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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

8012

OCD-ARTESIA

Month - Year
2007
OCD - ARTESIA, NM

ATS-07-255

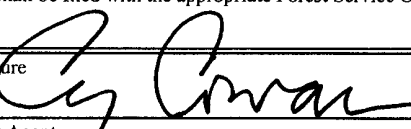
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OMB No. 1004-0136
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-7805	
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Yates Petroleum Corporation		7. If Unit or CA Agreement, Name and No.	
3A. Address 105 South Fourth Street Artesia, New Mexico 88210		8. Lease Name and Well No. 36500 Flick BIQ Federal #1H	
3b. Phone No. (include area code) (505) 748-1471		9. API Well No. 30-015-3S607	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 660' FSL and 760' FEL Surface Location At proposed prod. Zone 660' FNL and 760' FEL Bottom Hole Location		10. Field and Pool, or Exploratory Eagle Creek Wolfcamp	
11. Sec., T., R., M., or Blk. and Survey or Area Section 4, T17S-R24E		12. County or Parish Eddy County	
13. State NM		14. Distance in miles and direction from nearest town or post office* Approximately 11 miles west of Artesia, New Mexico.	
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 520.32	17. Spacing Unit dedicated to this well E/2	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1/2 mile	19. Proposed Depth 4760'	20. BLM/BIA Bond No. on file NMB-000434	
21. Approximate date work will start* ASAP		22. Estimated duration 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 an 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 shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) Cy Cowan	Date 4/13/2007
Regulatory Agent		
Approved by (Signature) James A. Ames	Name (Printed/Typed) James A. Ames	Date MAY 08 2007
Title ACTING FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify that the operations thereon.

Conditions of approval, if any, are attached.

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

*(Instructions on reverse)

C-144 attached

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

ject lease which would entitle the applicant to conduct

o make to any department or agency of the United

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

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96622	Pool Name Eagle Creek; Wolfcamp
Property Code	Property Name FLICK "BIQ" FEDERAL	Well Number 1H
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3737

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	4	17S	24E		660	SOUTH	760	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	4	17S	24E		660	NORTH	760	EAST	EDDY

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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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

<p>BOTTOM HOLE LOCATION Y=680300.6 N X=421992.1 E LAT.=32.869971 N LONG.=104.587404 W</p>	<p>NM-7805</p> <p>PROJECT AREA</p> <p>PRODUCING AREA</p> <p>B.H.</p> <p>GRID AZ. = 359°29'20" HORIZ. DIST. = 3980.9'</p> <p>3738 3738</p> <p>3740 3739</p>	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>[Signature]</i> 4/13/07 Signature Date Cy Cowan, Regulatory Agent Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>1/25/2007 Date Surveyed Signature & Seal of Professional Surveyor <i>[Signature]</i> HERSCHELL L. JONES NEW MEXICO 3640 Certificate No. Herschell Jones 3640 GENERAL SURVEYING</p>
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YATES PETROLEUM CORPORATION

Flick BIQ Federal #1H

660' FSL & 760' FEL (Pilot Hole)

660' FNL & 760' FEL (Bottom Hole)

Section 4-T17S-R24E

Eddy County, New Mexico

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

San Andres	375'	Base Wolfcamp Pay	4748'
Glorietta	1710'	Base Wolfcamp Shale	4760'
Tubb	3025'	TD (Pilot Hole)	5000'
Abo	3675'	TD (Lateral Hole)	8000'
Wolfcamp	4695'		

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

Water: 430'

Oil or Gas: All potential formations.

3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and the 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"	48#	H-40	ST&C	0- 350'	350'
12 1/4"	9.5/8"	36#	J-55	ST&C	0-1100'	1100'
**8 3/4"	7.0"	26#	J-55	ST&C	0-4830'	4830'
7 7/8"	5.5"	17#	HCP-110	LT&C	0-8509'MD	8509'

***Pilot hole will be drilled to 5000'. Well will then be plugged back and kicked off at approximately 4330' at 15 degrees per 100' with an 8 3/4" hole to 4830' MD. If hole conditions warrant, 7" casing will be set and cemented back to previous casing. A 6 1/8" hole will then be drilled to a TD of 8509' and 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 8509'. 5 1/2" casing will be set and cemented.

