

Form 3160-3  
(August 2008)

AUG 18 2008

OCD-ARTESIA

UNITED STATES

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.

NM-10266

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No

8. Lease Name and Well No.

Link BKT Federal Com. #4H

9. API Well No.

30-015-36412

10. Field and Pool, or Exploratory

Wildcat Wolfcamp

11. Sec., T., R., M., or Blk. And Survey or Area

Section 18, T16S-R25E

12. County or Parish

Eddy County

13. State

NM

1a. Type of Work:

☒ DRILL☐ REENTER

Split Estate

1b. Type of Well

☐ Oil Well☒ Gas Well☐ Other☐ Single Zone☐ Multiple Zone

2. Name of Operator

Yates Petroleum Corporation 025575

3a. Address

105 South Fourth Street, Artesia, NM 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

1880' FSL and 240' FEL Section 18, T16S-R25E Surface Hole location

At proposed prod. zone

1880' FSL and 660' FEL Section 17, T16S-R25E Bottom Hole Loc.

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

Approximately 5 miles northwest of Artesia, New Mexico

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

240'

16. No. of acres in lease

640.00

17. Spacing Unit dedicated to this well

S/2S/2 320

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

20'

19. Proposed Depth

9533'  
4950' TVD 9960' MD

20. BLM/ BIA Bond No. on file

NATIONWIDE BOND #NMB000434

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

3554' GR

22. Approximate date work will start\*

ASAP

23. Estimated duration

60 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 must be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by 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 BLM.

25. Signature

Name (Printed/ Typed)

Cy Cowan

Date

6/30/2008

Title

Regulatory Agent

Approved By (Signature)

/s/ James Stovall

Name (Printed/ Typed)

/s/ James Stovall

Date

AUG 14 2008

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not constitute approval of operations thereon

Conditions of approval,

Title 18 U.S.C. Section 1

States any false, fictitious

\* (Instructions on page 1)

## NOTE: NEW PIT RULE

19-15-17 NMAC PART 17

A form C-144 must be approved before starting drilling operations.

equitable title to those rights in the subject lease which would entitle the applicant to co

## APPROVAL FOR TWO YEARS

any person knowingly and wilfully to make to any department or agency of the United States within its jurisdiction.

SEE ATTACHED FOR  
CONDITIONS OF APPROVALApproval Subject to General Requirements  
& Special Stipulations Attached

Roswell Controlled Water Basin

MARTIN YATES, III  
1912-1985

FRANK W. YATES  
1936-1986



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (575) 748-1471

S.P. YATES  
CHAIRMAN EMERITUS

JOHN A. YATES  
CHAIRMAN OF THE BOARD

FRANK YATES, JR.  
PRESIDENT

PEYTON YATES  
DIRECTOR

JOHN A. YATES, JR.  
DIRECTOR

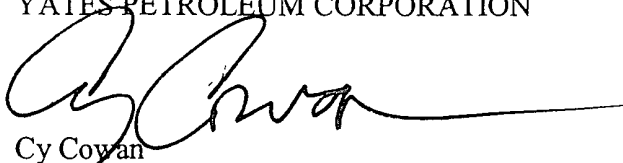
Please be advised that a surface use agreement has been reached with the private surface owners for the following wells:

Cottonwood KI Federal Com. #3H  
Link BKT Federal Com. #1H  
Link BKT Federal Com. #4H

Private Surface Owners: Haskins Family Trust and Jane R. Haskins  
4274 Excelsior Lane  
Eureka, CA 95503

Thank you.

YATES PETROLEUM CORPORATION



Cy Cowan  
Regulatory Agent

RANDY G. PATTERSON  
SECRETARY

DAVID LANNING  
CHIEF OPERATING OFFICER

DENNIS G. KINSEY  
TREASURER

DISTRICT I  
1825 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 97668	Pool Name Wildcat Wolfcamp
Property Code	Property Name LINK "BKT" FEDERAL COM	Well Number 4H
GRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3554'

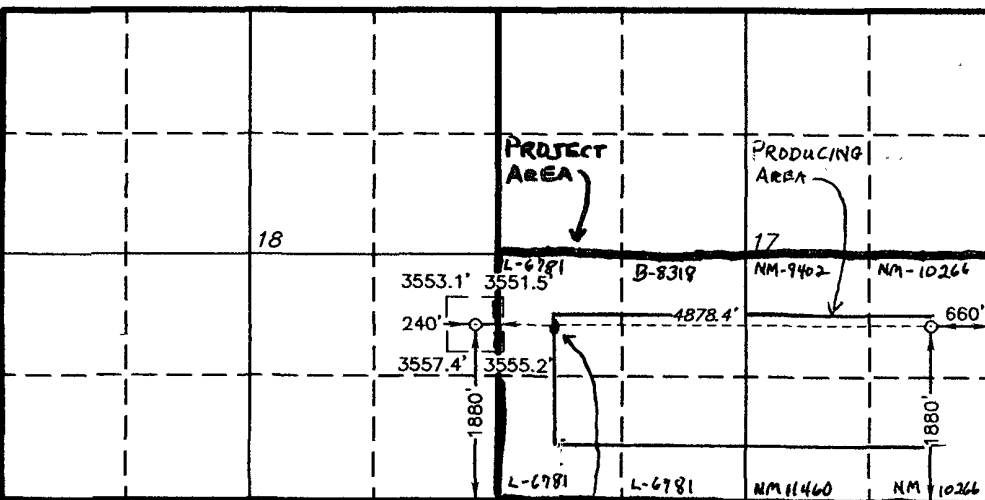
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	18	16 S	25 E		1880	SOUTH	240	EAST	EDDY

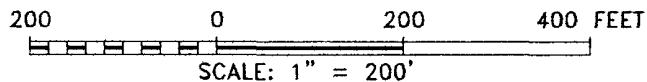
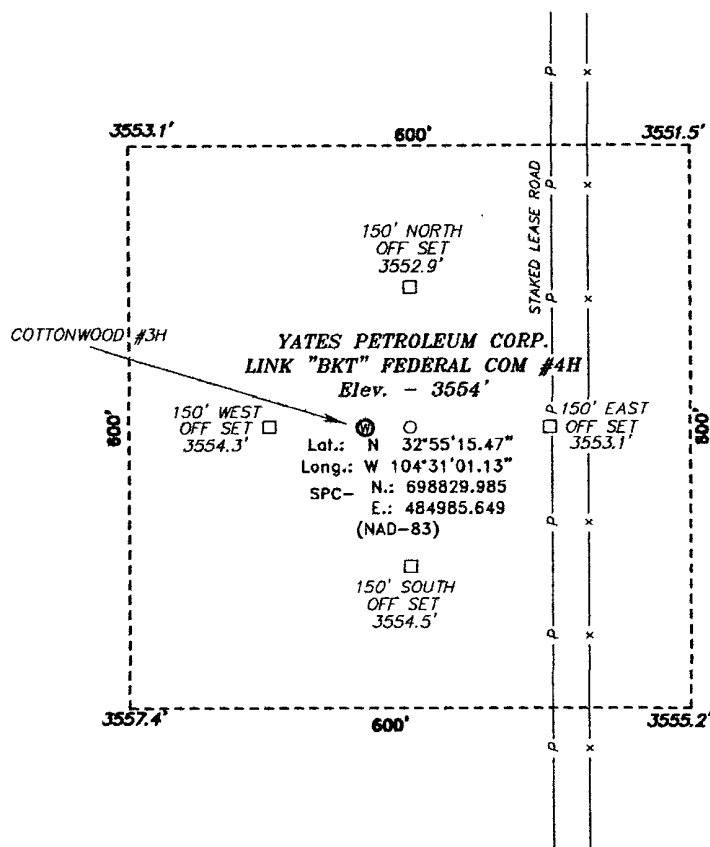
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	17	16 S	25 E		1880	SOUTH	660	EAST	EDDY
Dedicated Acres 320 S2	Joint or Infill	Consolidation Code	Order No.						

