

OCD Artesia

A+S-09-497

RW

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

APPd expires 8/8/09

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) 575-748-1471

4 Location of well (Report location clearly and in accordance with any State requirements *)
At surface 330' FSL and 990' FWL, Surface Hole Location
330' FNL and 660' FWL Bottom Hole Location
At proposed prod zone same as above

14 Distance in miles and direction from the nearest town or post office*
Approximately 36 miles east of Malaga, New Mexico

15 Distance from proposed* location to nearest property or lease line, ft
(Also to nearest drlg unit line, if any) 430 feet

16 No of acres in lease 320.00

17. Spacing Unit dedicated to this well
NE/NW

18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 300 feet

19 Proposed Depth
TVD - 8160' RGH
MD - 12587' MVD 9397'

20 BLM/ BIA Bond No on file
NATIONWIDE BOND #NMB000434

21 Elevations (Show whether DF, KDB, RT, GL, etc)
3011' 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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)

4. Bond to cover the operations unless covered by existing bond on file(see item 20 above)
5. Operator certification
6. Such other site specific information and/ or plans as may be required by the BLM

25 Signature
Title
Land Regulatory Agent

Cy Cowan

Date
7/8/2009

Approved By (Signature)
Title
FIELD MANAGER

Name (Printed/ Typed)
Office
CARLSBAD FIELD OFFICE

Date
SEP 18 2009

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

Previously Approved
Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

OCD-ARTESIA

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (re-entry)		6. If Indian, Allottee or Tribe Name Not Applicable
2. Name of Operator Yates Petroleum Corporation 025575		7. If Unit or CA/Agreement, Name and/o Not Applicable
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) (575) 748-1471	8. Well Name and No. Corral Draw AQH Federal #4H
4. Location of Well (Footage, Sec., T, R., M., or Survey Description) 330' FSL & 990' FWL, Surface Hole, 13-24S-29E 330' FNL & 660' FWL, Bottom Hole, 13-24S-29E		9. API Well No. 30-015-35096
		10. Field and Pool, or Exploratory Area Pierce Crossing, Bone Spring East
		11. County or Parish, State Eddy County, New Mexico

12 CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change of Surface Use Plan
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA Required subsequent reports must be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Yates Petroleum Corporation requests permission to change from the use of a Reserve Pit to a Closed Loop System. Attached is the Location for a Closed Loop Design Plan and Piping from Choke Manifold to the Closed Loop Drilling Mud System.

Engineering Review - OK
RGH 5/04/09

Thank you.

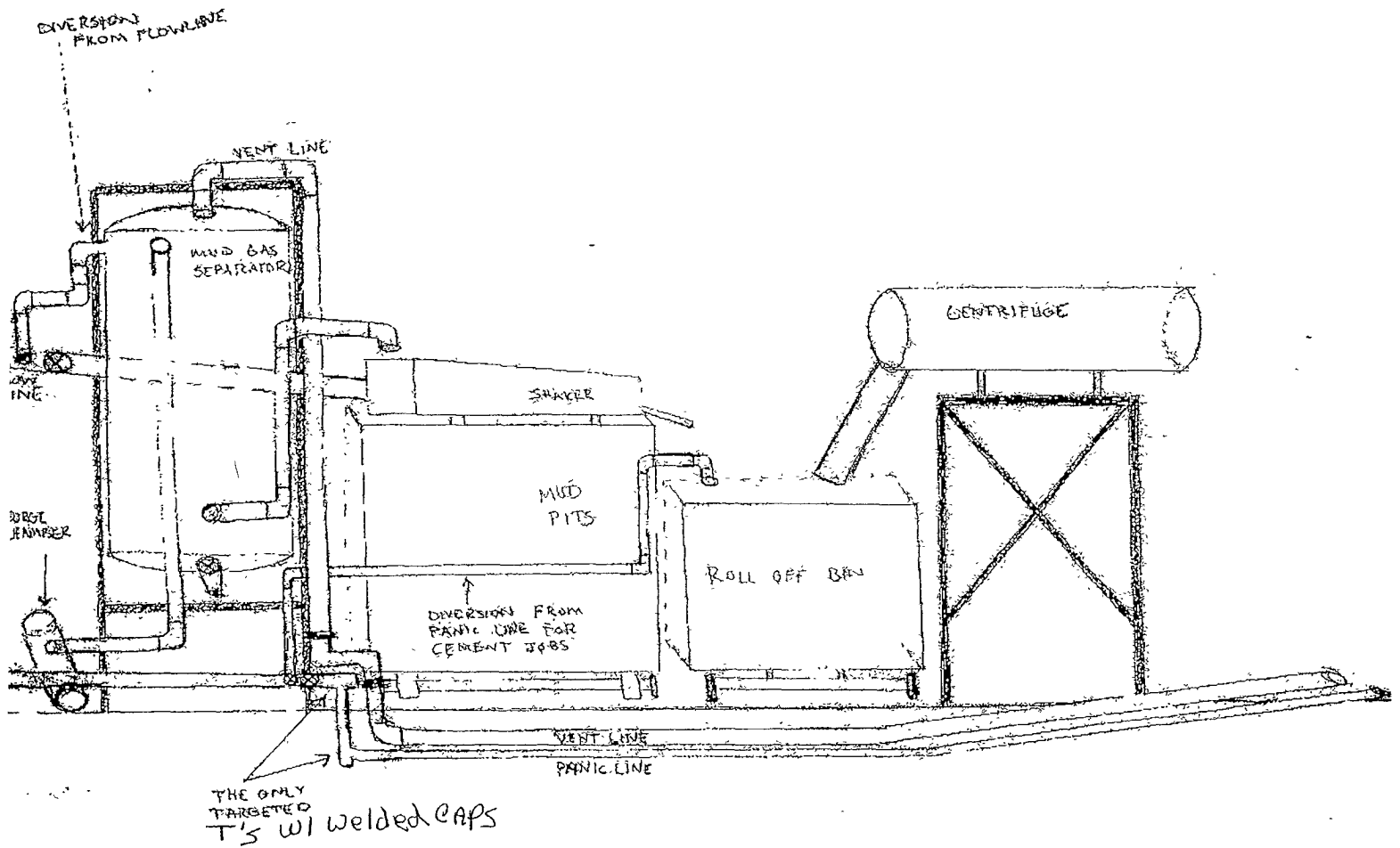
14. I hereby certify that the foregoing is true and correct		
Name (Printed/Typed) Cy Cowan	Title Land Regulatory Agent	
Signature 	Date April 30, 2009	
THIS SPACE FOR FEDERAL OR STATE USE		
Approved by /s/ DAVID D. EVANS	Title FIELD MANAGER	Date SEP 18 2009
Conditions of approval, if any, are attached Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Office CARLSBAD FIELD OFFICE	

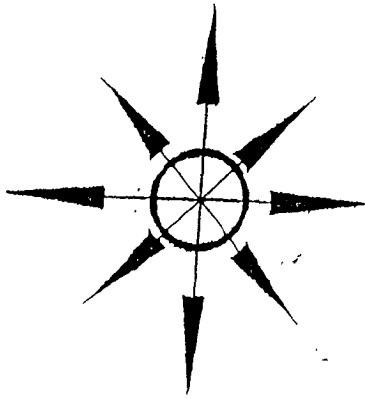
Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Change well # From 7 To 44

