

OCD Artesia

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

JUL 13 2009

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

1a Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No NM-57274
1b. Type of Well. <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Yates Petroleum Corporation 025575		7. If Unit or CA Agreement, Name and No N/A
3a Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) 505-748-1471	8. Lease Name and Well No. Haracz AMO Federal #9H
4 Location of well (Report location clearly and in accordance with any State requirements *) At surface 330' FSL & 660' FEL. UL P, SWSW SE SE At proposed prod. zone 330' FNL & 660' FEL, UL A, NENE		9 API Well No 30-015-37153
14 Elevations (Show whether DF, KDB, RT, GL, etc) This well is approximately 29 miles east of Carlsbad, NM		10. Field and Pool, or Exploratory Poker Lake, Westcat Delaware, East Section 23-T24S-R31E
15 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 330'		11 Sec , T , R., M , or Blk And Survey or Area
16 No. of acres in lease 1743.52		12 County or Parish Eddy
17 Spacing Unit dedicated to this well E2E2		13 State NM
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft None		14. Proposed Depth 8320' VD & 12735' MD
20 BLM/ BIA Bond No on file NATIONWIDE BOND #NMB000434		21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3549' GL
22. Approximate date work will start* ASAP		23. Estimated duration

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 must be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/ or plans as may be required by the BLM |

25 Signature 	Name (Printed/ Typed) Cy Cowan	Date 6/11/09
Title Land Regulatory Agent		
Approved By (Signature) 	Name (Printed/ Typed)	Date 7/13/09
Title FIELD MANAGER	Office	

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

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Carlsbad Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DISTRICT I

1025 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 DepartmentForm C-102
Revised October 12, 2005Submit 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37153	Pool Code 50388	Pool Name Doker Lake Wildcat Delaware; East
Property Code 14835	Property Name HARACZ "AMO" FEDERAL	Well Number 9H
OGRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3549'

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	23	24 S	31 E		330	SOUTH	660	EAST	EDDY

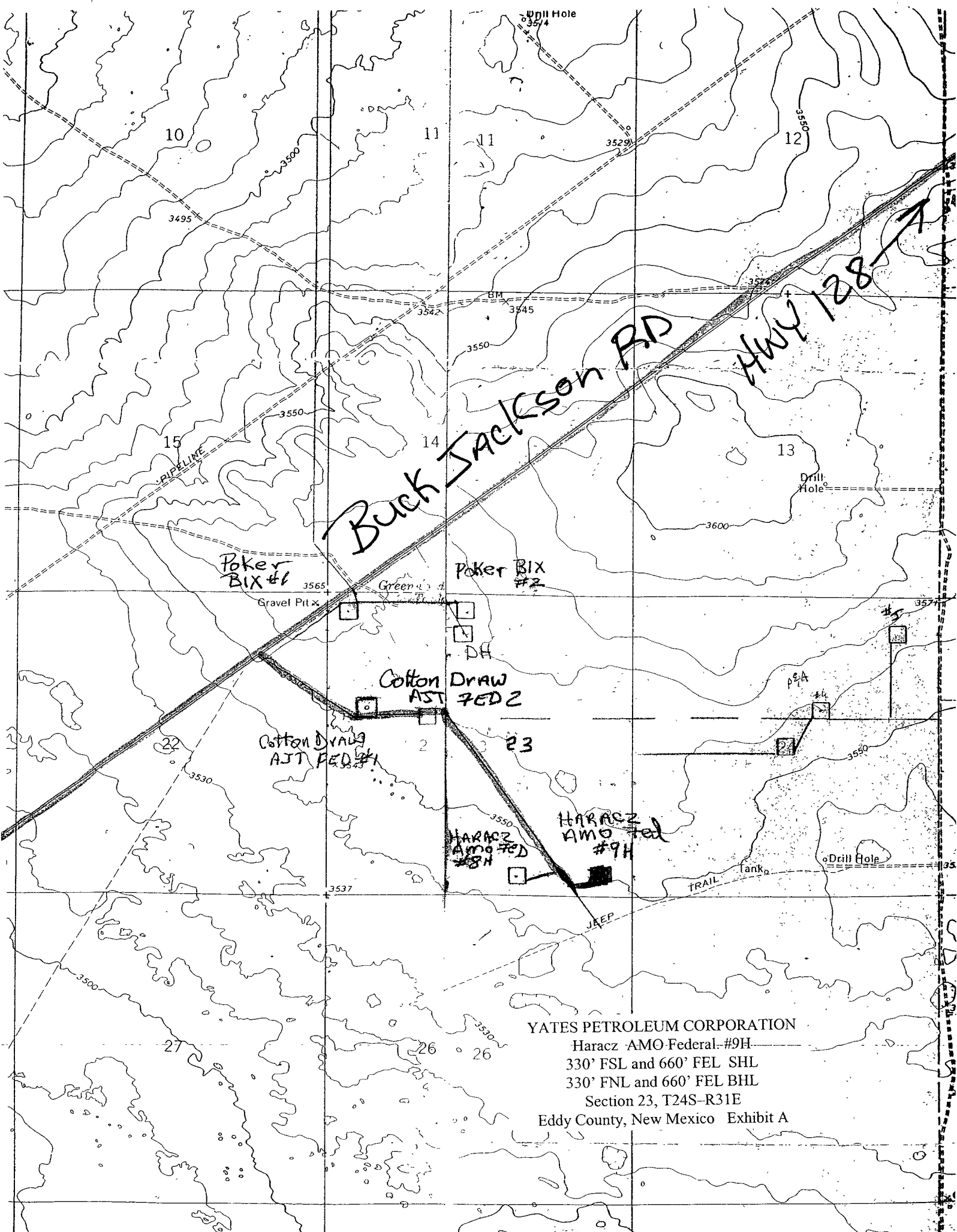
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	23	24 S	31 E		330	NORTH	660	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

