

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

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

RECEIVED

AUG 05 2005

OCU-ARTEZIA

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator

Yates Petroleum Corporation

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

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

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

At surface NESE 1980FSL 1090FEL  
At proposed prod. Zone same as above

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

APPROXIMATELY 33 MILES NE OF CARLSBAD, NM

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

16. No. of Acres in lease

17. Spacing Unit dedicated to this well

320.00

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

19. Proposed Depth  
8900 MD

20. BLM/BIA Bond No. on file

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

4409 GL

22. Approximate date work will start\*

23. Estimated duration

50 DAYS

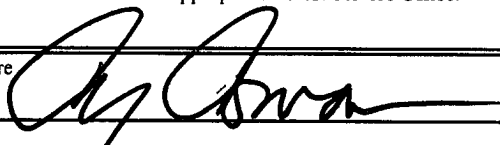
24. Attachments

CARLSBAD CONTROLLED WATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized office.

25. Signature



Name (Printed/Typed)

Cy Cowan

Date

6/28/2005

Title:

Regulatory Agent / Land Department

Approved by (Signature)

/S/ James Stovall

Name (Printed/Typed)

/S/ James Stovall

Date

AUG - 3 2005

Title

FOR FIELD MANAGER

Office

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 conduct operations thereon.

APPROVAL FOR 1 YEAR

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions for use)

RECEIVED

Previously Approved

C-144 attached

NSL - 5209

JUN 30 '05

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

BLM  
ROSWELL, NM

District I  
PO Box 1988, Hobbs, NM 88240-2988  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-10C  
Revised February 10, 1999  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name Indian Basin Upper Perm Assoc Pool
Property Code	Property Name HICKORY ALV FEDERAL		Well Number 6
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION		Elevation 4409

10 Surface Location

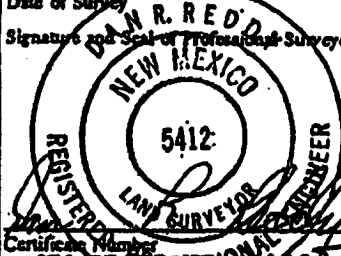
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
I	18	22S	24E		1980	SOUTH	1090	EAST	HDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16					17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature: <i>Ken Beardemphl</i> Printed Name: Ken Beardemphl Title: Landman Date: 11/22/94
					18 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.  NOVEMBER 18, 1994 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number: NM PROFESSIONAL SURVEYOR 5412

**YATES PETROLEUM CORPORATION**  
**Hickory ALV Federal #6**  
1980' FSL and 1090' FEL  
Sec. 18-T22S-R24E  
Eddy County, New Mexico

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

San Andres	1293'
Glorietta	2770'
Bone Springs	3682'
Wolfcamp	7550'
Canyon	8470'
TD	8900'

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

Water: 0 – 200'  
Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	54.5#	J-55	ST&C	0-350'	350'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-3400'	3400'
8 3/4"	7"	26#	N-80	LT&C	0-600'	600'
8 3/4"	7"	26#	J-55	LT&C	600-1800'	1200'
8 3/4"	7"	23#	J-55	LT&C	1800-6300'	4500'
8 3/4"	7"	26#	N-80	LT&C	6300-8900'	2600'

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

**B. CEMENTING PROGRAM:**

Surface casing: 350 sx "C" w/2% CaCl<sub>2</sub>, Cement circulated to surface.

Intermediate Casing: 1000 sx Lite and 250 sx "C" + 2% CaCl<sub>2</sub>, Cement circulated to surface.

Production Casing: 650 sx "H" + 5# Gilsontite, 5# CSE (YLD 1.31 WT 15.1), DV Tool at 6000'.

2<sup>nd</sup> Stage: 850 sx Lite "C" + 5# Salt + 5# Gilsontite, 0.25# Celloseal, and 100 sx "C", Cement circulated to surface.

**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	30-36	N/C
350'-3750'	FW	8.3	28	N/C
3750'-7400'	FW	8.4	28	N/C
7400'-8250'	Cut Brine	8.9 - 9.4	28	N/C
8250'-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 from TD to casing w/CR-CNL up to surface; DLL from TD to casing RXO from TD.