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

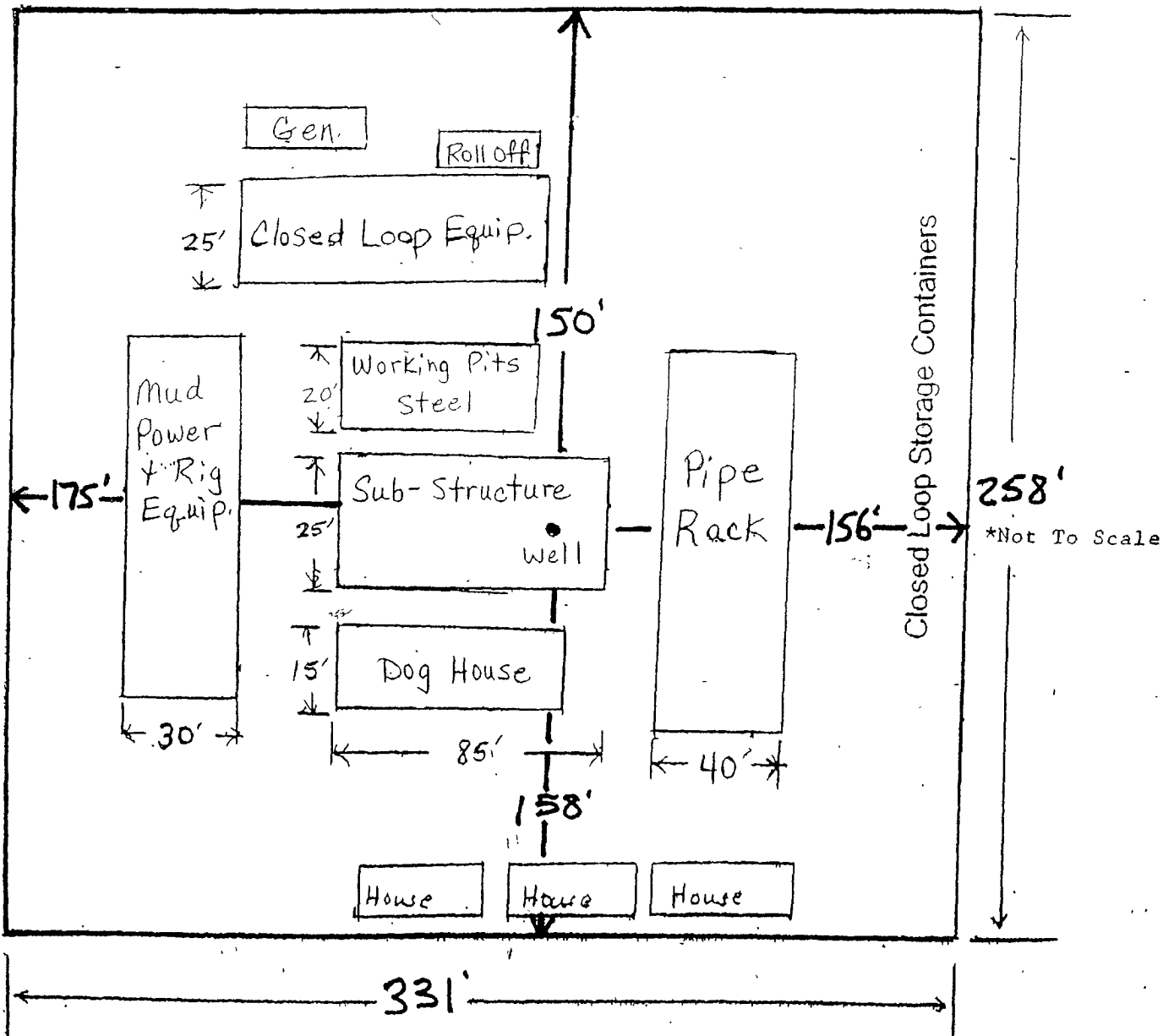




Yates Petroleum Corporation

Location Layout for Permian Basin

Closed Loop Design Plan



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

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SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

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 (Footage, Sec., T., R., M., or Survey Description)

1150' FNL & 430' FWL' Surface Hole Location, Section 13-T24S-R29E
990' FNL and 330' FWL Bottom Hole Location, Section 13-T24S-R29E

5. Lease Serial No

NM-88136

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/o

8. Well Name and No.

Corral Draw AQH Federal #4H

9. API Well No

30-015-35098

10. Field and Pool, or Exploratory Area

Pierce Crossing, Bone Spring, East

11. County or Parish, State

Eddy County, New Mexico

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other <u>move the</u>
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Surface Hole &</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>bottom hole</u>

13 Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Yates Petroleum wishes to change from a directional drill to a horizontal drill by moving the surface location from 1150' FNL & 430' FWL to new footages of 330' FSL & 990' FWL. Change the bottom hole from 990' FNL & 330' FWL to 330' FNL & 660' FWL, section 13, T24S-R29E. A new C-102 is attached along with a revised drilling plan and Multi-point surface use and operations plan.

14 I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Cy Cowan

Title

Land Regulatory Agent

Signature

Date

3/27/09

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

/S/ DAVID D. EVANS

Title FIELD MANAGER

Date SEP 18 2009

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Office

CARLSBAD FIELD OFFICE

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

(Instructions on reverse)

CHanged name From well # 7 to 4H

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

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

Form C-102
Revised October 12, 2005

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37305	Pool Code	Pool Name WC Pierce-Crossing, Bone Spring, East
Property Code 20474	Property Name CORRAL DRAW "AQH" FEDERAL	Well Number 4H
GRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3058'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	24 S	29 E		330	SOUTH	990	WEST	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
D	13	24 S	29 E		330	NORTH	660	WEST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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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>BOTTOM HOLE LOCATION Lat - N32°13'26.20" Long - W103°56'40.18" SPC- N.: 445421.017 E.: 661580.603 (NAD-83)</p> <p>Project Area</p> <p>Producing Area</p> <p>Penetration Point 806' FSL & 956' FWL</p> <p>SURFACE LOCATION Lat.: N 32°12'40.22" Long.: W 103°56'36.41" SPC- N.: 440776.147 E.: 661921.643 (NAD-83)</p>	<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>Cy Cowan</i> 3/27/09 Signature Date</p> <p>Cy Cowan Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>FEBRUARY 26, 2009</p> <p>Date Surveyed</p> <p>Signature <i>GARY L. JONES</i> Professional Surveyor</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
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YATES PETROLEUM CORPORATION
Corral Draw AQH Federal #4H
 330' FSL and 990' FWL (Surface)
 330' FNL and 660' FWL (Bottom Hole)
 Section 13-T24S-R29E
 Eddy County, New Mexico

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

Rustler	330'	Brushy Canyon MKR	6,700'
Top of Salt	450'	Bone Springs (Oil)	6,970'
Bottom of Salt	3,015'	Kick off @ 12°/100'	7,693'
Bell Canyon (Oil)	3,220'	Bone Springs 1 /SD/ (Oil)	8,086' (MD)
Cherry Canyon (Oil)	4,090'	TVD	8,170' (TVD)
Brushy Canyon (Oil)	5,360'	Bone Springs 1 PAY (Oil)	8,433' (MD)
		TD	12,587' (MD)

Well will be drilled vertically to 7,683'. At 7,683' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12,587' MD (8,160' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 806' FSL and 956' FWL Section 4, T24S-R29E. Deepest TVD in the well is 8,160' in the lateral.

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

Water: 118'+
 Oil or Gas: All potential zones

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

Auxiliary Equipment:

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

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Thread</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-500'	500'
11"	8 5/8"	32#	J-55	ST&C	0-100'	100'
11"	8 5/8"	24#	J-55	ST&C	100-2200'	2100'
11"	8 5/8"	32#	J-55	ST&C	2200-3200'	1000'
7 7/8"	5 1/2"	17#	HCP-110	LT&C	0-12587'	12587'

1. Minimum Casing Design Factors: Burst 1.0, Tensile Strength 1.8, Collapse 1.125
2. A 3,000 psi BOP will be nipped up on the 13 3/8" casing and tested to 3000 psi.

B. Cementing Program:

Surface Casing: Cement with 225 sx C Lite (WT 12.6 YLD 1.98). Tail in with 200 sx class "C" w/CaCl₂ (WT 14.8 YLD 1.36) TOC-Surface

Intermediate Casing: 625 sx C Lite (Wt 12.4 YLD 2.18). Tail in with 200 sx class "C" w/CaCl₂ (WT 14.80 YLD 1.31) TOC - surface.

Production Casing: Stage 1--955 sx PecosVILt (WT 13.0 Yld 1.85). TOC - 7500'.
 Stage 2--725 sx LiteCrete (WT 9.90 YLD 2.34). Tail in 100 sx H (Wt 15.6 YLD 1.18). TOC - 4150'.
 Stage 3--555 sx LiteCrete (WT 9.90 YLD 2.34). Tail in 100 sx H (Wt 15.6 YLD 1.18). TOC - surface.

DV tools will be placed at approximately 7500' and 4150' on production casing, production casing will be cemented in three stages.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-500'	Fresh Water	8.6-9.2	29-32	N/C
500'-3200'	Brine Water	10.0-10.20	28-28	N/C
3200'-7683'	Cut Brine	8.9-9.1	28-29	N/C
7683'-12587'	Cut Brine (lateral section)	8.9-9.1	28-32	<15

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

6. EVALUATION PROGRAM:

Samples: 30' samples to 3000; Samples from 3000' to TD
 Logging: Platform HALS,CMR
 Coring: None anticipated.
 DST's: As warranted.

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

Anticipated BHP:

From: 0 TO 500'	Anticipated Max. BHP:	240	PSI
From: 500' TO 3200'	Anticipated Max. BHP:	1700	PSI
From: 3200' TO 8160'	Anticipated Max. BHP:	3865	PSI

Abnormal Pressures Anticipated: None
 Lost Circulation Zones Anticipated: None
 H₂S Zones Anticipated: None
 Maximum Bottom Hole Temperature: 152° F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 40 days to drill the well with completion taking another 40 days.