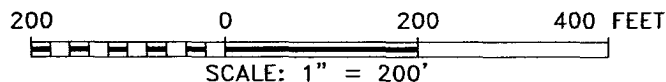
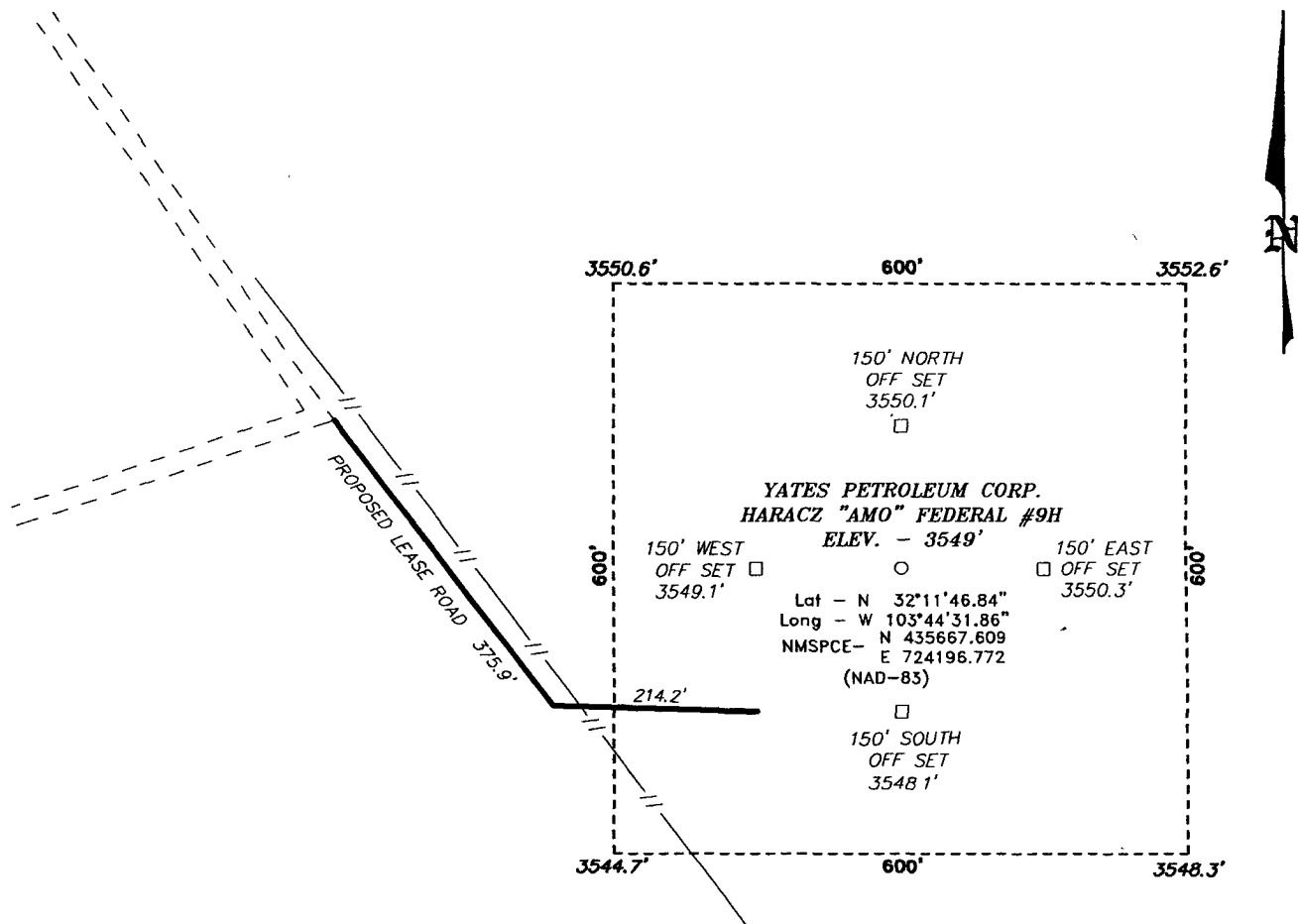
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, 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. Signature _____ Date 6/10/09 Printed Name Cy Cowan
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Surveyed _____ Signature & Seal of Professional Surveyor _____ Certificate No. Gary L. Jones 7977
	BASIN SURVEYS



YATES PETROLEUM CORPORATION
Haracz AMO Federal #9H
330' FSL and 660' FEL SHL
330' FNL and 660' FEL BHL
Section 23, T24S-R31E
Eddy County, New Mexico Exhibit A

SECTION 23, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



YATES PETROLEUM CORP.

REF: -- HARACZ --"AMO"-- FEDERAL #9H--/--WELL PAD--TOPO--

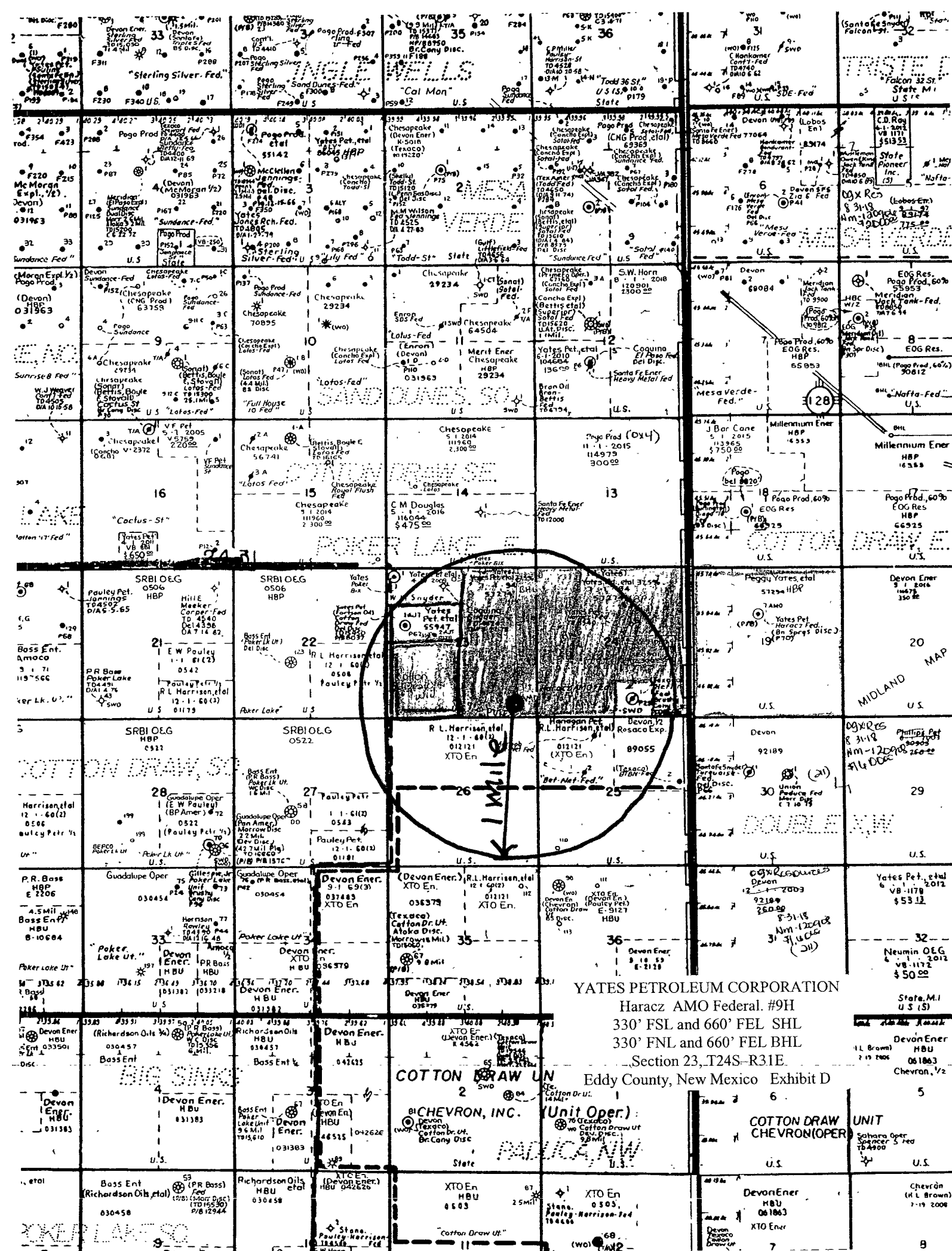
THE HARACZ "AMO" FEDERAL #9H LOCATED 330'
FROM THE NORTH LINE AND 660' FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 24 SOUTH, RANGE 31 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 21372 Drawn By: J. SMALL

