

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

V-Dist. 2  
Avenue  
8210

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

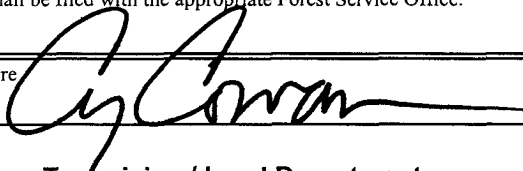
APPLICATION FOR PERMIT TO DRILL OR REENTER JAN 04 2006

1a. Type of Work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. <b>NM-101080</b>	
b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input 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 <b>Yates Petroleum Corporation</b>		7. If Unit or CA Agreement, Name and No.	
3A. Address <b>105 South Fourth Street Artesia, New Mexico 88210</b>		8. Lease Name and Well No. <b>Liberty BEL Federal #1</b>	
3b. Phone No. (include area code) <b>(505) 748-1471</b>		9. API Well No. <b>30-015-35233</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>1672' FSL and 1144' FEL</b> At proposed prod. Zone <b>660' FSL and 660' FWL : Section 26, T21S-R24E BHL</b>		10. Field and Pool, or Exploratory <b>Indian Basin Upper Penn Assciated</b>	
14. Distance in miles and direction from nearest town or post office* <b>APPROXIMATELY 30 MILES northwest of CARLSBAD, New Mexico.</b>		11. Sec., T., R., M., or Blk, and Survey or Area <b>Sec 27, T21S-R24E Surface Location</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>660'</b>	16. No. of Acres in lease <b>760.00</b>	17. Spacing Unit dedicated to this well <b>S/2 sec. 26</b>	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>1500'</b>	19. Proposed Depth <b>10400'</b>	20. BLM/BIA Bond No. on file <b>NM-2811</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>4002' GL</b>	22. Approximate date work will start* <b>ASAP</b>	23. Estimated duration <b>45 DAYS</b>	

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) <b>Cy Cowan</b>	Date <b>11/11/2005</b>
Title: <b>Regulatory Technician / Land Department</b>		
Approved by (Signature) <b>/s/ Joe G. Lara</b>	Name (Printed/Typed) <b>/s/ Joe G. Lara</b>	Date <b>DEC 30 2005</b>
Title <b>ACTING FIELD MANAGER</b>		
Office <b>CARLSBAD FIELD OFFICE</b>		

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.

**APPROVAL FOR 1 YEAR**

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

\*(Instructions on reverse)

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED**

**Witness Surface Casing  
Carlsbad Controlled Water Basin**

District I  
1625 N. French Dr., Hobbs, NM 88249  
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  
Geology, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 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

<sup>1</sup> API Number		<sup>2</sup> Pool Code 33685		<sup>3</sup> Pool Name Indian Basin Upper Penn Assoc.	
<sup>4</sup> Property Code		<sup>5</sup> Property Name Liberty BEL Federal			<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 025575		<sup>8</sup> Operator Name YATES PETROLEUM CORPORATION			<sup>9</sup> Elevation 4002'

<sup>10</sup> Surface Location

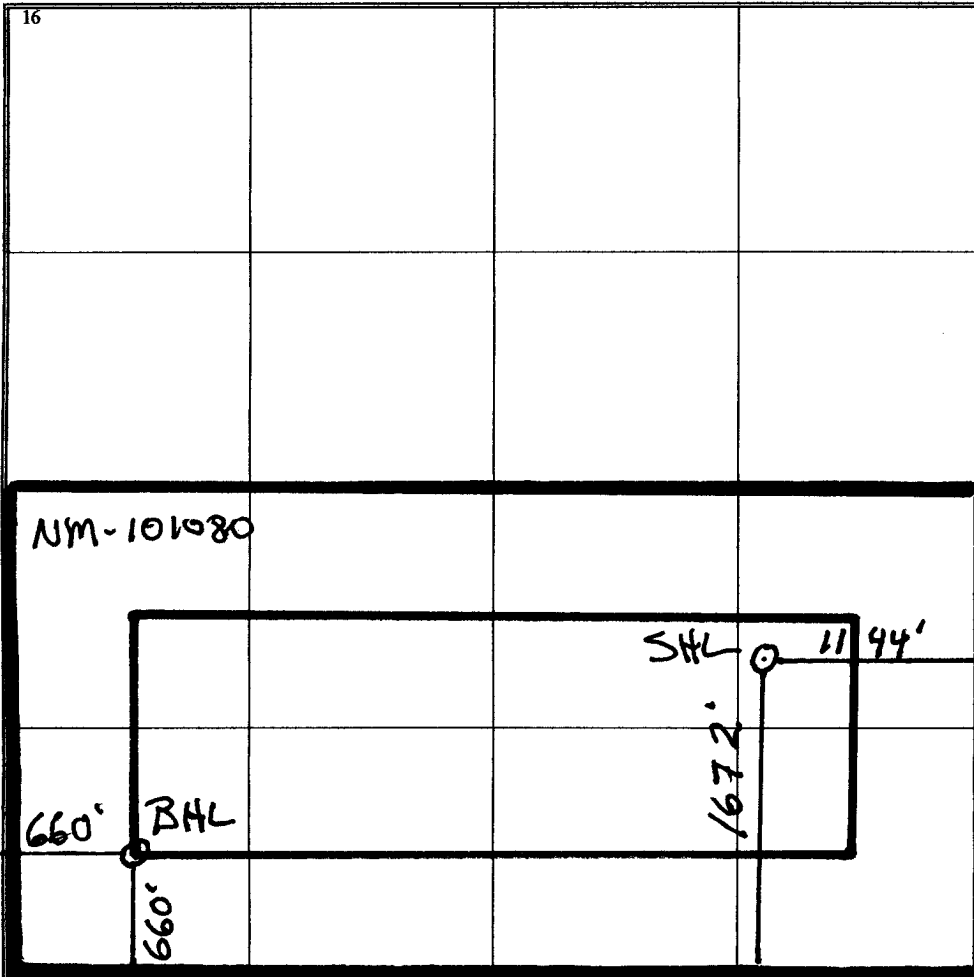
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	27	21S	24E		1672'	South	1144'	East	Eddy