Coring: As warranted.

DST's: As warranted.

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

Anticipated BHP:

From:	0	To:	350'	Anticipated Max. BHP	<175 PSI.
From:	350'	To:	3750'	Anticipated Max. BHP	<1650 PSI.
From:	3750'	To:	8900'	Anticipated Max. BHP	<3600 PSI.

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

H<sub>2</sub>S Zones Anticipated: H<sub>2</sub>S information attached.

Maximum Bottom Hole Temperature: 159 F.

**8. ANTICIPATED STARTING DATE:**

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 30 days to drill the well with completion taking another 20 days.

## **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

**Hickory ALV Federal #6**

1980' FSL and 1090' FEL

Sec. 18-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 33 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 and turn east on caliche road for 0.8 miles.  
The new road will start here.

### **2. PLANNED ACCESS ROAD**

- A. The proposed new access road will be approximately 3200' in length from the point of origin to the southwest corner of the drilling pad. The road will lie in a southwest to northeast direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side. Some traffic turnouts will be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same manner or better condition.

### **3. LOCATION OF EXISTING WELL**

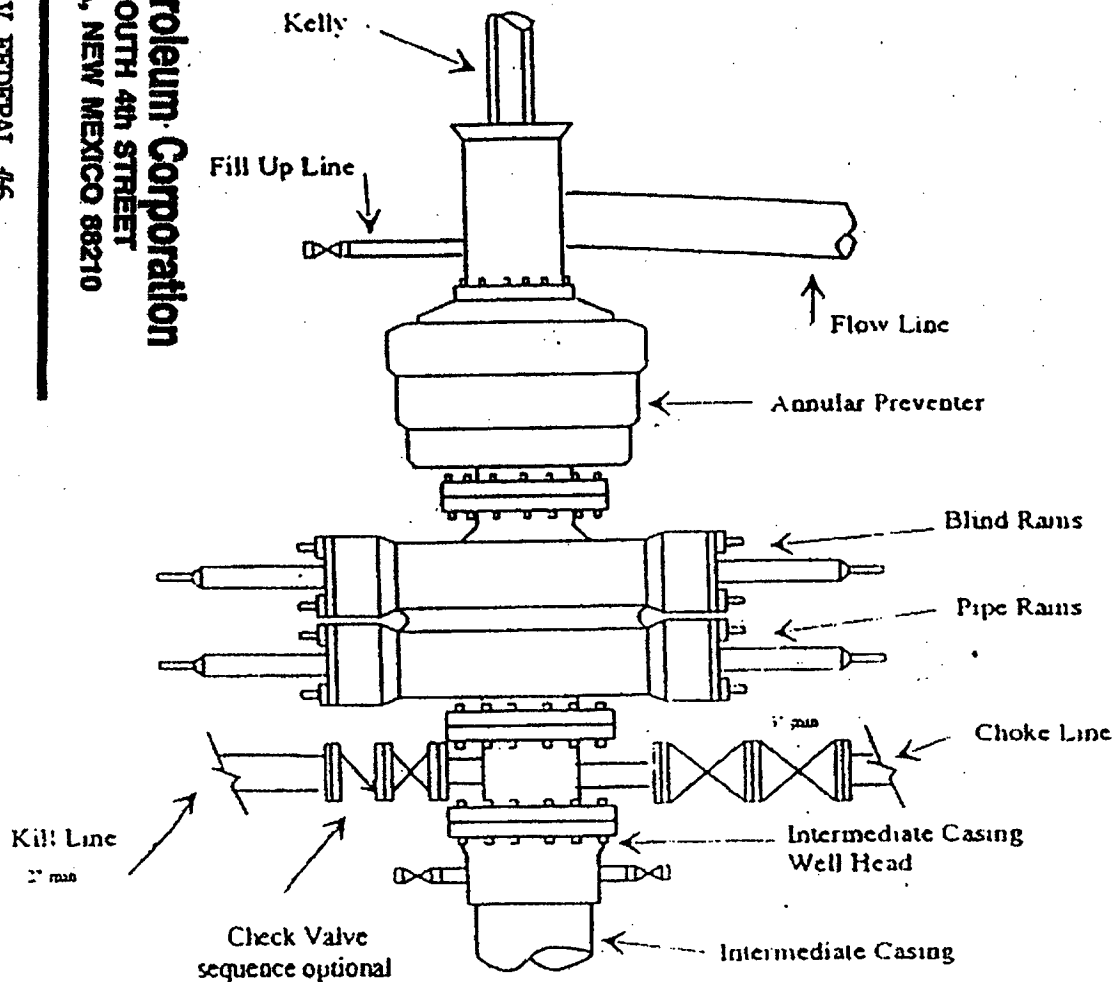
- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

