

FEB 28 2008

OCD-ARTESIA

OCD-ARTESIA

Form 3160-3  
(April 2004)FORM APPROVED  
OMB NO. 1004-0137  
Expires: March 31, 2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
**RESUBMITTAL** BUREAU OF LAND MANAGEMENT  
APPLICATION FOR PERMIT TO DRILL OR REENTER  
**HIGH CAVE ARST**

5. Lease Serial No. <b>NM-92742</b>
6. If Indian, Allottee or Tribe Name <b>Not Applicable</b>
7. If Unit or CA Agreement, Name and No.  Lease Name and Well No. <b>Zingaro ANG Federal #6</b>
9. API Well No. <b>30-015-32367</b>
10. Field and Pool, or Exploratory <b>Indian Basin Upper Penn Associated</b>
11. Sec., T., R., M., or Blk. And Survey or Area <b>Section 1, T22S-R23E</b>
12. County or Parish <b>Eddy</b>
13. State <b>NM</b>
14. Distance in miles and direction from the nearest town or post office* <b>Approximately 31 miles NW of Carlsbad, New Mexico</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) <b>660'</b>
16. No. of acres in lease <b>1318.35</b>
17. Spacing Unit dedicated to this well <b>E/2</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>1500'</b>
19. Proposed Depth <b>8200'</b>
20. BLM/ BIA Bond No. on file <b>NATIONWIDE BOND #NMB000434</b>
21. Elevations (Show whether DF RT, GR, etc.) <b>3976' GL</b>
22. Approximate date work will start* <b>ASAP</b>
23. Estimated duration <b>45 Days</b>
24. Attachments

1a. Type of Work: ☒ DRILL ☐ REENTER  
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone  
2. Name of Operator  
**Yates Petroleum Corporation**

3a. Address  
**105 South Fourth Street, Artesia New Mexico 88210**  
3b. Phone No. (include area code)  
**(575) 748-1471**

4. Location of well (Report location clearly and In accordance with any State requirements. \*)  
At surface  
**1980' FSL and 660' FEL**

At proposed prod. zone  
**same as above**

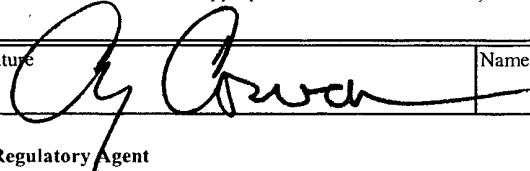
14. Distance in miles and direction from the nearest town or post office\*  
**Approximately 31 miles NW of Carlsbad, New Mexico**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) <b>660'</b>	16. No. of acres in lease <b>1318.35</b>	17. Spacing Unit dedicated to this well <b>E/2</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>1500'</b>	19. Proposed Depth <b>8200'</b>	20. BLM/ BIA Bond No. on file <b>NATIONWIDE BOND #NMB000434</b>
21. Elevations (Show whether DF RT, GR, etc.) <b>3976' 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 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 a authorized officer |

25. Signature 	Name (Printed/ Typed) <b>Cy Cowan</b>	Date <b>1/16/2008</b>
Title <b>Regulatory Agent</b>		
Approved By (Signature) <b>/s/ James Stovall</b>	Name (Printed/ Typed) <b>/s/ James Stovall</b>	Date <b>FEB 22 2008</b>
Title <b>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 cc operations thereon

Conditions of approval, if any, are attached.

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

\* (Instructions on page 2) Previously approved C-102 attached C-144 attached Contingency Plan per Rule 118 attached

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Roswell Controlled Water Basin

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 & 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	<sup>3</sup> Pool Name Indian Basin Upper Penn Associated
<sup>4</sup> Property Code	<sup>5</sup> Property Name Zingaro ANG Federal	<sup>6</sup> Well Number 6
<sup>7</sup> OGRID No. 025575	<sup>8</sup> Operator Name Yates Petroleum Corporation	<sup>9</sup> Elevation 3976'

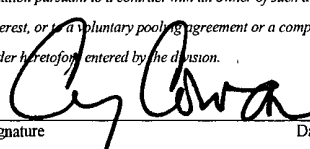
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	1	22S	23E		1980	South	660	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
<sup>12</sup> Dedicated Acres 320 E/2	<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>16</sup>		NM-92742		<sup>17</sup> OPERATOR CERTIFICATION <i>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.</i>  Signature 1/15/08 Date Cy Cowan Regulatory Agent Printed Name
				<sup>18</sup> SURVEYOR CERTIFICATION <i>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.</i>  Date of Survey Signature and Seal of Professional Surveyor:  REFER TO ORIGINAL PLAT  Certificate Number

District I  
1625 N. French Dr. Hobbs, NM 88240

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Brazos Rd., Aztec NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, N M 87505

Form C-102  
Revised March 17, 1999  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name Indian Basin Upper Penn Associated	
Property Code	Property Name ZINGARO "ANG" FEDERAL		Well Number 6	
OGRID No. 025575	Operation Name YATES PETROLEUM CORPORATION		Elevation 3976	

