

Form 3160-3
(August 2008)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

NOV 16 2009

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

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 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
660' FSL and 330' FEL UL P SE/SE/4 Surface-Hole Location
At proposed prod. zone
660' FSL and 330' FWL UL M SW/SW/4 Bottom Hole Location

14. Distance in miles and direction from the nearest town or post office*
The well location is approximately 10 miles southwest of Malaga, New Mexico.

15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg. unit line, if any) 330'
16. No. of acres in lease 636.70
17. Spacing Unit dedicated to this well S/2S/2 of Section 4, T25S-R27E

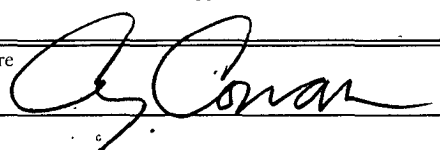
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 1 mile
19. Proposed Depth, 4950 TVD / 9366' TMD
20. BLM/ BIA Bond No. on file NATIONWIDE BOND #NMB000434


21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3246' GL
22. Approximate date work will start* ASAP
23. Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form:

- Well plat certified by a registered surveyor
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
- Bond to cover the operations unless covered by existing bond on file (see item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM

25. Signature 
Name (Printed/ Typed) Cy Cowan
Date 10/6/2009
Title Land Regulatory Agent

Approved By (Signature) 
Name (Printed/ Typed) CARLSBAD FIELD OFFICE
Date NOV 12 2009
Title /s/ Don Peterson

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 operations thereon.

Conditions of approval, if any, are attached

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and wilfully 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)

Carlsbad Controlled Water Basin
SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-37406	Pool Code	Pool Name UNDESIGNATED BONE SPRING
Property Code 37934	Property Name MAGELLAN FEDERAL UNIT	Well Number 4H
OGRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3246'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	4	25 S	27 E		660	SOUTH	330	EAST	EDDY

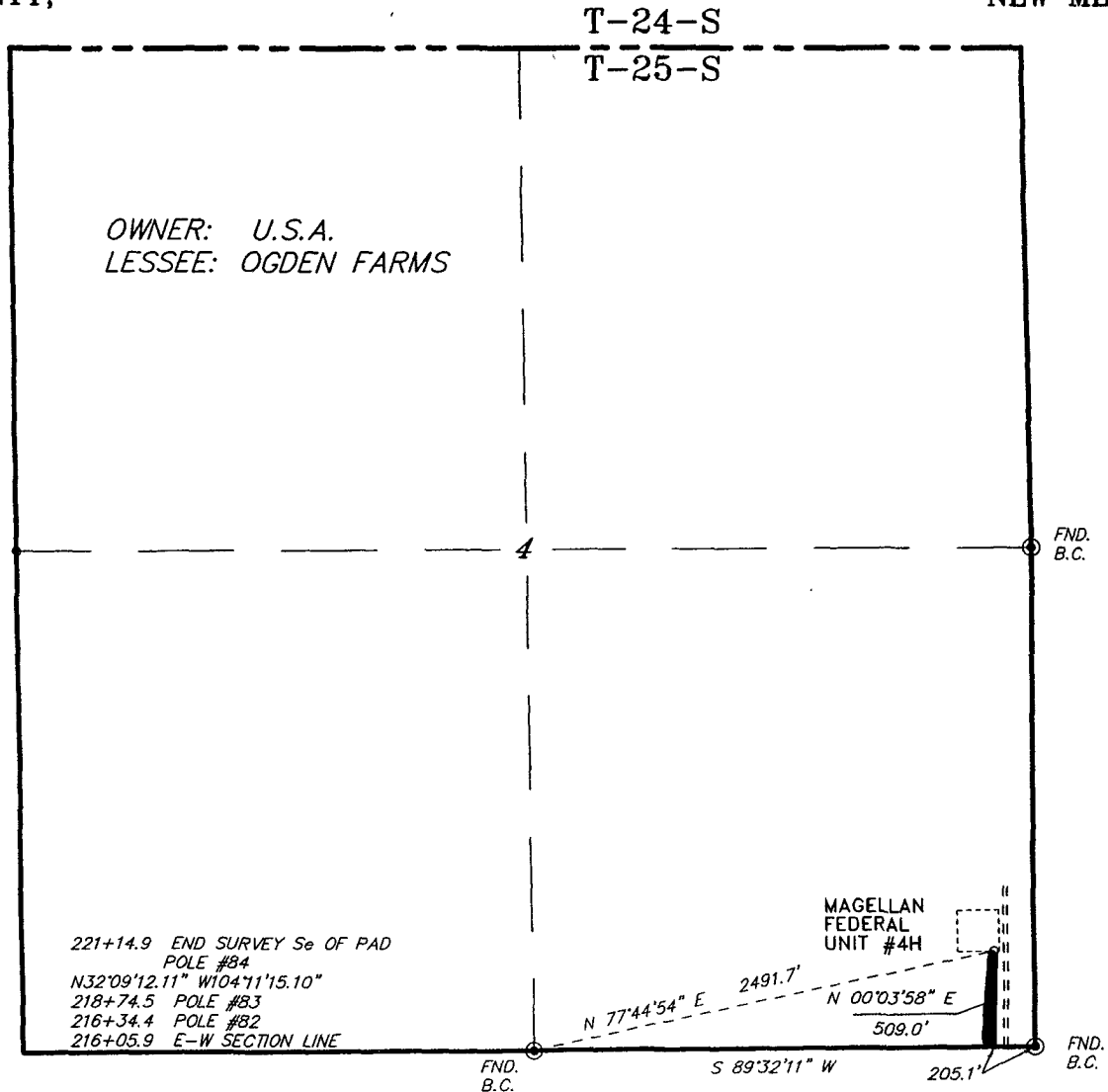
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	4	25 S	27 E		660	SOUTH	330	WEST	EDDY
Dedicated Acres 160	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>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>[Signature]</i> 10/6/09 Signature Date Cy Cowan Printed Name</p>	
<p>BOTTOM HOLE LOCATION Lat - N 32°09'13.31" Long - W 104°12'10.35" NMSPCE- N 419674.966 E 581710.541 (NAD-83)</p>				<p>SURFACE LOCATION Lat - N 32°09'13.60" Long - W 104°11'16.61" NMSPCE- N 419709.6 E 586329.8 (NAD-83)</p>	
<p>PRODUCING AREA</p>				<p>PENETRATION POINT 4620' FSL 807' FEL</p>	
<p>DATE SURVEYED SEPTEMBER 1, 2009</p>				<p>NEW MEXICO 7977 W. G. PROFESSIONAL SURVEYOR</p>	
<p>Certificate No. Gary L. Jones 7977</p>				<p>BASIN SURVEYS</p>	

SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

509.0 FEET = 30.85 RODS = 0.10 MILES = 0.35 ACRES

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED
FROM FIELD NOTES OF AN ORIGINAL SURVEY AND
MEETS OR EXCEEDS THE REQUIREMENTS FOR LAND
SURVEYS AS PROVIDED BY THIS STATE.



