9        | 4,556.9         | 0.00                 | 498,398.00         | 733,265.86        |  |
| 12,897.0       | 90.00      | 355.61               | 8,476.5       | 4,908.0         | 4,619.9       | -561.3        | 4,653.8         | 0.00                 | 498,494.72         | 733,258.44        |  |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

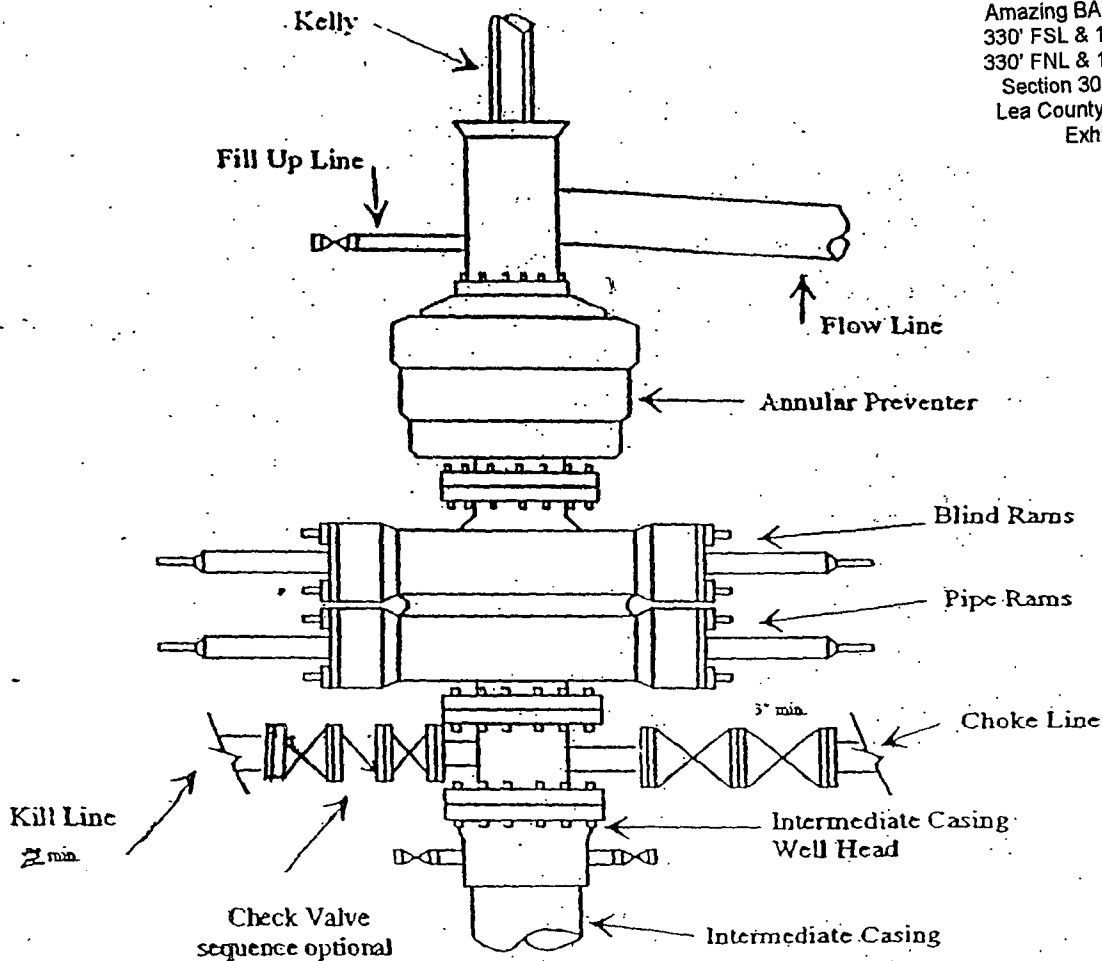


# Yates Petroleum Corporation

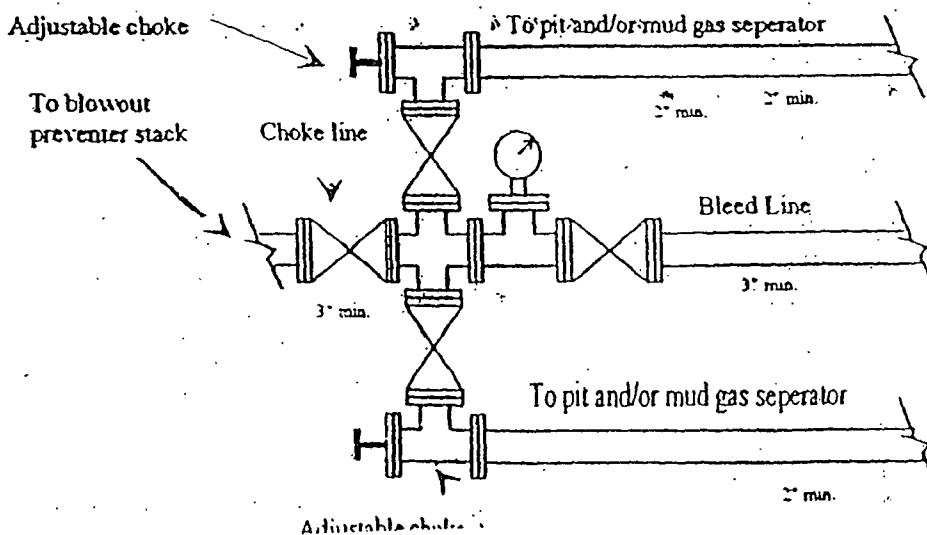
## Typical 3,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack

BOP-3

Yates Petroleum Corporation  
Amazing BAZ Federal #4H  
330' FSL & 1450' FEL-SHL  
330' FNL & 1980' FEL-BHL  
Section 30, T22S-R32E  
Lea County, New Mexico  
Exhibit "C"