### **4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

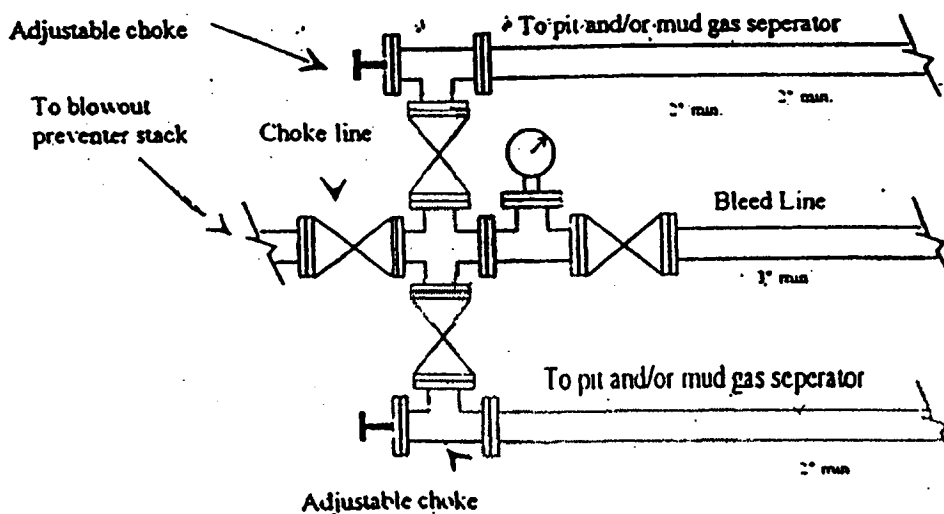
- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

## 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 minimum features

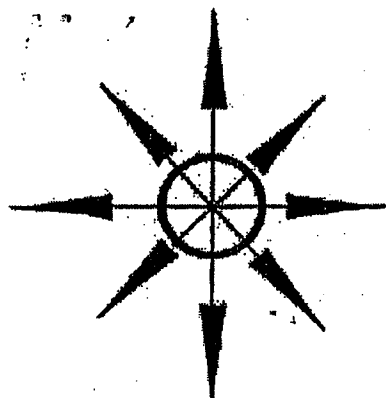


Yates Petroleum Corporation

105 SOUTH 4th STREET  
 ARTESIA, NEW MEXICO 88210

HICKORY ALV FEDERAL #6  
 1980' FSL and 1090' FEL.  
 Sec. 18-T22S-R24E  
 Eddy County, New Mexico