GARY L. JONES, No. 5074
STATE OF NEW MEXICO

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

W.O. Number: YAT21749 Drawn By: James Presley

Date: 09/24/09 Disk: JLP #1 - YAT21749

1000 0 1000 2000 FEET

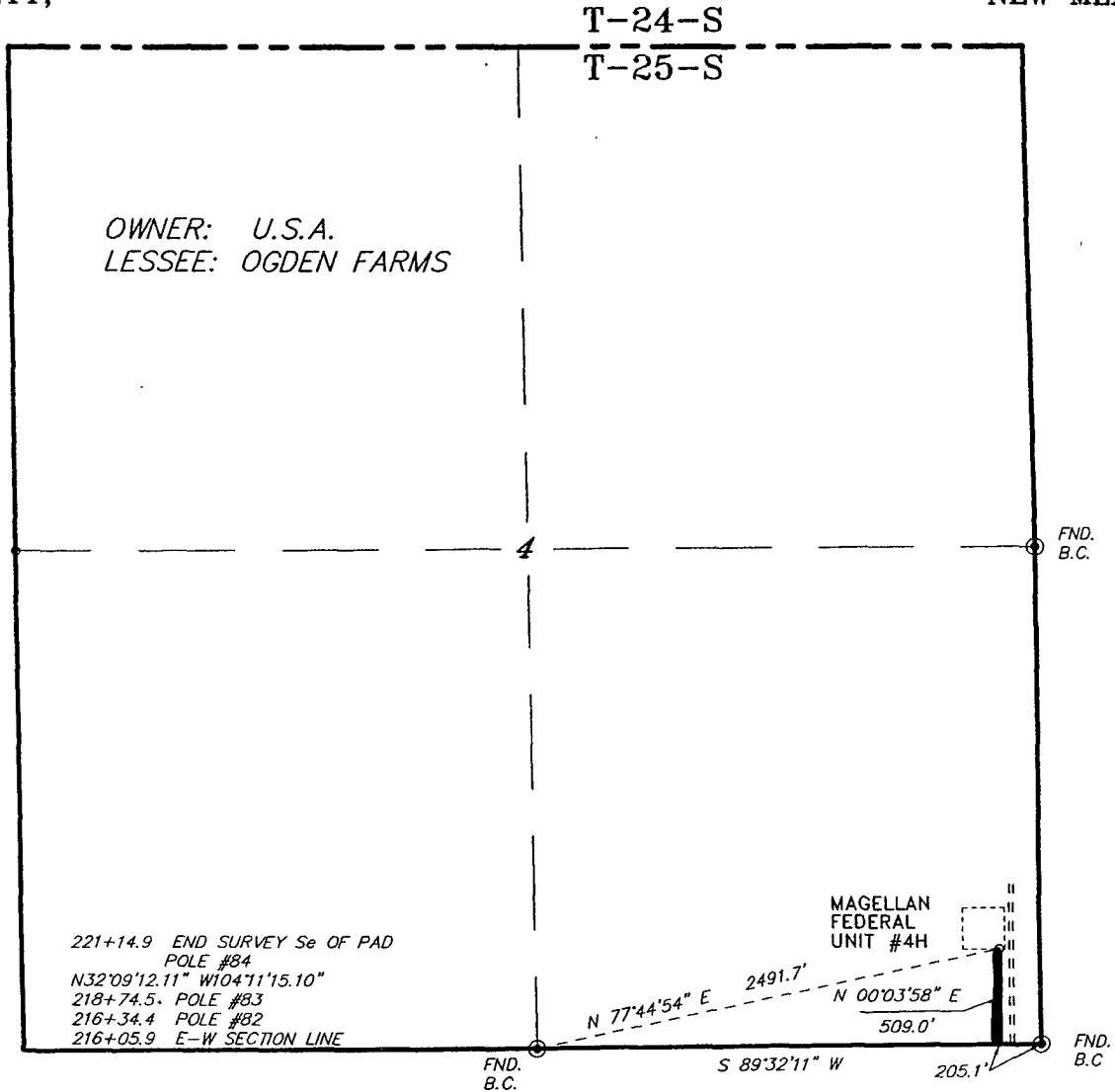
YATES PETROLEUM CORP.

REF: PROPOSED ELECTRIC LINE TO THE MAGELLAN FED. UNIT #4H

Natural gas flow LINE CROSSING U.S.A. LAND IN
SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 09/22/09 Sheet 7 of 7 Sheets

SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

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1000 0 1000 2000 FEET

YATES PETROLEUM CORP.

REF: PROPOSED ELECTRIC LINE TO THE MAGELLAN FED. UNIT #4H

Produced H₂O flowLINE CROSSING U.S.A. LAND IN
SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

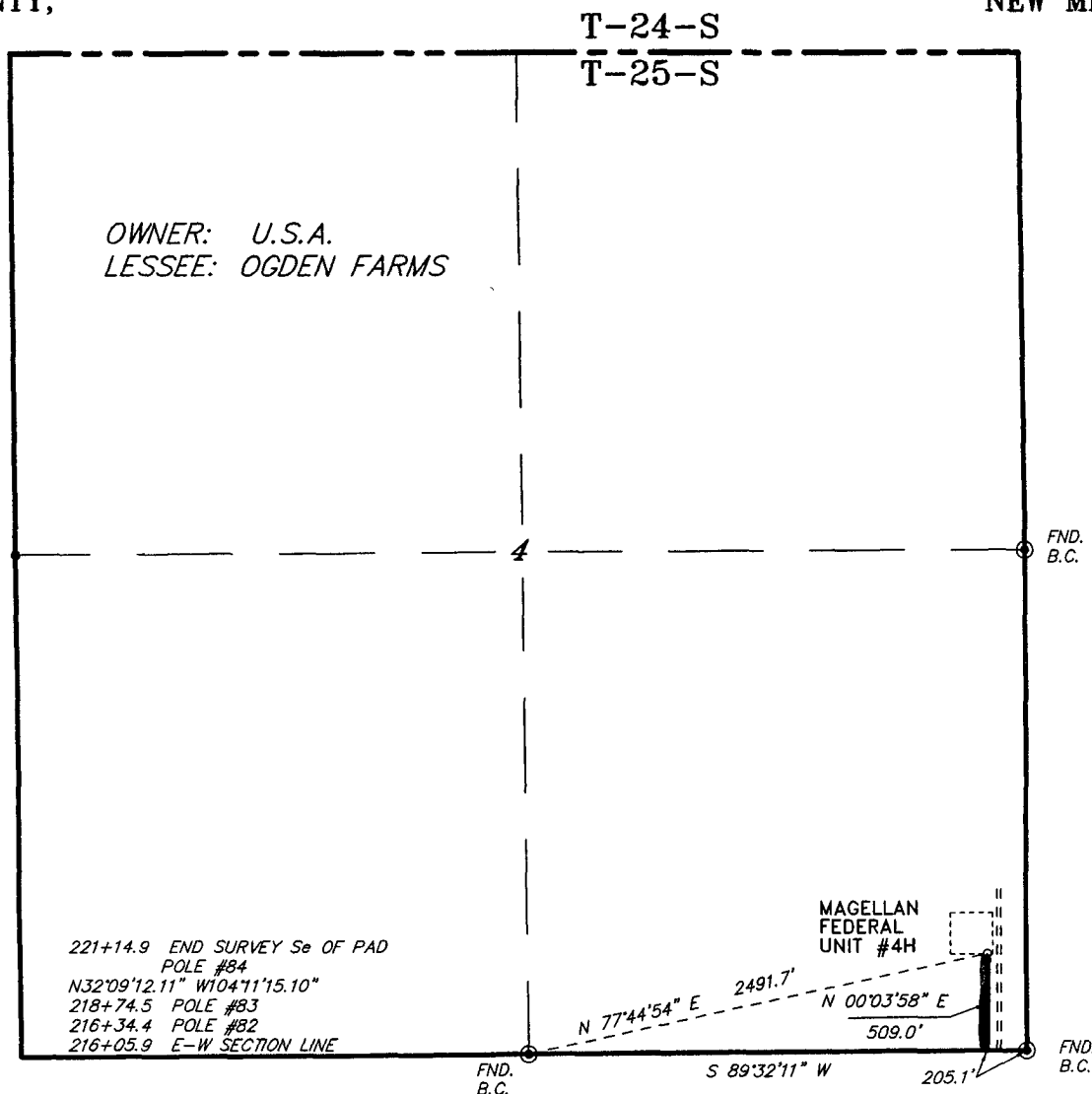
BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: YAT21749 Drawn By: James Presley