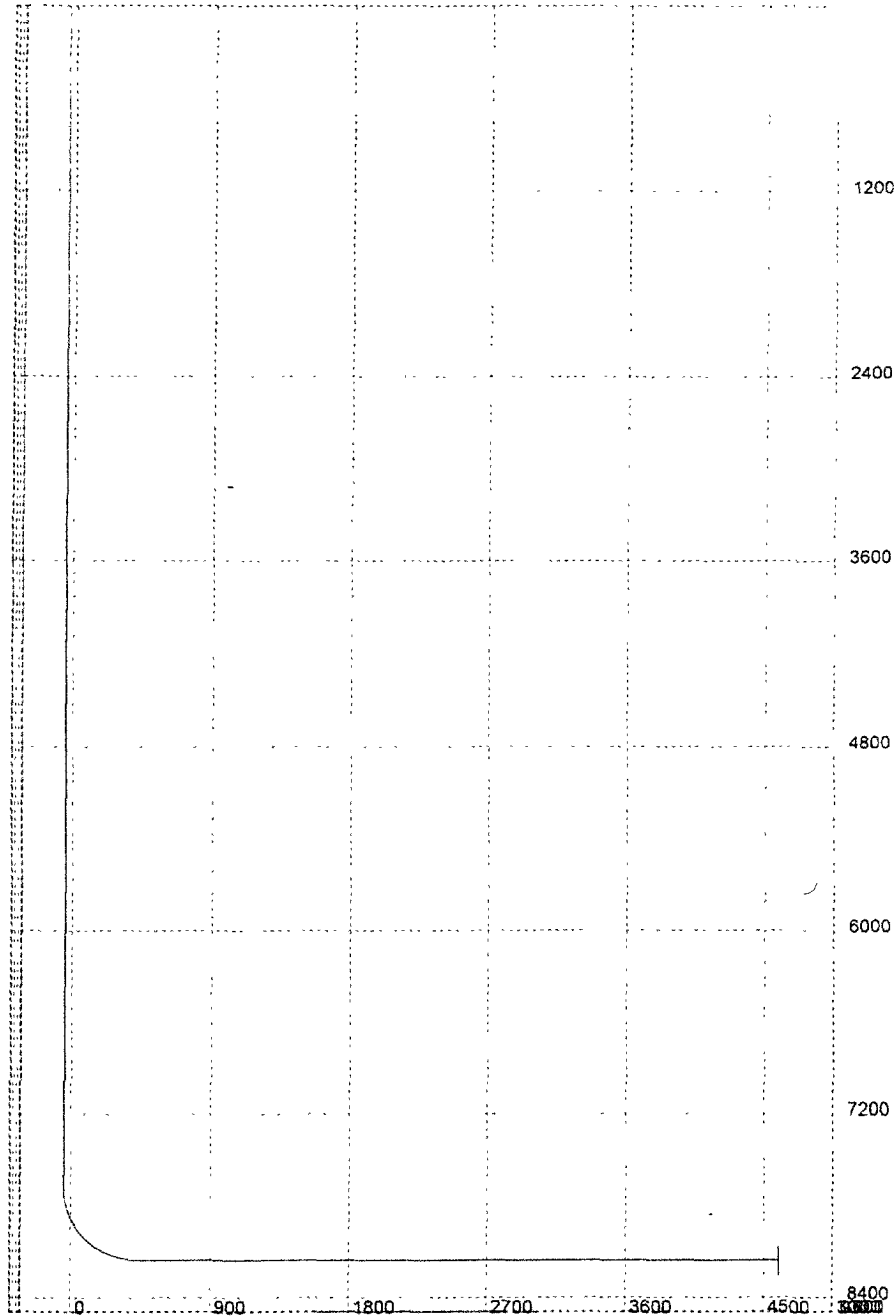
M.D.	Inclination	Azimuth	T.V.D.	N+/S-	E+/W-	D.L.S.	ToolFace	T.F. Ref [HS/GN]	
0	0	0	0	0	0	0			
330	0	0	330	0	0	0			RUSTLER
450	0	0	450	0	0	0			TOP OF SALT
3,015	0	0	3,015	0	0	0			BASE OF SALT
3,220	0	0	3,220	0	0	0			BELL CANYON
4,090	0	0	4,090	0	0	0			CHERRY CANYON
5,360	0	0	5,360	0	0	0			BRUSHY CANYON
6,700	0	0	6,700	0	0	0			BRUSHY CANYON MARKER
6,970	0	0	6,970	0	0	0			BONE SPRINGS
7683	0	0	7683	0	0	12	366	GN	KOP
7700	2.04	355.91	7700	0.3	-0.02	12	0	HS	
7725	5.04	355.91	7724.95	1.84	-0.13	12	0	HS	
7750	8.04	355.91	7749.78	4.68	-0.33	12	0	HS	
7775	11.04	355.91	7774.43	8.81	-0.63	12	360	HS	
7800	14.04	355.91	7798.83	14.23	-1.02	12	0	HS	
7825	17.04	355.91	7822.92	20.91	-1.49	12	0	HS	
7850	20.04	355.91	7846.62	28.84	-2.06	12	0	HS	
7875	23.04	355.91	7869.87	37.99	-2.71	12	360	HS	
7900	26.04	355.91	7892.61	48.35	-3.45	12	360	HS	
7925	29.04	355.91	7914.77	59.87	-4.28	12	0	HS	
7950	32.04	355.91	7936.3	72.54	-5.18	12	360	HS	
7975	35.04	355.91	7957.14	86.32	-6.17	12	0	HS	
8000	38.04	355.91	7977.22	101.16	-7.23	12	0	HS	
8025	41.04	355.91	7996.5	117.04	-8.36	12	360	HS	
8050	44.04	355.91	8014.91	133.9	-9.56	12	0	HS	
8075	47.04	355.91	8032.42	151.69	-10.84	12	0	HS	
8086.5	48.42	355.91	8040.16	160.18	-11.44	12	360	HS	1ST BONE SPRINGS
8100	50.04	355.91	8048.97	170.38	-12.17	12	360	HS	
8125	53.04	355.91	8064.52	189.9	-13.56	12	360	HS	
8150	56.04	355.91	8079.02	210.21	-15.02	12	360	HS	
8175	59.04	355.91	8092.44	231.25	-16.52	12	360	HS	
8200	62.04	355.91	8104.73	252.96	-18.07	12	360	HS	
8225	65.04	355.91	8115.87	275.28	-19.66	12	0	HS	
8250	68.04	355.91	8125.82	298.15	-21.3	12	360	HS	
8275	71.04	355.91	8134.56	321.51	-22.97	12	360	HS	
8300	74.04	355.91	8142.06	345.3	-24.66	12	0	HS	
8325	77.04	355.91	8148.3	369.44	-26.39	12	0	HS	
8350	80.04	355.91	8153.27	393.88	-28.13	12	360	HS	
8375	83.04	355.91	8158.95	418.54	-29.9	12	0	HS	
8400	86.04	355.91	8159.33	443.36	-31.67	12	0	HS	
8425	89.04	355.91	8160.4	468.27	-33.45	12	360	HS	
8433.05	90.01	355.91	8160.46	476.31	-34.02	0			1ST BONE SPRINGS PAY
12587.31	90.01	355.91	8160	4620	-330	0			LATERAL TD

Well will be drilled vertically to 7683'. At 7683' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12,587' MD (8,160' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 806' FSL and 956' FWL. Section 4-24S-29E. Deepest TVD in the well is 8160' in the lateral.

3D^s Directional Drilling Planner - 3D View

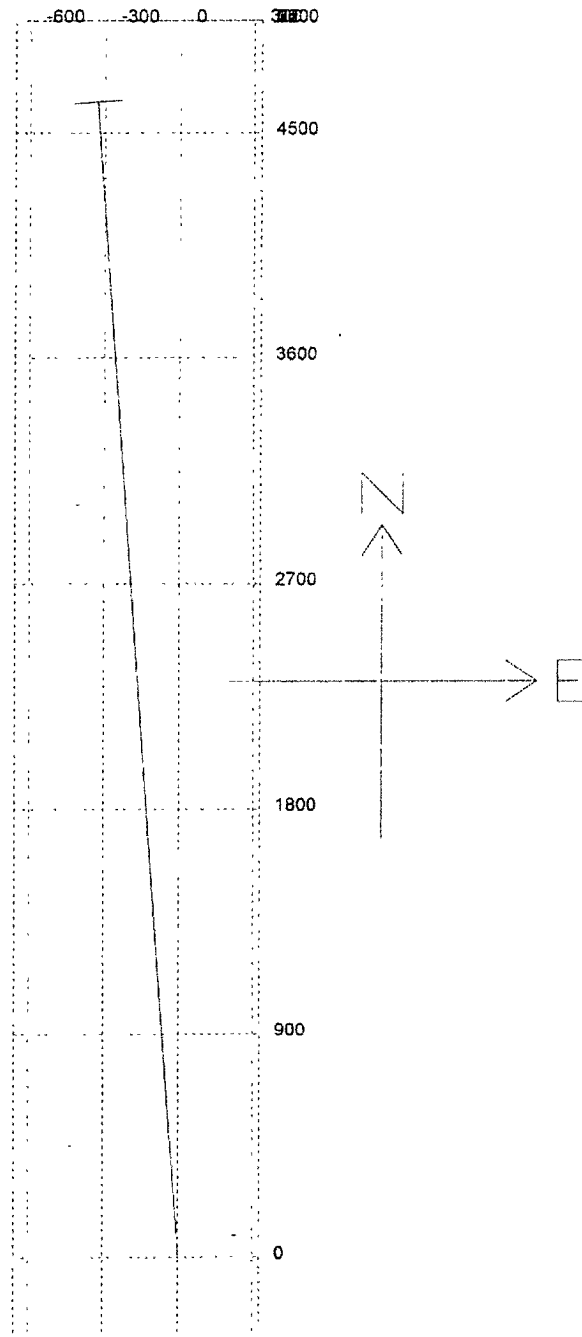
Company: Yates Petroleum Corporation

Well: Corral Draw AQH Federal #4H



3D^s Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation
Well: Corral Draw AQH Federal #4H



MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation
Corral Draw AQH Federal #4H
330' FSL and 990' FWL (Surface)
330' FNL and 660' FWL (Bottom Hole)
Section 13-T24S-R29E
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 36 miles east of Malaga, 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 approximately 4 miles to Rawhide Road (CR-793) Mississippi Potash Mine Shaft #5 is here. Turn south here on CR-793 and go approximately 3.4 miles. Follow County road to the left and go east for approx. .2 of a mile. Turn south on county road and follow it for approx. 5.4 miles. Turn west on lease road and go approx. .5 of a mile to Bass' Poker Lake Unit #215 well location. The new road will start here going west for approx. 1.1 of a mile to the southeast corner of the proposed well location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 1.1 of a mile in length going west to the southeast corner of the drilling pad. The road will lie in a westerly direction.
- 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. One 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 no 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 electric power can be brought in if needed. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will acquire any materials from the closest source at the time of construction of the 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 C shows the relative location and dimensions of the well pad and the location of the drilling equipment, rig orientation and access road approach.
- 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. Form C-144 attached.
- C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION

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

be accomplished as expeditiously as possible.