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><b>PENETRATION POINT</b> 1890' FSL &amp; 660' FWL</p> <p><b>SURFACE LOCATION</b> Lat - N32°55'15.47" Long - W104°31'01.13" SPC- N.: 698829.985 E.: 484985.649 (NAD-83)</p> <p><b>BOTTOM HOLE LOCATION</b> Lat - N32°55'15.36" Long - W104°30'03.89" SPC- N.: 698810.737 E.: 489863.961 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b></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 released 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>Cy Cowan</i> Signature _____ Date _____ Cy Cowan Printed Name _____</p> <p><b>SURVEYOR CERTIFICATION</b></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>MAY 8, 2008</p> <p>Date Surveyed _____ Signature of _____ Professional _____ Certificate No. Gary L. Jones 7977</p> <p><b>BASIN SURVEYS</b></p>
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SECTION 18, TOWNSHIP 16 SOUTH, RANGE 25 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



**YATES PETROLEUM CORP.**

REF: LINK "BKT" FEDERAL COM #4H / WELL PAD TOPO

THE LINK "BKT" FEDERAL COM #4H LOCATED 1880'  
FROM THE SOUTH LINE AND 240' FROM THE EAST LINE OF  
SECTION 18, TOWNSHIP 16 SOUTH, RANGE 25 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786 - HOBBS, NEW MEXICO