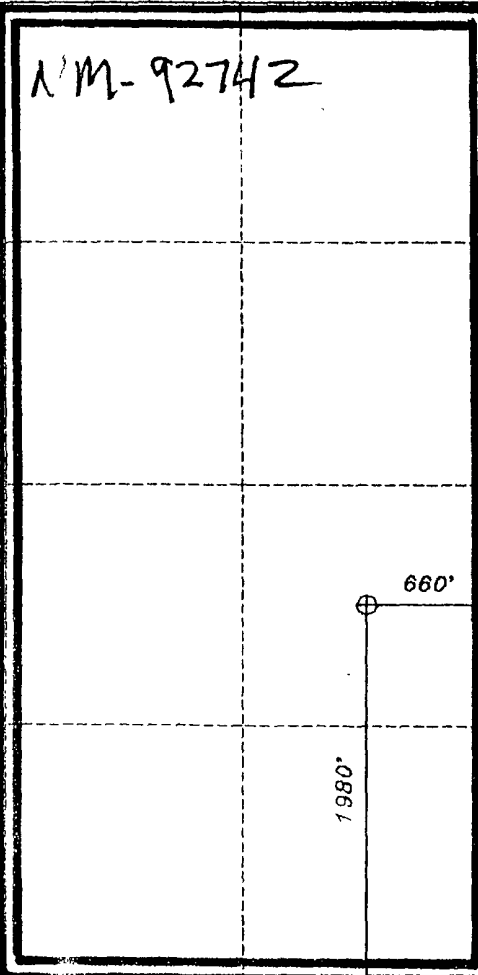
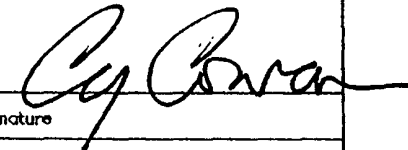
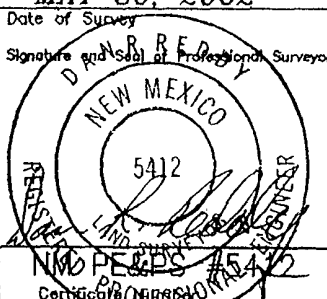
Surface Location

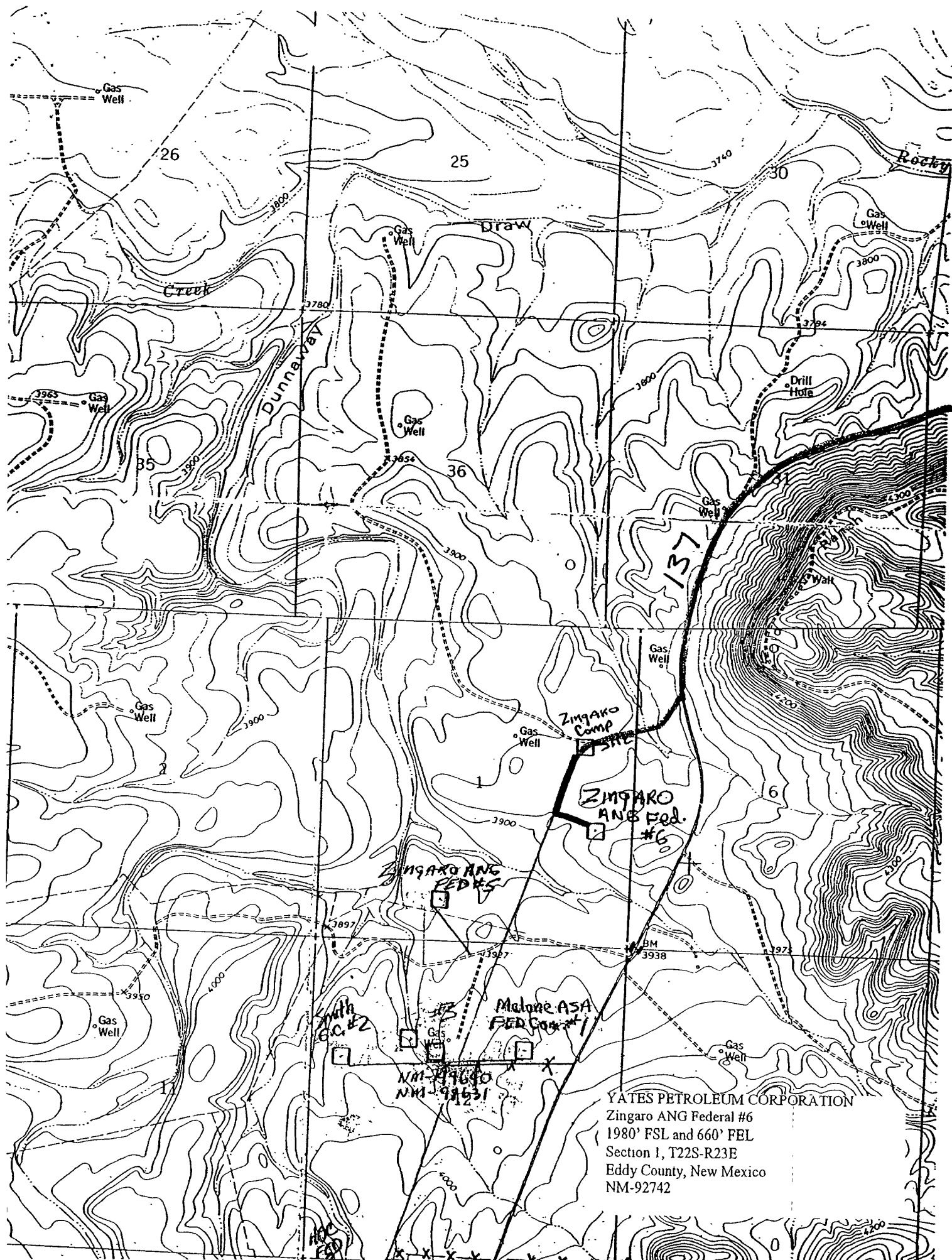
UL or Lot No. I	Section 1	Township 22-S	Range 23-E	Lot Idn.	Feet from the 1980	North/South line SOUTH	Feet from the 660	East/West line EAST	County EDDY
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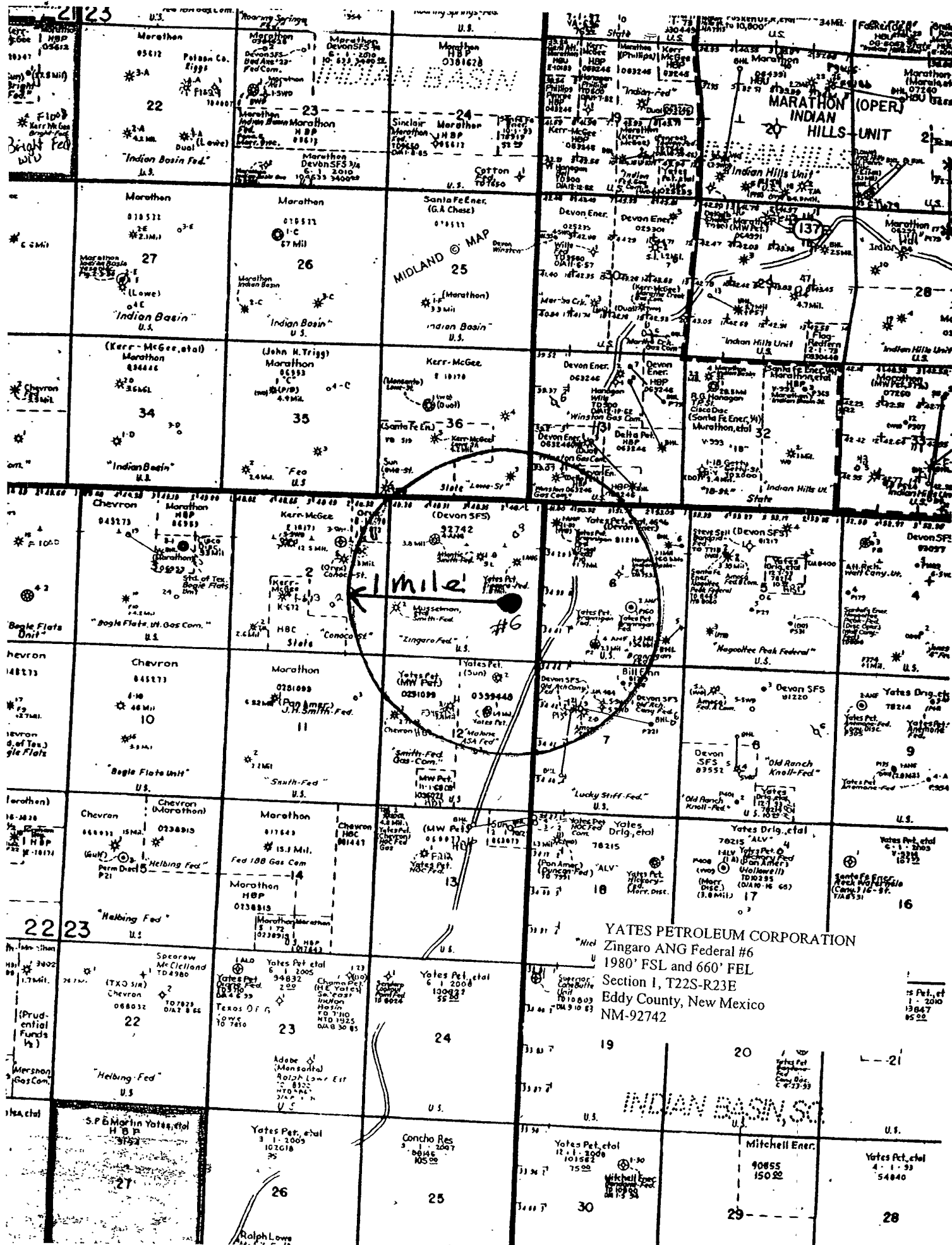
Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320		Joint or Infill	Consolidation Code	Order No.					