Date: 05-19-2009 Disk: JMS 21372

Survey Date: 05-18-2009 Sheet 1 of 1 Sheets



YATES PETROLEUM CORPORATION
Haracz AMO Federal. #9H
330' FSL and 660' FEL SHL
330' FNL and 660' FEL BHL
Section 23, T24S-R31E

Eddy County, New Mexico Exhibit D

1946 6

Oper.) : COTTON DRAIN

Cotton Draw Ut
Dev. Disc.)
98 Mil

5. NAME

U.S.	U.S.
1944	1944

XTO En	DevonEner
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0505, (Harrison-Ped HBU 061863

Devon
Zurro

NO) (TAX 2 - Cotton Draw Up 7

9

YATES PETROLEUM CORPORATION
Haracz AMO Federal #9H
330' FSL and 660' FEL, Surface Hole
330' FNL & 660' FEL, Bottom Hole
Section 23-T24S-R31E
Eddy County, New Mexico

1. The estimated tops of geologic markers are as follows:
- | | | | |
|---------------|-----------|----------------------|-----------|
| Rustler | 680' | Brushy Canyon | 6620'-Oil |
| Top of Salt | 1020' | Brushy Canyon Marker | 8092'-Oil |
| Base of Salt | 4270' | Basal Sand Target | 8592'-Oil |
| Bell Canyon | 4550' | TD | 8320' |
| Cherry Canyon | 5450'-Oil | TMD | 12735' |
2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: 160
Oil or Gas: See above

3. Pressure Control Equipment: BOPE will be installed on the 11 3/4" and the 8 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"	11 3/4"	42#	H-40	ST&C	0-900'	900'
11"	8 5/8"	32#	J-55	ST&C	0-100'	100'
11"	8 5/8"	24#	J-55	ST&C	100-2100'	2000'
11"	8 5/8"	32#	J-55	ST&C	2100-4200'	2100'
11"	8 5/8"	32#	HCK-55	ST&C	4200-4400'	200'
7 7/8"	5.5"	17#	HCP-110	LT&C	0'-12735'	12735'

Well will be drilled vertically to 7842'. At 7842' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12735' TMD (8320' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 807' FSL & 660' FEL, Section 23, T24S-R31E. Deepest TVD in the well is 8320' in the lateral. It is requested that a variance be granted to test the BOP on the surface casing to ~~1000 psi using rig pumps~~. A 3000 psi BOPE will be nipped up on the 8 5/8" casing and tested to 3000 psi,

See
COA

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

B. CEMENTING PROGRAM: ← See COA

Surface Casing: 265 sacks 'C' Lite (WT 12.5 YLD 1.96). Tail in with 200 sacks 'C' w/2% CaCl₂ (WT 14.8 YLD 1.34). TOC Surface ← See COA

Intermediate Casing: 975 sacks of 'C' Lite (WT 12.6 YLD 2.0) Tail in with 225 sacks 'C' (WT 14.8 YLD 1.34). TOC Surface.

Production Casing: Stage One: 1650 sacks PecoVILt (WT 13.0 YLD 1.41). Top of Cement 6100'. Stage Two: DV tool will be placed at 6100'. Lead with 225 sacks Lite Crete (WT 9.90 YLD 2.78). Tail in with 100 sacks PecosVILt (WT 13.0 YLD 1.41). Top of Cement 3900'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-900'	Fresh Water	8.6-9.2	32-34	N/C
900'-4400'	Brine Water	10.0-10.2	28-28	N/C
4400'-7842'	Cut Brine	8.5-8.8	28-29	N/C
7842'-12735'	Cut Brine	8.5-8.8	28-29	N/C
(Lateral Section)				

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

7. EVALUATION PROGRAM:

Samples: 30' samples to 4500'. 10' samples 4500-TD

Logging: Platform Hals, CMR

Coring: None anticipated

DST's: None Anticipated

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

Maximum Anticipated BHP:

0'-900' 430 PSI

900'-4400' 2335 PSI

4400'-8320' 3800 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: H₂S water flow possible below 2800'

Maximum Bottom Hole Temperature: 150 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.