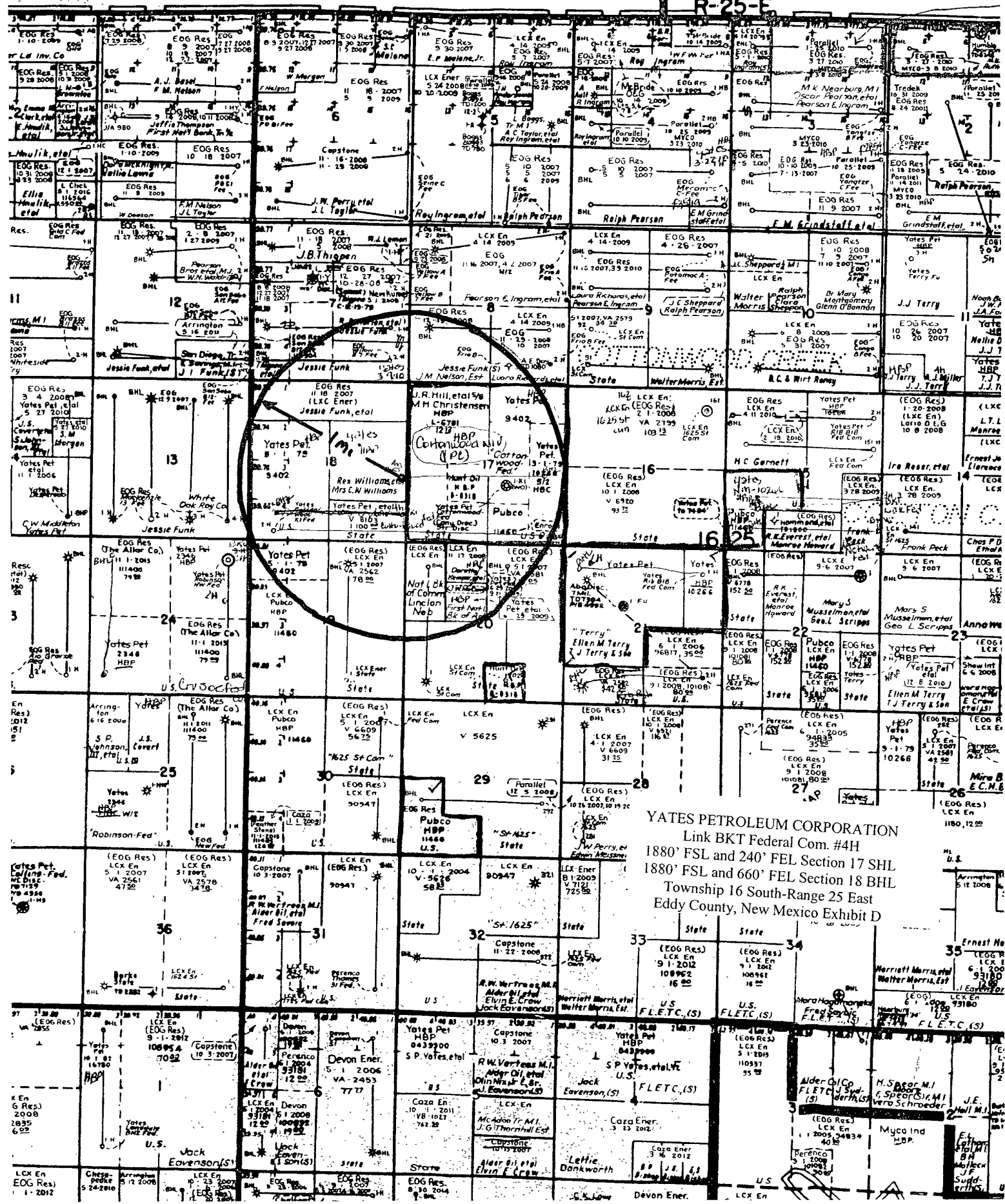
W.O. Number: 19493

Drawn By: J. M. SMALL

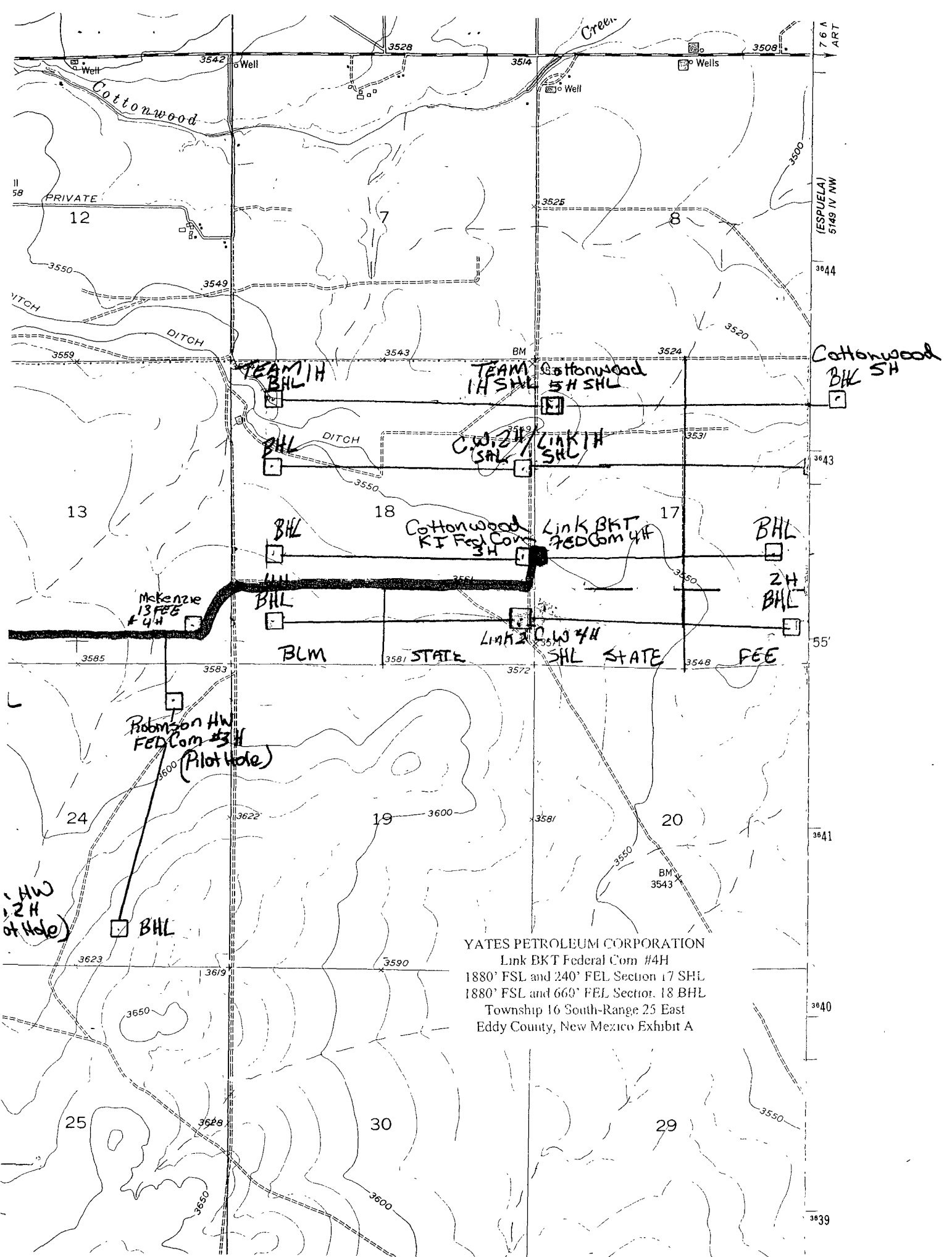
Date: 05-09-2008 Disk: 19493 JMS

Survey Date: 05-08-2008

Sheet 1 of 1 Sheets



YATES PETROLEUM CORPORATION  
Link BKT Federal Com. #4H  
1880' FSL and 240' FEL Section 17 SHL  
1880' FSL and 660' FEL Section 18 BHL  
Township 16 South-Range 25 East  
Eddy County, New Mexico Exhibit D



YATES PETROLEUM CORPORATION  
Link BKT Federal Com #4H  
1880' FSL and 240' FEL Section 17 SHL  
1880' FSL and 660' FEL Section 18 BHL  
Township 16 South-Range 25 East  
Eddy County, New Mexico Exhibit A

**YATES PETROLEUM CORPORATION**  
**Link BKT Federal Com. #4H**  
 1880' FSL and 240' FEL (Surface Hole Location)  
 Section 18, T16S-R25E Unit I  
 1880' FSL and 660' FEL (Bottom Hole Location)  
 Section 17, T16S-R25E Unit I  
 Eddy County, New Mexico

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

San Andres	525'	No Pay	Abo	3775' No Pay
Glorietta	1775'	No Pay	Wolfcamp	4834' Gas Pay
Tubb	3775'	No Pay	TD	4905' Gas Pay

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

Water: 100'  
 Oil or Gas: Wolfcamp

**3. Pressure Control Equipment:** BOPE will be installed on the 8 5/8" 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>Thread</u>	<u>Interval</u>	<u>Length</u>
12 1/4"	8 5/8"	24#	J-55	ST&C	0-1000'	1000'
7 7/8"	5 1/2"	17#	HCP-110	LT&C	0-9950' MD	9950'
					9533'	

The vertical portion of this well will be drilled to 4400'. At 4400' the well will be directionally drilled at 12 degrees per 100' with a 7 7/8" hole until horizontal. The lateral will then be drilled to a TVD of 4905' with a MD of 9950' where 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: Burst 1.0, Tensile Strength 1.8, Collapse 1.125

