#### OCD Hobbs

#### HOBBS OCD

FORM APPROVED Form 3160-3 1111 0 9 2013 OMB NO. 1004-0137 (August 2008) **UNITED STATES** Expires: July 31, 2010 5. Lease Serial No DEPARTMENT OF THE INTERIOR RECEIVED BUREAU OF LAND MANAGEMENT NM-90 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. X DRILL REENTER 1a. Type of Work: 8. Lease Name and Well No. < 3088 Oil Well Other Gas Well Single Zone Multiple Zone 1b. Type of Well: 9. API Well No. Name of Operator Yates Petroleum Corporation 3a. Address Phone No. (include area code) 105 South Fourth Street, Artesia, NM 88210 575-748-1471 Livingston Ridge, Delaware, SE Location of well (Report location clearly and In accordance with any State requirements.\*) 11. Sec., T., R., M., or Blk. And Survey or Area 330' FSL and 1650' FWL, Unit N Surface Hole Location Section 20. T22S-R32E At proposed prod. zone and 1980' FWL, Unit Bottom Hole Location 14. Distance in miles and direction from the nearest town or post office 12. County or Parish 13. State Approximately thirty eight (38) miles west & north of Jal, New Mexico Lea County NM 15. Distance from proposed\* 16. No. of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 1760.00 18. Distance from proposed location\* Proposed Depth BLM/ BIA Bond No. on file to nearest well, drilling, completed, TVD-8,460' TMD 10,420' NATIONWIDE BOND #NMB000434 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) Aproximate date work will start\* 23. Estimated duration 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form: 4. Bond to cover the operations unless covered by existing bond on file(see 1. Well plat certified by a registered surveyor. item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan ( if the location is on National Forest System Lands, the 5. Operator certification. 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 25. Signature 5/26/2011 Title Land Regulatory Agent Approved By (Signature) Name (Printed/ Typed) Date /s/George MacDonell Office Title FIELD MANAGER CARLSBAD FIELD OFFICE 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 APPROVAL FOR TWO YEARS operations thereon. Conditions of approval, if any, are attached. Fitle 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

ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements arisbad Controlled Water Basic KE07/15/13 2m

& Special Stipulations Attached

JUL 1 8 2013

#### YATES PETROLEUM CORPORATION

Amazing BAZ Federal #6-H

330' FSL and 1650' FWL, SHL 2310' FSL & 1980' FWL, BHL Section 29, 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            | 5540'    |
| Brushy Canyon            | 6830'    |
| Brushy Horizontal Target | 8733'MD  |
| TD                       | 10263'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: 6830' & 8460'

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 | <u>Grade</u> | Coupling | Interval          | Length | C    |
|-----------|-------------|--------|--------------|----------|-------------------|--------|------|
| 17 1/2"   | 13 3/8"     | 48#    | J-55         | ST&C     | 0 <b>-825 900</b> | 825    | See  |
| 12 1/4"   | 9 5/8"      | 40#    | HCK-55       | LT&C     | 0-100'            | 100'   | COTT |
| 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'       | 1250'  |      |
| 8 3/4"    | 5 1/2"      | 17#    | P-110        | LT&C     | 0'-7983'          | 7983'  |      |
| 8·1/2"**  | 5 1/2" /    | 17#    | P-110        | Buttress | 7983'-10263'      | 2280'  |      |

This well will be drilled vertically to 7983'. Well will then be kick off at 7983' and directionally drilled at 12 degrees per 100' with a 8 3/4" to 8733 MD (8460' TVD). If hole conditions dictate, 7" casing will be set and cemented. A 6 1/8" hole will then be drilled to 10263' MD (8460') 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 10263' MD (8460' TVD) where 5 1/2"

#### Amazing BAZ Federal #6-H Page 2

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 801' FSL & 1725' FWL, Section 29-22S-32E. Deepest TVD in this well will be 8460' in the lateral.

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

#### B. CEMENTING PROGRAM:

SURFACE CASING: 434 sacks of 35:65:6PzC (Wt. 12.50 Yld. 2.00). Tail w/200sx Class "C" + 2% CaC12 (Wt. 14.80 Yld. 1.34). 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" + CaCl2% (Wt. 14.80 Yld. 1.34). Designed with 100% excess. Cement circulated to surface.

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

1<sup>st</sup> Stage: 670 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'.

 $2^{nd}$  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            | <u>Type</u>                | Weight        | <u>Viscosity</u> | Fluid Loss |
|---------------------|----------------------------|---------------|------------------|------------|
| 0-8255 900          | Fresh Water                | 8.60 - 9.20   | 28-32            | N/C        |
| <i>\$</i> 25'-4450' | Brine Water                | 10.00 - 10.20 | 28-30            | N/C        |
| 4450'-8733'         | Cut Brine                  | 8.60 - 9.20   | 30-32            | N/C        |
| 8733'-TD            | 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:

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: Surface casing to TD.

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#### 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: 8460 Anticipated Max BHP: 4047 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 50 days to drill the well with completion taking another 20 days.