<sup>11</sup> 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
M	26	21S	24E		660'	South	660'	West	Eddy

<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.



<sup>17</sup> 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 or has a right to drill this well at this 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.

*Cy Cowan* 11/15/06  
Signature Date

Cy Cowan  
Printed Name

Regulatory Agent

<sup>18</sup> SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

REFER TO ORIGINAL PLAT.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

DISTRICT II  
911 South First, Artesia, NM, 88210

DISTRICT III  
1009 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

# OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Well Code	Well Name
		Indian Basin Upper Penn Associated
Property Code	Property Name	Well Number
	LIBERTY "BEL" FEDERAL	1
OGRID No. 025575	Operator Name	Elevation
	YATES PETROLEUM CORPORATION	4002

### Surface Location

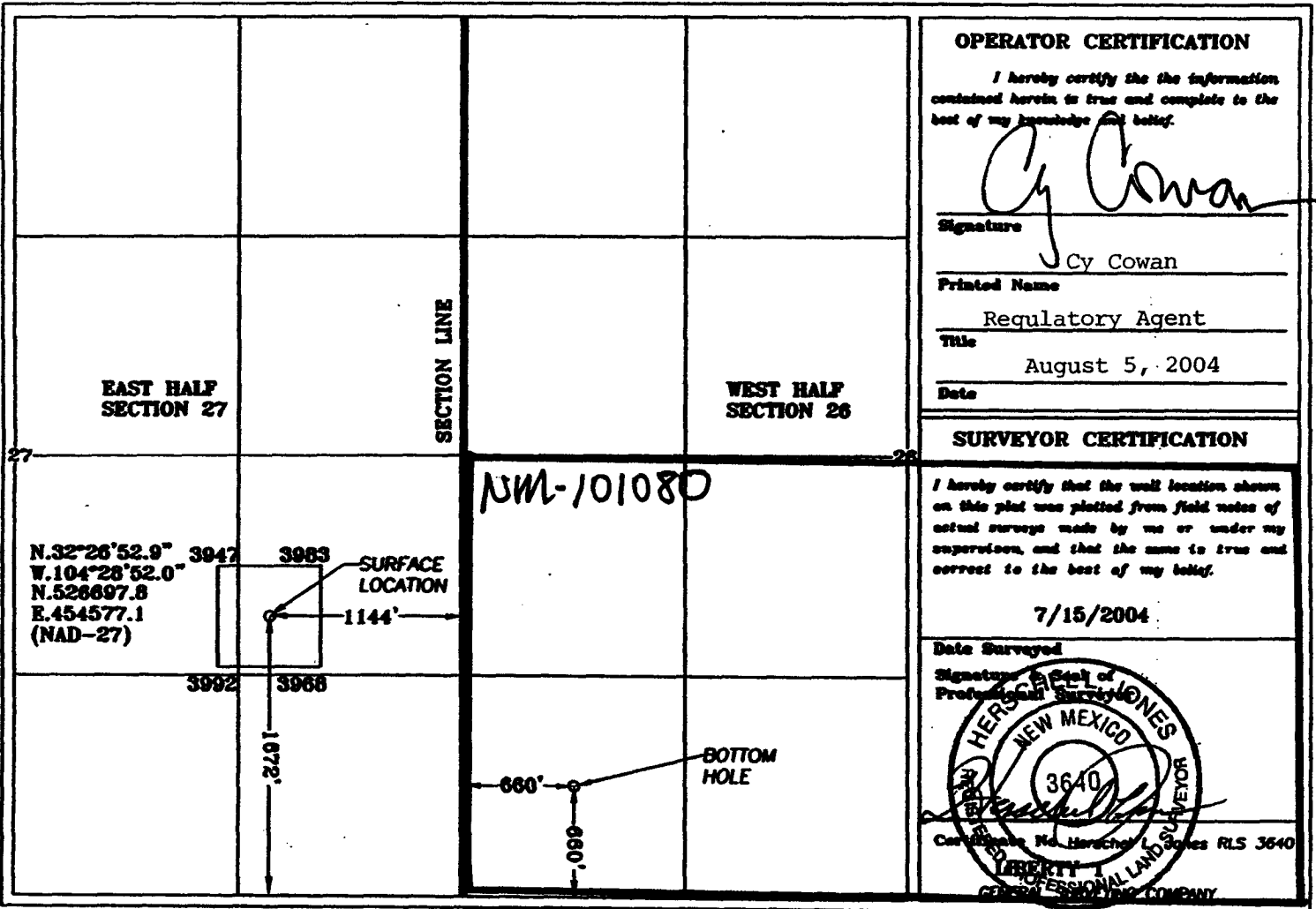
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	27	21S	24E		1672	SOUTH	1144	EAST	EDDY