11. SURFACE OWNERSHIP:

Federal lands administered by the Bureau of Land Management, Carlsbad, NM.

12. OTHER INFORMATION:

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

(Exhibits Attached)

Exhibit A	Topographic Map and Road Plat
Exhibit B	BOP Schematic
Exhibit C	Location Layout
Exhibit C-1	Closed Loop System Diagram
Exhibit D	One Mile Radius

CERTIFICATION
YATES PETROLEUM CORPORATION
Corral Draw AQH Federal #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; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 27th day of March, 2009.

Name Andy Cowan

Position Title Land Regulatory Agent

Address 105 South Fourth Street 88210

E-mail (optional) luckyb@yatespetroleum.com

Telephone 575-748-4335

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

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

E-mail (optional) _____

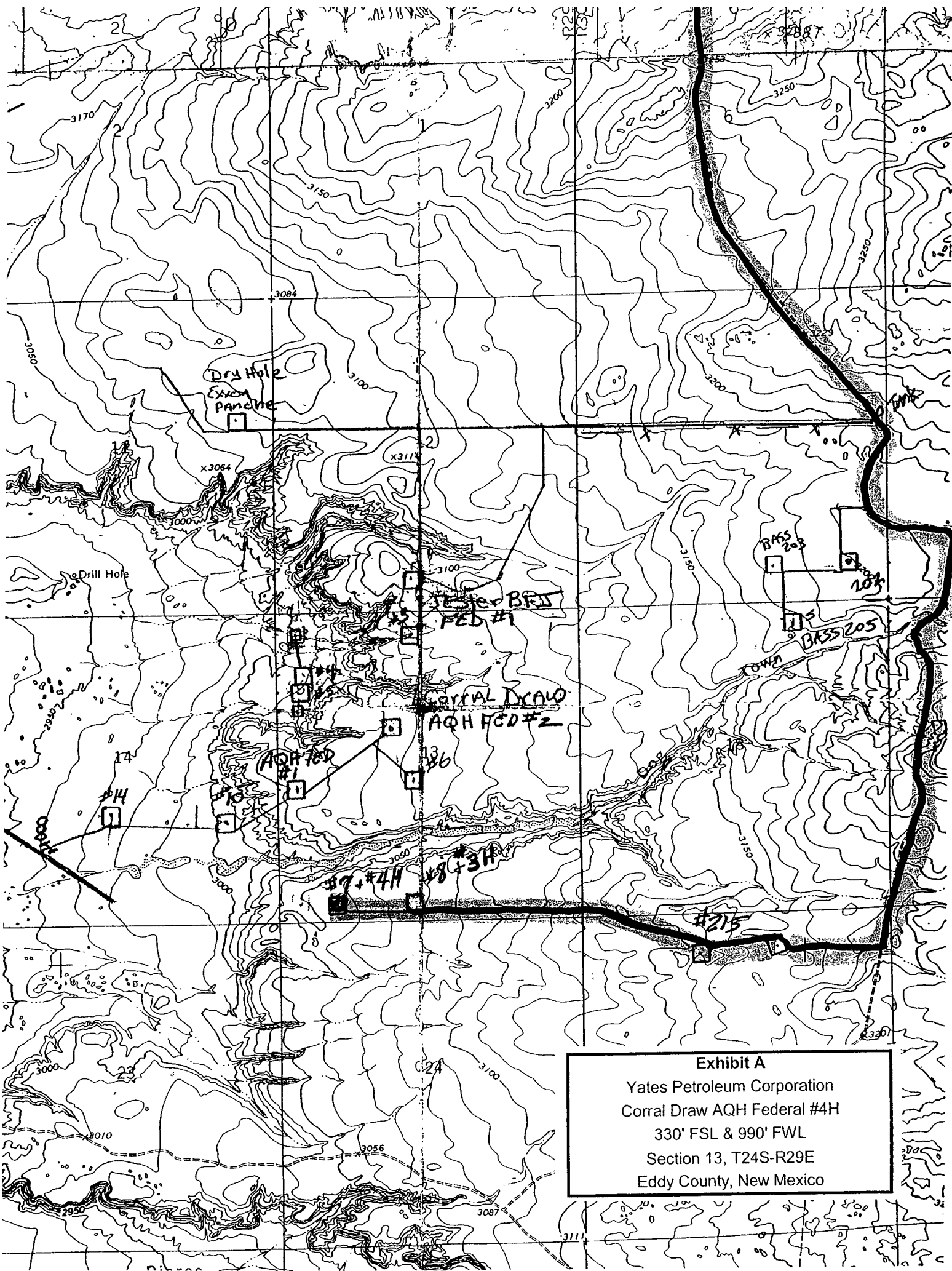
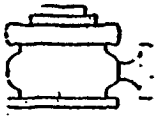


Exhibit A
Yates Petroleum Corporation
Corral Draw AQH Federal #4H
330' FSL & 990' FWL
Section 13, T24S-R29E
Eddy County, New Mexico