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

	<b>OPERATOR CERTIFICATION</b> I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.		
	Signature 		
	Printed Name Cy Cowan		
	Title Regulatory Agent		
Date December 5, 2003		<b>SURVEYOR CERTIFICATION</b> 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 KNOWLEDGE AND BELIEF.	
Date of Survey MAY 30, 2002		Signature and Seal of Professional Surveyor 	





YATES PETROLEUM CORPORATION  
Zingaro ANG Federal #6  
1980' FSL and 660' FEL  
Section 1, T22S-R23E  
Eddy County, New Mexico  
NM-92742

INDIAN BASIN, SANTA FE, MARATHON

**YATES PETROLEUM CORPORATION**

**Zingaro "ANG" Federal #6**

1980' FSL & 660' FEL

Sec. 1-T22S-R23E

Eddy County, New Mexico

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

San Andres	520'	Oil Pay
Glorietta	2194	Oil Pay
Bone Springs	2941	Oil Pay
2 <sup>nd</sup> Bone Springs	3261'	Oil Pay
3 <sup>rd</sup> Bone Springs	6668'	Oil Pay
Wolfcamp	6740'	Gas Pay
Cisco Canyon Dolomite	7526'	Gas Pay
Base of Dolomite	7884'	Gas Pay
TD	8400'	Gas Pay
	8200'	

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

**Auxiliary Equipment:**

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

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-350'	350'
12 1/4"	9 5/8"	36#	J-55	LT&C	0-2250'	2250'
8 3/4"	7"	26#	J-55	LT&C	0-100'	100'
8 3/4"	7"	23#	J-55	LT&C	100'-5800'	5700'
8 3/4"	7"	26#	J-55	LT&C	5800'-8200'	2300'

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

replaced  
2/22/08  
[Signature]