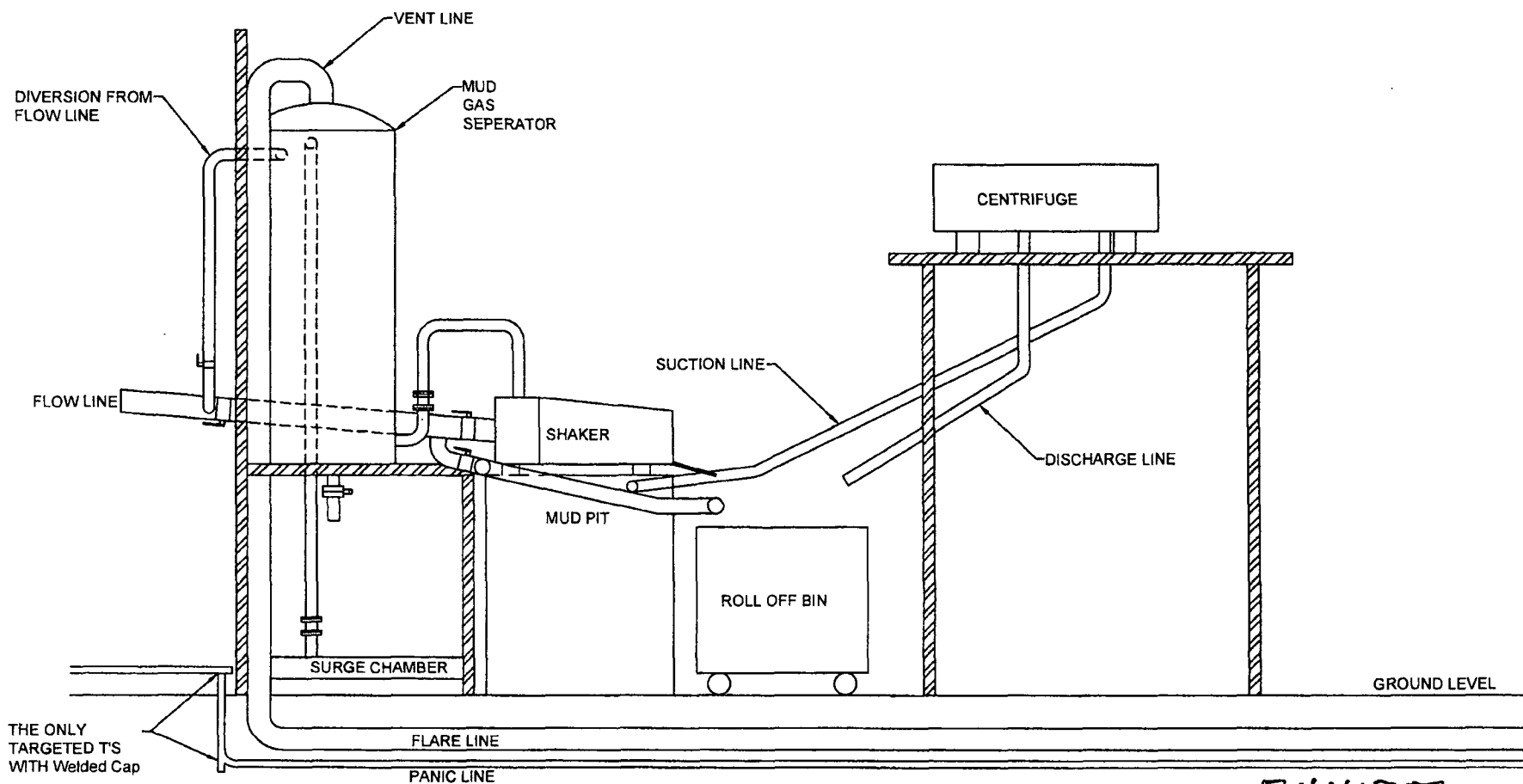


Typical 3,000 psi choke manifold assembly with at least these minimum features



# YATES PETROLEUM CORPORATION

Piping from Choke Manifold  
to the Closed Loop Drilling Mud System

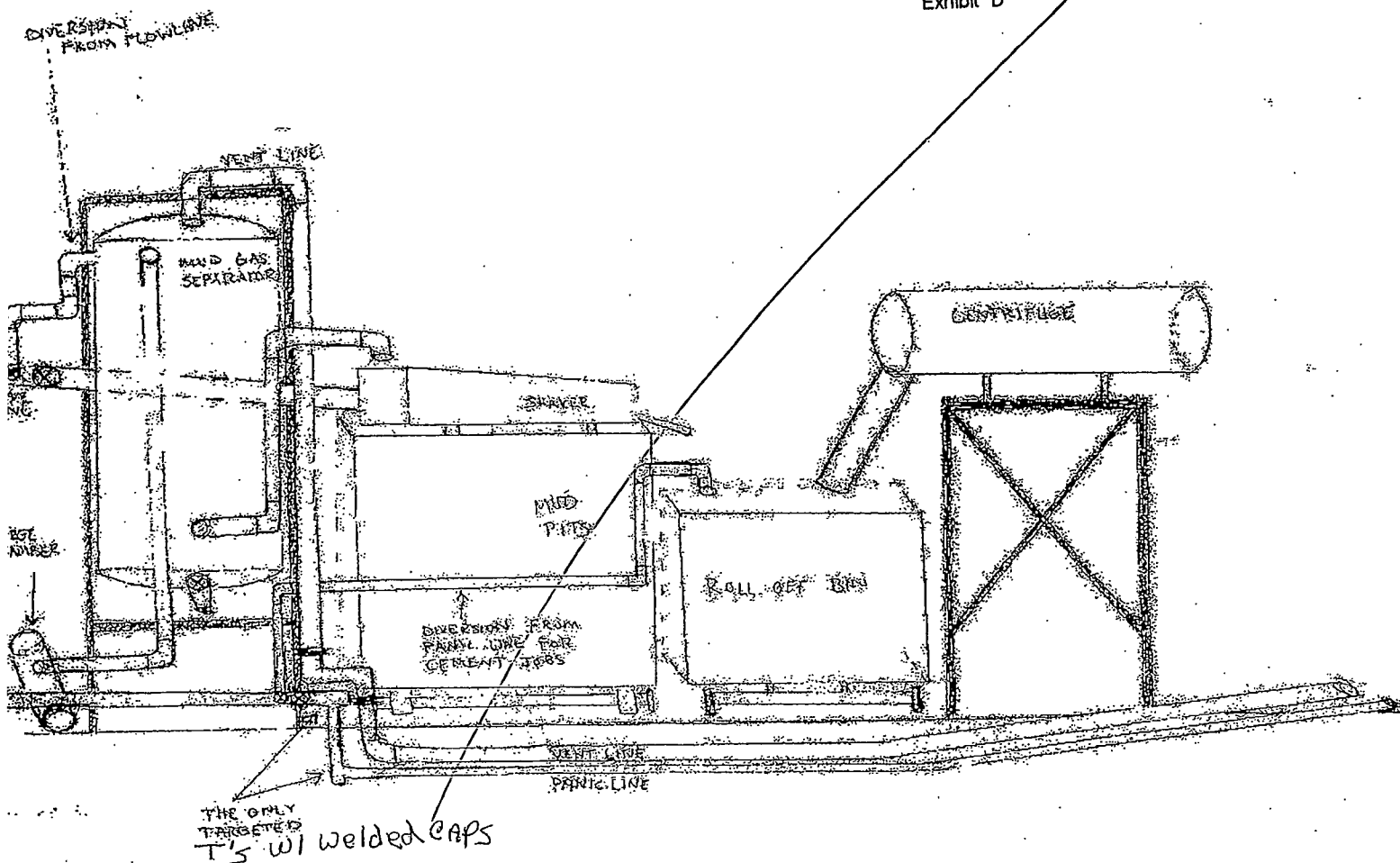


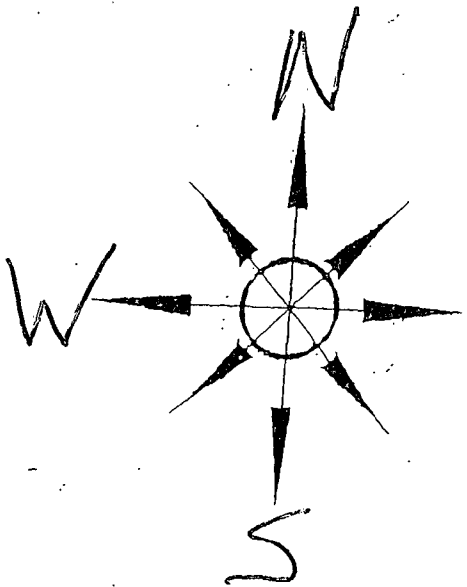
The flare discharge must be 100' from wellhead for non H2S wells and 150' from wellhead for wells expected to encounter H2S.

EXHIBIT

YATES PETROLEUM CORPORATION  
Piping from Choke Manifold  
to the Closed-Loop Drilling Mud System

Yates Petroleum Corporation  
Amazing BAZ Federal #4H  
330' FSL & 1450' FEL-SHL  
330' FNL & 1980' FEL-BHL  
Section 30, T22S-R32E  
Lea County, New Mexico  
Exhibit "D"