Yates Petroleum Corporation requests a variance to install a rotating head on the surface casing strings when intermediate casing will be set. If a BOP system is required then we wish to install a 2M system and receive a variance to test the system to 500# using the rig pumps. The test will be held for 30 minutes on each system component. Components to be tested include pipe rams, blind rams, and annular preventer.

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

B. CEMENTING PROGRAM:

Surface Casing: 400 sx 'C' + 2% CaCl₂ (YLD 1.35 WT 14.8). TOC-Surface

Intermediate Casing: 225 sx C lite + 2% CaCl₂ (YLD 1.98 WT 12.5) Tail in with 200 sx 'C' (YLD 1.34 WT 14.8). TOC-Surface.

Production Casing: Lead with 800 sx lite C (YLD 2.05 WT 12.5). Tail in with 700 sx acid solution (YLD 2.60 WT 11.15).

*See
Revised
Sheet from
Operator*

If 7' casing is run a 6 1/8" hole will be drilled and 4 1/2" production casing will be set. (TOC-1000') Lead w/ 775 sx Lite 'C' (YLD 2.05 WT 12.5). Tail in w/1200 sx Magne Plus (YLD 1.05 WT 13).

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-350'	Fresh Water	8.4-8.9	32-36	N/C
350'-1100'	FW Gel/Air Mist	8.4-8.9	28-34	N/C
1100'-5000'	Cut Brine	8.8-9.2	28	N/C
	(Horizontal Section)			
4330'-8509'	Cut Brine	8.8-9.2	28	N/C

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 out from under intermediate casing.

Logging: Platform Express/HALS, FMI (Pilot Hole).

Coring: Rotary Sidewall Cores (Pilot Hole).

DST's: None Anticipated.

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

From: 0	TO: 350'	TVD	Anticipated Max. BHP: 162 PSI
From: 350'	TO: 1100'	TVD	Anticipated Max. BHP: 510 PSI
From: 1100	TO: 5000'	TVD	Anticipated Max. BHP: 2390 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 168 F

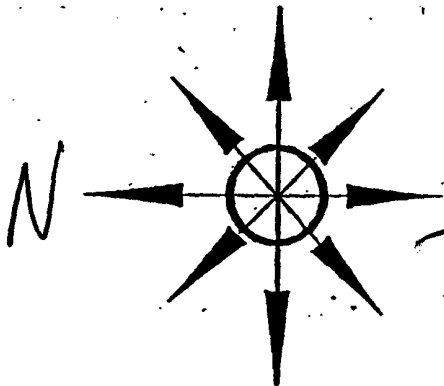
8. ANTICIPATED STARTING DATE:

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.