Exhibit B



# Yates Petroleum Corporation

Location Layout for Permian Basin

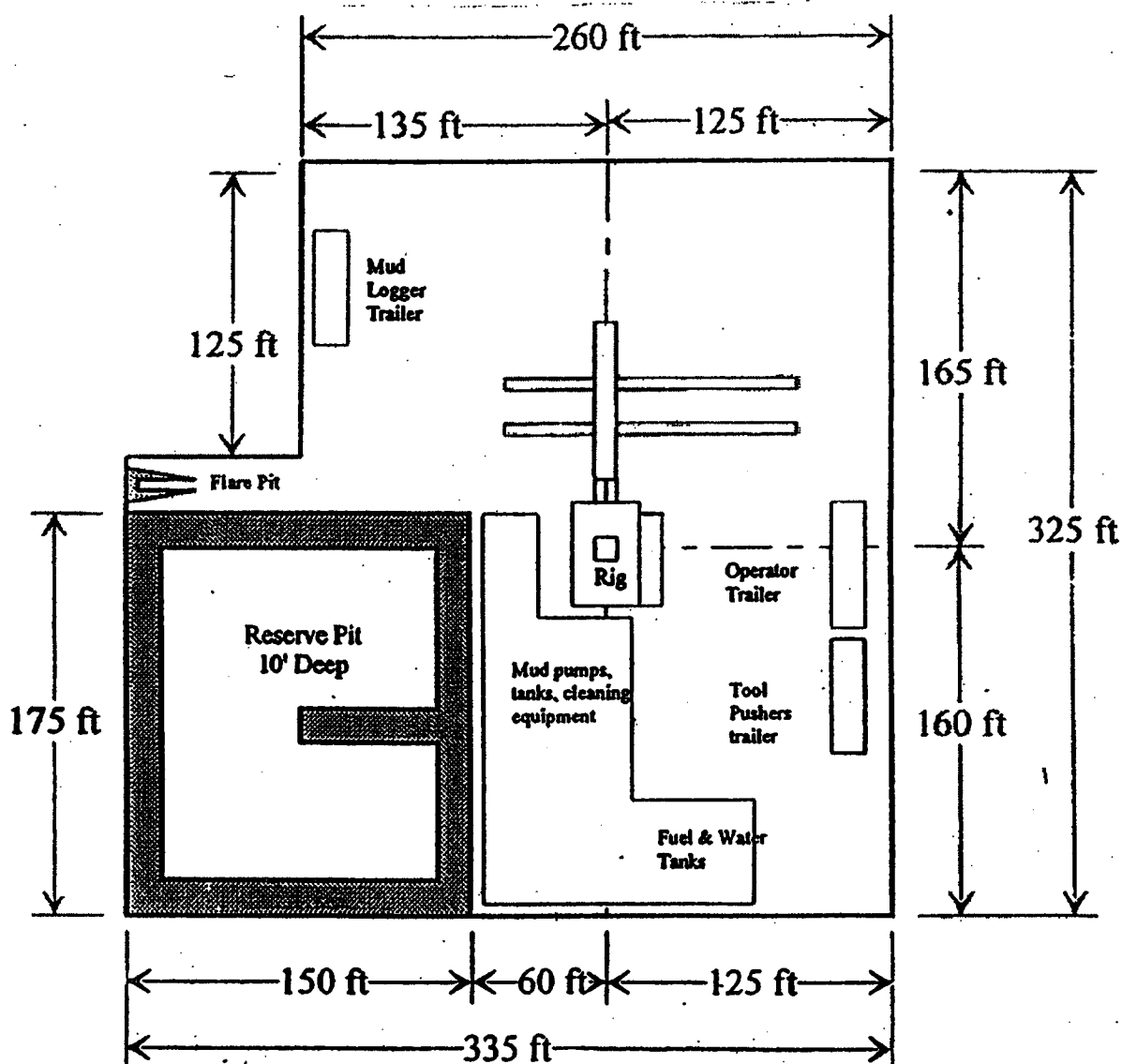
Up to 12,000'

## Yates Petroleum Corporation

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HICKORY ALV FEDERAL #6  
1980' FSL and 1090' FEL  
Sec. 18-T22S-R24E  
Eddy County, New Mexico