**Zingaro ANG Federal #6 Production Casing**

0 ft to 100 ft		Make up Torque ft-lbs			Total ft = 100	
O.D. 7 inches	Weight 26 #/ft	Grade J-55	Threads LT&C	opt. 3670	min. 2750	mx. 4590
Collapse Resistance 4,320 psi	Internal Yield 4,980 psi	Joint Strength 367,000 #		Body Yield 415,000 #		Drift 6.151

100 ft to 5,600 ft		Make up Torque ft-lbs			Total ft = 5,500	
O.D. 7 inches	Weight 23 #/ft	Grade J-55	Threads LT&C	opt. 3130	min. 2350	mx. 3910
Collapse Resistance 3,270	Internal Yield 4,360 psi	Joint Strength 313,000 #		Body Yield 366,000 #		Drift 6.25

5,600 ft to 7,800 ft		Make up Torque ft-lbs			Total ft = 2,200	
O.D. 7 inches	Weight 26 #/ft	Grade J-55	Threads LT&C	opt. 3670	min. 2750	mx. 4590
Collapse Resistance 4,320 psi	Internal Yield 4,980 psi	Joint Strength 367,000 #		Body Yield 415,000 #		Drift 6.151

7,800 ft to 8,200 ft		Make up Torque ft-lbs			Total ft = 400	
O.D. 7 inches	Weight 26 #/ft	Grade L-80	Threads LT&C	opt. 5110	min. 3830	mx. 6390
Collapse Resistance 5,410 psi	Internal Yield 7,240 psi	Joint Strength 511,000 #		Body Yield 604,000 #		Drift 6.151

B. Cementing Program:

Surface Casing: 300 sx Lite (YLD 2.0 WT 12.6) tail with 200 sx Class 'C' +2% CaCL<sub>2</sub> (YLD 1.33 WT 15.6). Approximately 350 feet and cement circulated to surface.

Intermediate Casing: 750 sx Lite (YLD 2.0 WT 12.6) tail with 300 sx 'C' + 2% CaCL<sub>2</sub> (YLD 1.33 WT 15.6). Circulate to surface.

Production Casing Stage I: 650 sx 'H' + 5# Gilsomite + 5# CSE (YLD 1.32 WT 15.1)

Stage II: 850 sx Lite (YLD 2.0 WT 15.6), Tail with 100 sx 'C' (YLD 1.33 WT 15.6). Production casing is to be sufficient to reach at least 500 feet above the uppermost hydrocarbon potential pay.

*DVT 001 @ 5400'  
per operator  
2/21/08*

*See COA*

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-350'	FW/Air Mist	8.4	28	N/C
350'-2250'	FW/Air Mist	8.4	28	N/C
2250'-7550'	Cut Brine	8.6-9.0	28	N/C
7550'-8200'	Cut Brine/Starch Salt Gel	9.0-9.4	28-32	<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/HALS/NGT.

Coring: None anticipated

DST's: None anticipated.

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

Anticipated BHP:

From: 0	TO: 350'	Anticipated Max. BHP:	150	PSI
From: 350'	TO: 2250'	Anticipated Max. BHP:	900	PSI
From: 2250'	TO: 8200'	Anticipated Max. BHP:	4000	PSI

Abnormal Pressures Anticipated: None

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

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

Maximum Bottom Hole Temperature: 178 F

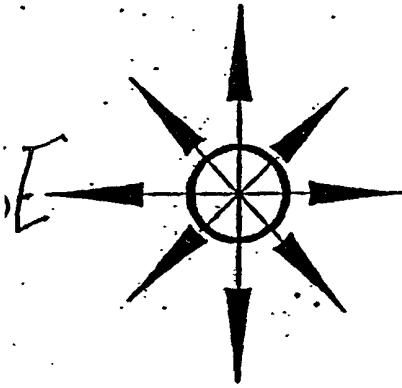
8. ANTICIPATED STARTING DATE:

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.