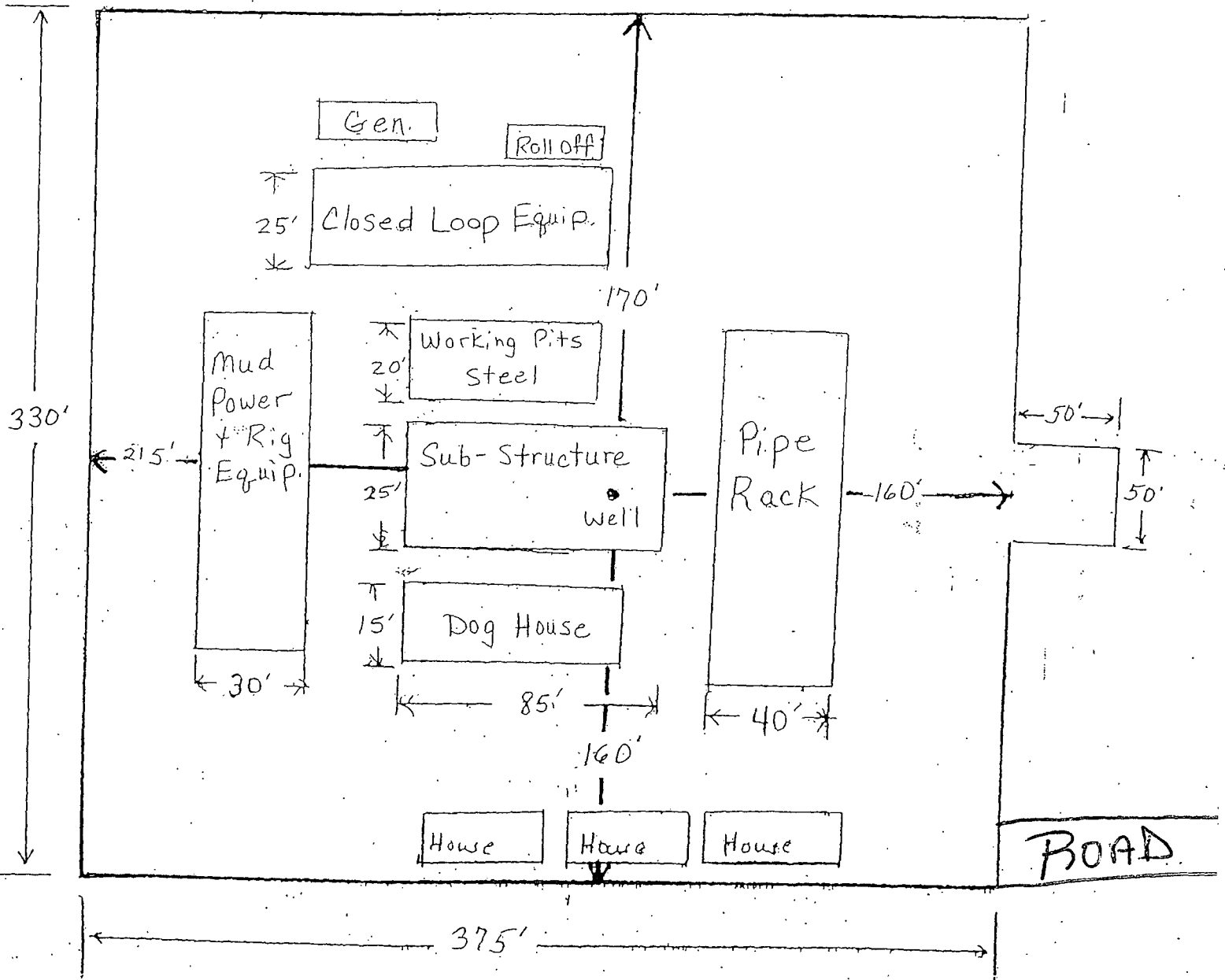
# Yates Petroleum Corporation

Location Layout for Permian Basin

Yates Petroleum Corporation  
Amazing BAZ Federal #4H  
330' FSL & 1450' FEL-SHL  
330' FNL & 1980' FEL-BHL  
Section 30, T22S-R32E  
Lea County, New Mexico  