### 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
M	26	21S	24E		660	SOUTH	660	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.

*Cy Cowan*  
Signature

Cy Cowan  
Printed Name

Regulatory Agent  
Title

August 5, 2004  
Date

### SURVEYOR CERTIFICATION

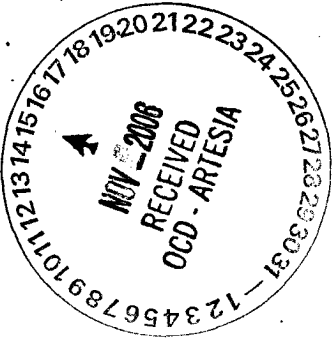
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

7/15/2004  
Date Surveyed

Signature: *[Signature]*  
Professional Surveyor  
HERSCHEL L. JONES  
NEW MEXICO  
3640  
Certification No. Herschel L. Jones RLS 3640  
LIBERTY  
PROFESSIONAL LAND SURVEYING COMPANY

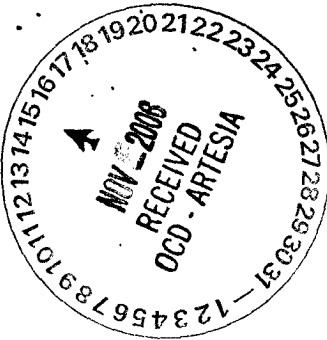
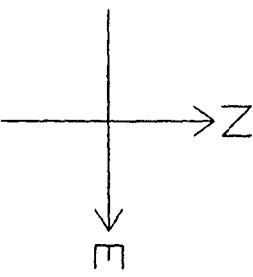
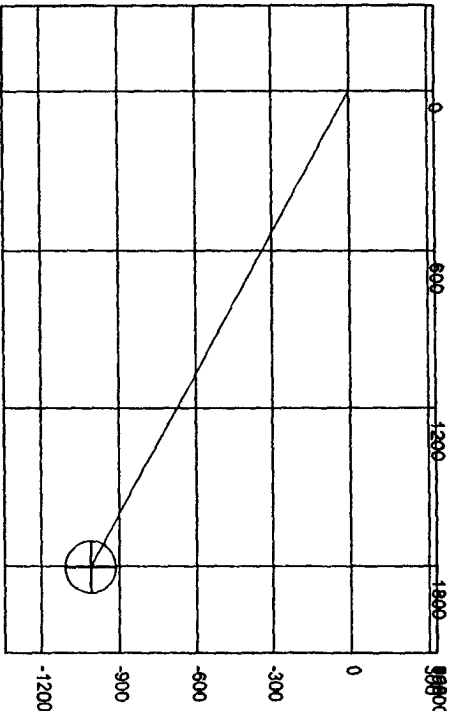