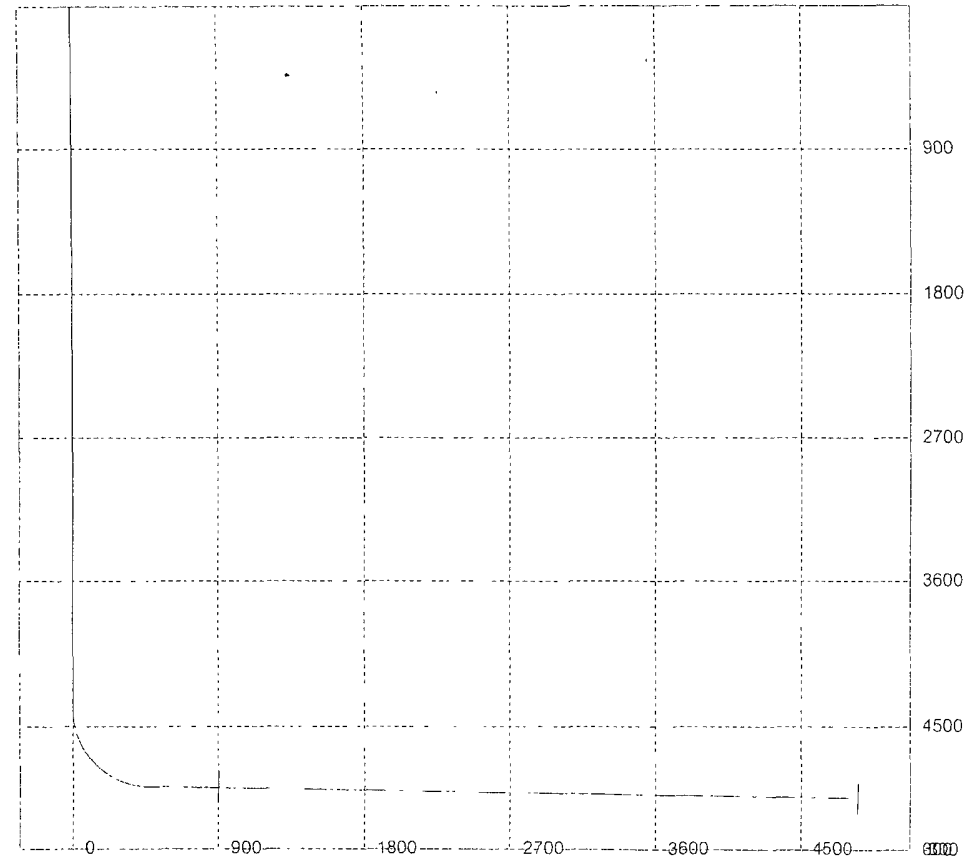
MD	Inclination	Azimuth	TVD	ENT/SS	FEET/W	DIP	Toolface	REF	HS/GN	
0	0	0	0	0	0	0				
566	0	0	566	0	0	0				SAN ANDRES
1820	0	0	1820	0	0	0				GLORIETA
3113	0	0	3113	0	0	0				TUBB
3804	0	0	3804	0	0	0				ABO
4400	0	0	4400	0	0	12	90	GN		KOP
4425	3	90	4424.99	0	0.65	12	0	HS		
4450	6	90	4449.91	0	2.62	12	0	HS		
4475	9	90	4474.69	0	5.88	12	0	HS		
4500	12	90	4499.27	0	10.43	12	0	HS		
4525	15	90	4523.58	0	16.27	12	0	HS		
4550	18	90	4547.54	0	23.37	12	0	HS		
4575	21	90	4571.11	0	31.71	12	0	HS		
4600	24	90	4594.2	0	41.28	12	0	HS		
4625	27	90	4616.77	0	52.04	12	0	HS		
4650	30	90	4638.73	0	63.97	12	0	HS		
4675	33	90	4660.05	0	77.03	12	0	HS		
4700	36	90	4680.65	0	91.19	12	0	HS		
4725	39	90	4700.48	0	106.4	12	0	HS		
4750	42	90	4719.49	0	122.64	12	0	HS		
4775	45	90	4737.62	0	139.85	12	0	HS		
4800	48	90	4754.83	0	157.98	12	0	HS		
4825	51	90	4771.06	0	176.99	12	0	HS		
4850	54	90	4786.28	0	196.82	12	0	HS		
4875	57	90	4800.44	0	217.42	12	0	HS		
4900	60	90	4813.5	0	238.73	12	0	HS		
4925	63	90	4825.42	0	260.7	12	0	HS		
4950	66	90	4836.19	0	283.26	12	0	HS		
4975	69	90	4845.75	0	306.36	12	0	HS		
5000	72	90	4854.1	0	329.92	12	0	HS		
5025	75	90	4861.2	0	353.89	12	0	HS		
5050	78	90	4867.03	0	378.19	12	0	HS		
5075	81	90	4871.59	0	402.77	12	0	HS		
5100	84	90	4874.85	0	427.56	12	0	HS		
5125	87	90	4876.81	0	452.48	12	0	HS		
5141.57	88.99	90	4877.39	0	469.04	0				
5572.6	88.99	90	4885	0	900	0				WOLFCAMP
5572.6	88.99	90	4885	0	900	12	3	HS		
5573.28	89.07	90	4885.01	0	900.68	0				
9533.14	89.07	90	4950	0	4860	0				LATERAL TD

Well will be drilled vertically to 4400' At 4400' the well will be directionally drilled at 12 degrees per 100' with a 7 7/8" hole until horizontal  
The lateral will then be drilled to a TVD of 4950' with a MD of 9533' where 5 1/2" casing will be set and cemented  
The penetration point for the Wolfcamp formation will be 1880' FSL & 660' FWL of Section 17, 16S-25E



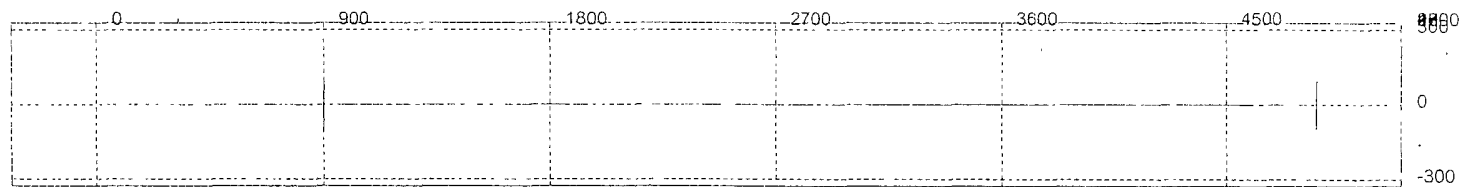
### 3D<sup>3</sup> Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation  
Well: Link BKT Federal Com. #4H



### 3D<sup>3</sup> Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation  
Well: Link BKT Federal Com. #4H



**B. CEMENTING PROGRAM:**

Surface Casing: TOC Surface, 300 sx Lite "C" + 2% CaCL<sub>2</sub> (WT 12.5 YLD 2.0) tail in w/ 200 sx "C" (WT 14.8 YLD 1.35)

Production Casing: TOC Surface, Lead w/ 675 sx Lite "C" (WT 12.5 YLD 2.05)  
Tail in w/ 750 sx Acid Solution (WT 11.15 YLD 2.6).

SOLUBLE CEMENT

**5. Mud Program and Auxiliary Equipment:**

Interval	Type	Weight	Viscosity	Fluid Loss
0 to 1000'	Fresh Water Gel	8.6-8.8	28	N/C
1000'-4400'	Cut Brine	8.8-9.2	28-32	N/C
4400'-9950'	Cut Brine	8.8-9.2	40-45	<10-15cc
4533'	(Horizontal Section)			

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' out from under surface casing to TD.

Logging: Horizontal MWD/GR.

Coring: None anticipated.

DST's: None anticipated.

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

From: 0 TO 1000' TVD Anticipated Max. BHP: 460 PSI

From: 1000' TO 4950' TVD Anticipated Max. BHP: 2370 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H<sub>2</sub>S Zones Anticipated: None

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 30 days to drill the well with completion taking another 15 days.

## Yates Petroleum Corporation – Equipment Design Plan Closed Loop System

Closed Loop System will consist of:

1 – double panel shale shaker

1 – (minimum ) Centrifuge, certain wells and flow rates may require 2 centrifuges

On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System

1 – minimum centrifugal pump to transfer fluids

2- 500 bbl. FW Tanks

1 – 500 bbl. BW Tank

1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.