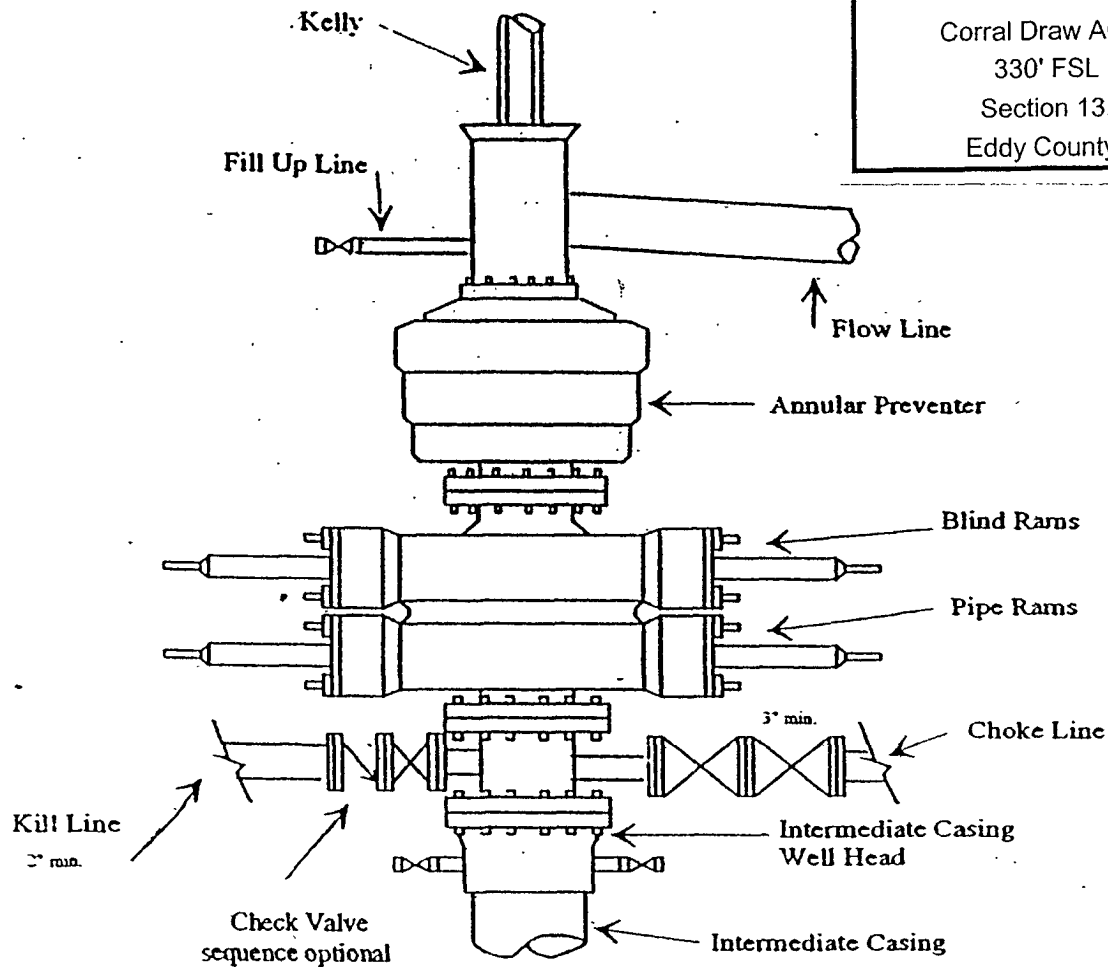
Yates Petroleum Corporation

BOP-3

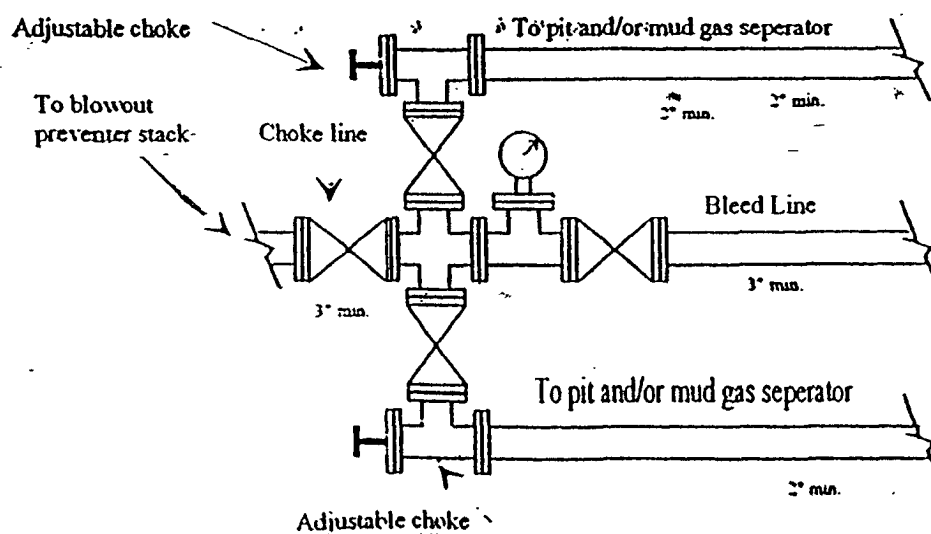
Typical 3,000 psi Pressure System Schematic Annular with Double Ram Preventer

Exhibit B

Yates Petroleum Corporation
Corral Draw AQH Federal #4H
330' FSL & 990' FWL
Section 13, T24S-R29E
Eddy County, New Mexico



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



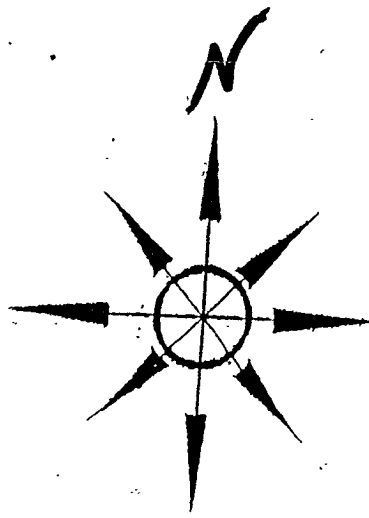


Exhibit C
Yates Petroleum Corporation
Corral Draw AQH Federal #4H
330' FSL & 990' FWL
Section 13, T24S-R29E
Eddy County, New Mexico

Yates Petroleum Corporation
Location Layout for Permian Basin

Closed Loop Design Plan

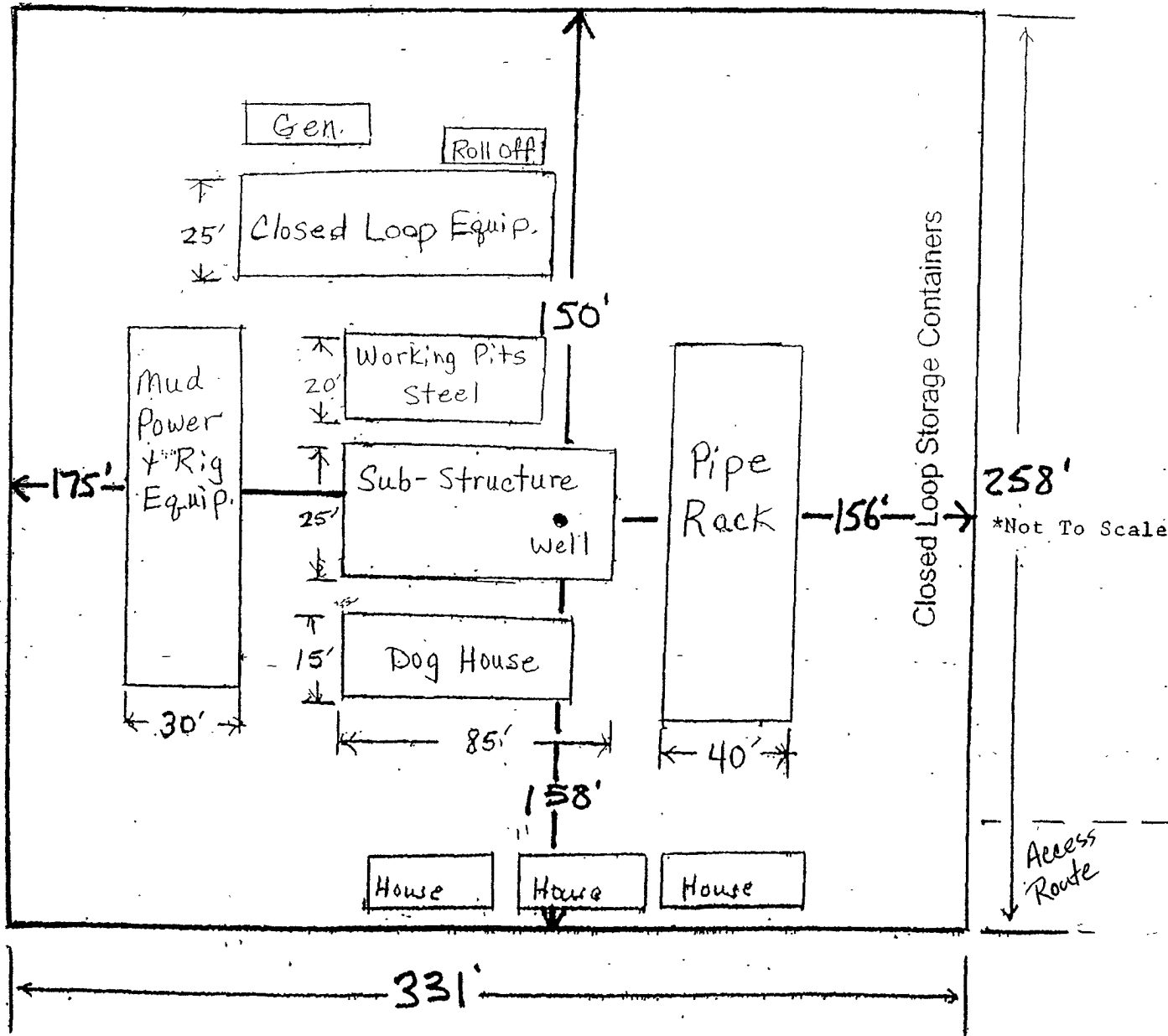
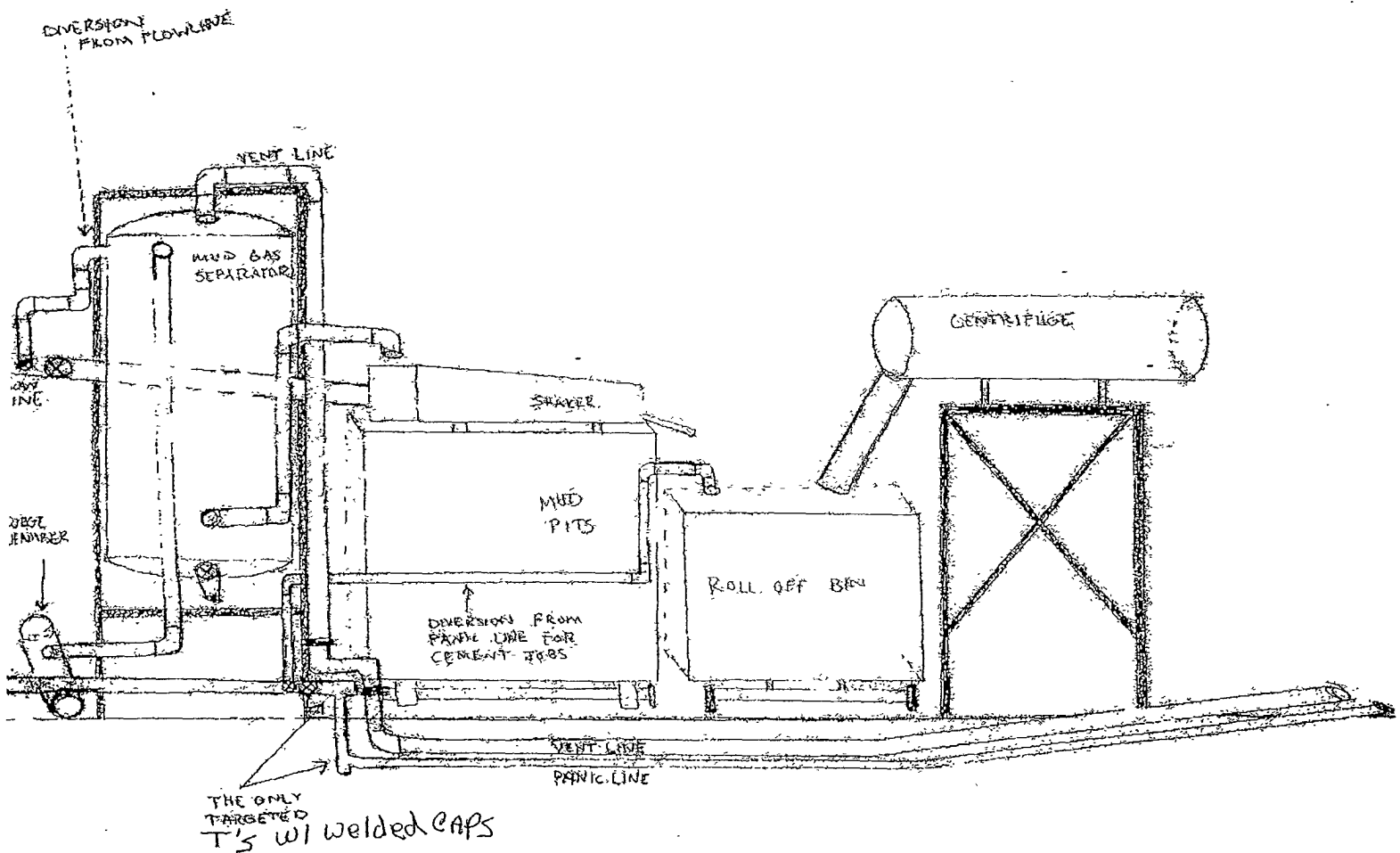


