ATS-07-261
EA-07-733

OCD-ARTESIA

Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
Month 31
MAY 31 2007
OCD - ARTESIA, NM

OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: **NM-105854**

6. If Indian, Allottee or Tribe Name: **Not Applicable**

1a. Type of Work: [X] DRILL [ ] REENTER

7. If Unit or CA Agreement, Name and No.: **Not Applicable**

b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [X]

8. Lease Name and Well No. 36531: **Apeman BKA Federal #1 H**

2. Name of Operator: **Yates Petroleum Corporation** 25575 Roswell Controlled Water Basin

9. API Well No.: 30-015-35644

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

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

10. Field and Pool, or Exploratory: Four Mile Draw; Wolfcamp, SW

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

At surface: **660' FNL / 1880' FWL (SL) Unit C (NENW)**

At proposed prod. Zone: **660' FSL / 1880' FWL (BHL) Unit N (SESW)**

11. Sec., T., R., M., or Blk, and Survey or Area: **Section 17, T19S-R21E**

14. Distance in miles and direction from nearest town or post office*: **Approximately 10 miles south southwest of Hope, New Mexico**

12. County or Parish: **Eddy**

13. State: **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): **660'**

16. No. of Acres in lease: **480**

17. Spacing Unit dedicated to this well: **W/2**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: **None**

19. Proposed Depth: **7300' P ~~8300'~~ H TD 3030 MD**

20. BLM/BIA Bond No. on file: **NMB000434**

21. Elevations (Show whether DF, KDB, RT, GL, etc.): **4471 GL**

22. Approximate date work will start*: **ASAP**

23. Estimated duration: **30 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.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized office.

25. Signature: Debbie S. Caffall — Name *(Printed/Typed)*: **Debbie Caffall** — Date: **4/4/2007**

Title: **Regulatory Agent/Land Department**

Approved by *(Signature)*: Stephen J. Caffey — Name *(Printed/Typed)*: Steve Caffey — Date: MAY 29 2007

Title: Acting **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.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S. States any false, fictitious or fraudulent statem

willfully to make to any department or agency of the United

(Instructions on reverse) C-144 atta

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

APPROVAL FOR TWO YEARS

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005

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
	97553	Four Mile Draw; Wolfcamp, SW

Property Code	Property Name	Well Number
	APEMAN BKA FEDERAL	1H

OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORPORATION	4471

Surface Location

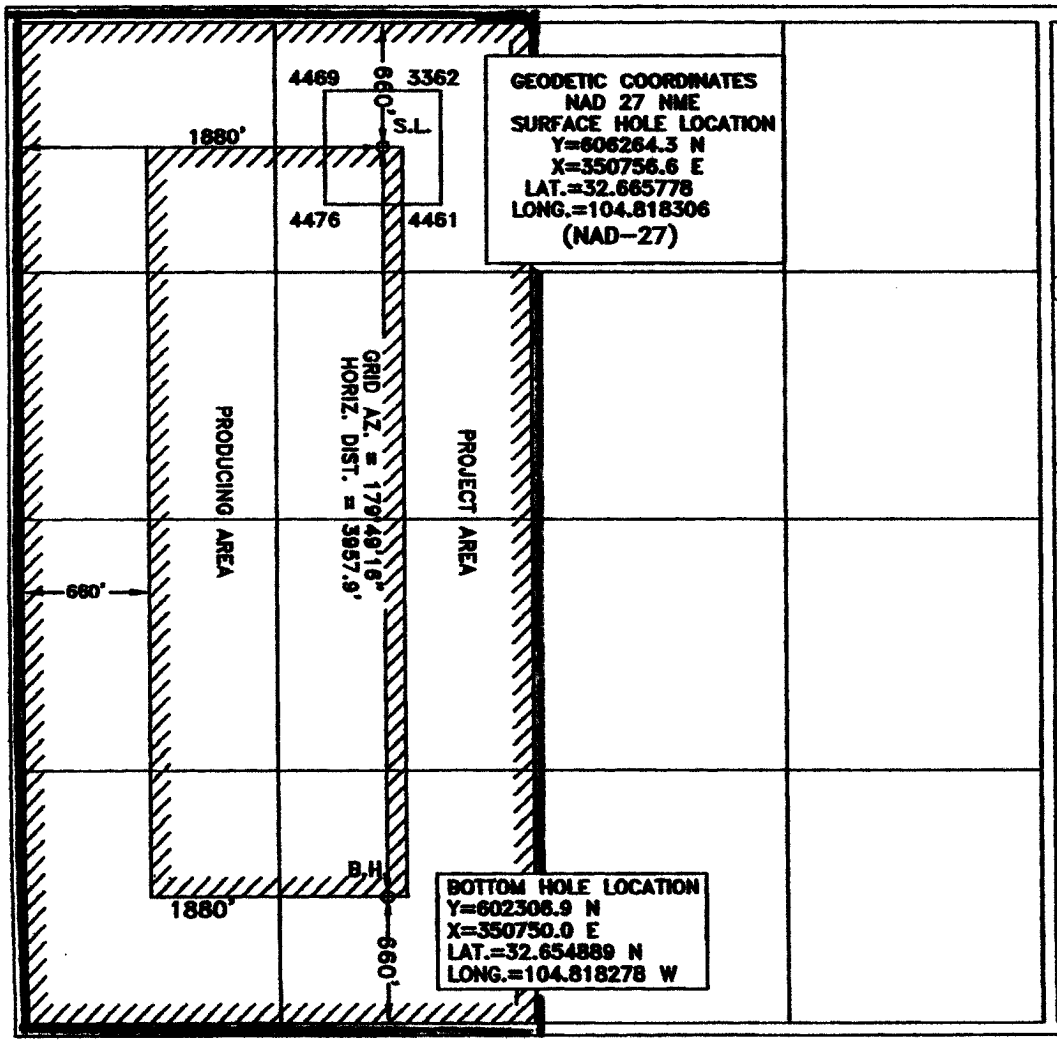
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	17	19S	21E		660	NORTH	1880	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	17	19S	21E		660	SOUTH	1880	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 3/2/07