	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+S- [ft]	E+W- [ft]	D.L.S. [°/100ft]	Toolface [°]	T.F. Ref. [HS/GN]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	2500.00	0.00	0.00	2500.00	0.00	0.00	1.50	119	GN
3	2624.67	1.87	119.29	2624.65	-1.00	1.77	1.50	360	HS
4	2952.76	6.79	119.29	2951.70	-13.11	23.37	1.50	0	HS
5	3280.84	11.71	119.29	3275.41	-38.91	69.36	1.50	0	HS
6	3608.92	16.63	119.29	3593.41	-78.20	139.40	1.50	0	HS
7	3937.01	21.56	119.29	3903.35	-130.70	232.98	1.50	360	HS
8	4265.09	26.48	119.29	4202.94	-196.00	349.40	1.50	360	HS
9	4593.18	31.40	119.29	4489.98	-273.64	487.80	1.50	360	HS
10	4921.26	36.32	119.29	4762.34	-363.05	647.17	1.50	0	HS
11	4969.47	37.04	119.29	4801.00	-377.14	672.29	1.50	360	HS
12	5843.94	37.04	119.29	5499.00	-634.86	1131.71	0.00		
13	5905.51	36.12	119.29	5548.44	-652.82	1163.72	1.50	180	HS
14	6233.60	31.20	119.29	5821.44	-741.75	1322.25	1.50	180	HS
15	6561.68	26.28	119.29	6109.03	-818.90	1459.78	1.50	180	HS
16	6889.76	21.35	119.29	6409.09	-883.70	1575.28	1.50	180	HS
17	7217.85	16.43	119.29	6719.40	-935.66	1667.91	1.50	180	HS
18	7545.93	11.51	119.29	7037.68	-974.40	1736.98	1.50	180	HS
19	7874.02	6.59	119.29	7361.57	-999.65	1781.98	1.50	180	HS
20	8202.10	1.67	119.29	7688.71	-1011.21	1802.59	1.50	180	HS
21	8313.41	0.04	116.34	7800.00	-1012.00	1804.00	0.00		
22	10913.41	0.00	0.00	10400.00	-1012.00	1804.00	0.00		



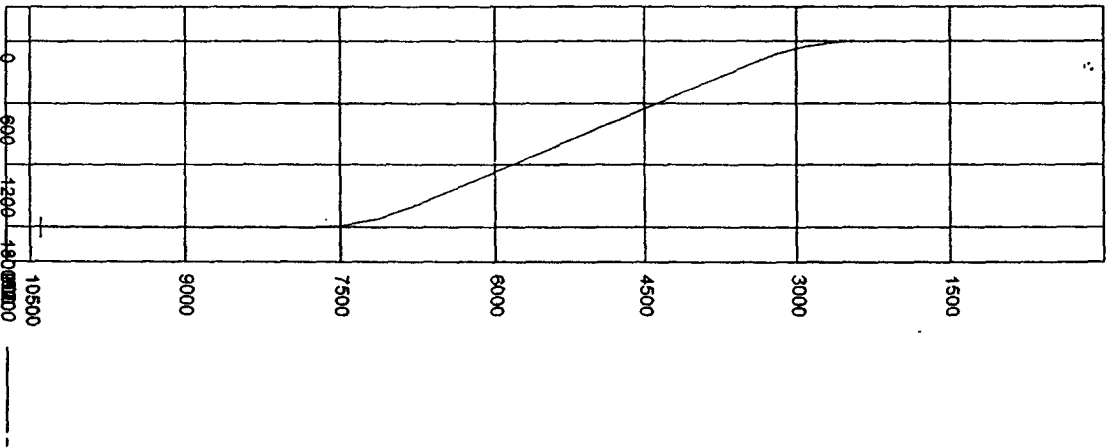
Company: Yates Petroleum Corporation  
Well: Liberty BEL Federal #1

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



Company: Yates Petroleum Corporation  
Well: Liberty BEL Federal #1

### 3D's Directional Drilling Planner - 3D View



**YATES PETROLEUM CORPORATION**  
**Liberty BEL Federal #1**  
 1672' FSL and 1144' FEL Surface Location  
 Section 27, T21S-R24E  
 660' FSL & 660' FWL Bottom Hole Location  
 Section 26-T21S-R24E  
 Eddy County, New Mexico

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

Yates/Seven Rivers	Surface	Lower Canyon Lime	8335'
San Andres	585'	Strawn	8875'
Glorietta	1568'	Atoka	9535'
2 <sup>nd</sup> Bone Springs	4134'	Upper Morrow	9875'
3rd Bone Springs	6975'	Mid Morrow	9975'
Wolfcamp	7295'	Lower Morrow	10135'
Cisco Canyon Dolomite	7925'	Base Morrow	10215'
Base of Dolomite	8465'	TD	10400'

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

Water: 250' - 350'  
 Oil or Gas: All potential zones.