#### Amazing BAZ Federal #6H

#### **Contingency Casing Design**

If hole conditions dictate, 7" casing will be set at 8,733' MD (8,460' TVD) and cemented. A 6 1/8" hole will then be drilled to 10,263' MD (8,460' TVD) where 4 1/2" casing will be set and cemented.

#### 2nd Intermediate

|                     | <b>0</b> ft to   | 8,733 ft       | Make up Torque    | ft-lbs | Total ft = | 8,733 |
|---------------------|------------------|----------------|-------------------|--------|------------|-------|
| O.D.                | Weight           | Grade Threads  | opt. min.         | mx.    |            | -     |
| 7 inches            | 1 26 #/ft        | L-80 LT&C      | 5110 3830         | 6390   |            |       |
| Collapse Resistance | Internal Yield   | Joint Strength | Body Yield        | Drift  | 1          |       |
| <b>5,410</b> psi    | <b>7,240</b> psi | 511 ,000 #     | <b>604</b> ,000 # | 6.151  |            |       |

DV tool placed at 4500'.

Stage I: Lead w/495sx 35:65:6 PzC (YLD 2.0 Wt 12.5), tail w/200sx PVL (YLD 1.41 Wt 13) 8,733' - 4500' Stage II: Lead w/540sx 35:65:6 PzC (YLD 2.0 Wt 12.5), tail w/200sx Class C (YLD 1.34 Wt 14.8) 4500' - 0'

#### Production

|                     | 0 ft to        | 7,983 ft       | Make up Torque ft-lbs | Total ft = 7,983 |
|---------------------|----------------|----------------|-----------------------|------------------|
| O.D.                | Weight         | Grade Threads  | opt. min. mx.         | 1                |
| 4.5 inches          | 11.6 #/ft      | P-110 LT&C     | 3020 2270 378         | 0                |
| Collapse Resistance | Internal Yield | Joint Strength | Body Yield Drif       | t                |
| <b>7,580</b> psi    | 10,690 psi     | 279 ,000 #     | 367 ,000 # 3.87       | 5                |
|                     |                |                |                       |                  |
|                     | 7,983 ft to    | 10,263 ft      | Make up Torque ft-lbs | Total ft = 2,280 |
| O.D.                | Weight         | Grade Threads  | opt. min. mx.         |                  |
| 4.5 inches          | 11.6 #/ft      | P-110   BT&C   |                       |                  |
| Collapse Resistance | Internal Yield | Joint Strength | Body Yield Drift      | <del>, 1</del>   |

367 .000 #

3.875

279 ,000 #

4 1/2" casing will be cemented from TD to 7,900'. DV Tool will be placed approx. 7,900'

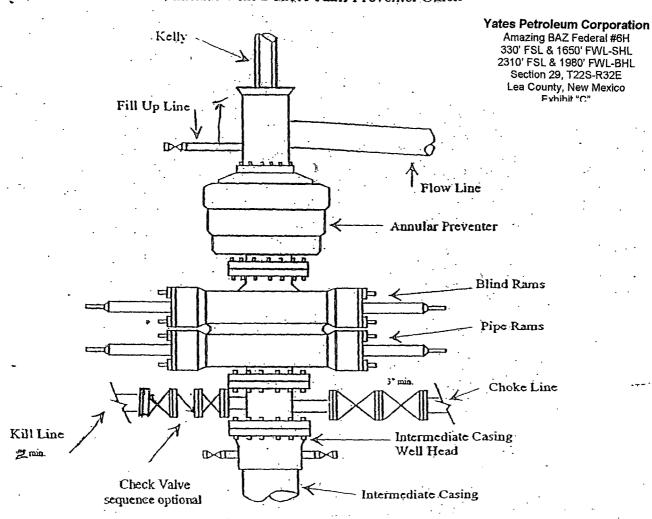
Cemented w/215sx PVL (YLD 1.41 Wt 13) 10,263' - 7,900'