Debbie L. Caffall
Printed Name

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 supervison, and that the same is true and correct to the best of my belief.

2/19/2007
Date Surveyed

Signature & Seal of Professional Surveyor

HERSCHEL JONES
NEW MEXICO
3640
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number Herschel L. Jones 3640
GENERAL SURVEYING

Yates Petroleum Corporation

Jeremiah Mullen (jmullen@ypcnm.com)
(505)748-4378
105 S. Fourth Street
Artesia, N.M. 88210

April 17, 2007

Wesley_Ingram@nm.blm.gov

Mr. Wesley Ingram,

The following is the contingency casing design and cement program you requested on the Apeman BKA Federal #1H:

Size	Wt. (#/ft.)	Grade	Depth	Top of Cement
7"	23#	J-55	0'-4350'	1000'

Lead with 350sx C-lite (Yld 2.04 Wt. 12.5#) and tail with 225sx class C (Yld 1.33 Wt. 14.8).

4 ½" liner	11.6#	HCP-110	3350'-8030'	3350'

Lead with 175sx C-lite (Yld 2.05 Wt. 12.5) and tail with 675sx Magne Plus (Yld 1.05 Wt. 13.0).

Please call me if you have any questions.

Sincerely,
Jeremiah Mullen
Drilling Engineer Asst.

YATES PETROLEUM CORPORATION
Apeman BKA Federal #1 H
660' FNL & 1880' FWL Unit C (NENW) (SL/Pilot Hole)
660' FSL & 1880' FWL Unit N (SESW) (Bottom Hole)
Section 17-T19S-R21E
Eddy County, New Mexico

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

Glorietta	1335'	Cisco	5785'
Tubb	2695'	Strawn	6695'
Yeso Lower	2855'	Atoka	6875'
Abo	3345'	Morrow Middle	7115'
Wolfcamp Pay	4220'	Morrow Lower	7125'
Base Wolfcamp	4280'	Chester / LM /	7185'
Wolfcamp Shale	4325'	TD	7300'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:
   Water: 835'
   Oil or Gas: All potential formations.

3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and the rated for 5000# 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)

	Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
(Conductor)	26	20"	94#	H-40		20'- 60'	40'
(Surface)	14 ¾"	9 5/8"	36#	J-55	ST&C	0 - 1500'	1500'
(Pilot Hole)	8 ¾"	7.0"	26#	J-55	ST&C	0 - 7300'	7300'
(Production)	7 7/8"	5 ½"	17#	HCP-110	LT&C	0 – 8030'	8030'

Pilot hole will be drilled to 7300'. Well will then be plugged back and kicked off at approximately 3852' at 15 degrees per 100' with an 8 ¾" hole to 4350' MD.
If hole conditions warrant, 7" casing will be set and cement tied back to previous casing. A 6 1/8" hole will then be drilled to a TD of 8030' where 4 1/2" casing will be set and cement tied back to the 7" casing.
If 7" casing is not warranted, then hole size will be reduced to 7 7/8" and drilled to 8030'. Where 5 ½" casing will be set and cemented. – See COA

See attached revision for 7" & 4½" 4-18-07

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

B. CEMENTING PROGRAM:
Surface Casing: Lead with 900 sx C Lite with 2% CaCl2 (YLD 2.00 WT 12.5).
Tail in with 200 sx C (YLD 1.35 WT 14.8)

Production Casing: Lead with 600 sx C Lite (YLD 2.05 WT 12.5).
Tail in with 700 sx Acid Solution (YLD 2.60 WT 11.15).