Yates Petroleum Corporation

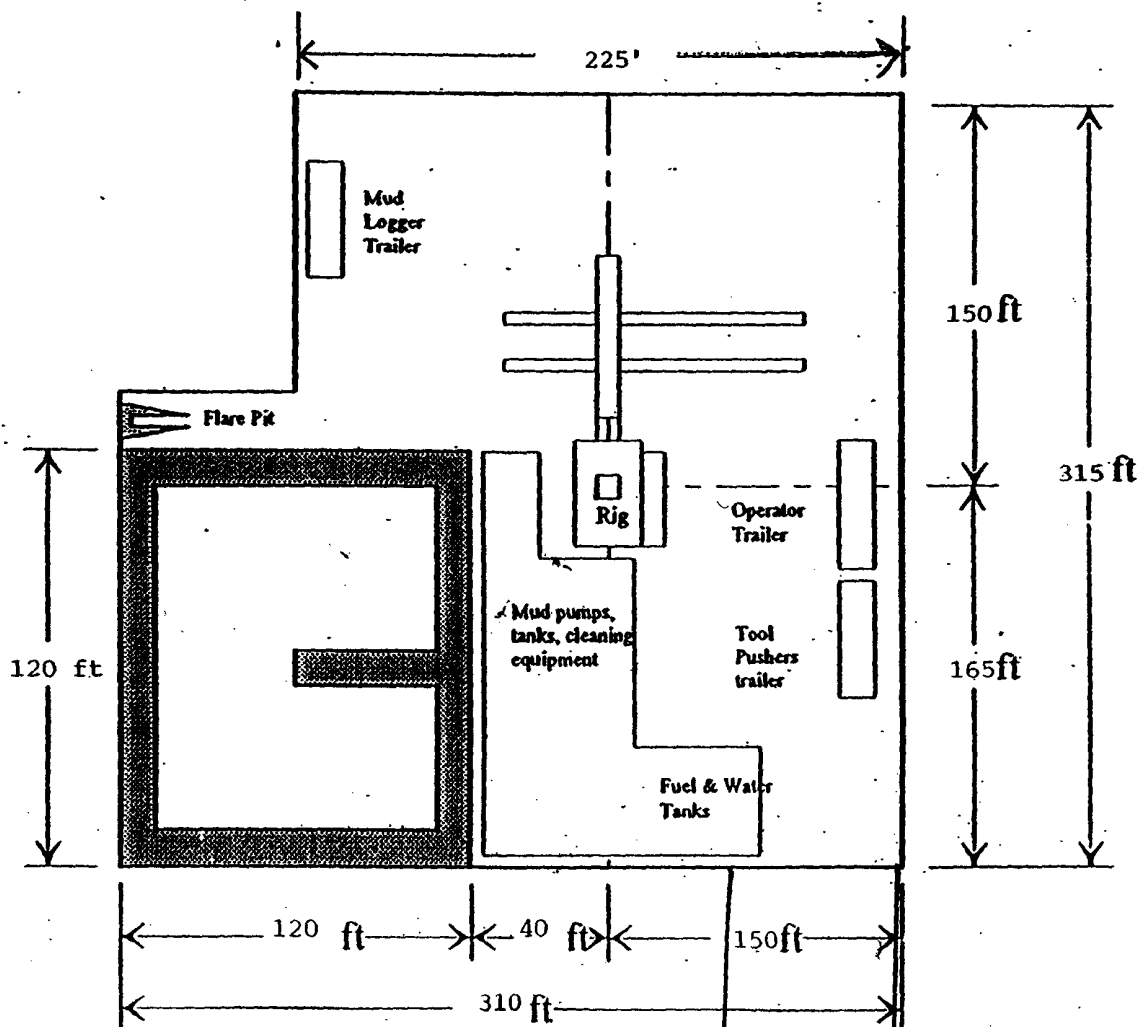
Location Layout for Permian Basin
Up to 12,000'

PB - LI



S Pits North

Yates Petroleum Corporation
Flick BIQ Federal #1H
660' FSL and 760' FEL SHL
660' FNL and 760' FEL BHL
Section 4, T17S-R24E
Eddy County, New Mexico