10,690 psi

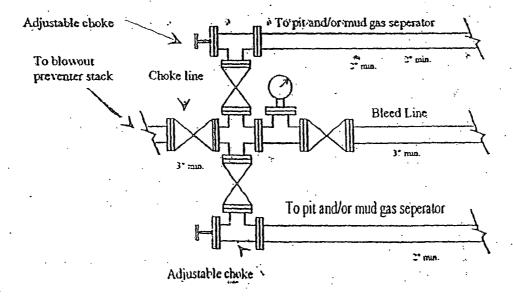


### Yates Petroleum Corporation

## Typical 3.000 psi Pressure System Schematic Annular with Double Ram Preventer Stack

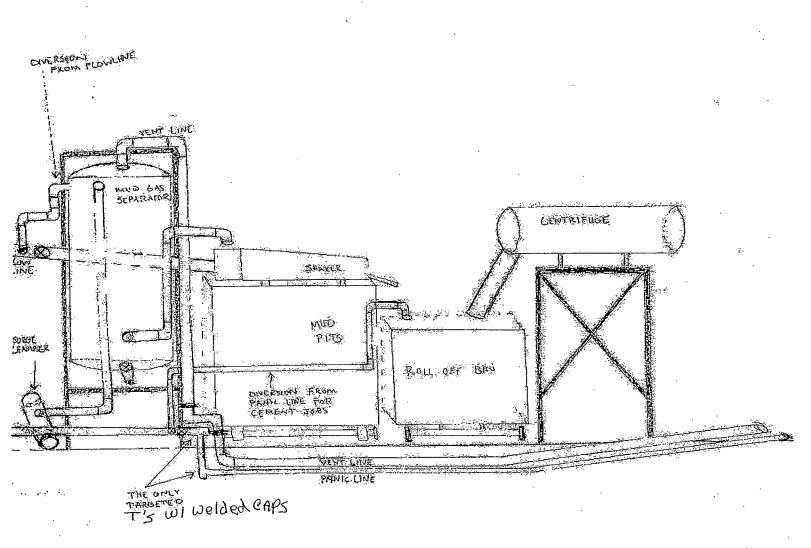


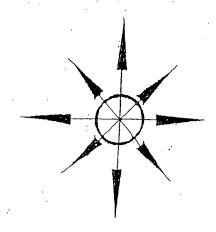
Typical 3,000 psi choke manifold assembly with at least these minimun features



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

Yates Petroleum Corporation Amazing BAZ Federal #6H 330' FSL & 1650' FWL-SHL 2310' FSL & 1980' FWL-BHL Section 29, T22S-R32E Lea County, New Mexico Exhibit "D"



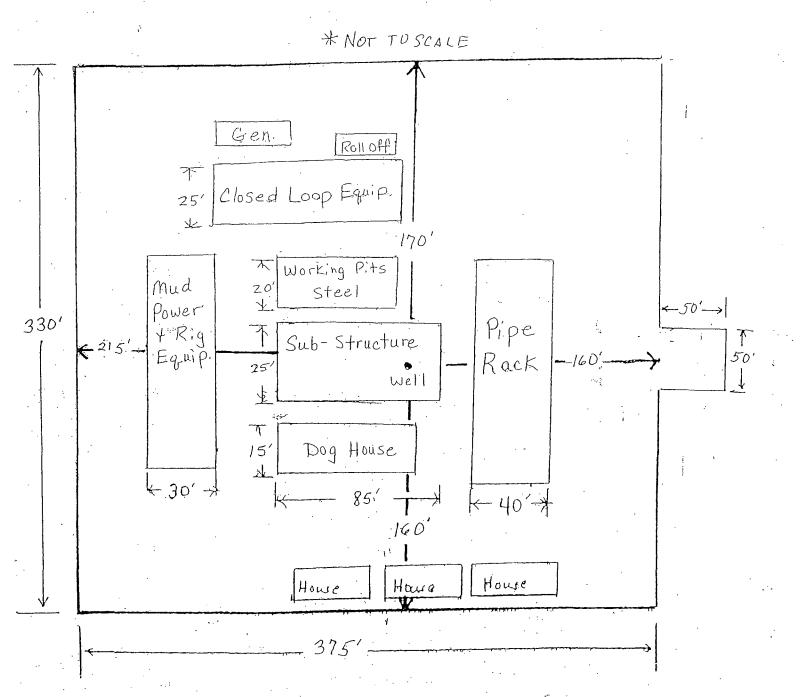


### Yates Petroleum Corporation

Location Layout for Permian Basin

**Yates Petroleum Corporation** Amazing BAZ Federal #6H 330' FSL & 1650' FWL-SHL 2310' FSL & 1980' FWL-BHL Section 29, T22S-R32E Lea County, New Mexico Exhibit "B"

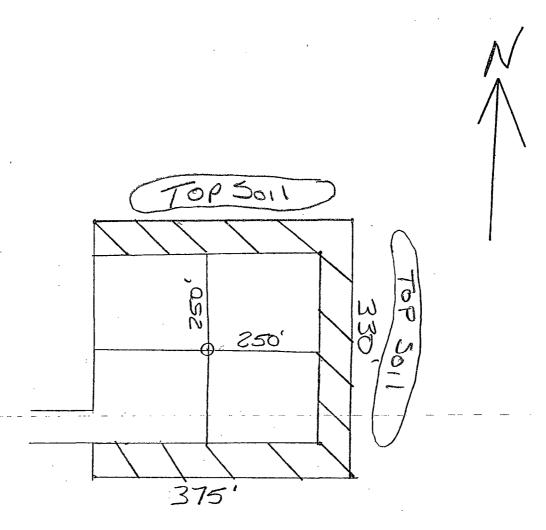
Closed Loop Design Plan



#### Yates Petroleum Corporation Amazing BAZ Federal #6H

#### **RECLAMATION PLAT**

Lea County, New Mexico



Not to Scale

PLEASE Note Final Reclamation May be Different Than This PLAE.

Possible Reclaimed Area



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

-Danny Matthews June, 2010