Date: 09/24/09 Disk: JLP #1 - YAT21749

Survey Date: 09/22/09 Sheet 7 of 7 Sheets

SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

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GARY L. JONES, Surveyor No. 7977
No. 5074

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

W.O. Number: YAT21749 Drawn By: James Presley

Date: 09/24/09 Disk: JLP #1 - YAT21749

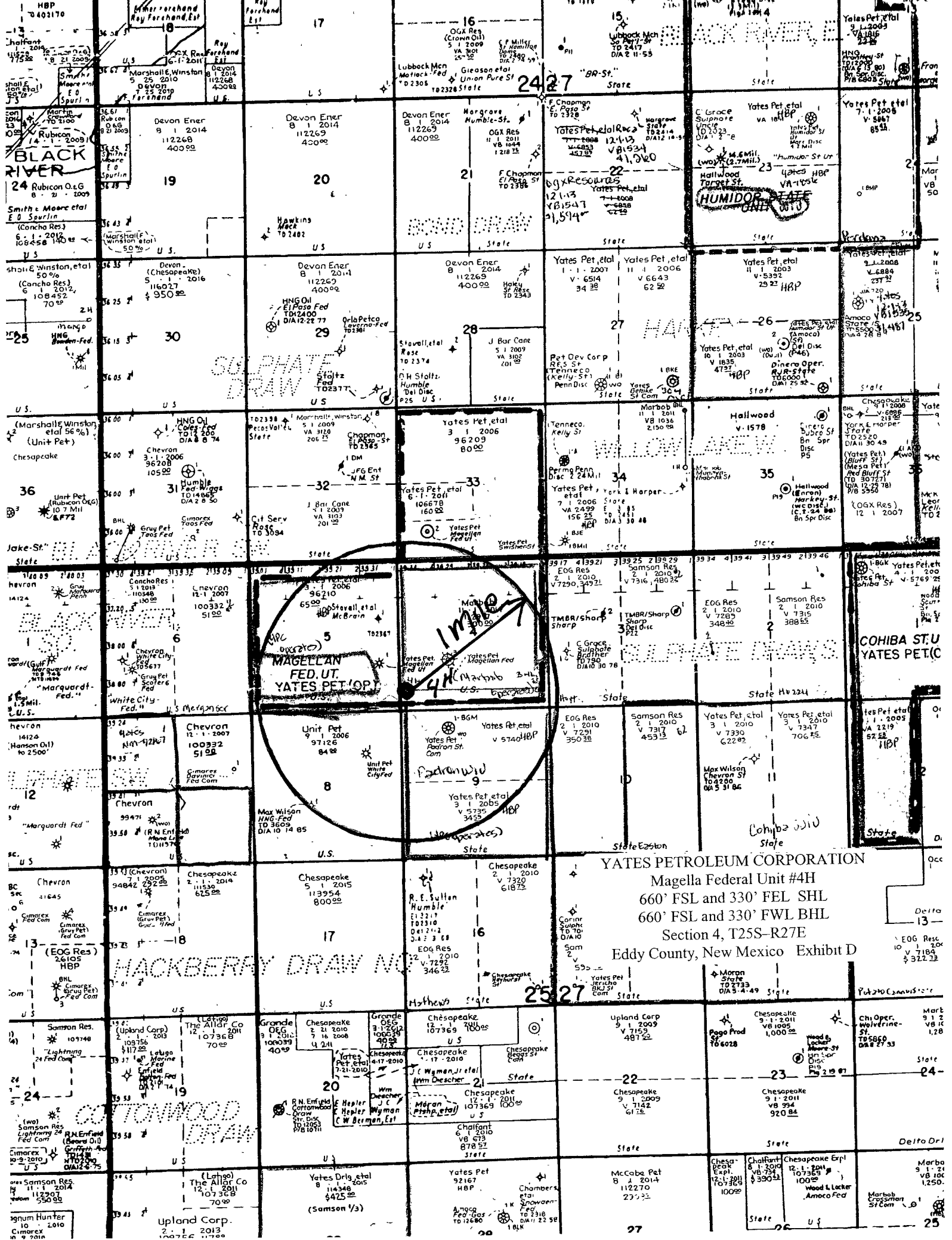
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YATES PETROLEUM CORP.