Exhibit C-1
Yates Petroleum Corporation
Corral Draw AQH Federal #4H
330' FSL & 990' FWL
Section 13, T24S-R29E
Eddy County, New Mexico



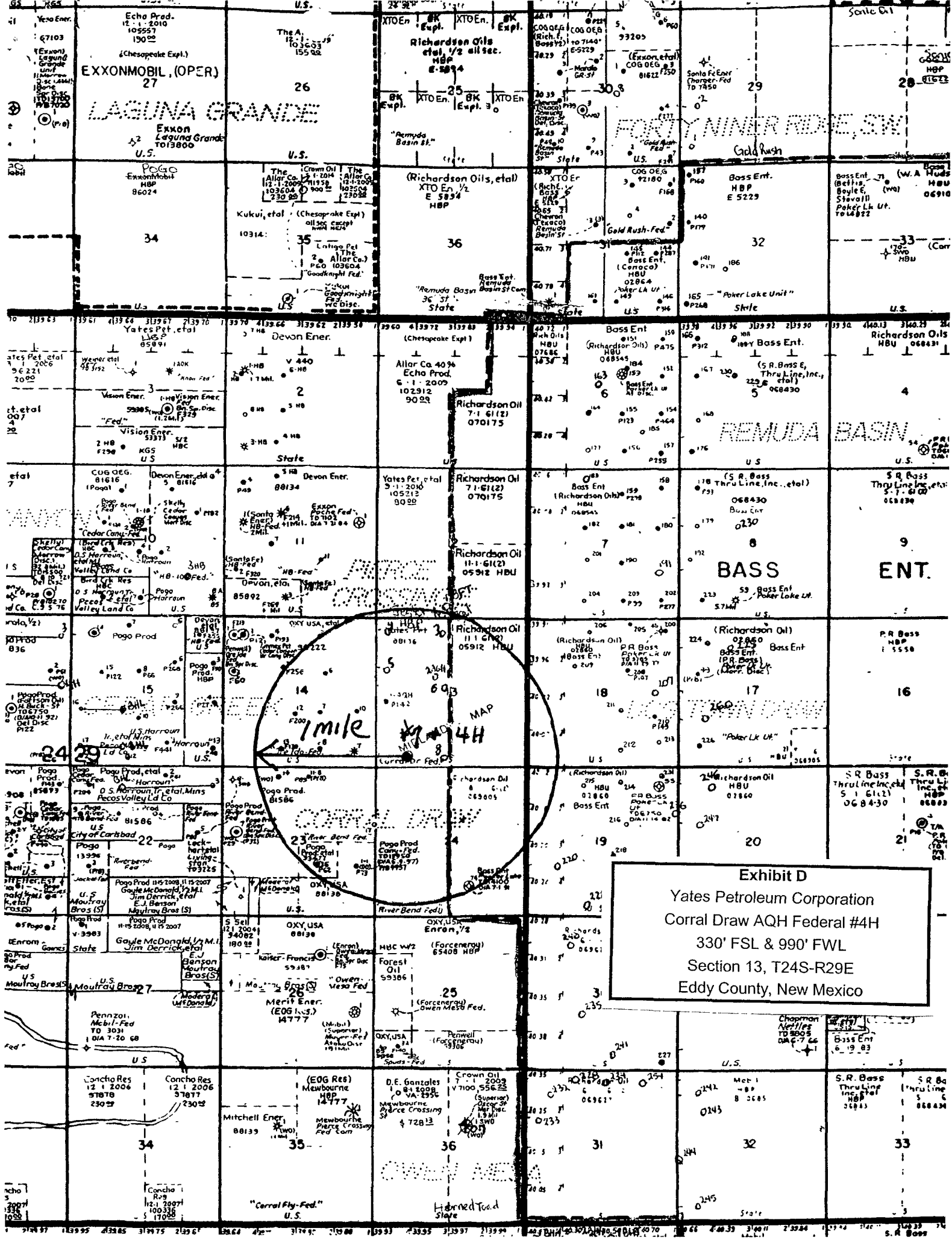


Exhibit D
Yates Petroleum Corporation
Corral Draw AQH Federal #4H
330' FSL & 990' FWL
Section 13, T24S-R29E
Eddy County, New Mexico

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

OCD-ARTESIA

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

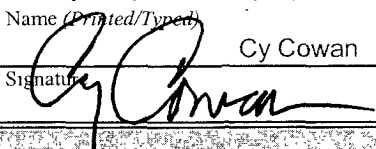
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		Lease Serial No NM-88136
2. Name of Operator Yates Petroleum Corporation 025575		6. If Indian, Allottee or Tribe Name N/A
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) (505) 748-1471	7. If Unit or CA/Agreement, Name and/o N/A
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 330' FSL & 990' FWL, Surface Hole, 13-24S-29E 330' FNL & 660' FWL, Bottom Hole, 13-24S-29E		8. Well Name and No Corral Draw AQH Federal #4H
		9. API Well No. 58 30-015-35096
		10. Field and Pool, or Exploratory Area Pierce Crossing; Bone Spring, East
		11. County or Parish, State Eddy County, NM

12 CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other attach new C-102 to show spacing unit, etc.
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13 Describe Proposed or Completed Operation Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA Required subsequent reports must be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Yates Petroleum Corporation wishes attach the C-102 showing the 160 acres that are dedicated to this well, the Project Area, the Producing Area, and the Penetration Point. The west half of the west half is dedicated.

14 I hereby certify that the foregoing is true and correct	
Name (Printed/Typed) Cy Cowan	Title Land Regulatory Agent
Signature 	Date April 30, 2009-
THIS SPACE FOR FEDERAL OR STATE USE	
Approved by /s/ DAVID D. EVANS	Title FIELD MANAGER
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Date SEP 18 2009
Office CARLSBAD FIELD OFFICE	

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

(Instructions on reverse)

C Hanged From #7 To 4H

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

DISTRICT II
1201 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name Pierce Crossing; Bone Spring, East
Property Code	Property Name CORRAL DRAW "AQH" FEDERAL	Well Number 4H
OGRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3058'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	24 S	29 E		330	SOUTH	990	WEST	EDDY

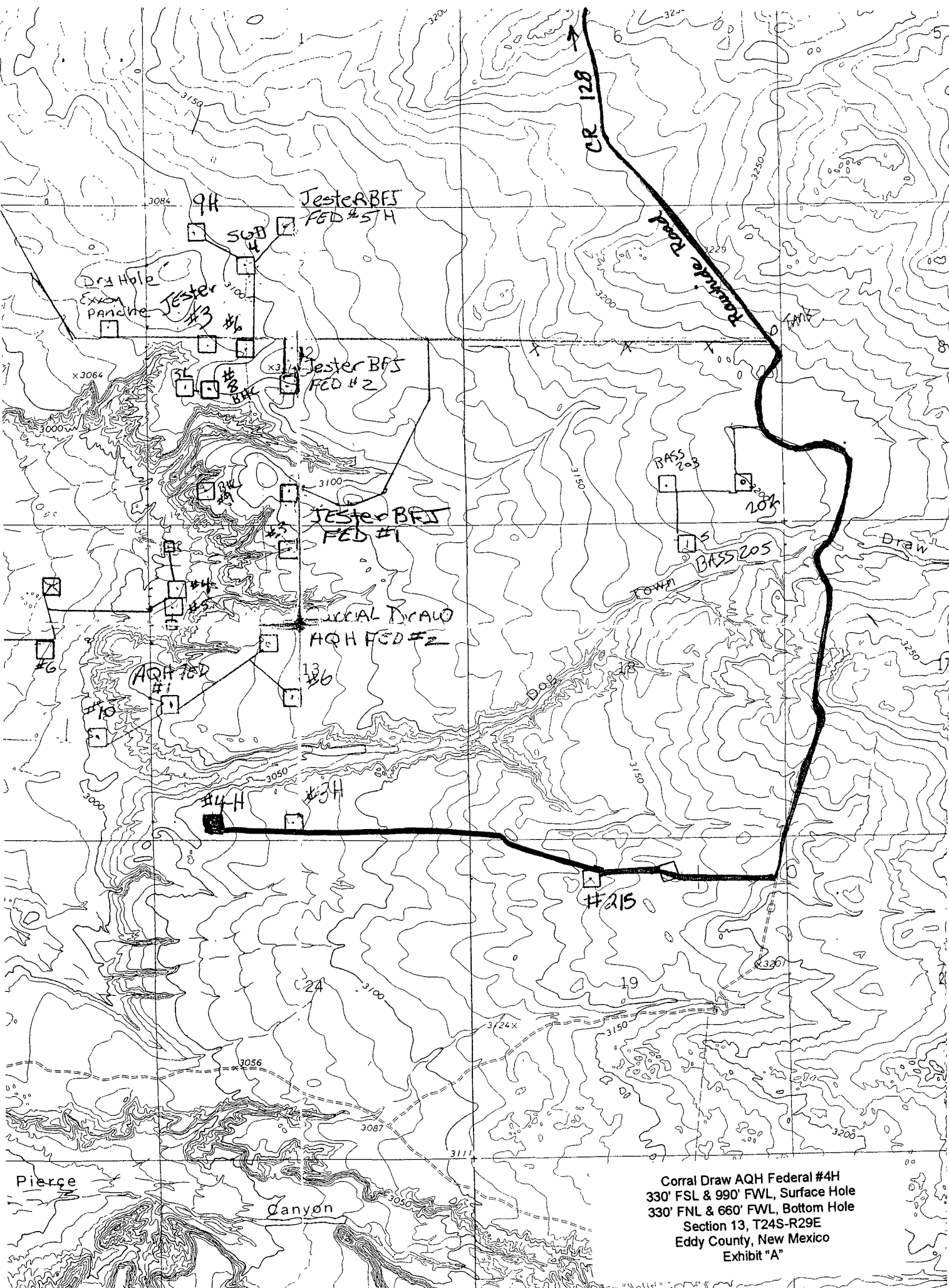
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	13	24 S	29 E		330	NORTH	660	WEST	EDDY