Distance from Well
Head to Reserve Pit
will vary between rigs

The above dimension
should be a maximum

ROAD



Yates Petroleum Corporation

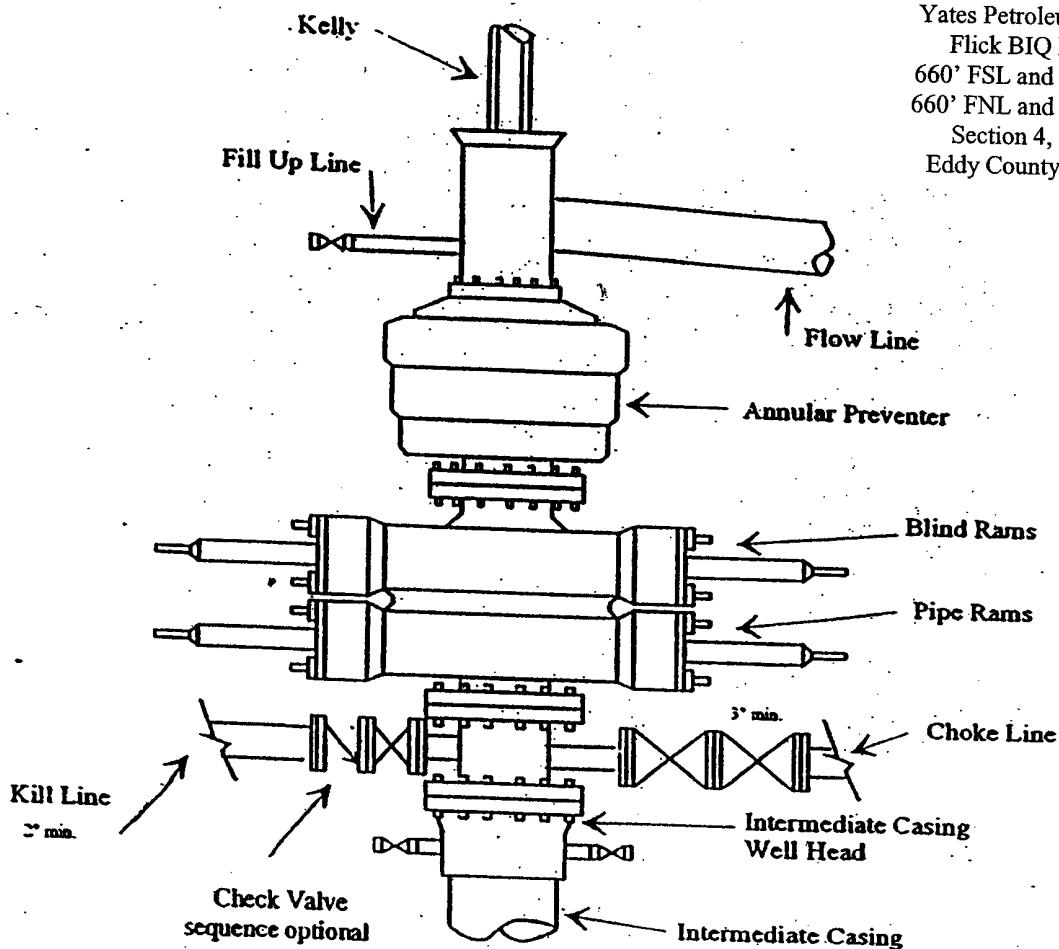
Typical 3,000 psi Pressure System

Schematic

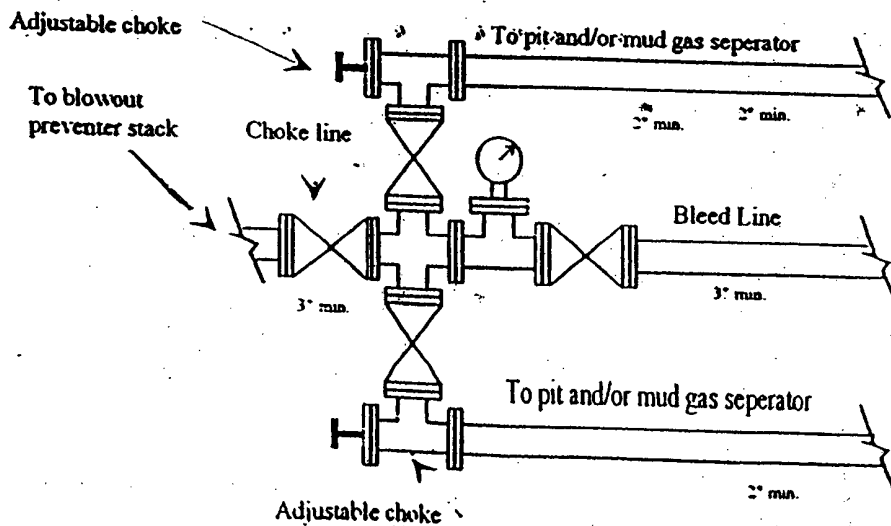
Annular with Double Ram Preventer Stack

BOP-3

Yates Petroleum Corporation
Flick BIQ Federal #1H
660' FSL and 760' FEL SHL
660' FNL and 760' FEL BHL
Section 4, T17S-R24E
Eddy County, New Mexico



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



Yates Petroleum Corporation

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

April 24, 2007

To Whom It May Concern:

The following is the contingency casing design and cement program for the Flick BIQ Federal #1H:

Size	Wt. (#/ft.)	Grade	Depth	Top of Cement
7"	23#	J-55	0'-4830'	600'

Lead with 475sx C-lite (Yld 2.04 Wt. 12.5#) and tail with 225sx class C (Yld 1.33 Wt. 14.8).