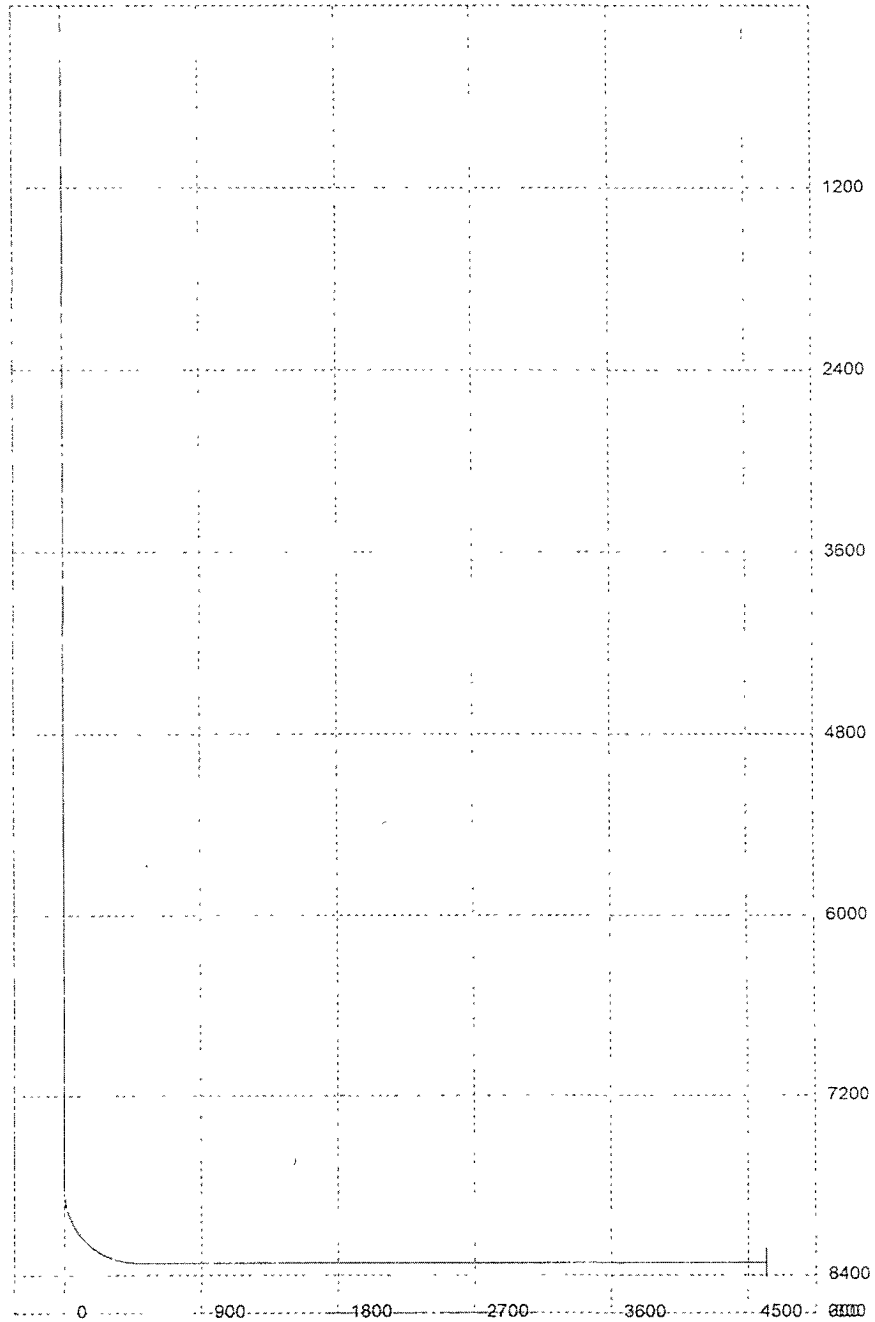
M.D.	Inclination	Azimuth	T.V.D.	N+/S-	E+/W-	D.L.S.	ToolFace	T.F. Ref. (HS/GN)	
0	0	0	0	0	0	0			
680	0	0	680	0	0	0			RUSTLER
1,020	0	0	1,020	0	0	0			TOP OF SALT
4,270	0	0	4,270	0	0	0			BASE OF SALT
4,550	0	0	4,550	0	0	0			BELL CANYON
5,450	0	0	5,450	0	0	0			CHERRY CANYON
6,620	0	0	6,620	0	0	0			BRUSHY CANYON
7842	0	0	7842	0	0	12	0	GN	KOP
7850	0.96	0	7850	0.07	0	12	0	HS	
7875	3.96	0	7874.97	1.14	0	12	0	HS	
7900	6.96	0	7899.86	3.52	0	12	0	HS	
7925	9.96	0	7924.58	7.2	0	12	0	HS	
7950	12.96	0	7949.08	12.16	0	12	0	HS	
7975	15.96	0	7973.29	18.4	0	12	0	HS	
8000	18.96	0	7997.13	25.9	0	12	0	HS	
8025	21.96	0	8020.55	34.64	0	12	0	HS	
8050	24.96	0	8043.48	44.59	0	12	0	HS	
8075	27.96	0	8065.86	55.73	0	12	0	HS	
8092	30	0	8080.73	63.97	0	12	0	HS	BRUSHY CANYON MARKER
8100	30.96	0	8087.63	68.03	0	12	0	HS	
8125	33.96	0	8108.72	81.44	0	12	0	HS	
8150	36.96	0	8129.08	95.94	0	12	0	HS	
8175	39.96	0	8148.65	111.49	0	12	0	HS	
8200	42.96	0	8167.39	128.04	0	12	0	HS	
8225	45.96	0	8185.23	145.55	0	12	0	HS	
8250	48.96	0	8202.13	163.97	0	12	0	HS	
8275	51.96	0	8218.04	183.25	0	12	0	HS	
8300	54.96	0	8232.93	203.33	0	12	0	HS	
8325	57.96	0	8246.74	224.16	0	12	0	HS	
8350	60.96	0	8259.44	245.69	0	12	0	HS	
8375	63.96	0	8271	267.86	0	12	0	HS	
8400	66.96	0	8281.38	290.6	0	12	0	HS	
8425	69.96	0	8290.56	313.85	0	12	0	HS	
8450	72.96	0	8298.51	337.55	0	12	0	HS	
8475	75.96	0	8305.2	361.63	0	12	0	HS	
8500	78.96	0	8310.63	386.03	0	12	0	HS	
8525	81.96	0	8314.77	410.68	0	12	0	HS	
8550	84.96	0	8317.62	435.52	0	12	0	HS	
8575	87.96	0	8319.16	460.47	0	12	0	HS	
8591.94	89.99	0	8319.47	477.41	0	12	0	HS	TARGET-BASAL SAND
12734.54	89.99	0	8320	4620	0	0			LATERAL TD

Well will be drilled vertically to 7842'. At 7842' well will be kicked off at 12 degrees per 100' with a 7 7/8" hole to 12,735' MD (8,320' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 807' FSL and 660' FEL, 23-24S-31E. Deepest TVD in the well is 8320' in the lateral

3D³ Directional Drilling Planner - 3D View

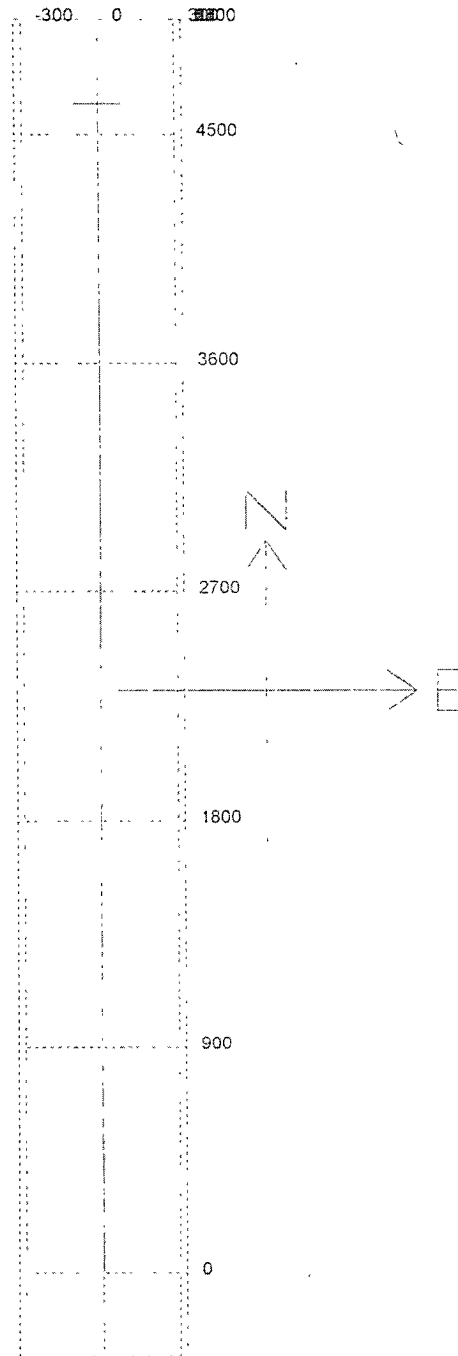
Company: Yates Petroleum Corporation

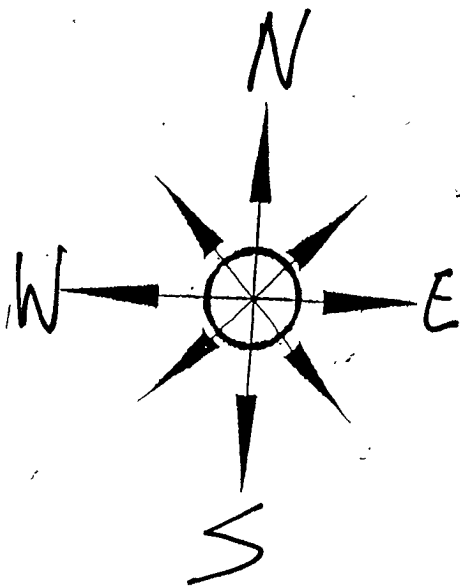
Well: Haracz AMO Federal #9H



3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation
Well: Haracz AMO Federal #9H