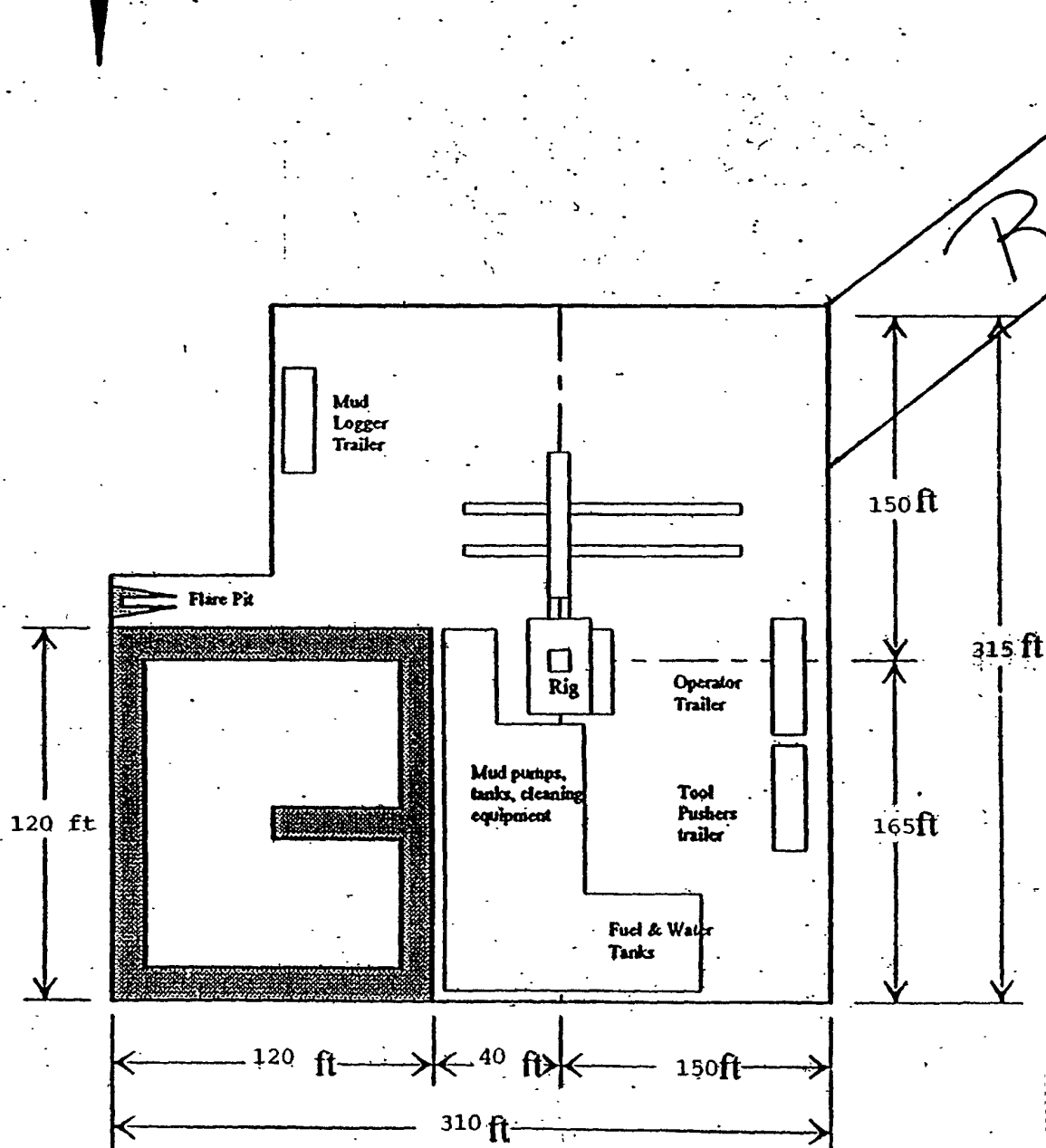


YATES PETROLEUM CORPORATION  
Angaro ANG Federal #6  
980' FSL and 660' FEL  
Section 1, T22S-R23E  
Eddy County, New Mexico  
NM-92742

**Yates Petroleum Corporation**  
**Location Layout for Permian Basin**  
**Up to 12,000'**

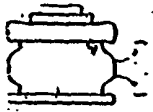


NW Pits Southeast



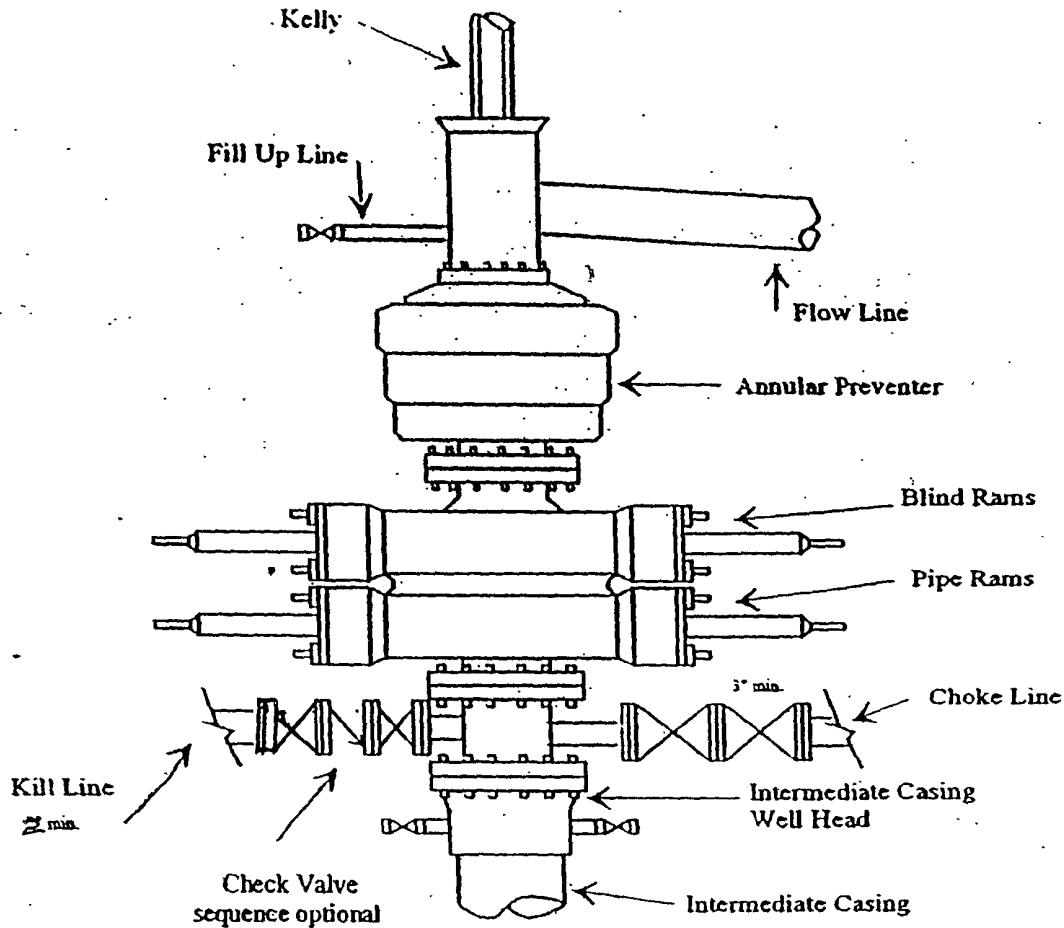
Distance from Well  
Head to Reserve Pit  
will vary between rigs