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
3852'-8030'	Cut Brine (Horizontal Section)	8.8-9.20	28-28	N/C
0-1500'	Fresh Water Gel/Air Mist	8.4-8.4	28-28	N/C
1500'-6650'	Cut Brine	8.6-9.2	28-28	N/C
6650'-7300'	Salt Water Gel/4-6% KCL	9.2-9.8	32-38	<10

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. Rig personnel will check mud hourly.

6. EVALUATION PROGRAM:

Samples: 10" Samples Intermediate.
Logging: Platform Express/NGT/HALS,
FMI and Rotary Sidewall Cores, GR on MWD in lateral.
Coring: None anticipated.
DST's: Possible.
Mudlogging: TBD.

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

Anticipated BHP:
From: 0' TO: 1500' Anticipated Max. BHP: 655 PSI
From: 1500' TO: 7300' Anticipated Max. BHP: 3720 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

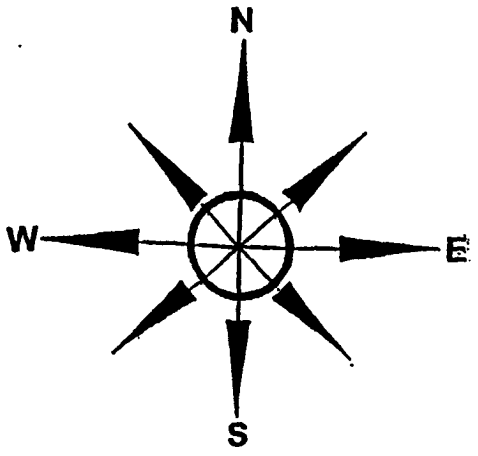
Maximum Bottom Hole Temperature: 168 F

8. ANTICIPATED STARTING DATE:
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 40 days.

PB - L1

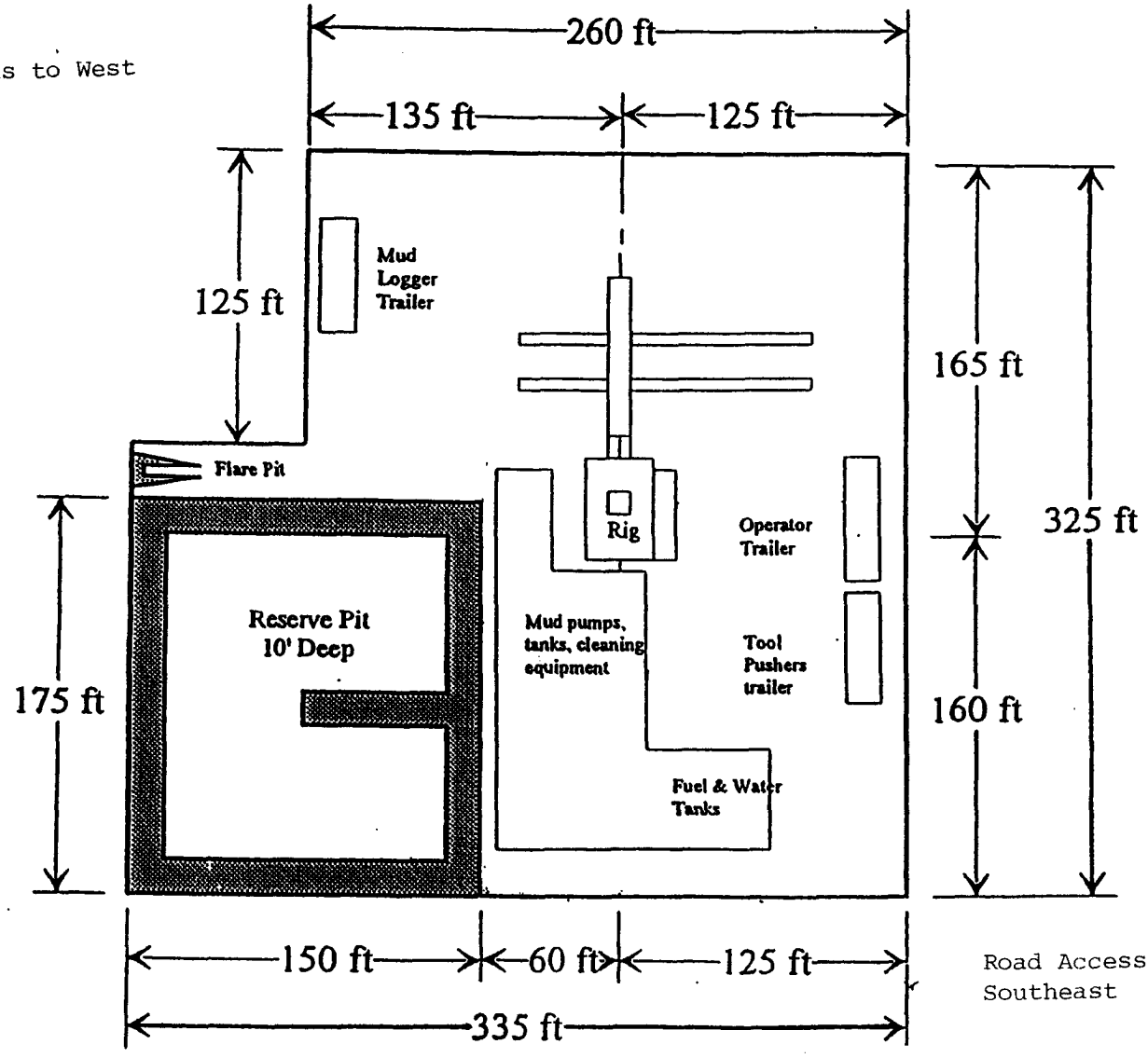
Yates Petroleum Corporation

Location Layout for Permian Basin
Up to 12,000'



Pits to West

Pits West
V-Door North



Road Access Southeast

Distance from Well Head to Reserve Pit will vary between rigs

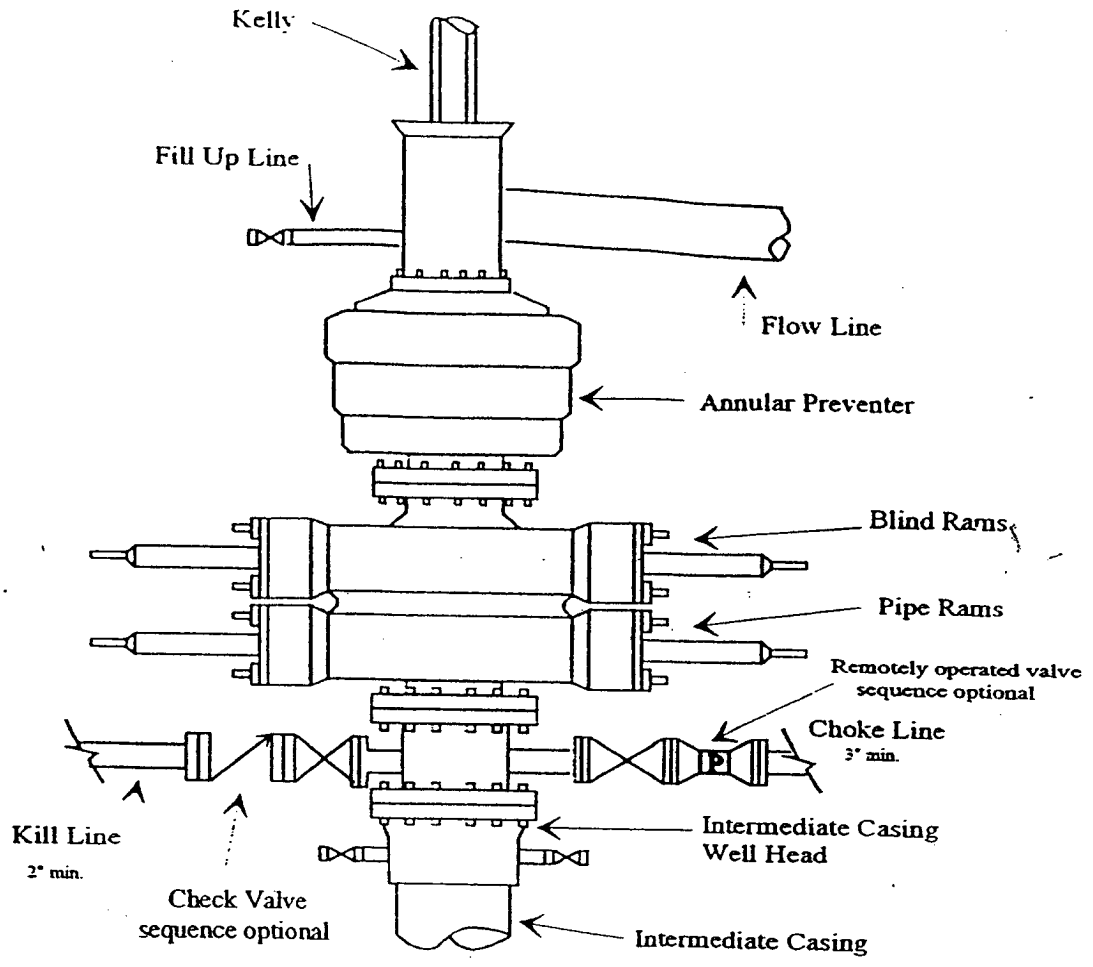
The above dimension should be a maximum

Yates Petroleum Corporation
Apeman BKA Federal #1 H
660' FNL and 1880' FWL Unit C (NENW) SL
660' FSL and 1880' FWL Unit N (SESW) BHL
Section 17, T19S-R21E Eddy County, NM
Exhibit "C"