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

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>	WITNESS
14 3/4"	9 5/8"	36#	J-55	ST&C	0-1650	1650'	
8 3/4"	7.0"	23#+26#	HCP-110	LT&C	9300'-10400'	1300'	

Possible set 7" early if severe lost circulation in Canyon

Yates Petroleum Corporation requests a variance to install a rotating head on the surface casing strings when production 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 1000# 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, Joint Strength 1.8

B. Cementing Program:

Surface casing: 200 sx 'H' (YLD 1.53 WT 14.6), tail with 1000 sx Lite 'C' Lite (YLD 1.9 WT 12.7). Tail in w/200 sx 'C' Neat + 2% CaCl<sub>2</sub> (YLD 1.9 WT 12.7).

Production Casing: Stage I 600 sx Super 'C' Modified (YLD 1.6 WT 13.0). DV Tool @7700'  
 Stage II 1200 sx Lite 'C' (YLD 1.95 WT 12.5). Tail in w/100 sx 'H'  
 Neat (YLD 1.18 WT 15.6). TOC-1150'

May use nitrified mud cement job if wellbore conditions permit.

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1650'	FW/Air Mist	8.4	28	N/C
1650'-7800'	Cut Brine	8.8-9.0	28	N/C
7800'-9800'	Cut Brine/Starch	9.0-9.4	28-32	<15cc
9800'-10400'	Salt Gel/Starch	9.4-9.8	34-36	<12cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: 10' samples from intermediate casing.  
 Logging: Platform Express/HRLA/NGT/FMI.  
 Coring: None anticipated.  
 DST's: None anticipated.

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

Anticipated BHP:

From: 0	TO: 1650	Anticipated Max. BHP:	1050 PSI
From: 1650'	TO: 10600'	Anticipated Max. BHP:	5300 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: Possible in surface and intermediate holes.

H<sub>2</sub>S Zones Anticipated: Possible Canyon

Maximum Bottom Hole Temperature: 178 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.



# MULTI-PURPOSE SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation

Liberty BEL Federal #1

1672' FSL and 1144' FEL Surface location

Section 27, T21S-R24E

660' FSL & 660' FWL Bottom Hole Location

Section 26, T21S-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 30 miles northwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

### DIRECTIONS:

Go north of Carlsbad on Highway 285 to approximately 12.5 miles to Highway 137. Turn west on Highway 137 and go approximately 14 miles. Turn left on lease road and go approximately 2 miles. Turn left here on lease and go approx. 4.6 miles. The road will fork here. Take the left fork and go .7 of a mile. At this point go right for .3 of a mile to a two track road. The two track road will be upgraded from this point for .5 of a mile to the well location.

## 2. PLANNED ACCESS ROAD

The new access will go approximately .5 of a mile in an east then northeasterly direction to the southwest corner of the proposed well location.

## 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. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

## 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:

Dirt contractor will locate nearest pit and obtain any permits and materials needed for construction.

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. 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. 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 wellsite 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 after they have evaporated and dried.

11. SURFACE OWNERSHIP: Federal Surface, Administered by 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, 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 Operations,  
Completions and Production:

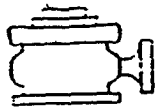
Pinson McWhorter, Operations Manager  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

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.