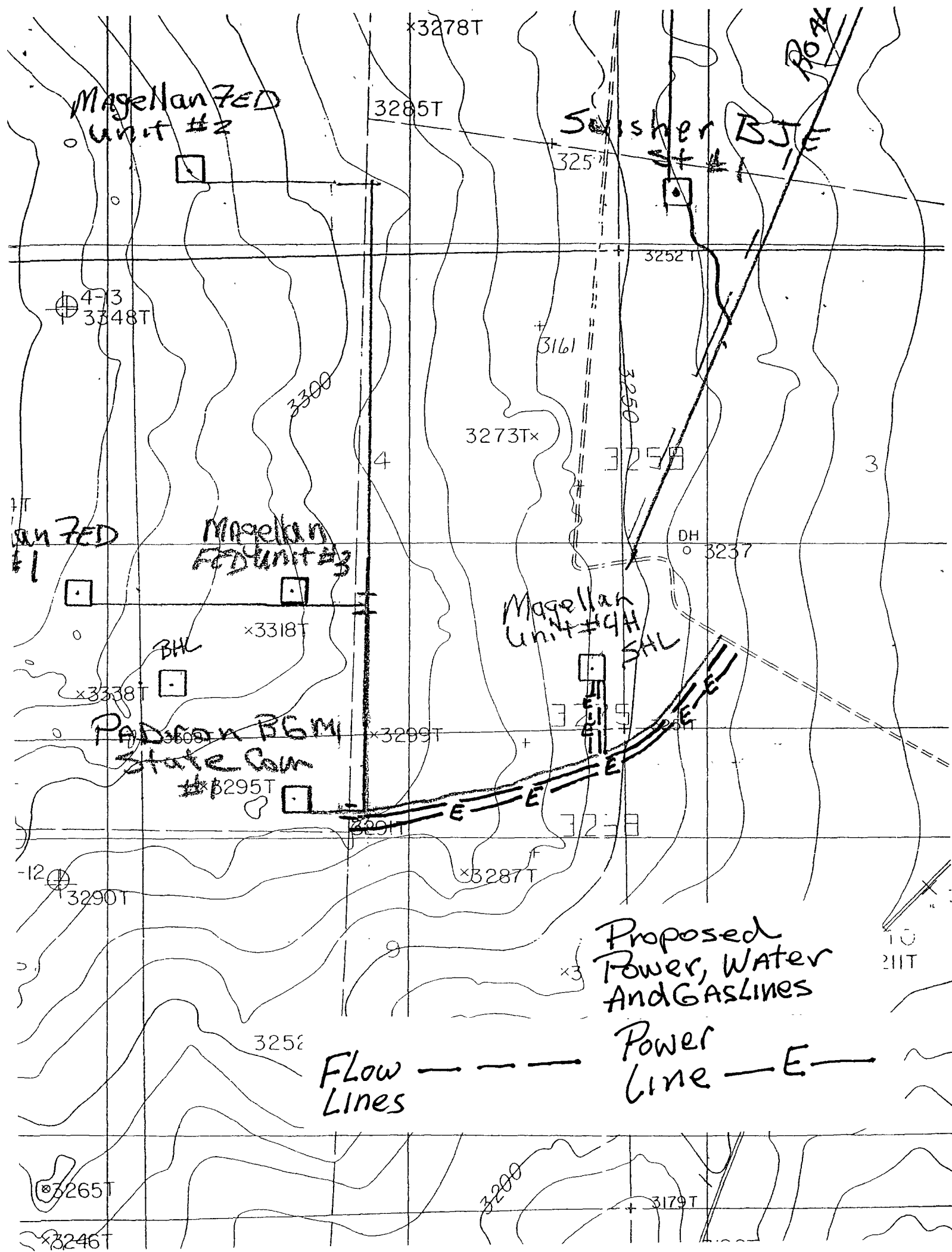
REF: PROPOSED ELECTRIC LINE TO THE MAGELLAN FED. UNIT #4H

A ELECTRIC LINE CROSSING U.S.A. LAND IN
SECTION 4, TOWNSHIP 25 SOUTH, RANGE 27 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 09/22/09 Sheet 7 of 7 Sheets



YATES PETROLEUM CORPORATION
Magella Federal Unit #4H
660' FSL and 330' FEL SHL
660' FSL and 330' FWL BHL
Section 4, T25S-R27E
Eddy County, New Mexico Exhibit D



YATES PETROLEUM CORPORATION
Magellan Federal Unit #4H
660' FSL and 330' FEL, Surface Hole
660' FSL & 330' FWL, Bottom Hole
Section 4-T25S-R27E
Eddy County, New Mexico

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

Castille	410'	Bone Spring	5580'-oil
Delaware	2270'	First Bone Spring	6770'-oil
Cherry Canyon	3150'-oil	PTD Pilot Hole	7150'
Brushy Canyon	4200'-oil	PTD Lateral	9366'-MD
Target 4900' Sand	4950'-oil		

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

Water: 170'
Oil or Gas: Oil Zones: 3150', 4200', 4950', 5580' & 6770'.

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and on the 9 5/8" casing and rated for 3000# BOP System. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers 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.
4. 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.
5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: All new casing to be used

<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	0-400'	400'
12 1/4"	9 5/8"	36#	J-55	ST&C	0-2350'	2350'
8 3/4"	5 1/2"	17#	HCP- 110	LT&C	0'-9366'	9366'

1. Minimum Casing Design Factors: Burst 1.0, Tensile Strength 1.8, Collapse 1.125
2. Pilot hole drilled vertically to 7150'. Well will be plugged back with 180' plug on bottom and 400'-500' kick off plug at approximately 4473' and directionally drill 12 degrees per 100' with a 8 3/4" hole to 5223' MD (4,950 TVD). If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 9366' MD (4950' TVD) where 4 1/2" casing will beset and cemented. If 7" is not set, then 7 7/8" hole and drilled to 9366' MD (4950' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 660' FSL & 807' FEL, 4-25S-27E. Deepest TVD in the well is 7150' in the pilot hole. Deepest TVD in the lateral is 4950'

B. CEMENTING PROGRAM:

Surface Casing: Lead with 425 sacks Class C (Wt. 14,80 Yld 1.34). TOC surface.

Intermediate Casing: 600 sacks of C Lite (WT 12.50 YLD 2.00) Tail in with 200 sacks C (WT 14.80 YLD 1.34). TOC surface

Production Casing: Lead w/1476 sacks Pecos Valley Lite (WT 13.00 YLD 1.41). Tail in w/200 sacks Lite Crete (WT 9.90 YLD 2.66). TOC 1850'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-400	Fresh Water	8.60-9.20	33-36	N/C
400-2350	Brine Water	10.00-10.20	28-29	N/C
2350-7150	Cut Brine	9.50-9.70	29	N/C
44733-9366	Cut Brine(Lateral Section)	9.50-9.70	29	<10-12

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

7. EVALUATION PROGRAM: See COA

Samples: Every 10' from 2250' to TD

Logging: Platform Express-NGT, CMR for Delaware, Dipole Sonic

Coring: None anticipated

DST's: None Anticipated

Mudlogging: Yes: From out of surface casing.

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

Maximum Anticipated BHP:

0'-400' 191 PSI

400'-2350' 1222 PSI

2350'-7150' 3606 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 120 F

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 20 days.

Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 5,223' MD (4,950' TVD). A 6 1/8" hole will then be drilled to 9,366' MD (4,950' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 4300'.

2nd Intermediate

0 ft to 5,223 ft				Make up Torque ft-lbs			Total ft =
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
7 inches	23 #/ft	J-55	LT&C	3130	2350	3940	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield		Drift		
3,270	4,350 psi	313,000 #	366,000 #		6,25		

Lead w/550sx Lite crete (YLD 2.66 Wt. 9.9) tail w/125sx PVL (YLD 1.41 Wt 13) TOC = Surface

Production

0 ft to 9,366 ft				Make up Torque ft-lbs			Total ft =
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
4.5 inches	11.6 #/ft	HCP-110	LT&C	3020	2270	3760	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield		Drift		
8,650 psi	10,690 psi	279,000 #	367,000 #		3,875		

DV tool placed at approx. 4300' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 4300'.

Cemented w/675sx PVL (YLD 1.41 Wt 13) TOC= 4300'