The above dimension  
should be a maximum

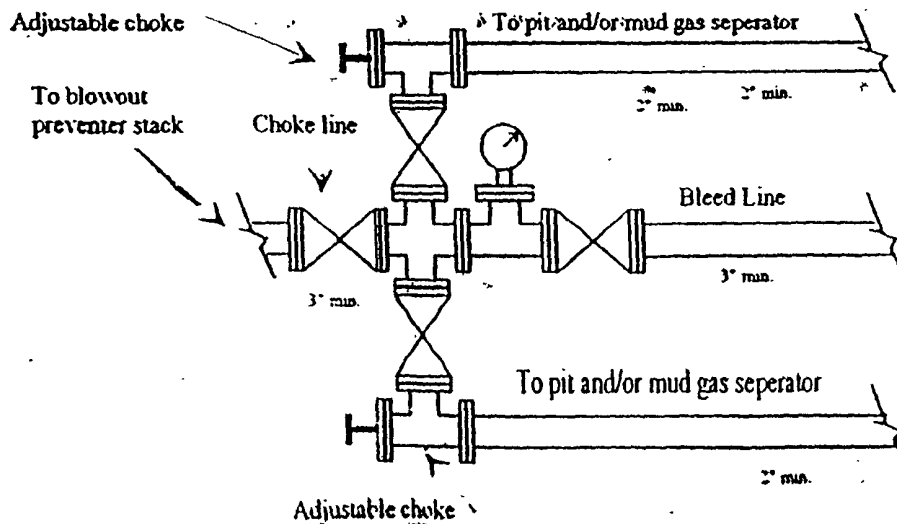


**Yates Petroleum Corporation**  
**Typical 3,000 psi Pressure System**  
**Schematic**  
**Annular with Double Ram Preventer Stack**

BOP-3



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



WF

# **Yates Petroleum Corporation**

105 S. Fourth Street  
Artesia, NM 88210

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

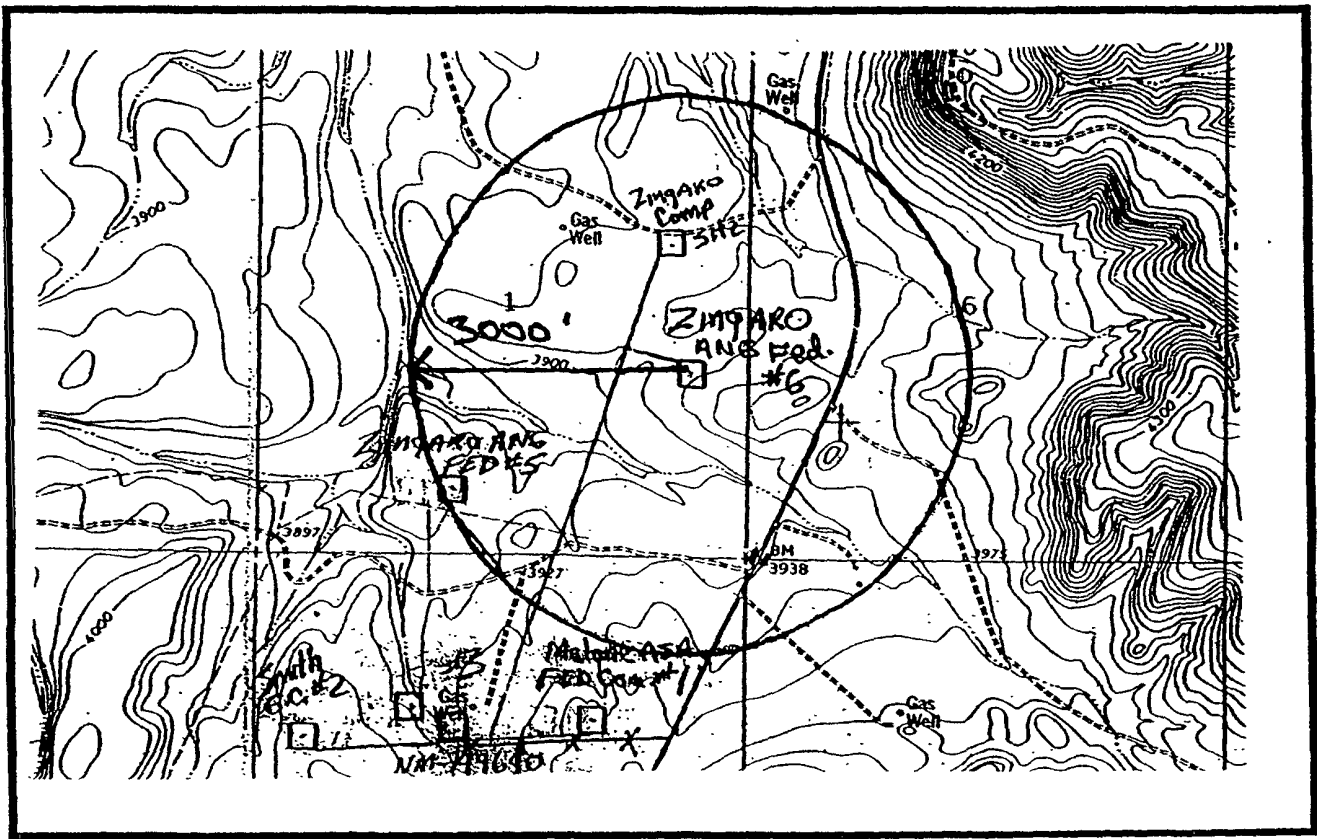
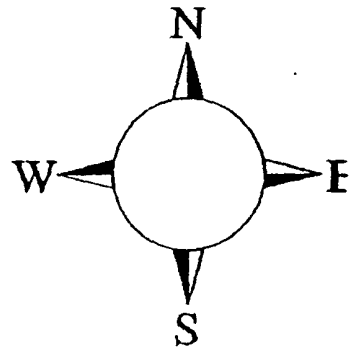
**For**

### **Zingaro ANG Federal #6**

1980' FSL, 660' FEL  
Sec-1, T-22S, R-23E  
Eddy County NM

## Zingaro ANG Federal #6

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  
Al 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  
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**  
**Zingaro "ANG" Federal # 6**  
1980' FSL & 660' FEL  
Sec. 1-T22S-R23E  
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 31 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 Highway 137. Turn west on Highway 137 and go approximately 12.8 miles. Turn west on lease road and go approximately .3 of a mile to the Zingaro ANG Federal #1 Compressor Site. From the southwest corner of the Zingaro ANG Federal #1 the new access road will start here going south following and existing pipeline right-of-way.