Exhibit C



Distance from Well  
Head to Reserve Pit  
will vary between rigs

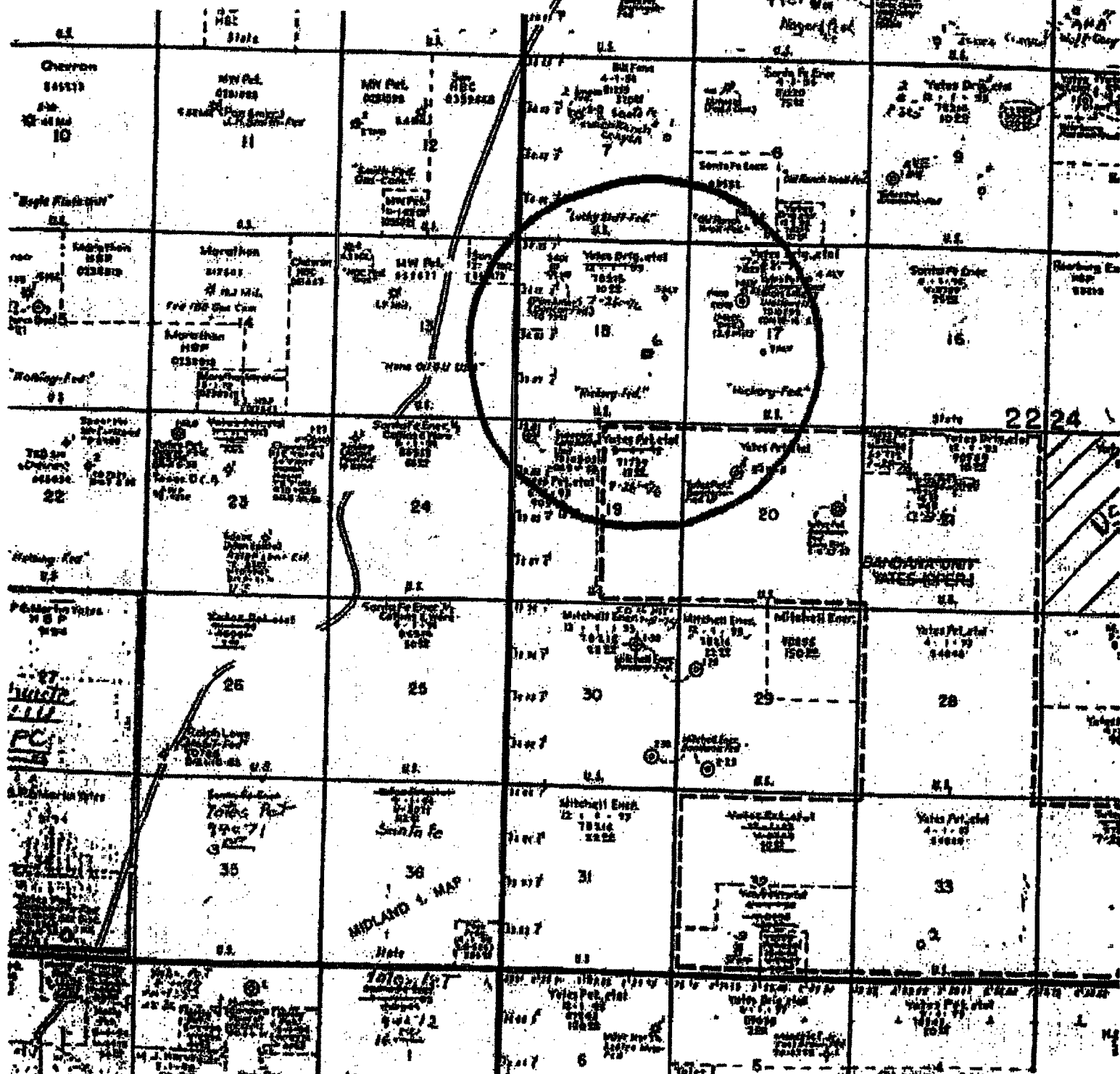
The above dimension  
should be a maximum

# Yates Petroleum Corporation

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Eddy County, New Mexico

Exhibit D





Koonunga Hill BGX Federal #1  
Prognosis

The Koonunga Hill BGX Federal #1 has been proposed on Federal Lease NM-103594 as for a one well project. Geologically this lease falls into a down dip situation which means the further to the east a well is proposed it will be more likely to drill into water formations and the possibility of drilling a well capable of producing natural gas is unlikely. Therefore based on the best-case geology Yates is planning to drill only one well in this section in the foreseeable future.

Road access to this well has been proposed to come in from the west utilizing an existing two track road that crosses approximately 1000 feet of the Mc Kittrick Hill Surface Management Area which has the No Surface Occupancy stipulation on lands within the SMA.