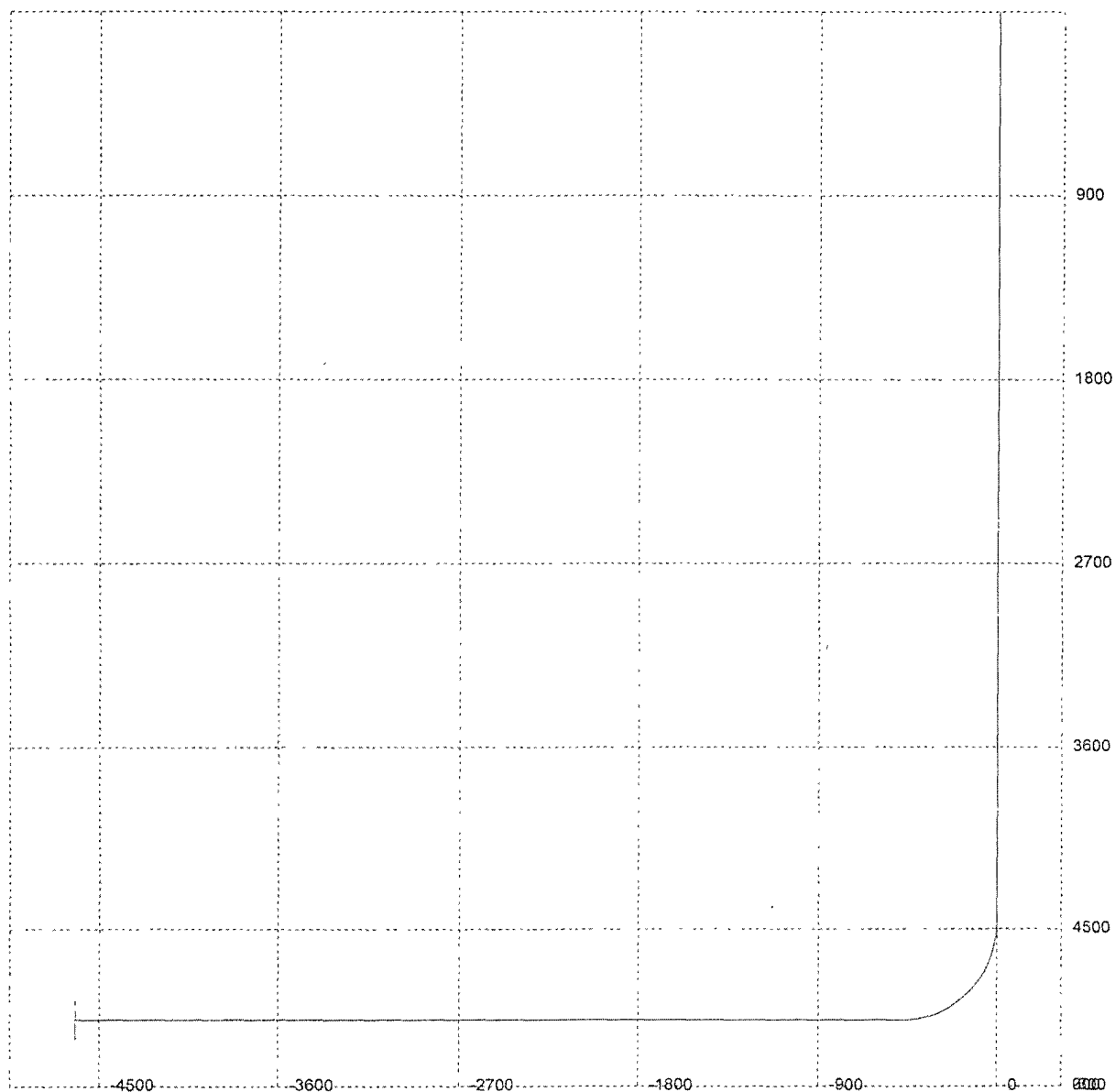
M.D'	Inclination	Azimuth	T.V.D	N+S	E+W	D.L.S	ToolFace	T.F. Ref.[HS/GN]	
0	0	0	0	0	0	0			
410	0	0	410	0	0	0			CASTILLE
2,270	0	0	2,270	0	0	0			DELAWARE
3,150	0	0	3,150	0	0	0			CHERRY CANYON
4,200	0	0	4,200	0	0	0			BRUSHY CANYON
4473	0	0	4473	0	0	12	270	GN	KOP
4475	0.24	270	4475	0	0	12	0	HS	
4500	3.24	270	4499.99	0	-0.76	12	0	HS	
4525	6.24	270	4524.9	0	-2.83	12	0	HS	
4550	9.24	270	4549.67	0	-6.2	12	0	HS	
4575	12.24	270	4574.23	0	-10.85	12	0	HS	
4600	15.24	270	4598.51	0	-16.79	12	0	HS	
4625	18.24	270	4622.45	0	-23.99	12	0	HS	
4650	21.24	270	4645.97	0	-32.43	12	0	HS	
4675	24.24	270	4669.03	0	-42.1	12	0	HS	
4700	27.24	270	4691.54	0	-52.95	12	0	HS	
4725	30.24	270	4713.46	0	-64.97	12	0	HS	
4750	33.24	270	4734.72	0	-78.12	12	0	HS	
4775	36.24	270	4755.26	0	-92.37	12	0	HS	
4800	39.24	270	4775.03	0	-107.67	12	0	HS	
4825	42.24	270	4793.97	0	-123.98	12	0	HS	
4850	45.24	270	4812.03	0	-141.26	12	0	HS	
4875	48.24	270	4829.16	0	-159.47	12	0	HS	
4900	51.24	270	4845.32	0	-178.54	12	0	HS	
4925	54.24	270	4860.45	0	-198.44	12	0	HS	
4950	57.24	270	4874.52	0	-219.1	12	0	HS	
4975	60.24	270	4887.49	0	-240.47	12	0	HS	
5000	63.24	270	4899.33	0	-262.49	12	0	HS	
5025	66.24	270	4910	0	-285.09	12	0	HS	
5050	69.24	270	4919.46	0	-308.23	12	0	HS	
5075	72.24	270	4927.71	0	-331.82	12	0	HS	
5100	75.24	270	4934.71	0	-355.82	12	0	HS	
5125	78.24	270	4940.44	0	-380.15	12	0	HS	
5150	81.24	270	4944.9	0	-404.75	12	0	HS	
5175	84.24	270	4948.05	0	-429.55	12	0	HS	
5200	87.24	270	4949.91	0	-454.47	12	0	HS	
5223.06	90.01	270	4950.46	0	-477.52	0			TARGET SAND
9365.53	90.01	270	4950	0	-4620	0			LATERAL TD

Pilot hole drilled vertically to 7150'. Well will be plugged back with 180' plug on bottom and 400'-500' kick off plug at approx 4473' and directionally drilled at 12 degrees per 100' with a 8 3/4" hole to 5223' MD (4,950' TVD). If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 9,366' MD (4,950' TVD) where 4 1/2" casing will be set and cemented. If 7" is not set, then hole size will be reduced to 7 7/8" and drilled to 9,366' MD (4,950' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 660' FSL and 807' FEL, 4-25S-27E. Deepest TVD in the well is 7150' in the pilot hole. Deepest TVD in the lateral will be 4950'.