Exhibit "B"

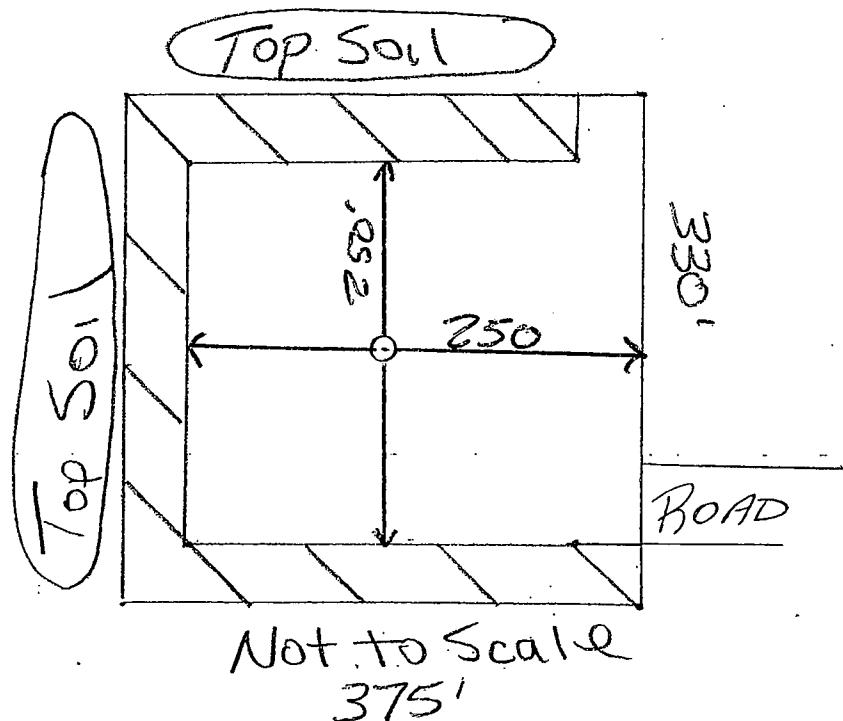
## Closed Loop Design Plan

\* NOT TO SCALE

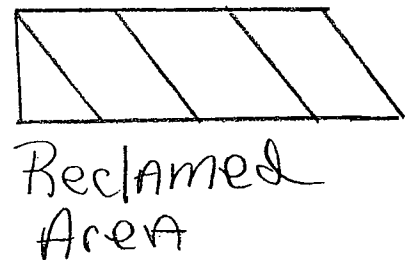




Yates Petroleum Corporation  
Amazing BAZ Federal #4H  
**RECLAMATION PLAT**  
Lea County, New Mexico