8/5/2004

  
Regulatory Agent

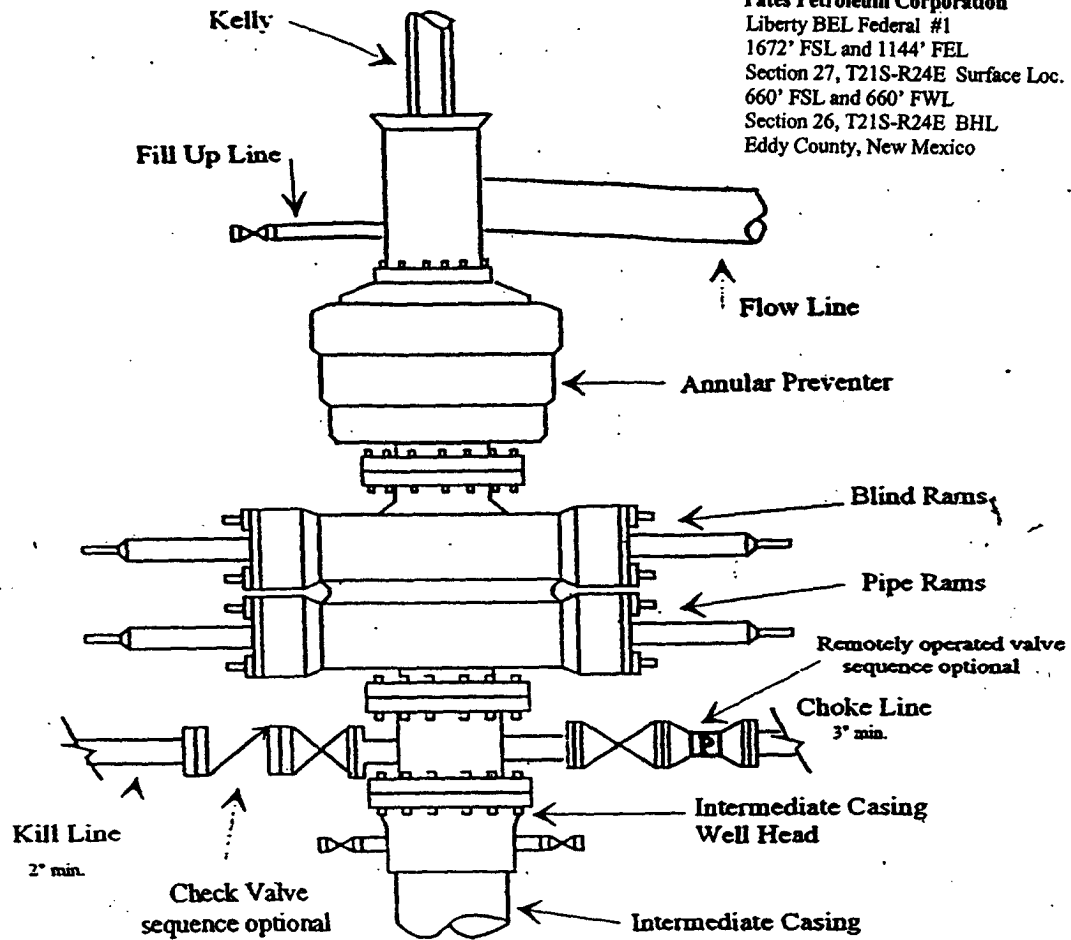


# Yates Petroleum Corporation

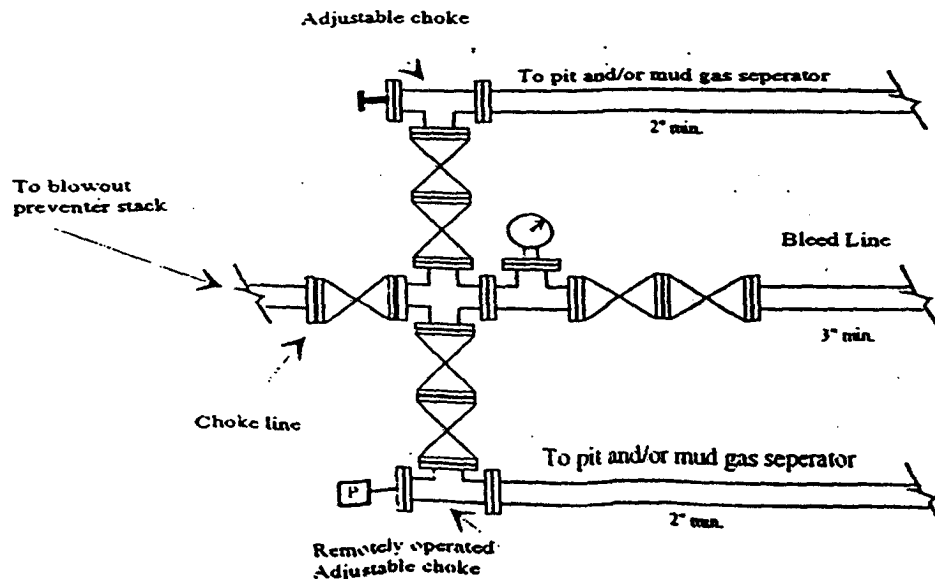
BOP-4

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

Yates Petroleum Corporation  
Liberty BEL Federal #1  
1672' FSL and 1144' FEL  
Section 27, T21S-R24E Surface Loc.  
660' FSL and 660' FWL  
Section 26, T21S-R24E BHL  
Eddy County, New Mexico