Possible road access from the east from the end of McKittrick has been studied by a dirt contractor and would involve an extensive upgrading project of the existing two track road. This option is not cost effective and would involve considerable impact to the area. Other two track road was also looked at but because of topography these are not good options.

A flowline and a power line right-of-way will be needed in the future. These will be proposed to follow the access road route to limit surface disturbance and additional invasion of the SMA.

SPECIAL DRILLING STIPULATIONS  
FOR THE EAST INDIAN BASIN OIL FIELD DEVELOPMENT

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATOR'S NAME Yates Petroleum Corporation  
WELL NAME & No. Hickory ALV Fed. #6  
LOCATION 1980 F S L & 1090 F E L, SEC. 18, T. 22 S, R. 24 E  
LEASE NO. NM-78215 COUNTY Eddy STATE NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management (BLM) office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination, whichever is shorter.

1. ON LEASE – SURFACE REQUIREMENTS PRIOR TO DRILLING

( x ) The BLM will monitor construction of this drill site. Notify the Carlsbad Field Office at (505) 234-5972, at least three (3) working days prior to commencing construction.

( x ) Roads and the drill pad for this well must be surfaced with a minimum of 4 inches of compacted caliche.

( ) The holder shall comply with the terms, conditions, and stipulations for drilling sites in the Azotea Mesa portion of the East Indian Basin development area, as listed below:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the rights-of-way or on facilities authorized by this grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the rights-of-way (unless the release or threatened release is wholly unrelated to the rights-of-way holder's activity on the rights-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the well site, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the

responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

5. The holder shall conduct all activities associated with the construction, operation, and termination of the rights-of-way within the authorized limits of the rights-of-way.
6. No well or plant sites will be allowed on slopes over 20 percent. Other use or occupancy on slopes over 20 percent would be limited. Uses permitted might include mineral material extraction sites, surface pipelines, projects designed to enhance or protect renewable natural resources, or other uses as approved by the Authorized Officer (AO). Projects on these steep grades will be considered on a case-by-case basis, and may require special conditions or stipulations for slope mitigation.
7. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair impacted improvements to at least their former state. The holder shall contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence will be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed in existing fences unless approved by the Authorized Officer.
8. All above-ground structures not subject to safety requirements shall be painted by the holder to reduce visual contrasts and to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The colors selected for this project include: ( ) A "Carlsbad Canyon" (Munsell Soil Color Chart [MSCC] Number 2.5Y 6/2), ( ) B "Slate Gray" [MSCC] Number 5Y 6/1), ( ) C "Desert Brown" [MSCC] Number 10YR 6/3), and (X) D "Juniper Green" [no MSCC Number], the color(s) for individual facilities will be specified depending on the site-specific contrasts caused by the individual action. Exceptions to these color requirements may be authorized on a case-by-case basis, if determined to be more effective in meeting site-specific VRM objectives, such as for power poles, fence posts, signs, etc.
9. The holder shall take whatever steps are necessary to ensure that non-road rights-of-way are not used as roadways. The holder shall not use non-road rights-of-way as roads or access for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder.
10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
11. Stacks on heater-treaters/separator-dehydrators will be required to be covered to prevent mortality of avian species including neotropical migrants and bats.
12. The BLM will be informed at least two (2) working days prior to any blasting. Notifications of blasting should include the purpose and location of the blasting, the intended date and duration of the blasting, and the estimated volume of the excavation or cut and/or fill.

13. The site will be maintained in neat and orderly condition at all times. All waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human refuse, trash, garbage, debris, petroleum products, brines, chemicals, oil drums, ashes, and equipment. No waste shall be buried on site.
14. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound management practices. Any earth work will require prior approval by the Authorized Officer.
15. The holder shall reseed all surface disturbed by construction activities. If reseeding is required, it will be done according to the attached seeding requirements, using the native seed mixture specified.
16. Upon completion of initial construction, the holder will promptly reclaim disturbed areas not necessary for continuing facility operation.
17. Closed circulation systems (steel pits) may be required on steeper slopes, on locations with restricted available area, in rocky zones where digging a pit could involve rock saws or blasting, or in other areas of special concern as determined by the BLM AO in consultation with Industry. Cuttings will be placed in permanent, lined pits, located by the BLM and Industry representatives during the initial on-site BLM-Industry meeting.