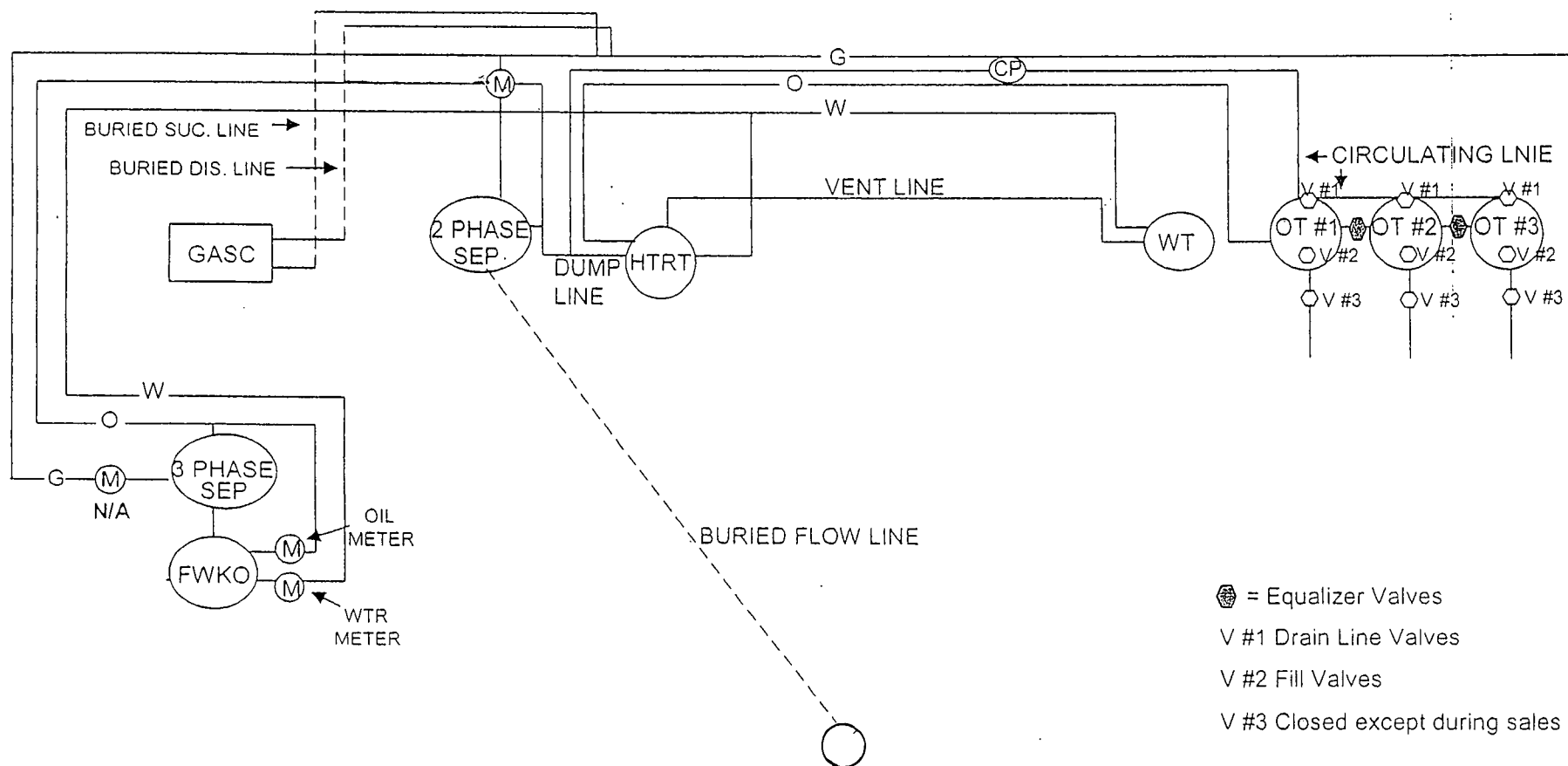
PLEASE Note  
Final Reclamation  
may be different  
from this PLAT.





105 South 4<sup>th</sup> Street \* Artesia, NM 88210  
(575)-748-1471

-Danny Matthews  
June, 2010



This diagram is subject to the Yates Petroleum Corporation August 1983 Security Plan  
which is on file at 105 South 4th Street, Artesia, NM