2. PLANNED ACCESS ROAD

The new access will go approximately 0.2 of a mile south turn east and go approximately 500 feet to the northwest corner of the 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.

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 locate closest pit and will 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.
- C. A 400' x 400' 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 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 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, historical and cultural sites.
- B. The primary surface use is for grazing.

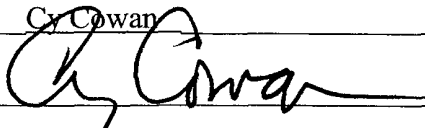


CERTIFICATION  
YATES PETROLEUM CORPORATION  
Zingaro ANG Federal #6

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have 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 I, or the company I represent, am 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 16th day of January, 2008.

Printed Name Cy Cowan

Signature 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

Field Representative (if not above signatory) Jim Krogman

Address (if different from above) Same

Telephone (if different from above) 575-748-4215

E-mail (optional) cy@ypcnm.com

## PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corp.
LEASE NO.:	NM-92742
WELL NAME & NO.:	6-Zingaro ANG Federal
SURFACE HOLE FOOTAGE:	1980' FSL & 660' FEL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 1, T. 22 S., R 23 E., NMPM
COUNTY:	Eddy County, New Mexico

### TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
  - Cave/Karst
  - VRM
- ☐ **Construction**
  - Notification
  - Topsoil
  - Reserve Pit
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
  - Well Structures & Facilities
- ☐ **Reserve Pit Closure/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

## **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)**

### **Cave and Karst**

#### **Cave/Karst Surface Mitigation**

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

##### **Berming:**

Tank batteries will be bermed to contain 1 ½ times the content of the largest tank.

Bermed areas will be lined with a permanent 20 mil plastic liner and then lined with a 4 oz. felt liner to prevent tears or punctures in liner.

#### **Cave/Karst Subsurface Mitigation**

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

##### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 100 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

##### **Delayed Blasting:**

Any blasting will be phased and time delayed.

##### **Abandonment Cementing:**

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

##### **Record Keeping:**

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.

## Visual Resources Management

The proposed project is located within a Class Three Visual Resource Area. The project will be built in a manner to minimize visibility. The proposed project will be an impacting feature to its surrounding natural visual resources.

### Painting Requirement

In accordance with notice to lessees (NTL) 87-1 New Mexico, *Painting of Oil Field Facilities to Minimize Visual Impacts*: ALL permanent surface production facilities, including the well-drive control system, treatment, storage, power (except specifically approved electrical transmission lines and poles, or other permanent above-ground facilities not otherwise specifically subject to safety coloring requirements), shall be painted by the holder to blend with the dominant natural color of the surrounding landscape. The paint used shall be one of the "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee, and shall be a flat, non-reflective finish. The color specified for this location is:

Standard Environmental Color: Shale Green

Munsell Soil Color Chart Number: # 657

Any exception to this Painting Requirement must be approved by the BLM Authorized Officer in writing prior to implementation.

### Surface Mitigation

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

1. The proposed construction and scenic impacts will be limited to the approved pad size.
2. Only facilities that solely serve the production from this pad can be added to this action. ie. no compressor station or central storage tanks can be placed on the approved pad.
3. Upon completion of the well and installation of the production facilities (if the well is a producer) the pad will be reclaimed back to a minimal size needed for production operations (approximately 50 ft out from the anchors). The pads edges will be recontoured and the extra caliche and pad material will be hauled off-site. After one year, the BLM may require additional site reclamation.
4. The reclaimed areas will be grid rolled and reseeded with seed mix as indicated in the Special Drilling Stipulations.

## **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**

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 120' X 120' on the Southeast side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

### **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.

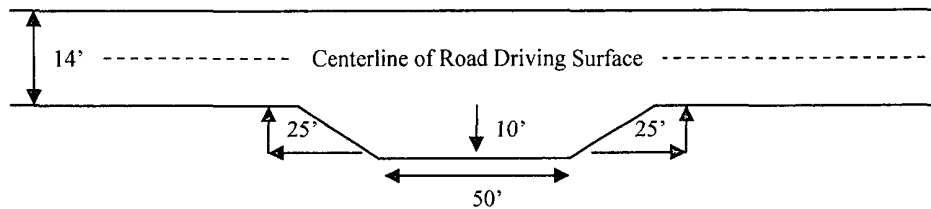
##### **Ditching**

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:

**Standard Turnout – Plan View**

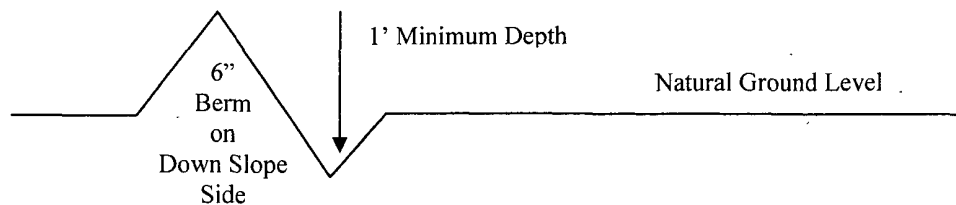


### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping 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.