When reserve (mud) pits are used, they will be constructed as per the decisions made at the initial on-site meeting between industry and BLM. Pits will be lined with heavy (8 mil) pit liners which are never to be breached. Berms, sufficient to contain any spills or water flows and preferable made from excavated pit material, will be constructed around the pits. Relocation or reorientation of pits, or modified "V" pits, may be required at certain locations. Padding material, such as sand, dirt fines, or straw, may be required to prevent punctures in the bottom of the pit liners.

During reclamation the pits will be allowed to dry, then the liners will be folded over the pit sediments, and the pit will be backfilled. No pit will be drained and no pit liner will be broken. An examination and approval by a BLM representative will be required prior to closure of any reserve pit.

18. BLM will require prompt notification by the operator of any bit drops of four feet or more accompanied by circulation losses greater than 75 percent.
19. To minimize potential impacts to subsurface resources from well drilling, casing, or cementing, the BLM may require specific procedures, such as fresh water drilling in certain zones, special cement additives or sweeps, or cementing casing to the surface. These procedures, if required, will be determined by the BLM Fluid Minerals staff in consultation with the operator.
20. To minimize potential problems due to casing and cementing, the BLM may require the following actions as determined by BLM and the operator.
  - (1) Use of cement baskets, external casing packers, multiple-staged and/or remedial cementing to isolate voids encountered;
  - (2) Use of special cements or cement additives to combat lost circulation;
  - (3) Use of cement evaluation tools;
  - (4) Cementing all casing strings to surface.

21. Permanent under-liners and berms sufficient to contain any spills will be built under and around storage tanks.
22. If, during on-site inspection, it is determined that surface disturbing activities must be conducted in areas of possible T&E plant habitat (limestone shelves or rocky outcroppings), a T&E species survey may be required prior to authorization of any surface disturbing activities.
23. Cleanup of spills in excess of state-reportable levels should be accomplished using bio-remediation techniques rather than by removing contaminated soil. If measures other than bio-remediation are required for individual spill sites, these special techniques will be approved by the Authorized Officer, BLM, in consultation with the companies.
24. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to commencing construction. Contact the BLM solid minerals staff for the various options to purchase mineral material.
25. Caliche pits will be reclaimed by sloping their walls, replacing the topsoil, and seeding. In some cases, caliche removed from other sites may be returned, depending on the condition of the caliche.
26. Abandoned surface pipelines and other above-ground equipment will be removed promptly once these are no longer needed, buried pipelines will be flushed and left in place.
27. Sites built on cut-and-fill will be recontoured to blend into the surrounding natural terrain, as nearly as feasible.
28. Special Stipulations:
- ( ) A. On a case-by-case basis, BLM may require gates on, or physical restriction to, any new or upgraded road constructed to provide access to a new facility within the study area. The gates or physical barrier would remain closed and locked at all times and access would be granted only to essential company and BLM personnel. This restriction could help to protect important cultural and archaeological sites, as well as wildlife, watershed, and recreation values.
  - ( ) B. To maintain Visual Resources along State Highway 137, screening with planting or natural or man-made materials, such as berms or fencing may be required at some locations.
  - ( x ) C. Padding material, such as sand, dirt fines, or straw, will be required to prevent punctures in the bottom of the pit liners.
  - ( x ) D. Other. See attached Special Reserve Pit Construction/Reclamation Stipulations.

## II. WELL COMPLETION REQUIREMENTS

- ( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.
- ( x ) Surface Restoration: When the well is completed, the reserve pit(s) will be dried and backfilled, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be recontoured to resemble the original contours of the surrounding terrain and reclaimed as per stipulation number 20. The disturbed area will be reseeded with the following seed mixture, in pounds of Pure Live Seed (PLS) per acre. (Pounds

of Pure Live Seed: Pounds of seed x percent purity x percent germination = Pounds Pure Live Seed.)