3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

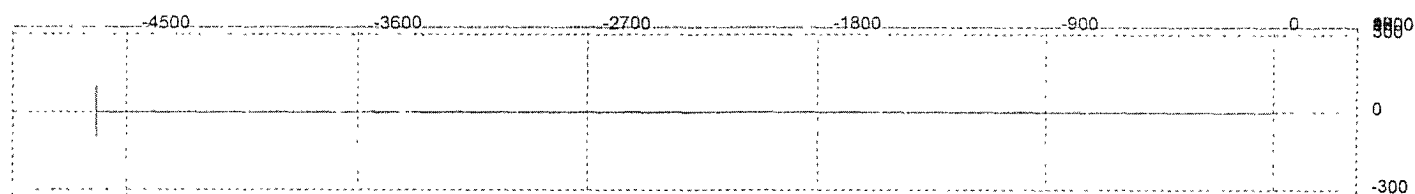
Well: Magellan Federal Unit #4H

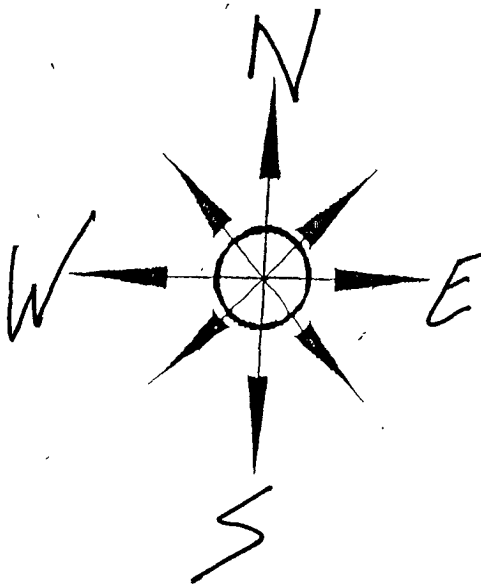


3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

Well: Magellan Federal Unit #4H



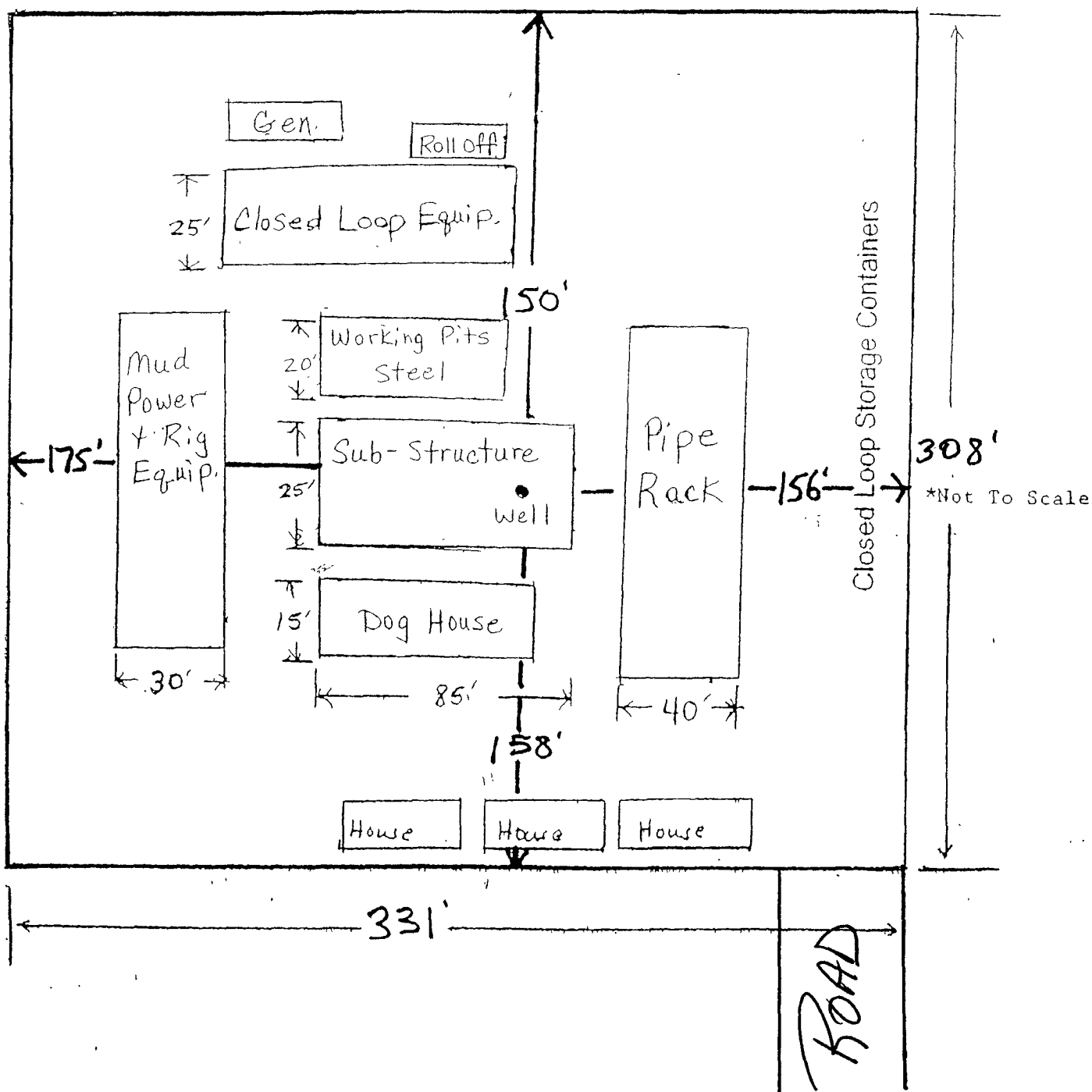


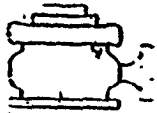
Yates Petroleum Corporation

Location Layout for Permian Basin

YATES PETROLEUM CORPORATION
Magella Federal Unit #4H
660' FSL and 330' FEL SHL
660' FSL and 330' FWL BHL
Section 4, T25S-R27E
Eddy County, New Mexico Exhibit B