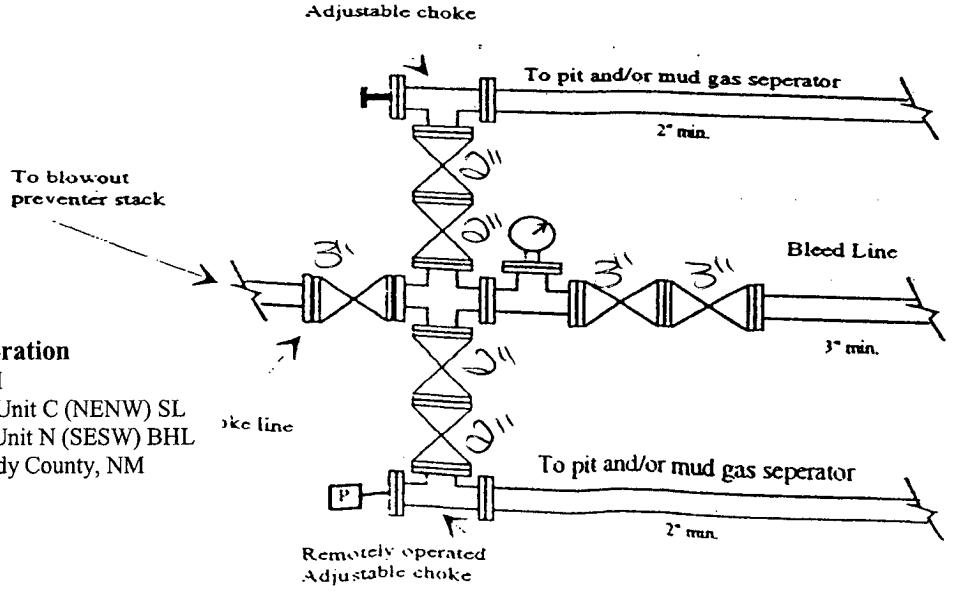
Yates Petroleum Corporation

BOP-4

Typical 5,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



Typical 5,000 psi choke manifold assembly with at least these minimun features



Yates Petroleum Corporation
Apeman BKA Federal #1 H
660' FNL and 1880' FWL Unit C (NENW) SL
660' FSL and 1880' FWL Unit N (SESW) BHL
Section 17, T19S-R21E Eddy County, NM
Exhibit "B"

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Apeman BKA Federal #1 H
660' FNL & 1880' FWL Unit C (NENW) (SL/Pilot Hole)
660' FSL & 1880' FWL Unit N (SESW) (Bottom Hole)
Section 17-T19S-R21E
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 well site is located approximately 10 miles South/ Southwest of Hope, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:
Travel west of Artesia on U.S. Highway 82 to Hope New Mexico approximately 21.4 miles to the Intersection of U. S. Highway 82 and Armstrong Road (County Rd. 12). Turn left (south) and continue on Armstrong Road (County Rd. 12) for approximately 6.3 miles to the intersection of Armstrong Road (County Rd. 12) and Bronc Road (County Rd. 20). Turn right (west) onto Bronc Road (County Road 20) and continue for approximately 3.2 miles to a lease road on the right (west/northwest) and travel this road for approximately 2.1 miles to a faded two track road on the south side of the Parallels Pandora's Box pad and continue west on two track along the fence line for approximately .6 of a mile more to the proposed access road to the southeast corner of the proposed location.

2. PLANNED ACCESS ROAD:

A. The lease access road; an existing caliche lease road from Bronc Road (Eddy County Road 20) located in Section 14: 505.5' = 30.6364 rods, 0.0957 miles, Section 11: 714.0' = 43.2727 rods, 0.1352 miles, Section 10: 5,389.5' = 326.6364 rods, 1.0207 miles, Section 9: 5,443.5' = 329.9091 rods, 1.0310 miles, Section 8: 120.5' = 7.3030 rods, 0.0228 miles, Section 17: 167.6' = 10.1576 rods, 0.0317 miles (12,340.6' = 747.9152 rods, 2.3371 miles more or less in length/federal surface). And the proposed new lease access road will follow an existing faded two track and be approximately 30 feet wide in Section 17: 3,254.4' = 197.2364 rods, 0.6164 miles more or less in length/federal surface (T19S-R21E) to the southeast corner of the proposed location. For a total of 15,595' = 945.1516 rods, 2.9535 miles more or less.
B. The new road will be 15 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
C. The two track road will be upgraded and the new road will be bladed with drainage on both sides. Traffic turnouts may be needed.
D. The route of the road is visible.
E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

A. There is drilling activity within a one-mile radius of the well site.
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 no 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 a producing gas well.