1 Set of rail cars / catch bins

Certain wells will use an ASC Auger Tank

All equipment will inspected at least hourly by rig personnel and daily by contractors personnel.

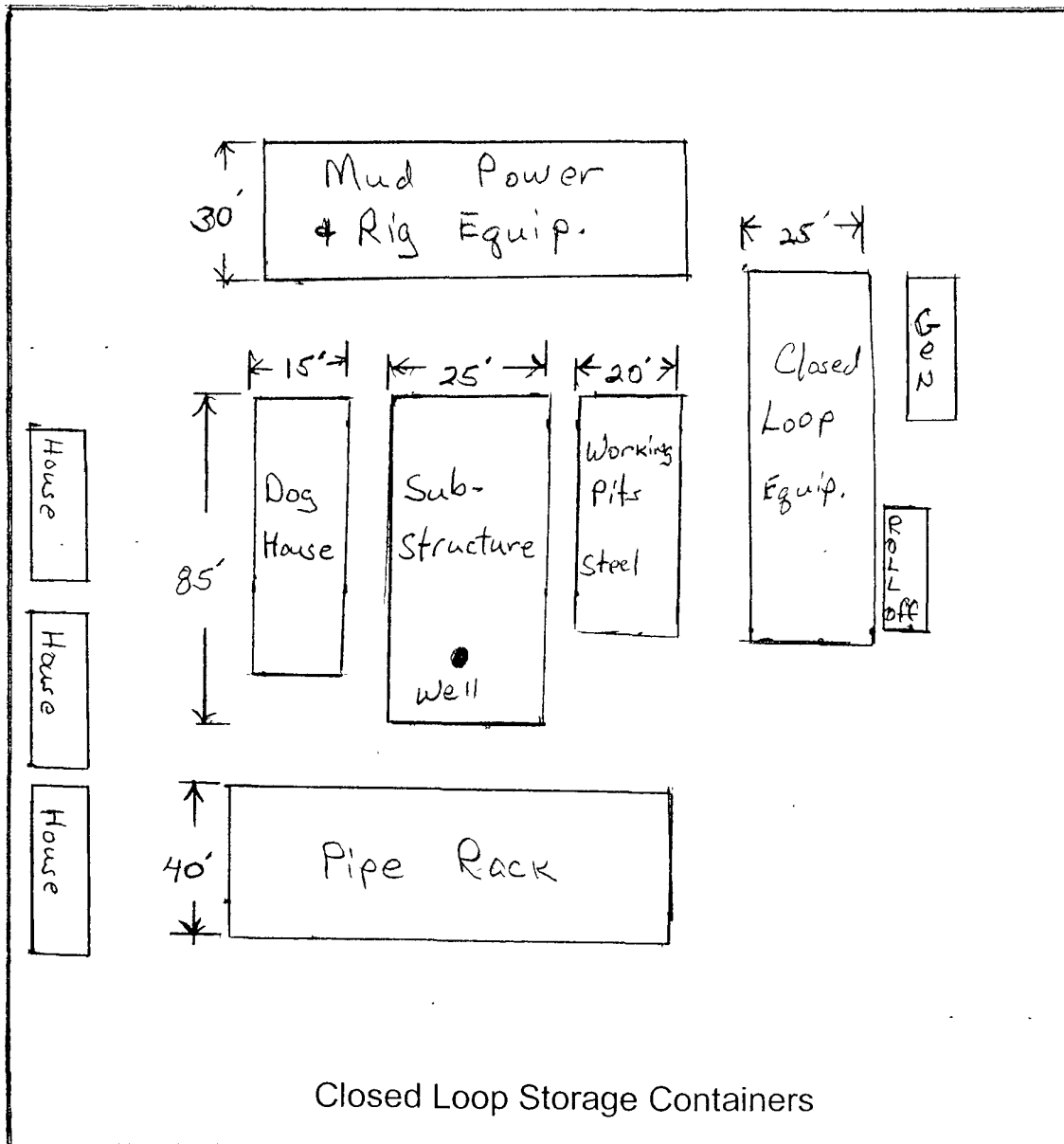
Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

## Closed Loop Operational Plan

Closed loop system will use solids control equipment to control liquid and solid waste generated in the drilling process. Waste will be disposed of at Gandy Marley or Lea Land Farm.