4 1/2" liner	11.6#	HCP-110	3830'-8509'	3830'
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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,

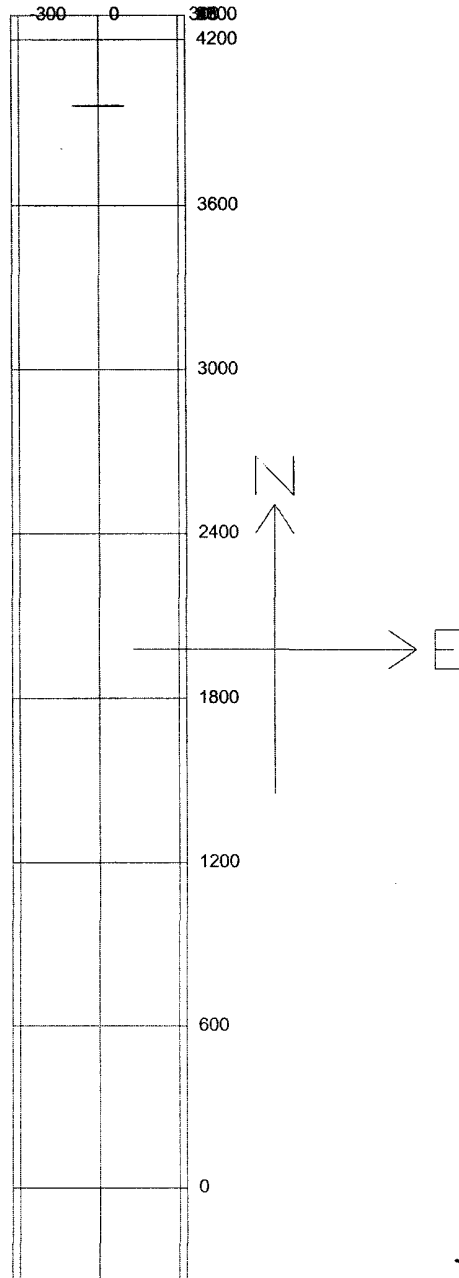
Jeremiah Mullen

Drilling Engineer Asst.

	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+/S- [ft]	E+/W- [ft]	D.L.S. [°/100ft]	ToolFace [°]	T.F. Ref. [HS/GN]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	4330.00	0.00	0.00	4330.00	0.00	0.00	15.00	0	GN
3	4350.00	3.00	0.00	4349.99	0.52	0.00	15.00	0	HS
4	4375.00	6.75	0.00	4374.90	2.65	0.00	15.00	0	HS
5	4400.00	10.50	0.00	4399.61	6.40	0.00	15.00	0	HS
6	4425.00	14.25	0.00	4424.02	11.75	0.00	15.00	0	HS
7	4450.00	18.00	0.00	4448.04	18.69	0.00	15.00	0	HS
8	4475.00	21.75	0.00	4471.54	27.19	0.00	15.00	0	HS
9	4500.00	25.50	0.00	4494.44	37.21	0.00	15.00	0	HS
10	4525.00	29.25	0.00	4516.64	48.70	0.00	15.00	0	HS
11	4550.00	33.00	0.00	4538.04	61.62	0.00	15.00	0	HS
12	4575.00	36.75	0.00	4558.54	75.92	0.00	15.00	0	HS
13	4600.00	40.50	0.00	4578.07	91.52	0.00	15.00	0	HS
14	4625.00	44.25	0.00	4596.54	108.36	0.00	15.00	0	HS
15	4650.00	48.00	0.00	4613.86	126.38	0.00	15.00	0	HS
16	4675.00	51.75	0.00	4629.97	145.50	0.00	15.00	0	HS
17	4700.00	55.50	0.00	4644.79	165.62	0.00	15.00	0	HS
18	4725.00	59.25	0.00	4658.27	186.67	0.00	15.00	0	HS
19	4750.00	63.00	0.00	4670.34	208.56	0.00	15.00	0	HS
20	4775.00	66.75	0.00	4680.95	231.19	0.00	15.00	0	HS
21	4800.00	70.50	0.00	4690.06	254.47	0.00	15.00	0	HS
22	4825.00	74.25	0.00	4697.63	278.29	0.00	15.00	0	HS
23	4850.00	78.00	0.00	4703.63	302.56	0.00	15.00	0	HS
24	4875.00	81.75	0.00	4708.02	327.16	0.00	15.00	0	HS
25	4900.00	85.50	0.00	4710.79	352.00	0.00	15.00	0	HS
26	4925.00	89.25	0.00	4711.94	376.97	0.00	15.00	0	HS
27	4939.09	91.36	0.00	4711.86	391.06	0.00	15.00	0	HS
28	8509.04	91.36	0.00	4627.00	3960.00	0.00	0.00		