Closed Loop Design Plan



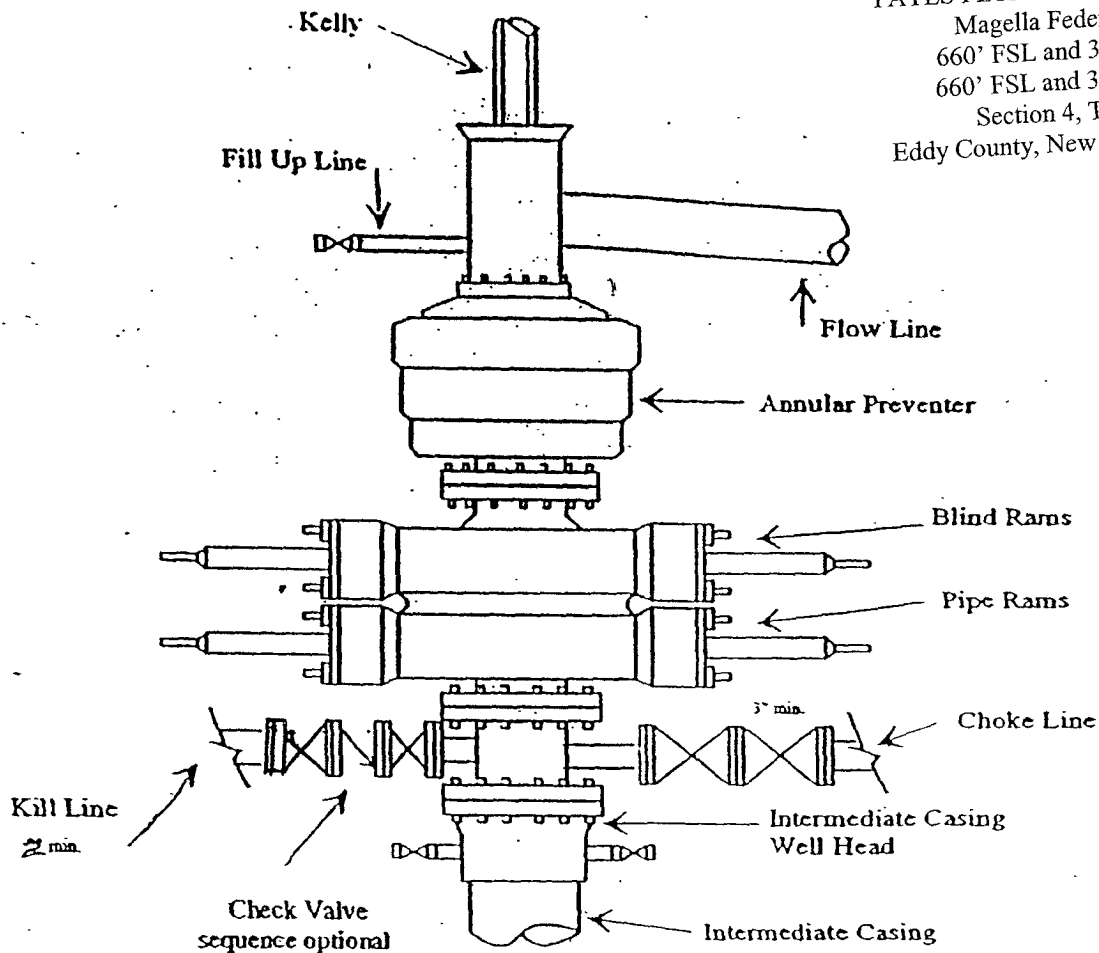


Yates Petroleum Corporation

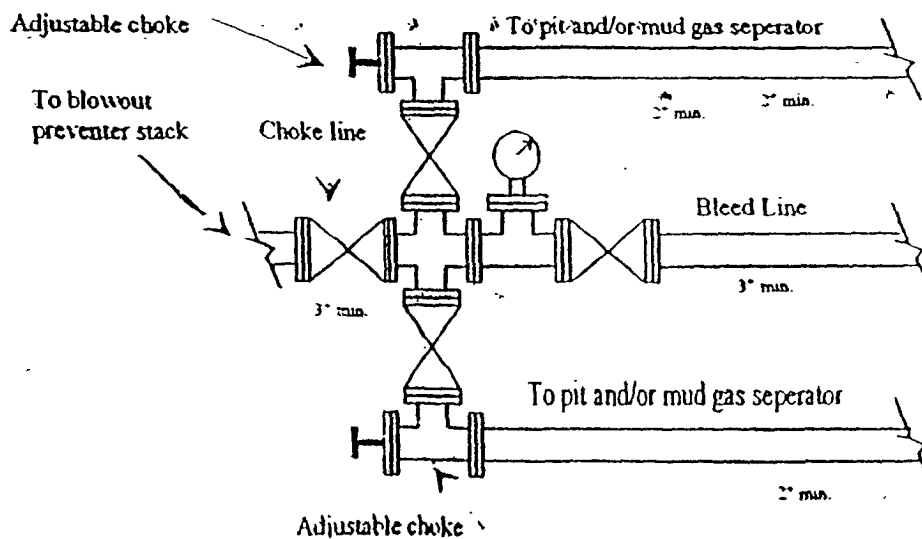
BOP-3

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

YATES PETROLEUM CORPORATION
Magella Federal Unit #4H
660' FSL and 330' FEL SHL
660' FSL and 330' FWL BHL
Section 4, T25S-R27E
Eddy County, New Mexico Exhibit C

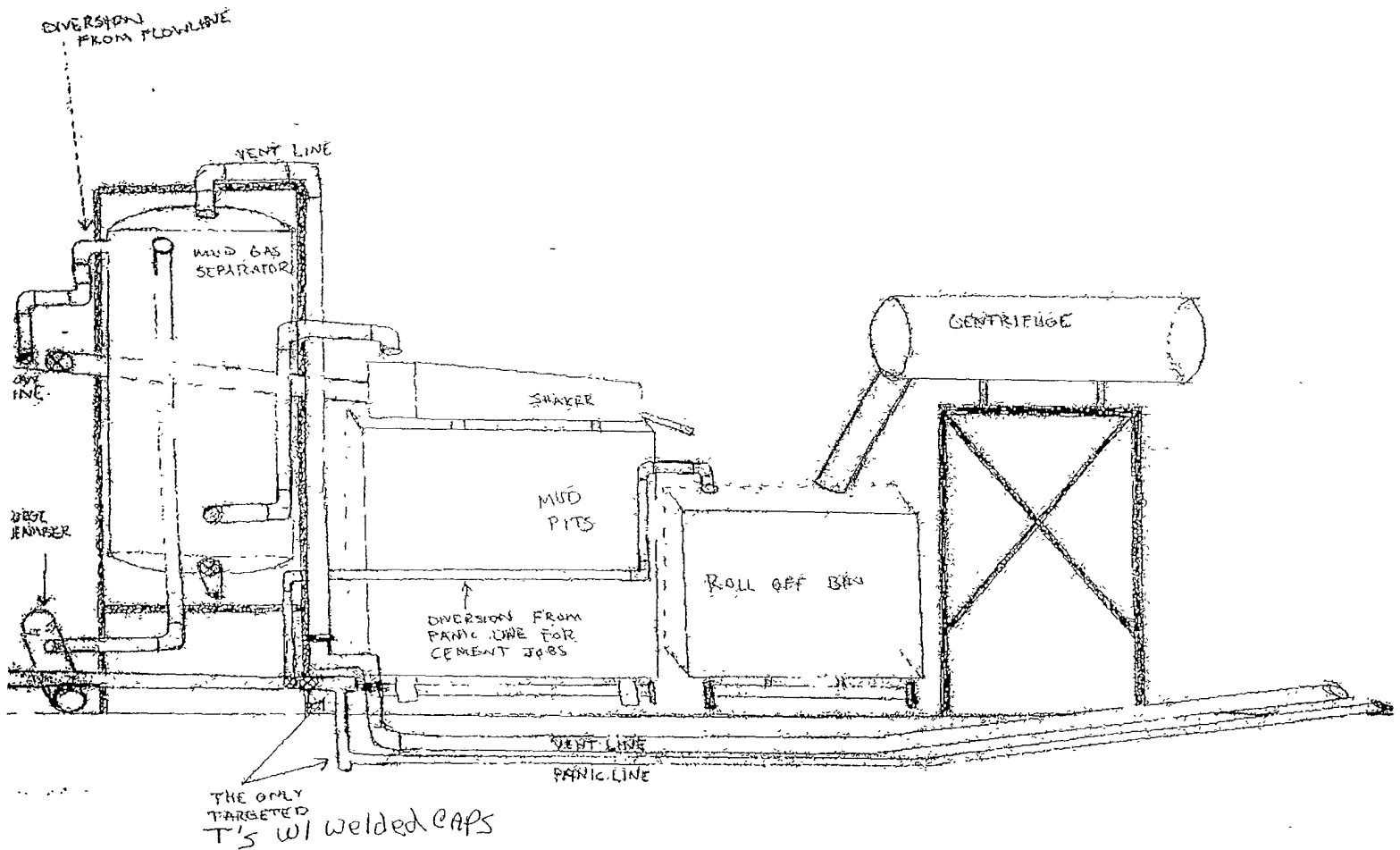


Typical 3,000 psi choke manifold assembly with at least these minimum features



YATES PETROLEUM CORPORATION
Piping from Choke Manifold
to the Closed-Loop Drilling Mud System

YATES PETROLEUM CORPORATION
Magella Federal Unit #4H
660' FSL and 330' FEL SHL
660' FSL and 330' FWL BHL
Section 4, T25S-R27E
Eddy County, New Mexico Exhibit E



MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Magellan Federal Unit #4H
660' FSL & 330' FEL, Surface Hole
660' FSL & 330' FWL, Bottom Hole
Section 4-T25S-R27E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximately 10 miles southwest of Malaga, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: Go west out of Malaga, New Mexico on Black River Road (CR-720) for approx. 2.5 miles to Road Runner Road and go approximately 4.7 miles to the ranch house on the right. Continue going south on Road Runner Road for approximately 1.5 miles to a lease road going to the right. Turn right on the existing lease road and go approximately 0.7 of a mile. Turn left here on existing lease road and go approximately 0.2 of a mile. The new road will start here and go to the right for approximately 0.2 of a mile to the southeast corner of the proposed well pad.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 0.2 of a mile 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. No traffic turnout 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. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power until an electric line can be built, if needed.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a brine water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. SOURCE OF CONSTRUCTION MATERIALS:

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

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. A closed loop system will be used to drill this well.
- B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division – the “Pit Rule” 19.15.17 NMAC.
- 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: Yates would like to have a buried 4” steel gas pipe line with a working pressure of approximately 700 psi and a volume of 200 mcf to a tie in point in the NENE of 9-25S-27E. Yates would like to include a buried 4” SDR-7 poly produced water pipe line with a working pressure of about 100 psi to a tie in point in the NENE of 9-25S-27E. Also, one 480 volt three phase raptor proof power line that will tie into a proposed powerline application on state land in Section Nine. These are all within the limits of the Magellan Unit. Please note attached plats.