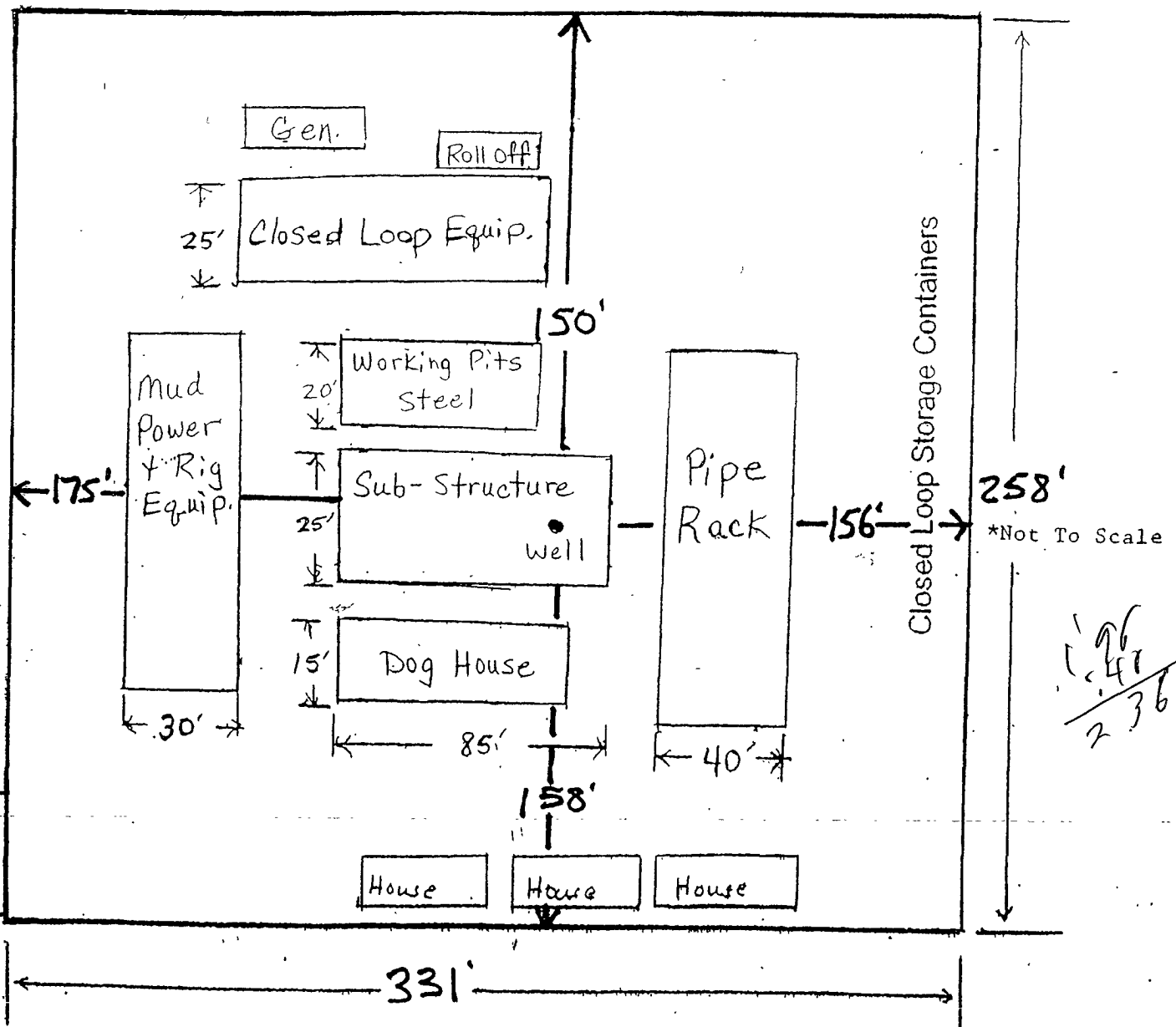


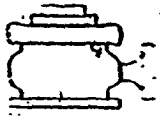
YATES PETROLEUM CORPORATION
Haracz AMO Federal. #9H
330' FSL and 660' FEL SHL
330' FNL and 660' FEL BHL
Section 23, T24S-R31E
Eddy County, New Mexico Exhibit B