( ) A. Seed Mixture 1 (Loamy Sites)		( ) B. Seed Mixture 2 (Sandy Sites)	
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.00	Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.00
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5.00	Four-wing saltbush DWS* ( <i>Atriplex canescens</i> )	8.00
Winterfat ( <i>Ceratoides lanata</i> )	1.00	Plains bristlegrass ( <i>Setaria macrostachya</i> )	5.00
OR		OR	
Mountain Mahogany ( <i>Cercocarpus nontanus</i> )	1.00	Desert globmallow ( <i>Sphaeralcea ambigua</i> )	0.25
OR		OR	
Apache plume ( <i>Fallugia paradoxa</i> )	2.00		
( x ) C. Seed Mixture 3 (Shallow Sites)		( ) D. Seed Mixture 4 (Gypsum Sites)	
Sideoats grama ( <i>Bouteloua curtipendula</i> )	7.00	Alkali Sacaton ( <i>Sporobolus airoides</i> )	1.50
Plains Bristlegrass ( <i>Setaria macrostrachya</i> )	5.00	Four-wing saltbush DWS* ( <i>Atriplex canescens</i> )	8.00
OR			
Bottlebrush squirrel tail ( <i>Sitanion heptrix</i> )	5.50		
Mountain Mahogany ( <i>Cercocarpus nontanus</i> )	1.00		
OR			
Apache plume ( <i>Fallugia paradoxa</i> )	2.00		

Seeding should be done either late in the fall (September 15 – November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

( x ) Special: BLM's objective through this mitigative process is to restore disturbed surfaces to a condition as similar to their original state as is feasible and/or blend these areas into the surrounding landscape. To achieve that objective, the following is a list of rehabilitation or reclamation methods that will be considered, in addition to standard procedures, as appropriate for each disturbed area:

- ( x ) Removal of caliche or other surfacing materials, these materials may be used to fill cuts for restoration or returned to the caliche pits, if the caliche is acceptable:
- ( ) Special seed bed preparation and seeding methods;
- ( ) Soil amendments, soil treatments, and fertilizers;
- ( ) Planting trees and shrubs (from seeds);
- ( ) Mulching;
- ( ) Initial watering;
- ( ) Erosion control and land treatments;
- ( ) Special Fencing;
- ( ) Other.

## RESERVE PIT CONSTRUCTION AND RECLAMATION STANDARDS

The pit will be built in 100 % cut so that the pit area can be folded in and leveled at ground level.

The pit area will be lined with a felt liner to prevent punctures in pit liner.  
The pit will be lined with two 6 mil liners.

### Reclamation:

Reclamation of this type of deep pit will consist of vacuuming off all fluids. Contact Paul Evans (505) 234-5977 or Becky Hunt (505) 234-5995, with the BLM, prior to reserve pit reclamation.

The pit liners are NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

After drying, another liner or suitable material will be placed over the mud to cap the pit.

The pit walls will be pushed in and the area covered with at least 3 ft. of soil.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Yates Petroleum Corporation  
Well Name & No: Hickory ALV Federal No. 06  
Location: Surface 1980' FSL & 1090' FEL, Sec.18, T. 22 S. R. 24 E.  
Lease: NMNM 78215  
Lea County, New Mexico

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### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:
  - A. Spudding
  - B. Cementing casing: 13 3/8 inch; 9 5/8 inch; 7 inch.
  - C. BOP Tests
2. A Hydrogen Sulfide (H2S) Drilling Plan is shall be in operations 500 feet or three days prior to drilling into the Top of the Cisco Canyon at approximately 7800 Ft.
3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 13 3/8 inch shall be set at 400 Feet with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 9 5/8 inch Intermediate casing is to circulate to surface.
3. The minimum required fill of cement behind the 5 1/2 inch Production casing is to Tie Back into the 9 5/8 inch casing shoe by at least 200 Ft.

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the \_\_inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3 M psi.



### **III. Pressure Control (continued):**

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.

- The test shall be done by an independent service company
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures.
- Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in safe workman-like manner. Hard line connections shall be required.
- Both low pressure and high pressure testing of BOPE is required.