Link BKT Federal Com #4H

## Closed Loop Design Plan

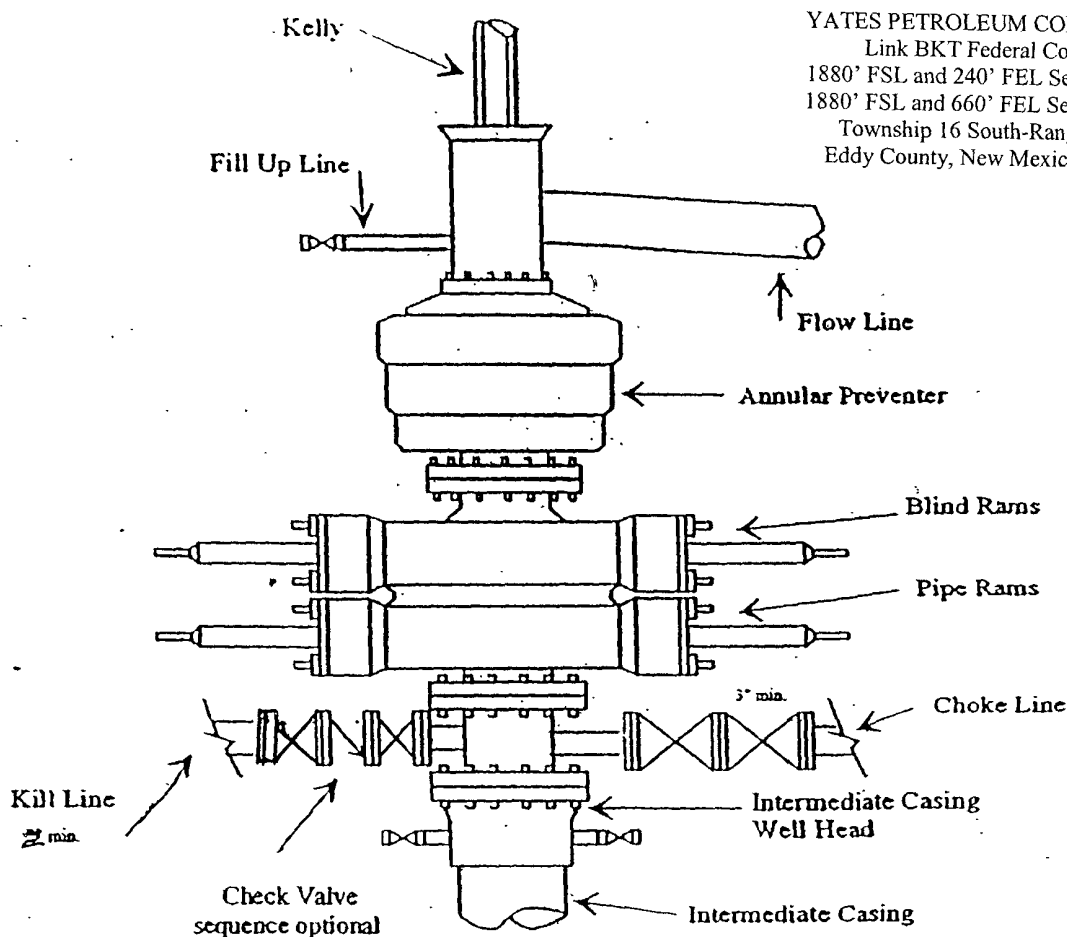




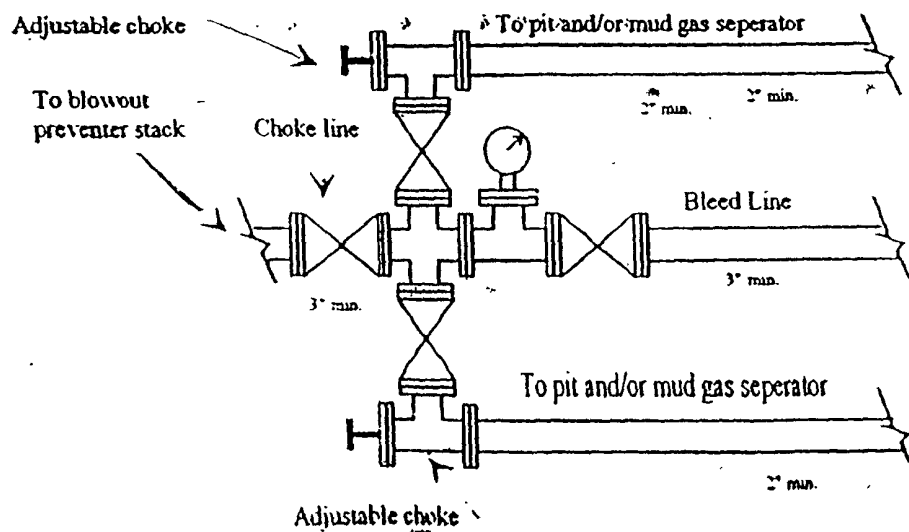
# Yates Petroleum Corporation

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

BOP-3



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



# **Yates Petroleum Corporation**

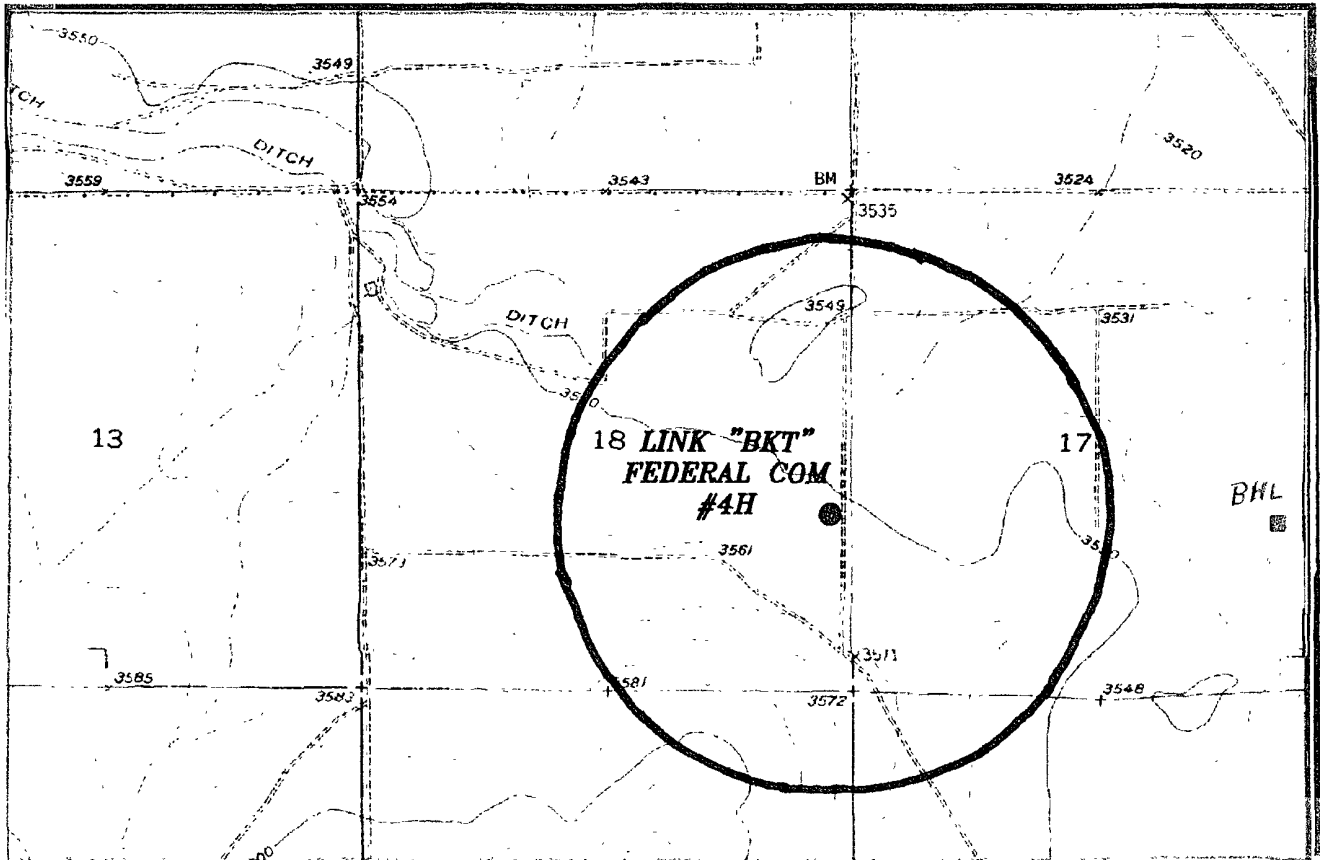
**105 S. Fourth Street  
Artesia, NM 88210**

## **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

**Link BKT Federal Com. #4H  
1880' FSL, 240' FEL, Sec. 18-16S-25E, (SL)  
1880' FSL & 660' FEL, Sec. 17-16S-25E (BH)  
Eddy County, New Mexico**

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



**100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.**



## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the “buddy system” to ensure no injuries during the response.

## Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

## Contacting Authorities

YPC personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. YPC Company response must be in coordination with the State of New Mexico’s ‘Hazardous Materials Emergency Response Plan’ (HMER)

## ***Yates Petroleum Corporation Phone Numbers***

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YPC Office .....	(575) 748-1471
Paul Ragsdale/Operations Manager.....	(575) 748-4520
Ron Beasley/Production Manager .....	(575) 748-4210
Wade Bennett/Prod Superintendent .....	(575) 748-4236
Mike Lankin/Drilling .....	(575) 748-4222
Paul Hanes/Prod. Foreman/Roswell .....	(575) 624-2805
Tim Bussell/Drilling Superintendent.....	(575) 748-4221
Artesia Answering Service .....	(575) 748-4302
(During non-office hours)	

### **Agency Call List**

#### **Eddy County (505)**

##### **Artesia**

State Police .....	746-2703
City Police.....	746-2703
Sheriff's Office .....	746-9888
Ambulance .....	911
Fire Department .....	746-2701
LEPC (Local Emergency Planning Committee) .....	746-2122
NMOCD.....	748-1283

##### **Carlsbad**

State Police .....	885-3137
City Police.....	885-2111
Sheriff's Office .....	887-7551
Ambulance .....	911
Fire Department .....	885-2111
LEPC (Local Emergency Planning Committee).....	887-3798
US Bureau of Land Management.....	887-6544

New Mexico Emergency Response Commission (Santa Fe)	(505) 476-9600
24 HR .....	(505) 827-9126
New Mexico State Emergency Operations Center.....	(505) 476-9635
National Emergency Response Center (Washington, DC)	...(800) 424-8802

##### **Other**

Boots & Coots IWC .....	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control.....	(915) 699-0139 or (915) 563-3356
Halliburton .....	(505) 746-2757
B. J. Services.....	(505) 746-3569

Flight For Life -4000 24th St, Lubbock, TX .....	(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX .....	(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....	(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM .....	(505) 842-4949

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

**Yates Petroleum Corporation**

**Link BKT Federal Com. #4H**

1880' FSL and 240' FEL (Surface Hole Location)

Section 18, T16S-R25E Unit I

1880' FSL and 660' FEL (Bottom Hole Location)

Section 17, T16S-R25 Unit I

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 6 miles northwest 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, New Mexico on Highway 82 for approximately 10 miles. Turn right on Joy Road and go approximately 6.7 miles. Turn right here on lease road and go south. Follow lease road approximately 1.1 miles. Turn left here following lease road for approximately 0.9 of a mile to EOG's Mackenzie 13 Fee #4H well location. The new road will start here going northeast on two track road next to some fastline for approximately 0.2 of a mile to a fence corner. Turn right here on two track that runs along a fence line and go approximately 1 mile to another fence line and two track road going north. Turn north here and go approximately 300' to the southwest corner of the proposed well location.

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

- A. The proposed new access will be approximately 1.3 miles in length from the point of origin to the southeast 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 well site.

### **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. It will be determined at a later date what type of power will be used to produce the 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 acquire any materials from the closest source at the time of construction of the well pad.

**7. METHODS OF HANDLING WASTE DISPOSAL:**

- ~~A. Drill cuttings will be disposed of in the reserve pits.~~  
~~B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.~~  
C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.  
D. Oil produced during operations will be stored in tanks until sold.  
E. Current laws and regulations pertaining to the disposal of human waste will be complied with.  
F. 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.

8/14/08  
per Cody  
Hayton

**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.

per Cody Hayton  
8/14/08

**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 non-productive, 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 filled level within 90 days after abandonment.

**11. SURFACE OWNERSHIP:** Jane R. Haskins & Haskins Family Trust  
6794 Wood Bay Lane, NE  
Poulsbo, WA 98370-7762

Please be advised that a surface use agreement has been made with the surface owner.

**12. OTHER INFORMATION:**

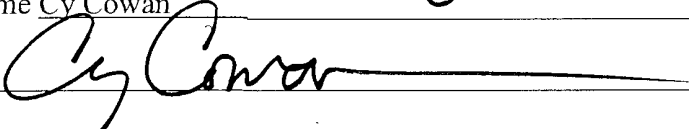
- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

CERTIFICATION  
YATES PETROLEUM CORPORATION  
**Link BKT Federal Com. #4H**  
**1880' FSL & 240' FEL, Sec.18-16S-25E (SHL)**  
**1880' FSL & 660' FWL, Sec. 17-16S-25E (BHL)**  
**Eddy County, New Mexico**

I hereby certify that I or the company I represent, have inspected the drill site and access route proposed herein; that the company I represent is familiar with the conditions which currently exist; that full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that the company I represent is responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 15<sup>th</sup> day of July, 2008.

Printed Name Cy Cowan

Signature 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

E-mail (optional) cyc@ypcnm.com

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

Telephone (if different from above) 575-748-4221

E-mail (optional) \_\_\_\_\_

## PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corporation
LEASE NO.:	NM 10266
WELL NAME & NO.:	Link BKT Federal Com No. 4H
SURFACE HOLE FOOTAGE:	1880' FSL & 240' FEL, Sec. 18, T.16 S, R. 25 E.
BOTTOM HOLE FOOTAGE	1880' FSL & 660' FEL
LOCATION:	Section 17, T. 16 S., R. 25 E., NMPM
COUNTY:	Eddy County, New Mexico

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## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.



## V. SPECIAL REQUIREMENT(S)

### Stipulations for Drilling in Aplomado Falcon Habitat

The following well pad construction and reclamation measures will be implemented to provide for minimal long-term disturbance:

No Yuccas over 5 feet in height will be damaged by vehicular use or any other activity associated with this project.

Remove all caliche from well pads and roads that are plugged and abandoned. Reclamation will consist of disking, mulching, seeding with a drill (See seed mixture below), and application of water to encourage seed germination.

Well pad size will not exceed 300 ft. x 390 ft. (unless multiple wells are drilled from the same well pad). All unused portions of the well pad associated with producing wells will be reclaimed using the seed mixture below:

Buffalograss ( <i>Buchloe dactyloides</i> )	4 lbs/acre
Blue grama ( <i>Bouteloua gracilis</i> )	1 lbs/acre
Cane bluestem ( <i>Bothriochloa barbinodis</i> )	5 lbs/acre
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5 lbs/acre
Plains bristlegrass ( <i>Setaria macrostachya</i> )	6 lbs/acre

**Reserve pits for drilling and disposal are not allowed unless the pit can be effectively netted to the satisfaction of the BLM. Steel tank circulation system must be used if the reserve pit is not netted.**

All active raptor nests will be avoided by a minimum of 400 meters by all activities or curtail activities until fledging is complete.

All inactive raptor nests will be avoided by a minimum of 200 meters by all activities.

All roads associated with well development will not exceed 30 ft in width

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

### **C. RESERVE PITS**

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

### **D. FEDERAL MINERAL MATERIALS PIT**

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

## **F. ON LEASE ACCESS ROADS**

### **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

### **Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

### **Crowning**

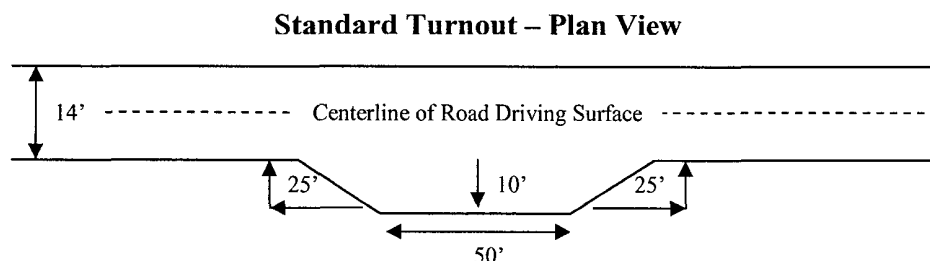
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

### **Ditching**

Ditching shall be required on both sides of the road.