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



WF

# **Yates Petroleum Corporation**

**105 S. Fourth Street**

**Artesia, NM 88210**

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

**For**

### **Liberty BEL Federal #1**

**1672' FSL, 1144' FEL Surface Location**

**Section-27, T-21S, R-24E**

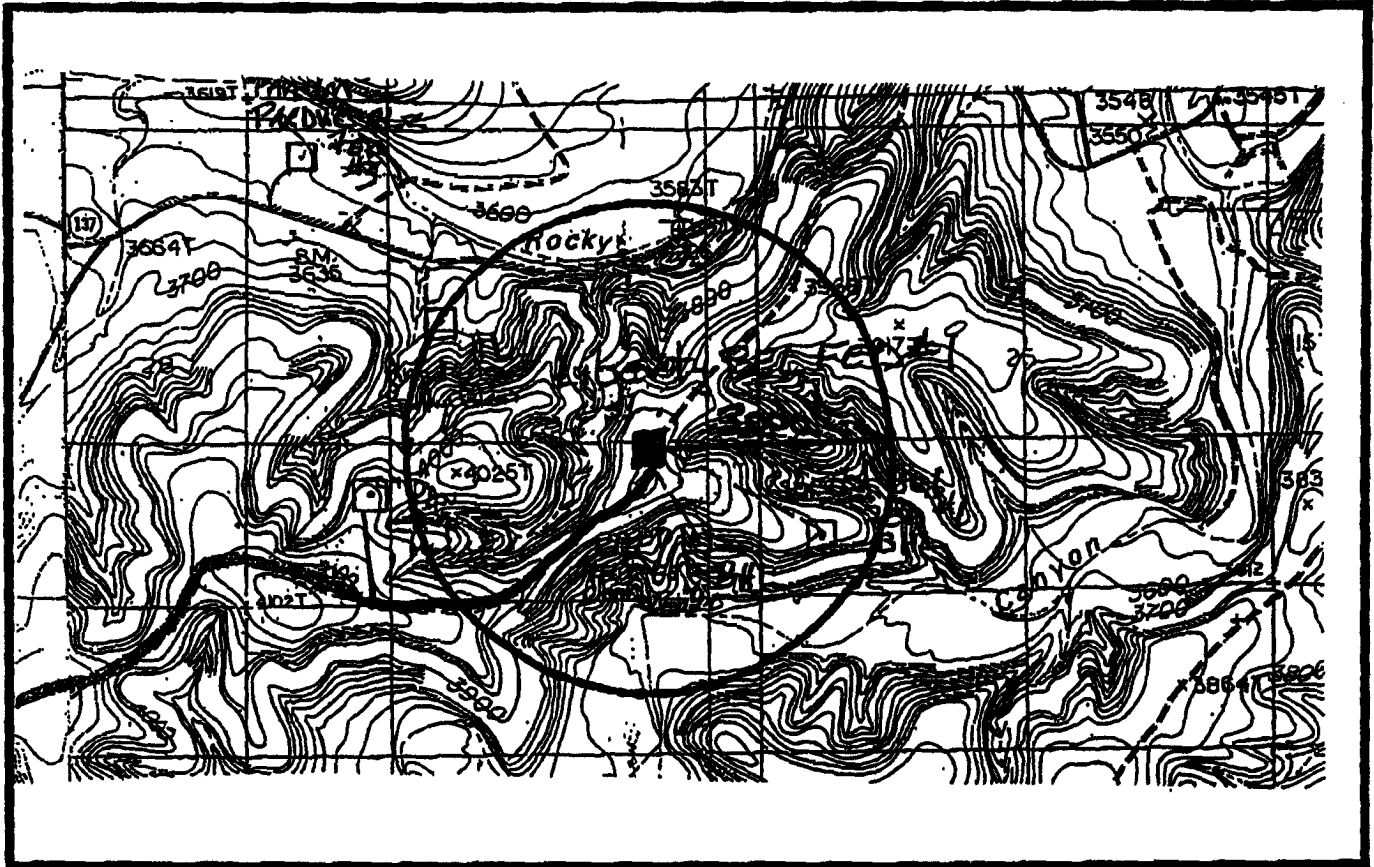
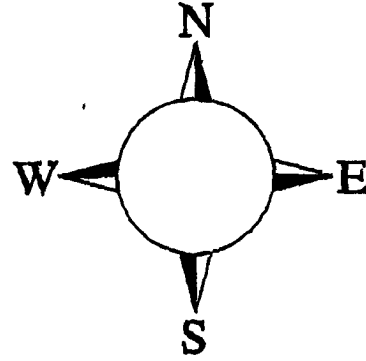
**660' FSL and 660' FWL Bottom Hole Location**

**Section 26, T21S-R24E**

**Eddy County NM**

### Liberty BEL Federal #1 Location

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.



### 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

YPC Office .....	(505) 748-1471
Pinson McWhorter/Operations Manager .....	(505) 748-4189
Darrel Atkins/Production Manager .....	(505) 748-4204
Ron Beasley/Prod Superintendent .....	(505) 748-4210
AJ Springer/Drilling .....	(505) 748-4225
Paul Hanes/Prod. Foreman/Roswell .....	(505) 624-2805
Jim Krogman/Drilling Superintendent.....	(505) 748-4215
Artesia Answering Service .....	(505) 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



Conditions of Approval  
For  
Yates Drilling Company  
Liberty BEL Fed #1 and Pan Am Pardue Fed. Cam. #4  
Lease #: NM-101080 & NM-105216

Liberty BEL #1 Surface Hole: 1672 FSL & 1144 FEL, Section 27, T.21 S., R. 24 E.  
Bottom Hole: 660 FSL & 660 FWL, Section 26, T. 21 S., R. 24 E.