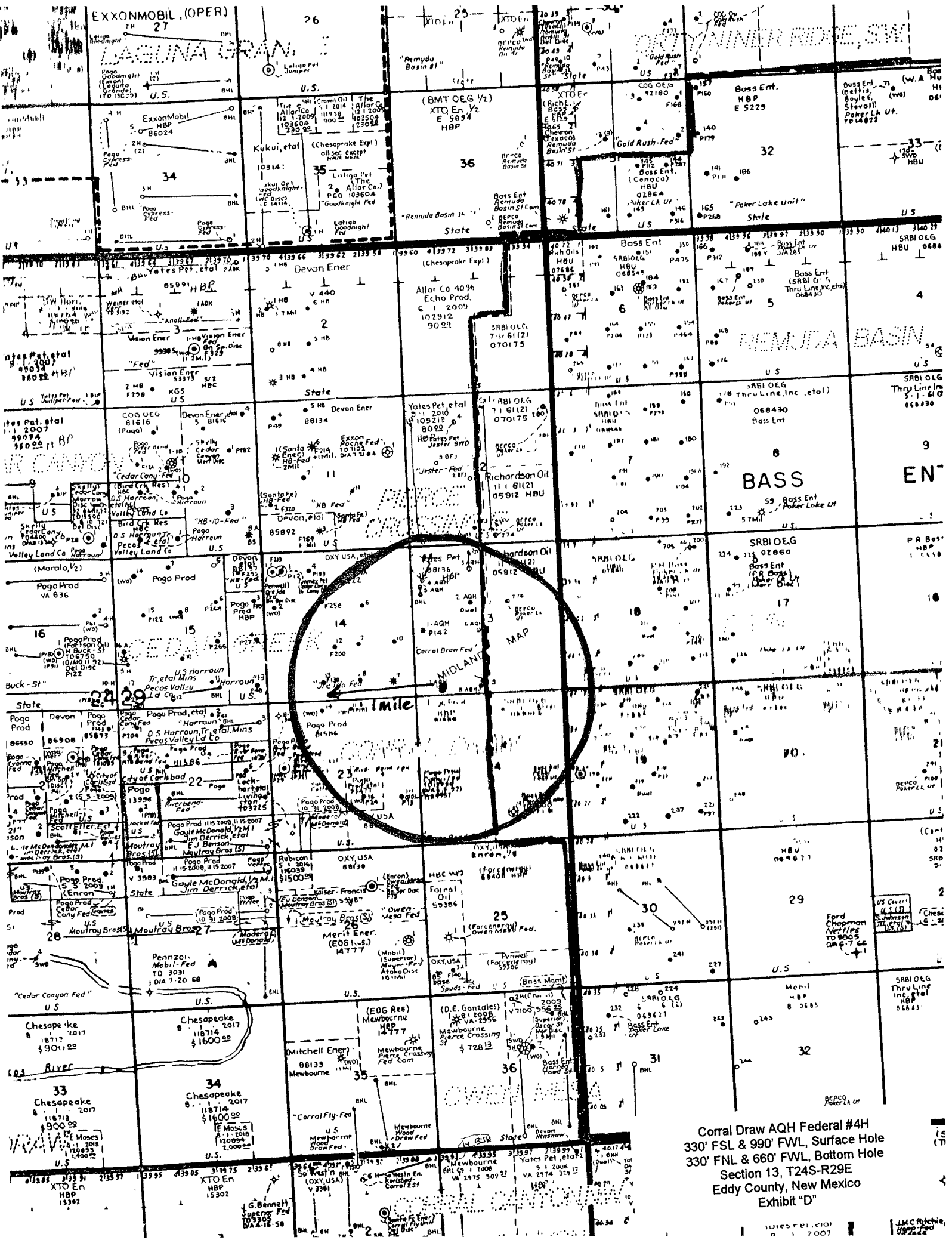
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

<p>BOTTOM HOLE LOCATION Lat - N32°13'26.20" Long - W103°56'40.18" SPC- N: 445421.017 E: 661580.603 (NAD-83)</p> <p>Project Area</p> <p>Producing Area</p> <p>Penetration Point 806' FSL & 956' FWL</p> <p>SURFACE LOCATION Lat.: N 32°12'40.22" Long.: W 103°56'36.41" SPC- N: 440776.147 E: 661921.643 (NAD-83)</p>	<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>Cy Cowan</i> 7-8-09 Signature Date</p> <p>Cy Cowan Land Regulatory Printed Name Agent</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>FEBRUARY 26, 2009</p> <p>Date Surveyed</p> <p><i>GARY L. JONES</i> Signature of Surveyor</p> <p>Professional Surveyor</p> <p>W. No. 21100 W. No. 21100</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
--	--



Corral Draw AQH Federal #4H
330' FSL & 990' FWL, Surface Hole
330' FNL & 660' FWL, Bottom Hole
Section 13, T24S-R29E
Eddy County, New Mexico
Exhibit "A"



CORRAL DRAW AQH FEDERAL #4H
330' FSL & 990' FWL, Surface Hole
330' FNL & 660' FWL, Bottom Hole
Section 13, T24S-R29E
Eddy County, New Mexico
Exhibit "D"

10/15/2007

J.M.C. Ritchie, Inc.

YATES PETROLEUM CORPORATION
Corral Draw AQH Federal #4H
 330' FSL and 990' FWL (Surface)
 330' FNL and 660' FWL (Bottom Hole)
 Section 13-T24S-R29E
 Eddy County, New Mexico

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

Rustler	330'	Brushy Canyon MKR	6,700'
Top of Salt	450'	Bone Springs (Oil)	6,970'
Bottom of Salt	3,015'	Kick off @ 12°/100'	7,693'
Bell Canyon (Oil)	3,220'	Bone Springs 1 /SD/ (Oil)	8,086' (MD)
Cherry Canyon (Oil)	4,090'	TVD	8,170' (TVD)
Brushy Canyon (Oil)	5,360'	Bone Springs 1 PAY (Oil)	8,433' (MD)
		TD	12,587' (MD)

Well will be drilled vertically to 7,683'. At 7,683' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12,587' MD (8,160' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 806' FSL and 956' FWL Section 4, T24S-R29E. Deepest TVD in the well is 8,160' in the lateral.

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

Water: 118'+
 Oil or Gas: All potential zones

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

Auxiliary Equipment:

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

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New) See Corr

Hole Size	Casing Size	Wt./Ft	Grade	Thread	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-500' ⁵²⁵	500'
11"	8 5/8"	32#	J-55	ST&C	0-100'	100'
11"	8 5/8"	24#	J-55	ST&C	100-2200'	2100'
11"	8 5/8"	32#	J-55	ST&C	2200-3200' ³¹⁵⁰	1000'
7 7/8"	5 1/2"	17#	HCP-110	LT&C	0-12587'	12587'

- Minimum Casing Design Factors: Burst 1.0, Tensile Strength 1.8, Collapse 1.125
- A 3,000 psi BOP will be nipped up on the 13 3/8" casing and tested to 3000 psi.

- B. Cementing Program: ~~See COA~~
- Surface Casing: Cement with 225 sx C Lite (WT 12.6 YLD 1.98). Tail in with 200 sx class "C" w/CaCl₂ (WT 14.8 YLD 1.36) TOC-Surface
- Intermediate Casing: 625 sx C Lite (Wt 12.4 YLD 2.18). Tail in with 200 sx class "C" w/CaCl₂ (WT 14.80 YLD 1.31) TOC - surface.
- Production Casing: Stage 1--955 sx PecosVILt (WT 13.0 Yld 1.85). TOC - 7500'.
 Stage 2--725 sx LiteCrete (WT 9.90 YLD 2.34). Tail in 100 sx H (Wt 15.6 YLD 1.18). TOC - 4150'.
 Stage 3--555 sx LiteCrete (WT 9.90 YLD 2.34). Tail in 100 sx H (Wt 15.6 YLD 1.18). TOC - surface.