**Cross Section of a Typical 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**

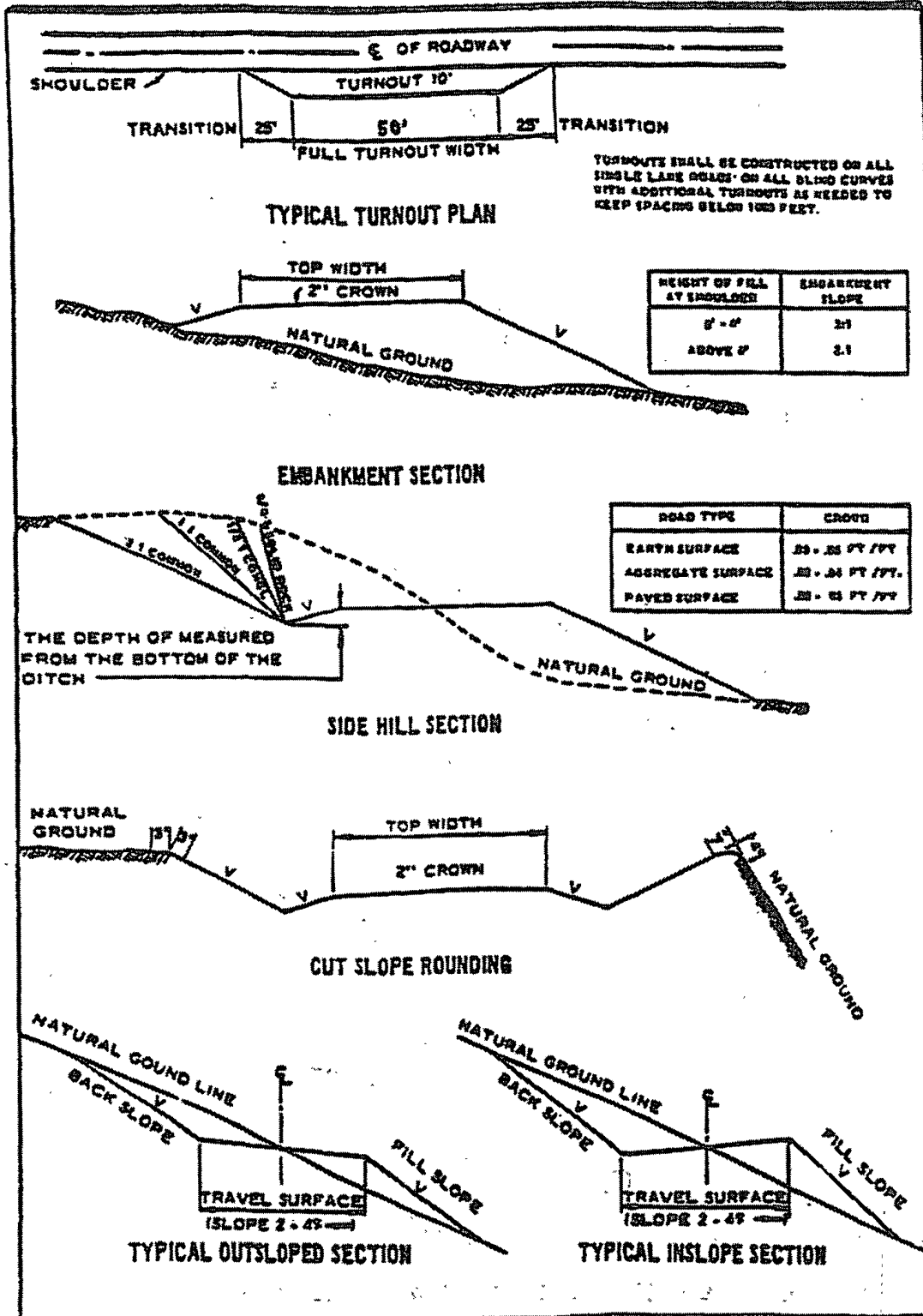
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated 500 feet prior to drilling into the **Canyon** formation. **Hydrogen Sulfide has been measured between 4300 - 9400 ppm in the gas stream.**
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

1. The **13-3/8** inch surface casing shall be set at **approximately 350** feet 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. (This is to include the lead cement). **Please provide WOC times to inspector for cement slurries.**

- 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 action will be done prior to drilling out that string.

**High cave/karst.**

**Possible lost circulation in the San Andres, Wolfcamp and Strawn formations.  
Possible high pressure gas bursts in the Wolfcamp and the Pennsylvanian section may be over pressured.**

- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a-d above. **Please provide WOC times to inspector for cement slurries.**

**If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.**

- 3. The minimum required fill of cement behind the 7 inch production casing is:

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **First stage to circulate.**

- 4. 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 intermediate 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.

#### **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.

**Approved for aerated mud to setting of intermediate casing, but not air drilling.**

#### **E. DRILL STEM TEST**

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

**WWI 021308**

## **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

#### **VRM Facility Requirement**

Low-profile tanks not greater than eight-feet-high shall be used.

## **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.

At the time reserve pits are to be reclaimed, 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.

### **B. RESERVE PIT CLOSURE**

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

### Seed Mixture 3, for Shallow 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 authorised officer.

Seed will be planted using a drill equipped with a 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 (smaller/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 Bristlegrass ( <i>Setaria magrostachya</i> )	1.0
Green Spangletop ( <i>Leptochloa dubia</i> )	2.0
Side oats 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



## **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.