5. LOCATION AND TYPE OF WATER SUPPLY:
   A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

   The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits that may be required.

7. METHODS OF HANDLING WASTE DISPOSAL:

   A. Drill cuttings will be disposed of in the reserve pits.
   B. The reserve pits will be constructed and reclamation done according to NMOCD guidelines.
   C. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
   D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
   E. Oil produced during operations will be stored in tanks until sold.
   F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
   G. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

   A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, and the location of the drilling equipment, rig orientation and access road approach.
   B. The reserve pits will be plastic lined. Yates Petroleum Corporation is in full compliance with the OCD General Plan for Drilling Pits approved on April 15, 2004.
   C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION:

   A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
   B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
   C. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be reclaimed as required by the Oil Conservation Division.

11. SURFACE OWNERSHIP:
   Federal Surface: Administered by BLM – Carlsbad, NM
   Grazing Alotee: Phyllis Crockett, PO Box C, Hope, NM 88250, (505) 484-3687.

12. OTHER INFORMATION:

A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, and historical and cultural sites.
B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:
Debbie L. Caffall, Regulatory Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

B. Through Drilling, Completions & Prod.
Pinson McWhorter, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

14. CERTIFICATION:

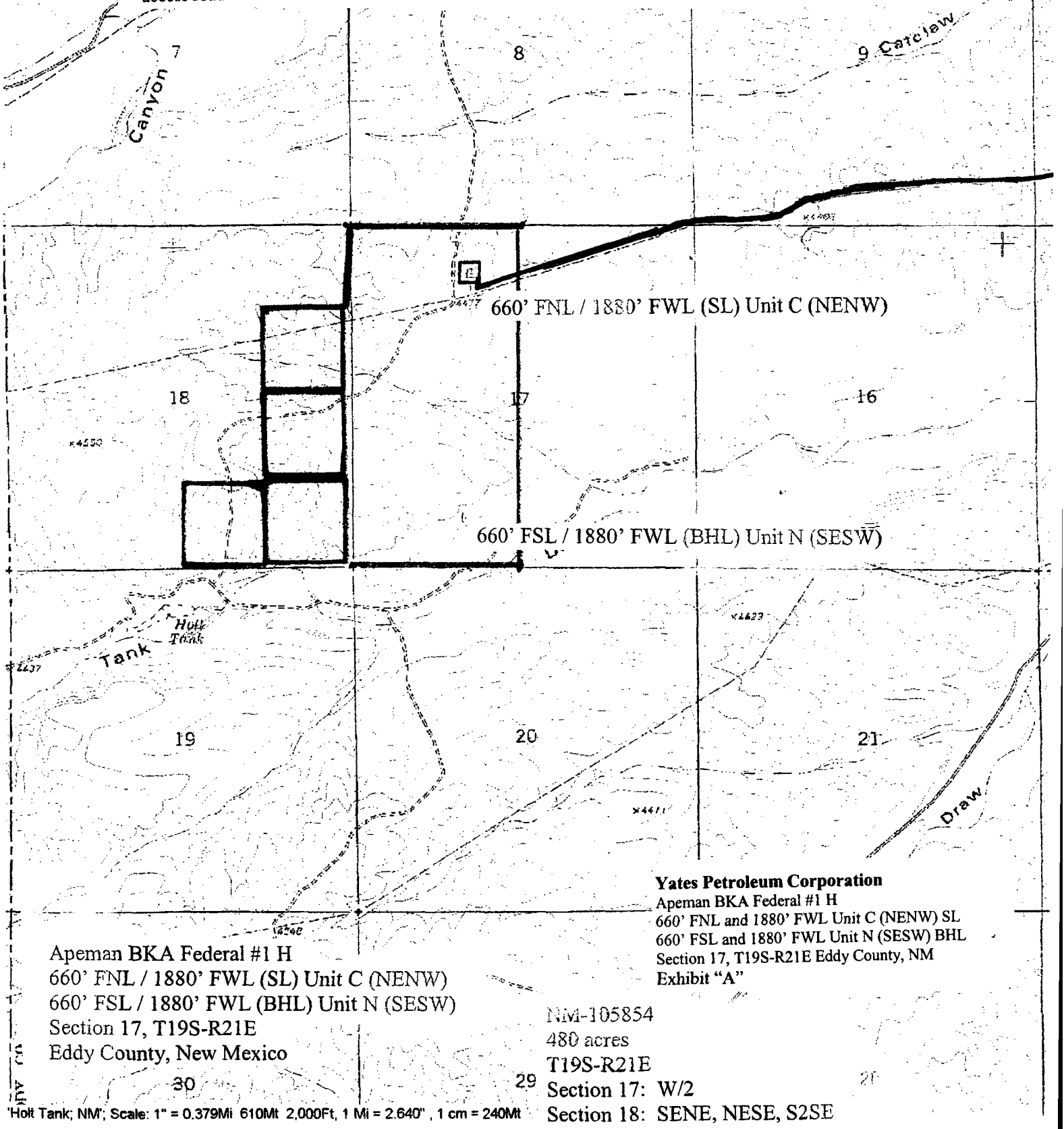
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