3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation
Well: Flick BIQ Federal #1



MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Flick BIQ Federal #1H
660' FSL & 760' FEL (Pilot Hole)
660' FNL & 760' FEL (Bottom Hole)
Section 4-T17S-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 well site is located approximately 11 miles west of Artesia, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go west of Artesia on Highway 82 for approximately 10 miles to Joy Road. Turn right on Joy Road and go approximately 1.1 miles. The new road will start here going east.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately .3 of a mile in length from the point of origin to the southwest corner of the drilling pad.
- 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 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 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, 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:

Surface is managed by the Bureau of Land Management, Carlsbad, New Mexico.

12. OTHER INFORMATION:

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

13. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

Cy Cowan, Regulatory Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

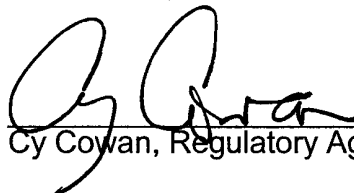
B. Through Drilling, Completions & Prod.

Pinson McWhorter, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

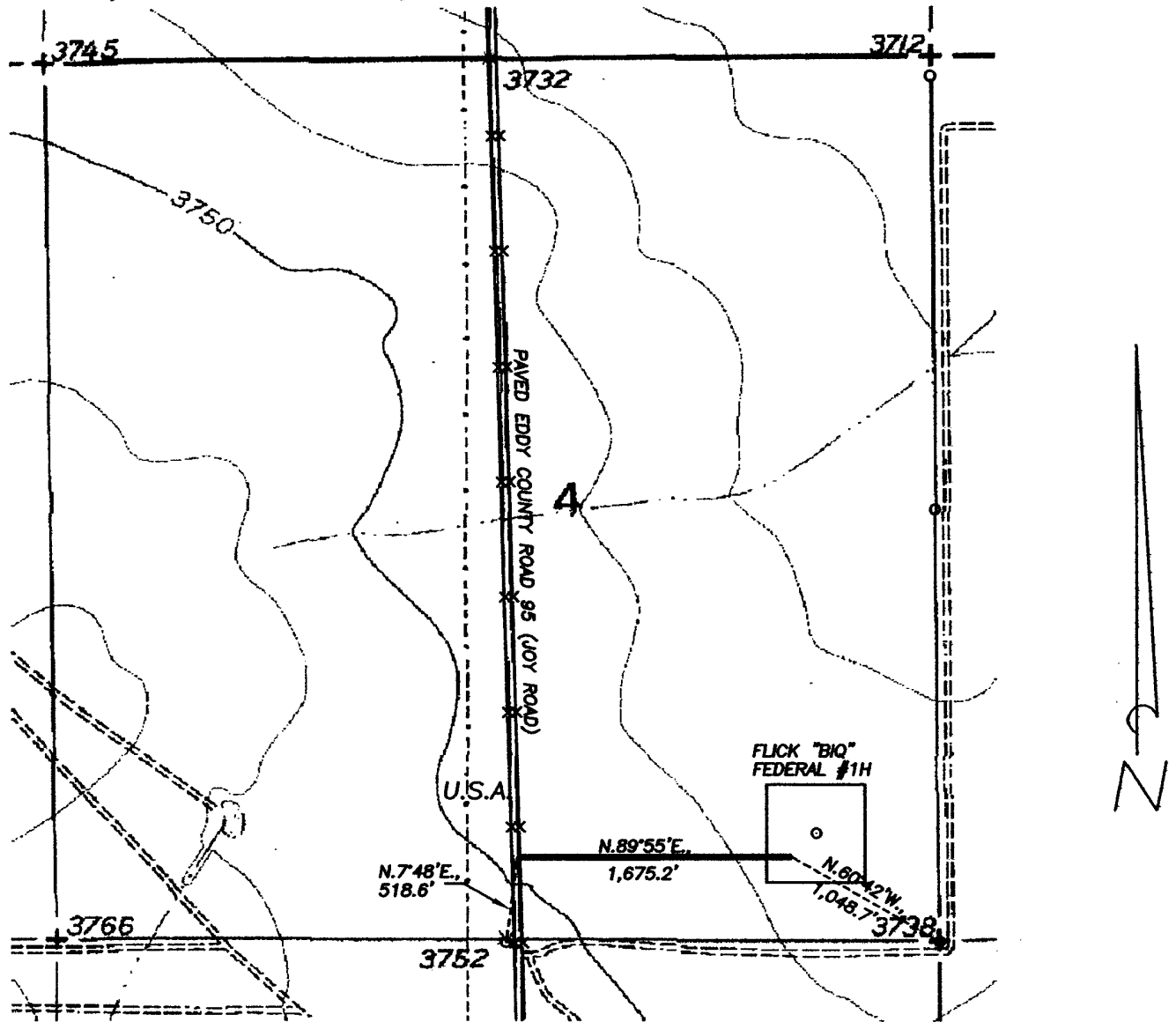
14. CERTIFICATION:

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.

2/22/07


Cy Cowan, Regulatory Agent

SECTION 4, TOWNSHIP 17 SOUTH, RANGE 24 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



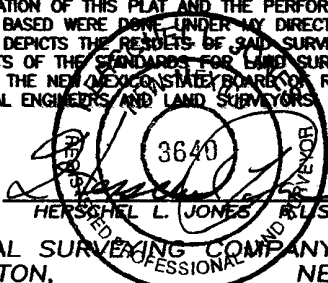
DESCRIPTION:

A LEASE ROAD RIGHT OF WAY 30 FEET WIDE AND 1,675.2 FEET IN LENGTH, BEING 15 FEET TO THE LEFT AND RIGHT OF THE SURVEY CENTERLINE AS SHOWN IN RED ON THIS PLAT.