### **Turnouts**

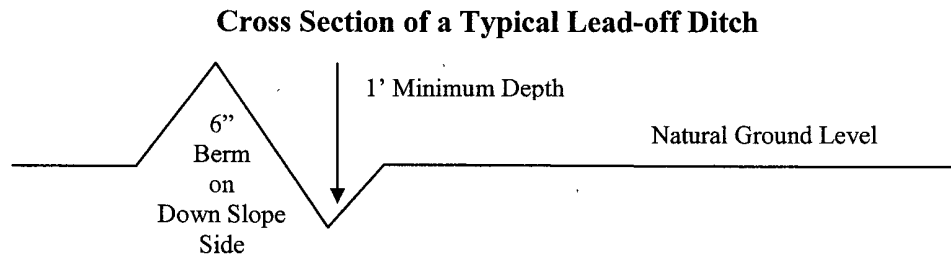
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



## Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

## Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

## Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

**Fence Requirement**

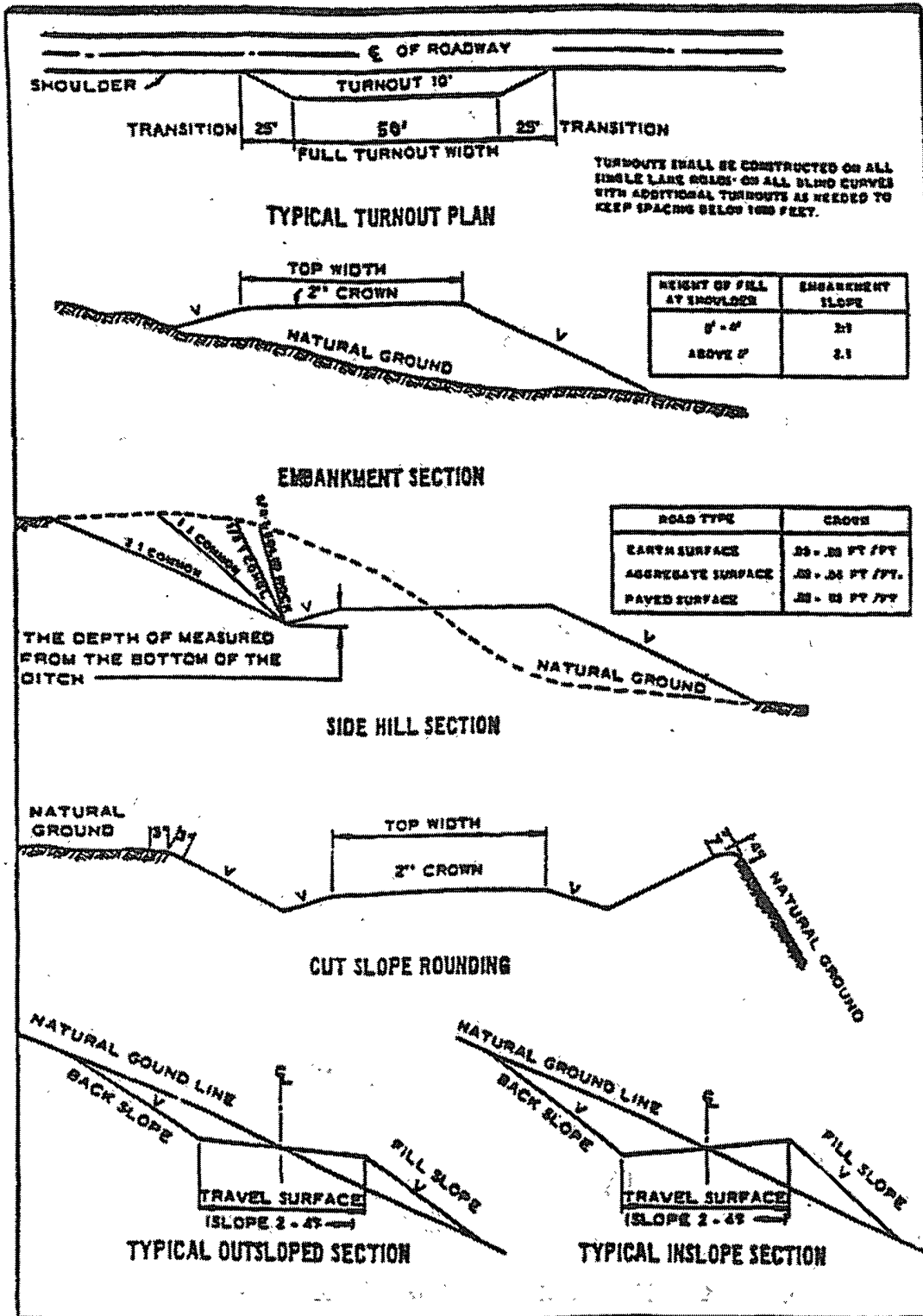
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

**Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



## **VII. DRILLING**

### **A. DRILLING OPERATIONS REQUIREMENTS**

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

**Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822**

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. It has been reported in Section 17. It is recommended that monitoring equipment be onsite for potential hydrogen Sulfide. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. 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.
3. Floor controls are required for 3M or Greater systems. These 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.

### **B. CASING**

**Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.**

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Lead slurry does not have to reach 500 pounds, but information still required to show compressive strength within 18-24 hours depending on water basin or potash. WOC for water basin or potash applies to entire wellbore.**

**No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.**

**Wildcat Wolfcamp**

**Possible lost circulation in Grayburg and San Andres Formations**

**Possible high pressure gas pockets in Wolfcamp Formation**

1. The 8-5/8 inch surface casing shall be set at approximately 1000 feet within the San Andres Formation and cemented to the surface.
  - a. 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.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater.
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

**Formation below the 8-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i.**

**Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.**

2. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.
3. 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.



### C. PRESSURE CONTROL

1. 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 Sec. 17.
2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. 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.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. 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.
  - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation **if the time between the setting of the surface casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
  - f. **No variance granted on BOP/BOPE test when running only two casing strings.**

### D. 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.

### E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

LB 8/11/08

## **VIII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color  
Shale Green, Munsell Soil Color Chart # 5Y 4/2

## **IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE**

### **A. INTERIM RECLAMATION**

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

## Seed Mixture 1, for Loamy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass ( <i>Eragrostis intermedia</i> )	0.5
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5.0

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed  
(Insert Seed Mixture Here)

## **X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS**

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.