04/05/2007

Debbie L. Caffall, Regulatory Agent

Driving Directions

Travel west of Artesia on U.S. Highway 82 to Hope New Mexico approximately 21.4 miles to the Intersection of U. S. Highway 82 and Armstrong Road (County Rd. 12). Turn left (south) and continue on Armstrong Road (County Rd. 12) for approximately 6.3 miles to the intersection of Armstrong Road (County Rd. 12) and Bronc Road (County Rd. 20). Turn right (west) onto Bronc Road (County Road 20) and continue for approximately 3.2 miles to a lease road on the right (west/northwest) and travel this road for approximately 2.1 miles to a faded two track road on the south side of the Parallels Pandora's Box pad and continue west on two track along the fence line for approximately .6 of a mile more to the proposed access road to the southeast corner of the proposed location.



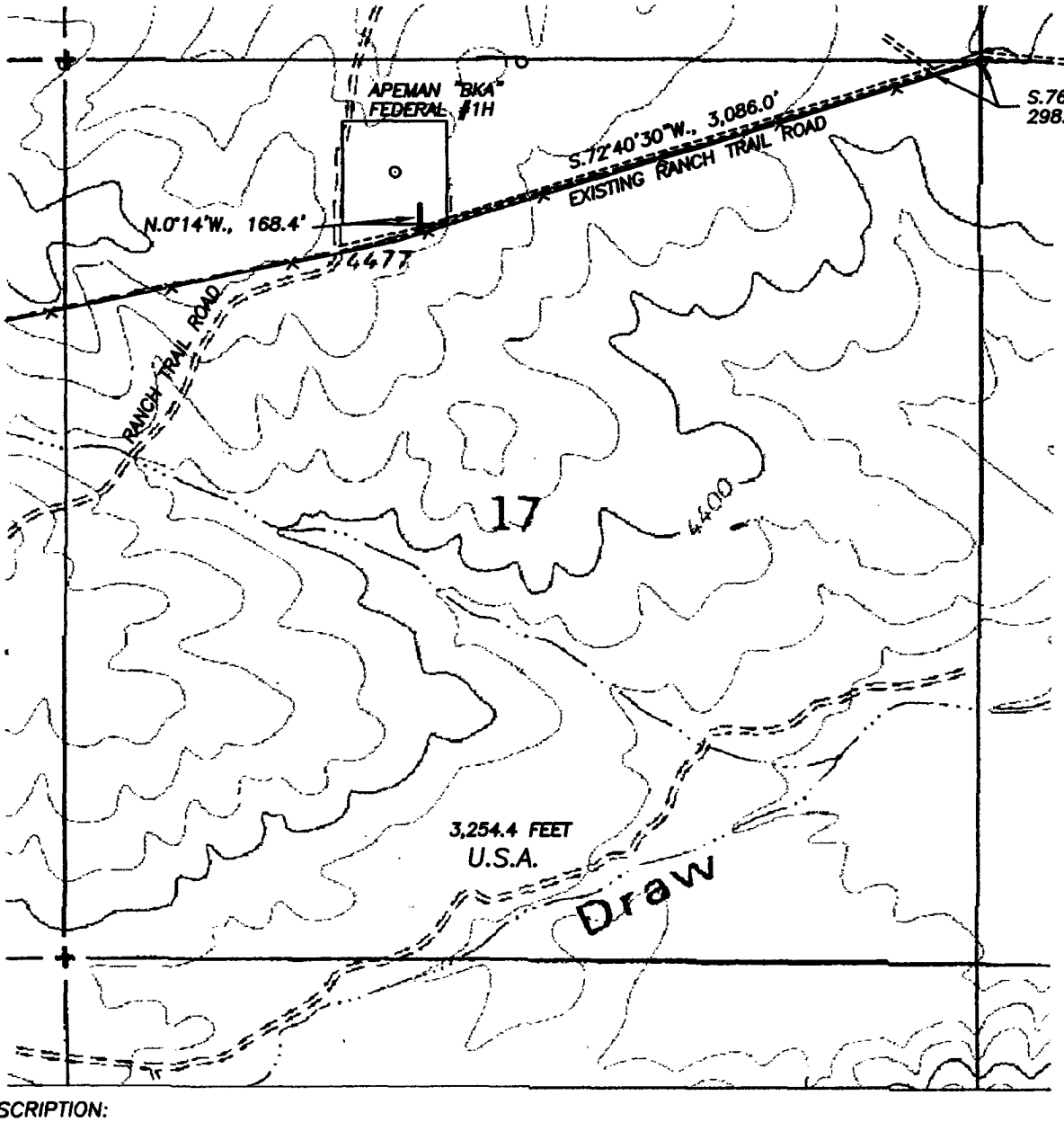
Yates Petroleum Corporation
Apeman BKA Federal #1 H
660' FNL and 1880' FWL Unit C (NENW) SL
660' FSL and 1880' FWL Unit N (SESW) BHL
Section 17, T19S-R21E Eddy County, NM
Exhibit "A"