9. WELLSITE LAYOUT:

- A. A closed loop system will be used to drill this well.
- B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division – the “Pit Rule” 19.15.17 NMAC.
- 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.

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 have been leveled.
- C. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits, if any, will be filled level after they have evaporated and dried. Pit reclamation will meet 19.15.17 requirements.

11. SURFACE OWNERSHIP:

Federal Lands under the supervision of the Carlsbad BLM.

12. OTHER INFORMATION:

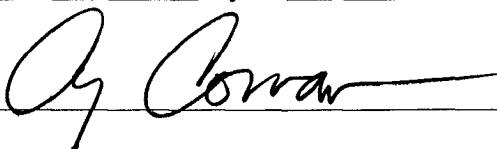
- A. The primary use of the surface is for grazing.
- B. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, and historical and cultural sites.

CERTIFICATION
YATES PETROLEUM CORPORATION
Magellan Federal Unit #4H

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; and an someone under employment of Yates Petroleum Corporation has 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 6th day of October 2009

Signature



Name Cy Cowan

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, New Mexico 88210

Telephone (505) 748-4372

Field Representative (if not above signatory) Tim Bussell, Drilling Supervisor

Address (if different from above) Same as above.

Telephone (if different from above) (505) 748-4221

E-mail (optional) cy@yates petroleumcorporation.com

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corp.
LEASE NO.:	NM112917
WELL NAME & NO.:	4H Magellan Federal Unit
SURFACE HOLE FOOTAGE:	660' FSL & 330' FEL
BOTTOM HOLE FOOTAGE:	660' FSL & 330' FWL
LOCATION:	Section 4, T. 25 S., R 27 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**
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 - Notification
 - Topsoil
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 - Well Structures & Facilities
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 - Electric Lines
- ☐ **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. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 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 4 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 (575) 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

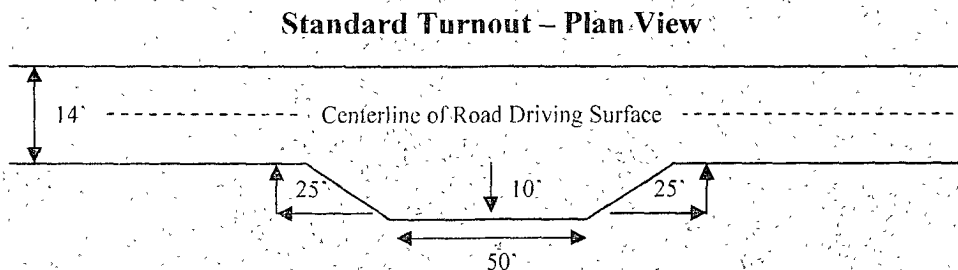
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

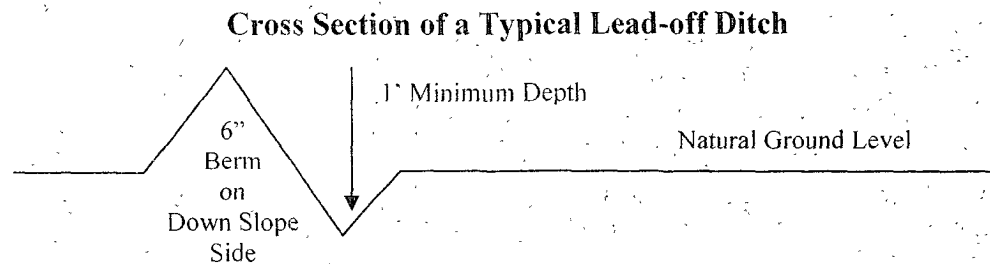
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

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

SHOULDER **TURNOUT 10'** **TRANSITION** **25'** **50'** **25'** **TRANSITION** **FULL TURNOUT WIDTH**

TURNOUTS SHALL BE CONSTRUCTED ON ALL SINGLE LANE ROADS ON ALL BLIND CURVES WITH ADDITIONAL TURNOUTS AS NEEDED TO KEEP SPACINGS BELOW 1000 FEET.

TYPICAL TURNOUT PLAN

TOP WIDTH
12' CROWN

NATURAL GROUND

HEIGHT OF FILL AT SHOULDER	EMBANKMENT SLOPE
4' - 6'	2:1
ABOVE 6'	2.5:1

EMBANKMENT SECTION

ROAD TYPE	CROWN
EARTH SURFACE	28 - 32 FT / FT
AGGREGATE SURFACE	28 - 34 FT / FT
PAVED SURFACE	28 - 36 FT / FT

THE DEPTH OF MEASURED FROM THE BOTTOM OF THE DITCH

SIDE HILL SECTION

NATURAL GROUND **TOP WIDTH** **2' CROWN** **NATURAL GROUND**

CUT SLOPE ROUNDING

NATURAL GROUND **BACK SLOPE** **TRAVEL SURFACE** **ISLOPE 2:42** **FILL SLOPE**

TYPICAL OUTSLOPE SECTION

NATURAL GROUND **BACK SLOPE** **TRAVEL SURFACE** **ISLOPE 2:42** **FILL SLOPE**

TYPICAL INSLOPE SECTION

VI. 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 possible hazard. It has been reported in the Township to the west. 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.
4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

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.

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 for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

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

Medium cave/karst

Possible lost circulation in the Delaware Formation.

1. The 13-3/8 inch surface casing shall be set at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If the salt is encountered at a shallower depth the casing is to be set 25 ft above the top of the salt.

- 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 is to include the lead cement slurry.**
- 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.

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, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

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

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

Pilot hole plug is approved as is, but the bottom plug must be tagged and depth reported on the Subsequent Sundry detailing the casing activity.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

Contingency Casing

4. The minimum required fill of cement behind the **7** inch second intermediate casing is:

- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

5. The minimum required fill of cement behind the **4-1/2** inch production casing is:

First stage to DV tool, cement shall:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office.

6. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi**.
Piping from choke manifold to flare to be as straight as possible.

3. 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.

D. DRILL STEM TEST

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

CRW 110509

VII. 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

B. PIPELINES

BURIED PIPELINE STIPULATIONS

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by, or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.
5. All construction and maintenance activity will be confined to the authorized right-of-way.
6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.
7. Blading of all vegetation will be allowed. Blading is defined as the complete removal of brush and ground vegetation. Clearing of brush species will be allowed. Clearing defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface. In areas where blading and/or clearing is allowed, maximum width of these operations will not exceed **35** feet.
8. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence

line. the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in row, piles, or berms, unless otherwise approved by the Authorized Officer. A berm will be left over the ditch line to allow for settling back to grade.

10. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

11. The holder will reseed. Seeding will be done according to the attached seeding requirements, using the following seed mix.

- | | |
|---|--|
| <input type="checkbox"/> seed mixture 1 | <input type="checkbox"/> seed mixture 3 |
| <input type="checkbox"/> seed mixture 2 | <input checked="" type="checkbox"/> seed mixture 4 |

12. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder 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 will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.
6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their

former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder 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 will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

VIII. 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 4. for Gypsum 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 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>
Alkali Sacaton (<i>Sporobolus airoides</i>)	1.0
DWS Four-wing saltbush (<i>Atriplex canescens</i>)	5.0

DWS: DeWinged Seed

*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.