Yates Petroleum Corporation

Location Layout for Permian Basin

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

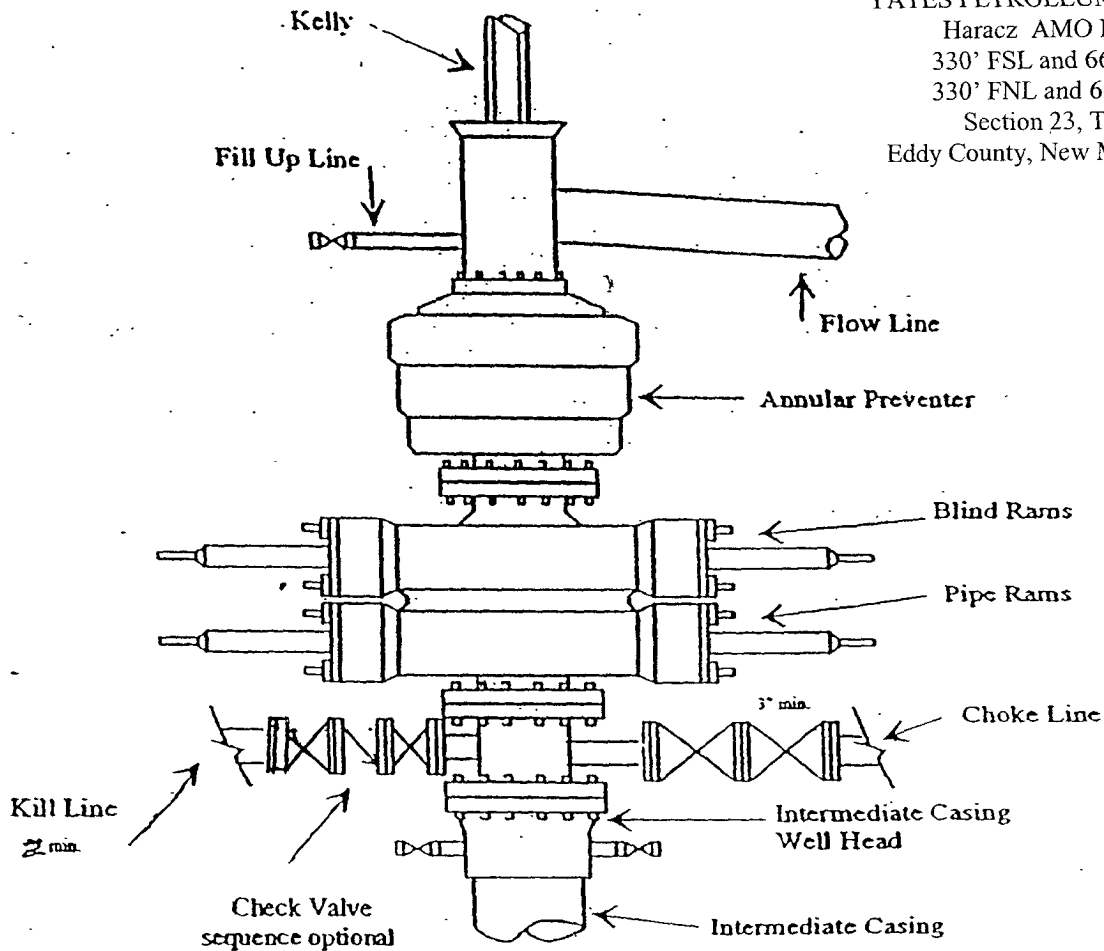
Haracz AMO Federal. #9H

330' FSL and 660' FEL SHL

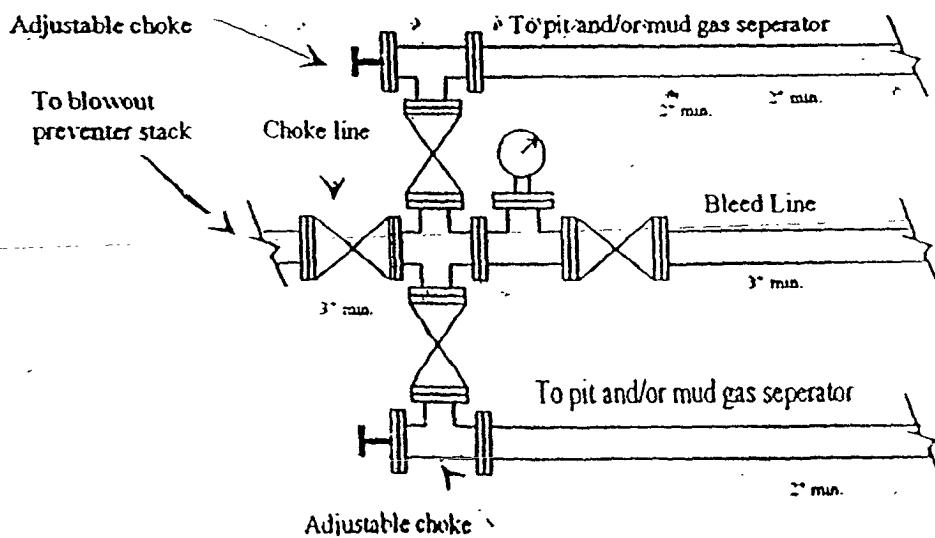
330' FNL and 660' FEL BHL

Section 23, T24S-R31E

Eddy County, New Mexico Exhibit C

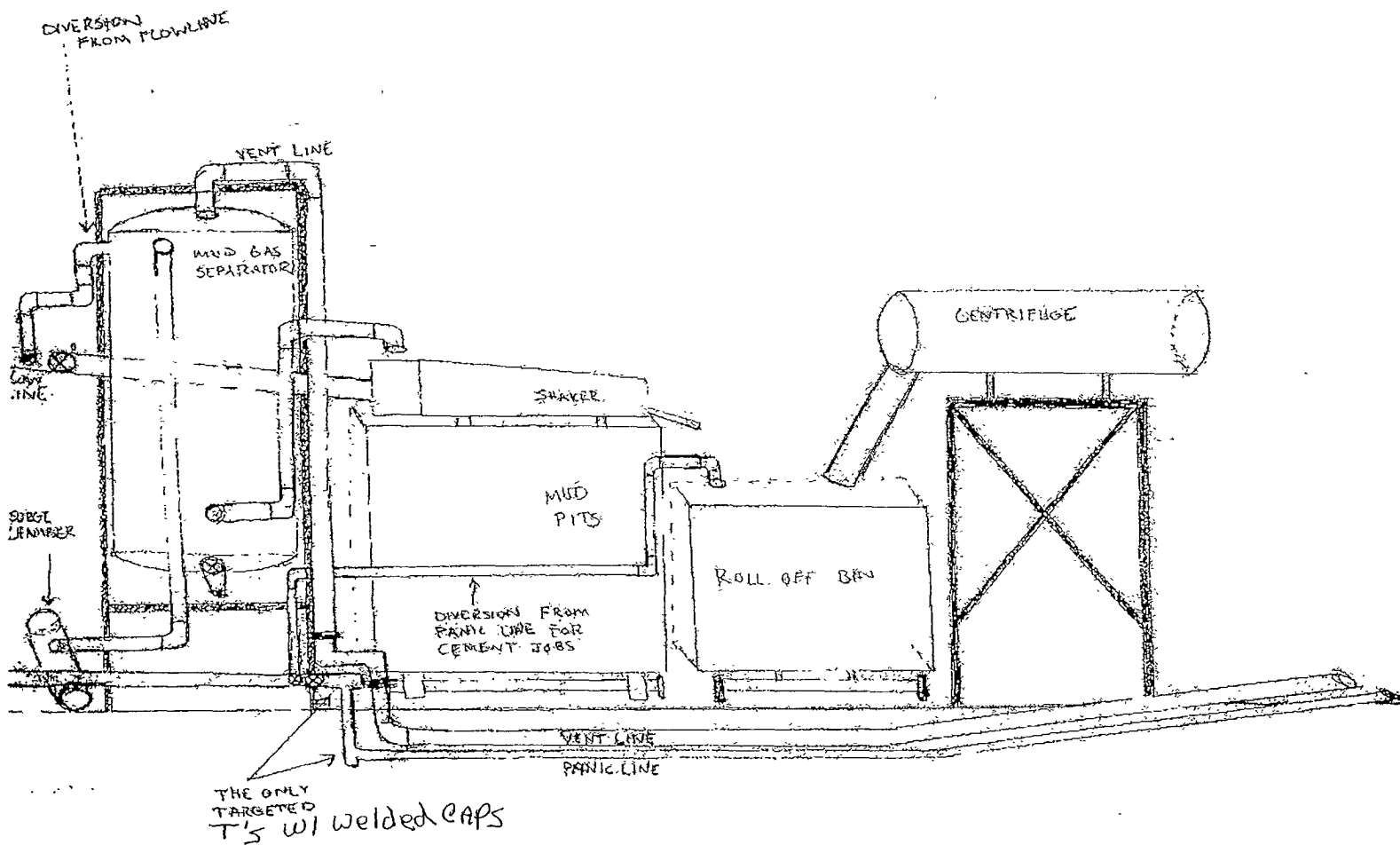


Typical 3,000 psi choke manifold assembly with at least these minimum features



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

YATES PETROLEUM CORPORATION
Haracz AMO Federal. #9H
330' FSL and 660' FEL SHL
330' FNL and 660' FEL BHL
Section 23, T24S-R31E
Eddy County, New Mexico Exhibit E