Apeman BKA Federal #1 H
660' FNL / 1880' FWL (SL) Unit C (NENW)
660' FSL / 1880' FWL (BHL) Unit N (SESW)
Section 17, T19S-R21E
Eddy County, New Mexico

NM-105854
480 acres
T19S-R21E
Section 17: W/2
Section 18: SENE, NESE, S2SE

'Holt Tank; NM'; Scale: 1" = 0.379Mi 610Mt 2,000Ft, 1 Mi = 2.640" , 1 cm = 240Mt

SECTION 17, TOWNSHIP 19 SOUTH, RANGE 21 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



DESCRIPTION:

A LEASE ROAD RIGHT OF WAY 30 FEET WIDE AND 3,254.4 FEET IN LENGTH, BEING 15 FEET TO THE LEFT AND RIGHT OF AN EXISTING RANCH TRAIL ROAD LOCATED IN SECTION 17, TOWNSHIP 19 SOUTH, RANGE 21 EAST, NMPM, EDDY COUNTY, NEW MEXICO AS SHOWN IN RED ON THIS PLAT.

3,254.4 FEET = 197.2364 RODS, 0.6164 MILES OR 2.2413 ACRES, MORE OR LESS.

Yates Petroleum Corporation
Apeman BKA Federal #1 H
660' FNL and 1880' FWL Unit C (NENW) SL
660' FSL and 1880' FWL Unit N (SESW) BHL
Section 17, T19S-R21E Eddy County, NM
Exhibit "A-2"

1000' 0 1000' 2000'
Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

REGISTERED PROFESSIONAL LAND SURVEYOR 3640

HERSCHEL L. JONES R.P.L.S. No.3640

GENERAL SURVEYING COMPANY P.O. BOX 1928
LOVINGTON, NEW MEXICO 88260

YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES APEMAN "BKA" FEDERAL #1H WELL, LOCATED IN SECTION 17, TOWNSHIP 19 SOUTH, RANGE 21 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 3/05/2007	Sheet 1 of 1 Sheets	
Drawn By: Ed Blevins	W.O. Number	
Date: 3/06/07	Scale 1" = 1000'	APEMAN 1H

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**Yates Petroleum Corporation**
Well Name & No.	**1H-Apeman BKA Federal**
Location SHL:	**0660 FNL, 1880 FWL, Section 17, T-19-S, R-21-E, Eddy County**
Location BHL:	**0660 FSL, 1880 FWL, Section 17, T-19-S, R-21-E, Eddy County**
Lease:	**NM-105854**

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:

1. Spudding well
2. Setting and/or Cementing of all casing strings
3. BOPE tests

- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822

B. Although no H2S has been reported in this section, it is always a potential hazard.

C. 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.

D. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

A. The **9-5/8** inch surface casing shall be set at **approximately 1500 feet** and cemented to the surface.

1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
4. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the San Andres, Glorieta, and Wolfcamp formations.

Possible high pressure gas bursts in the Wolfcamp and possible over pressure in the Strawn, Atoka, and Morrow formations.

B. The minimum required fill of cement behind the 7 inch intermediate casing **(which will be set if hole conditions warrant) is cement shall extend a minimum of 200' inside the surface casing. If 7 inch casing is set, the production casing will be 4-1/2 inch casing and will be cemented a minimum of 200 feet inside the 7 inch casing.**

C. The minimum required fill of cement behind the **5-1/2** inch production casing is **cement shall extend a minimum of 200 feet inside the surface casing.**

D. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53.

B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** PSI.

C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

1. The tests shall be done by an independent service company.
2. The results of the test shall be reported to the appropriate BLM office.
3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
5. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

Engineer on call phone: 505-706-2779

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