Pan Am Pardue Fed Com #4: Surface Hole: 1652 FSL & 1197 FEL, Sec. 27, T. 21 S., R. 24 E.  
Bottom Hole: 660 FSL & 660 FEL, Sec. 27, T. 21 S., R. 24 E.

### Surface Mitigation

The following stipulations will apply to minimize impacts during construction, drilling and production.

1. A 70X120 foot cuttings pit will be utilized for both wells in the location. The cuttings pit will be lined with two layers of 12 mil. plastic. Upon completion of the well the all fluids will be vacuumed off the cuttings pit and hauled off for proper disposal. The pit will be allowed to dry for 10 months and then reclaimed in accordance with the attached requirements.
2. A closed mud system or steel tanks will be utilized to drill the well. All fluids will be hauled off site to be disposed off.
3. All above ground facilities, structures, appurtenances, and pipelines will be low profile (less than 8 feet in height)
4. All above ground facilities, structures, appurtenances, and pipelines will be painted a non-reflective (Flat) Juniper Green.

### Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns.

1. Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst are expected (at a minimum of 3,000 feet). Below those zones, the operator may use whatever drilling fluid is approved in the drilling plan.
2. All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.
3. A cave protection casing will be required. The cave-protection casing string would be set at least 100 feet below the deepest known cave-bearing zone as determined by drilling. (See Attached Diagram as an example of the Cave Protection String)
4. All casing strings will be cemented to the surface.
5. **Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the Operator. In the event that such an incident occurs contact Jim Goodbar at 505 234-5929 or 505 236-1016 after hours and Jim Amos at (505) 234-5909 or 706-2775. The BLM will assess the consequences of the situation and work with Operator on corrective actions to resolve the problem.**

6. The casing will be cemented in place using one or a combination of any of the following methods that are environmentally sound, as determined by the BLM and the Operator:
  - a). If a large void is encountered, isolation from above and below rather than complete cement coverage of these zones could be employed. This would be accomplished by using stage cementing equipment, external packers, cement baskets, and one-inch remedial cementing techniques.
  - b). For a less severe lost circulation zone encountered while drilling, the operator will attempt to circulate cement to the surface using a single or multistage cementing job composed of a "lead" and "tail" slurry for each stage.
  - c.) Foam cementing techniques may be used.

**Any corrective actions proposed to resolve problems related to bit drops or lost circulation will require BLM concurrence prior to implementation. A decision on how to proceed will be reached within 24 hours of notification.**

7. Any blasting will be a phased and time delayed.
8. Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone (Approximately 2,600 feet deep) to the surface.

#### **Monitoring Production Operations**

1. Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

#### **Record Keeping**

1. The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence or absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.
2. The BLM may review data held by companies on wells drilled in cave or karst areas, to gain information about impacts to caves and karst. This information will be used to categorize lost-circulation zones on the basis of depth, relative volume, and severity, and to evaluate and compare the relative success or failure of different remedies attempted to combat lost-circulation problems while drilling and cementing casing in these zones. This information also will be used to update information about the occurrence of cave and karst features. Information concerning cave resources gathered during drilling will be submitted and be retained by the BLM in accordance with The Carlsbad Field Office Cave Management Plan and the regulations implementing the Federal Cave Resources Protection Act.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Yates Petroleum Corporation  
Well Name & No. Liberty BEL Federal #1 - RESUBMITTAL  
SH Location: 1672' FSL, 1144' FEL, Section 27, T. 21 S., R. 24 E., Eddy County, New Mexico  
BH Location: 660' FSL, 660' FWL, Section 26, T. 21 S., R. 24 E., Eddy County, New Mexico  
Lease: NM-101080

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

- A. Well spud
- B. Cementing casing: 9-5/8 inch 7 inch
- C. BOP tests

2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Operation Contingency Plan shall be activated prior to drilling into the **Canyon** formation. A copy of the plan shall be posted at the drilling site.

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 9-5/8 inch surface casing shall be set at approximately 1650 feet and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 7 inch production casing is ~~to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.~~

**CIRCULATE  
TO SURFACE**

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 9-5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 5000 psi. A 2000 psi system may be used to drill the intermediate section of the well if necessary. Testing to 1000 psi is approved.

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

- The tests shall be done by an independent service company.

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

#### **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.

Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

8/13/04

11/28/05 - rev

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