Yates Petroleum Corporation

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

Hydrogen Sulfide (H₂S) Contingency Plan

For

Haracz AMO Federal #9H

330' FSL and 660' FEL Surface Hole Location

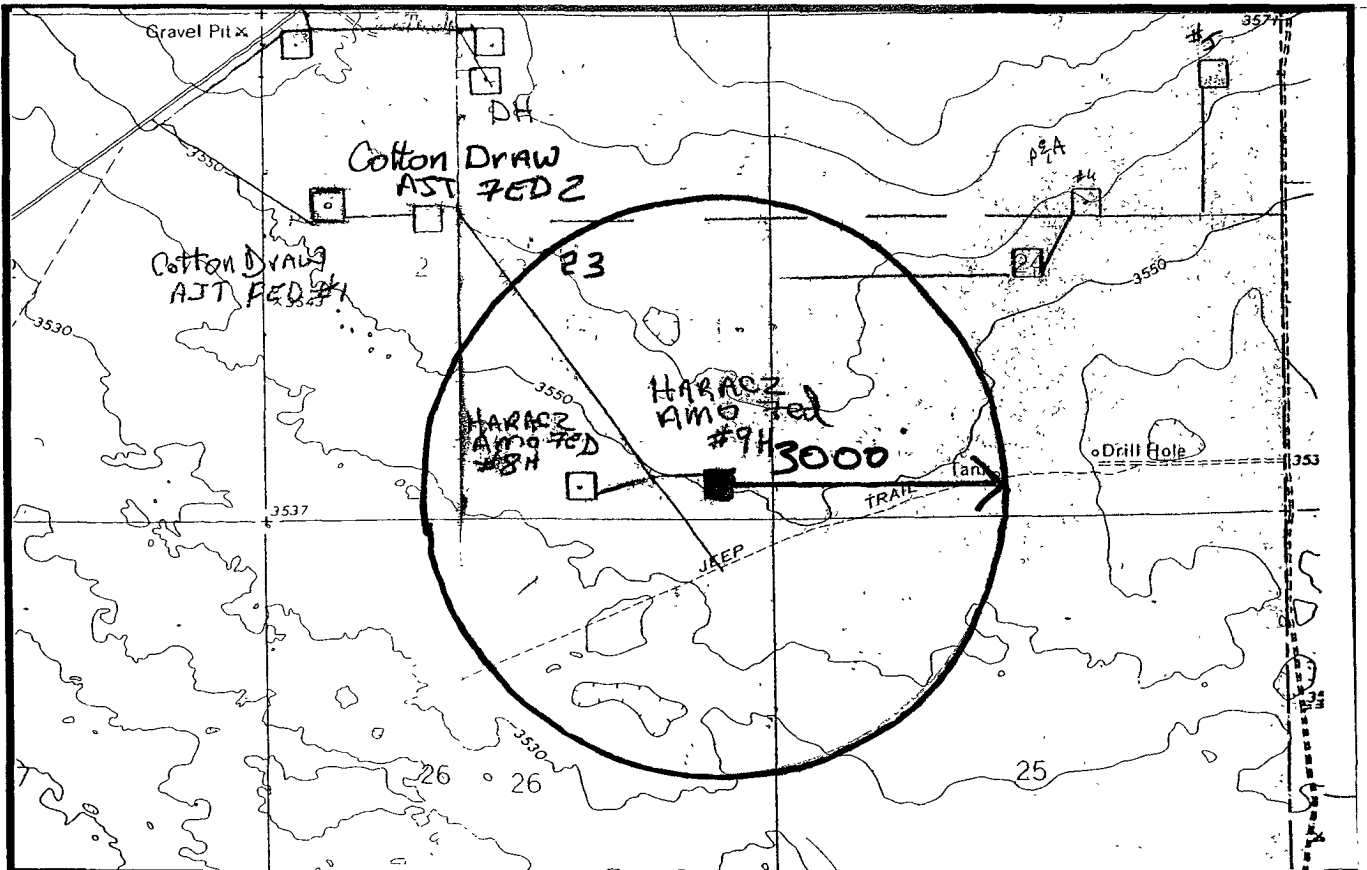
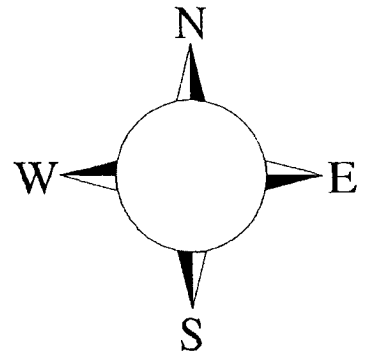
330' FNL and 660' FEL Bottom Hole Location

Section 23, T-24S, R-31E

Eddy County NM

Haracz AMO Federal #9H

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the case of a release of gas containing H₂S, 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 H₂S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H₂S 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 (SO₂). 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 H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	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
Paul Ragsdale/Operations Manager	(505) 748-4520
Ron Beasley/Production Manager	(505) 748-4210
Wade Bennett/Prod Superintendent	(505) 748-4236
Mike Lankin/Drilling	(505) 748-4222
Paul Hanes/Prod. Foreman/Roswell	(505) 624-2805
Tim Bussell/Drilling Superintendent	(505) 748-4221
Artesia Answering Service	(505) 748-4302
(During non-office hours)	

Agency Call List

Eddy County (505)

Artesia

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

Carlsbad

State Police	885-3137
City Police.....	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	885-2111
LEPC (Local Emergency Planning Committee).....	887-3798
US Bureau of Land Management.....	887-6544
New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR	(505) 827-9126
New Mexico State Emergency Operations Center.....	(505) 476-9635
National Emergency Response Center (Washington, DC)	...(800) 424-8802

Other

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

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

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Haracz AMO Federal #9H
330' FSL & 660' FEL, Surface Hole
330' FNL & 660' FEL, Bottom Hole
Section 23-T24S-R31E
Eddy County, New Mexico

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

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 29 miles southeast of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Carlsbad on Highway 62-180 to State Road 31. Turn south on 31 and go to Highway 128 (Jal Highway). Turn left on HWY 128 and go east for approximately 18.7 miles to the intersection of Highway 128 and Buck Jackson Road. Turn right on Buck Jackson Road and go approx. 2.9 miles. Turn left here at a cattle guard and lease road and go approximately .5 of a mile to the Cotton Draw AJT Federal #2 well location. From the northeast corner of the Cotton Draw AJT well location follow the existing lease road east for approximately 300 feet turn right here and follow the lease road south for approximately .7 of a mile. At this point the existing road will turn right and go to the Haracz AMO Federal #8H well location. However the proposed new access road will start here going south on a two track ranch road. Follow the two track ranch road for approximately 400 feet. The access road will then turn left and go approximately 300 feet to the southwest corner of the proposed well location.

2. PLANNED ACCESS ROAD.

- A. The proposed new access will be approximately .2 of a mile in length going south and then east to the southwest corner of the proposed well location.
- 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 one side. Traffic turnouts may be built.
- 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: None

9. WELLSITE LAYOUT:

- A. Exhibit B shows the relative location and dimensions of the well pad, the closed loop mud system, location of the drilling equipment, rig orientation and access road approach. The proposed well location will be approximately 350' x 300'. All of the location will be constructed within the 600' x. 600' staked area.
- 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.

10. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible.