1,675.2 FEET = 101.5273 RODS, 0.3173 MILES OR 1.1537 Ac., MORE OR LESS.

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.



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

YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES FLICK "BIO" FEDERAL #1H WELL, LOCATED IN SECTION 4, TOWNSHIP 17 SOUTH, RANGE 24 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 1/25/2007	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 1/25/07	Scale 1" = 1000' FLICK 1H

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Yates Petroleum Corporation
Well Name & No. 1H-Flick BIQ Federal
Location SHL: 0660 FSL, 0760 FEL, Section 4, T-17-S, R-24-E, Eddy County
Location BHL: 0660 FNL, 0760 FEL, Section 4, T-17-S, R-24-E, Eddy County
Lease: NM-7805

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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.

II. CASING:

- A. The 13-3/8 inch surface casing shall be set at approximately 350 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 Grayburg and San Andres formations.

Possible high pressure gas bursts in the Wolfcamp formation.

- B. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is **cement shall circulate to surface**. If cement does not circulate see A.1 thru 4.
- C. 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 intermediate 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.

- D. 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 intermediate casing.
- E. 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 2000 (2M) PSI.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 2000 (2M) PSI.
- D. 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.
 6. A variance to test the surface casing and BOP/BOPE to the reduced pressure of 1000 psi with the rig pumps is approved.

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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