11. SURFACE OWNERSHIP: Federal Lands managed by the supervision of the Carlsbad BLM.

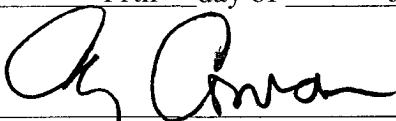
12 OTHER INFORMATION:

- 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
Haracz AMO Federal #9H

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 11th day of June 2009

Signature 

Name Cy Cowan

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, New Mexico 88210

Telephone (~~505~~⁷) 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~~⁷) 748-4221

E-mail (optional) _____

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	YATES PETROLEUM CORPORATION
LEASE NO.:	NM57254
WELL NAME & NO.:	HARACZ AMO FEDERAL – 9H
SURFACE HOLE FOOTAGE:	330' FSL & 660' FEL
BOTTOM HOLE FOOTAGE:	330' FNL & 660' FEL
LOCATION:	Section 23, T. 24 S., R 31 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**
 - Lesser Prairie Chicken
- ☐ **Construction**
 - Notification
 - Topsoil
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 - Federal Mineral Material Pits
 - Well Pads
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- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
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I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

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 (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 8 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

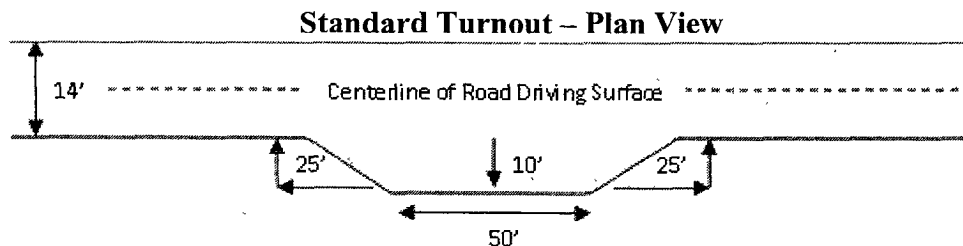
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

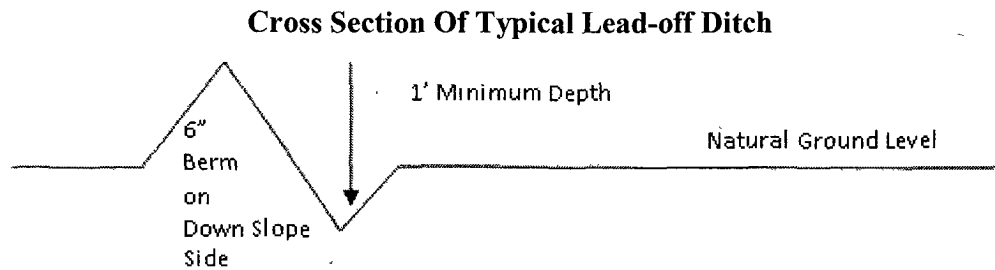
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

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

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

Culvert Installations

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

Cattleguards

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

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

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

Fence Requirement

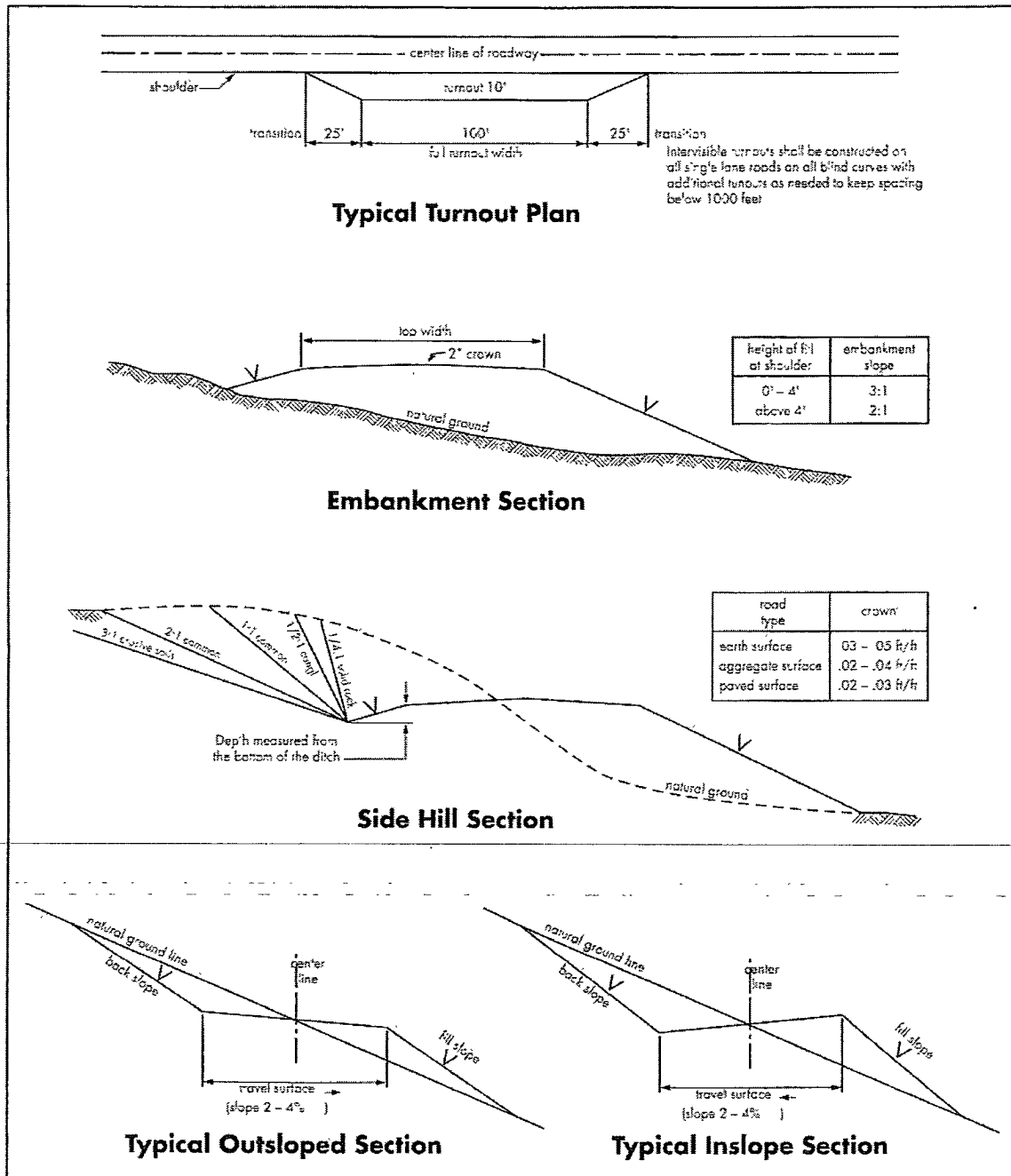
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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

Public Access

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

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

☒ **Eddy County**

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

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

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

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

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.

Possible lost circulation in the Delaware and Bone Spring formations.

Possible water flows in the Castile, Salado, Delaware and Bone Spring formations.

1. The **11-3/4 inch** surface casing shall be set **at approximately 900 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **Additional cement will be required as excess cement calculates to a negative 9%.**
 - 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 **8-5/8 inch** intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Formation below the 8-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

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

3. The minimum required fill of cement behind the **5-1/2 inch** production casing is:
 - a. First stage to DV tool, cement shall:
☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

b. Second stage above DV tool, cement shall:

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

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. **Piping from choke manifold and to flare to be as straight as possible.**
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 11-3/4" surface casing shoe shall be **3000 (3M) psi.**
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. **Operator to submit copies of test done for each casing string with the subsequent sundry detailing the casing/cementing details.**
 - 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. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILL STEM TEST

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

WWI 071009

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

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

Containment Structures

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

Painting Requirement

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

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

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

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

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

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

Seed Mixture for LPC Sand/Shinnery 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>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

**Four-winged Saltbush 5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*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.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

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.