DV tools will be placed at approximately 7500' and 4150' on production casing, production casing will be cemented in three stages.

5. Mud Program and Auxiliary Equipment: ~~See COA~~

Interval	Type	Weight	Viscosity	Fluid Loss
0-500' 535'	Fresh Water	8.6-9.2	29-32	N/C
500'-3200'	Brine Water	10.0-10.20	28-28	N/C
3200'-7683'	Cut Brine	8.9-9.1	28-29	N/C
7683'-12587'	Cut Brine (lateral section)	8.9-9.1	28-32	<15

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

6. EVALUATION PROGRAM:

Samples: 30' samples to 3000; Samples from 3000' to TD
 Logging: Platform HALS, CMR
 Coring: None anticipated.
 DST's: As warranted.

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

Anticipated BHP:

From: 0 TO 500'	Anticipated Max. BHP:	240	PSI
From: 500' TO 3200'	Anticipated Max. BHP:	1700	PSI
From: 3200' TO 8160'	Anticipated Max. BHP:	3865	PSI

Abnormal Pressures Anticipated: None
 Lost Circulation Zones Anticipated: None
 H₂S Zones Anticipated: None
 Maximum Bottom Hole Temperature: 152° F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 40 days to drill the well with completion taking another 40 days.

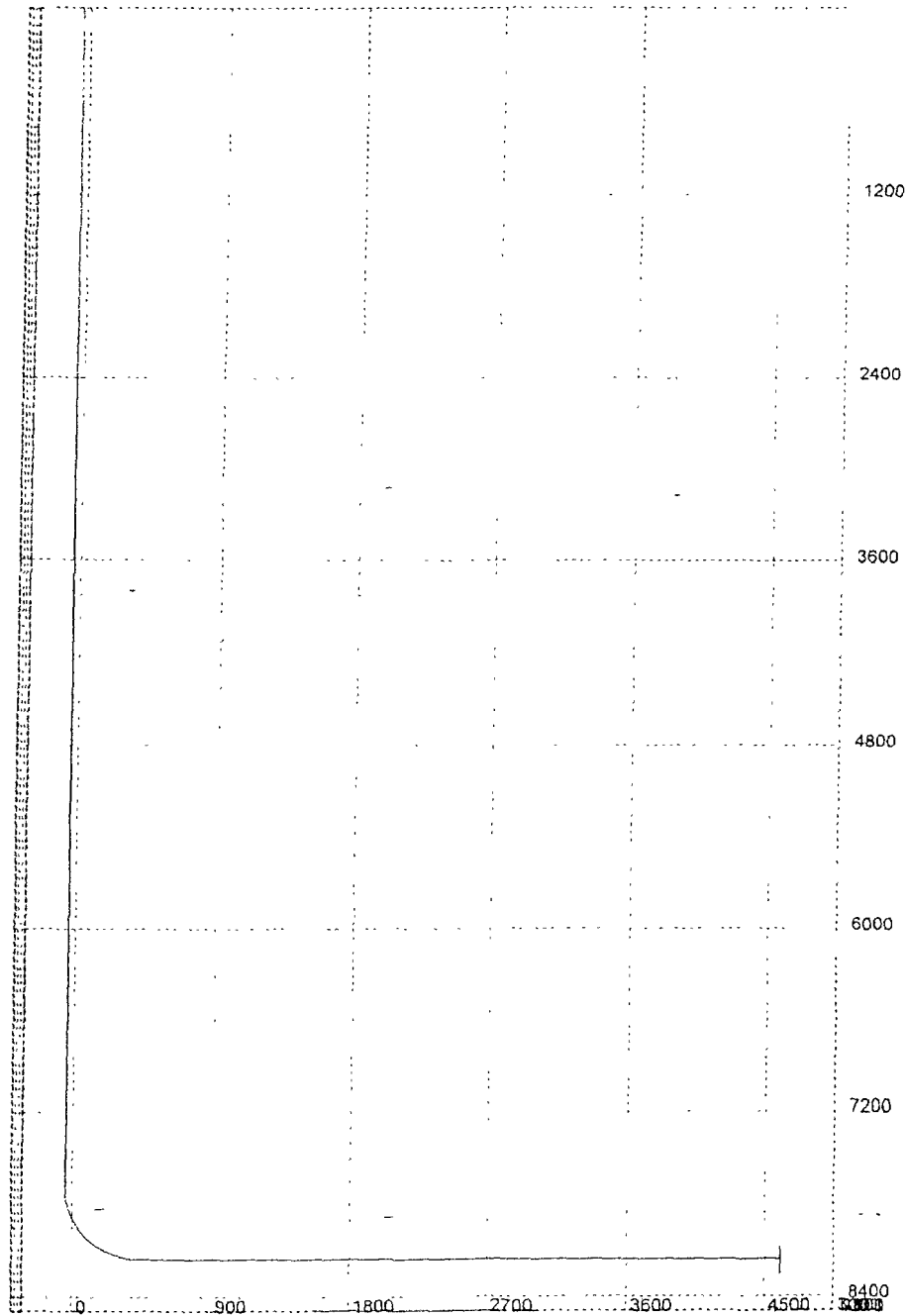
M.D.	Inclination	Azimuth	T.V.D.	N/S	E/W	D.L.S.	ToolFace	T.F. Ref (HS/GN)	
0	0	0	0	0	0	0			
330	0	0	330	0	0	0			RUSTLER
450	0	0	450	0	0	0			TOP OF SALT
3,015	0	0	3,015	0	0	0			BASE OF SALT
3,220	0	0	3,220	0	0	0			BELL CANYON
4,090	0	0	4,090	0	0	0			CHERRY CANYON
5,360	0	0	5,360	0	0	0			BRUSHY CANYON
6,700	0	0	6,700	0	0	0			BRUSHY CANYON MARKER
6,970	0	0	6,970	0	0	0			BONE SPRINGS
7683	0	0	7683	0	0	12	356	GN	KOP
7700	2.04	355.91	7700	0.3	-0.02	12	0	HS	
7725	5.04	355.91	7724.95	1.84	-0.13	12	0	HS	
7750	8.04	355.91	7749.78	4.68	-0.33	12	0	HS	
7775	11.04	355.91	7774.43	8.81	-0.63	12	360	HS	
7800	14.04	355.91	7798.83	14.23	-1.02	12	0	HS	
7825	17.04	355.91	7822.92	20.91	-1.49	12	0	HS	
7850	20.04	355.91	7846.62	28.84	-2.06	12	0	HS	
7875	23.04	355.91	7869.87	37.99	-2.71	12	360	HS	
7900	26.04	355.91	7892.61	48.35	-3.45	12	360	HS	
7925	29.04	355.91	7914.77	59.87	-4.28	12	0	HS	
7950	32.04	355.91	7936.3	72.54	-5.18	12	360	HS	
7975	35.04	355.91	7957.14	88.32	-6.17	12	0	HS	
8000	38.04	355.91	7977.22	101.16	-7.23	12	0	HS	
8025	41.04	355.91	7996.5	117.04	-8.36	12	360	HS	
8050	44.04	355.91	8014.91	133.9	-9.56	12	0	HS	
8075	47.04	355.91	8032.42	151.69	-10.84	12	0	HS	
8086.5	48.42	355.91	8040.18	160.18	-11.44	12	360	HS	1ST BONE SPRINGS
8100	50.04	355.91	8048.97	170.38	-12.17	12	360	HS	
8125	53.04	355.91	8064.52	189.9	-13.56	12	360	HS	
8150	56.04	355.91	8079.02	210.21	-15.02	12	360	HS	
8175	59.04	355.91	8092.44	231.25	-16.52	12	360	HS	
8200	62.04	355.91	8104.73	252.96	-18.07	12	360	HS	
8225	65.04	355.91	8115.87	275.28	-19.66	12	0	HS	
8250	68.04	355.91	8125.82	298.15	-21.3	12	360	HS	
8275	71.04	355.91	8134.56	321.51	-22.97	12	360	HS	
8300	74.04	355.91	8142.06	345.3	-24.66	12	0	HS	
8325	77.04	355.91	8148.3	369.44	-26.39	12	0	HS	
8350	80.04	355.91	8153.27	393.88	-28.13	12	360	HS	
8375	83.04	355.91	8156.95	418.54	-29.9	12	0	HS	
8400	86.04	355.91	8159.33	443.36	-31.67	12	0	HS	
8425	89.04	355.91	8160.4	468.27	-33.45	12	360	HS	
8433.05	90.01	355.91	8160.46	476.31	-34.02	0			1ST BONE SPRINGS PAY
12587.31	90.01	355.91	8160	4820	-330	0			LATERAL TD

Well will be drilled vertically to 7683'. At 7683' well will be kicked off and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 12,587' MD (8,160' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 806' FSL and 956' FWL. Section #24S-29E. Deepest TVD in the well is 8160' in the lateral.

3C

ectional Drilling Planner - 3D \

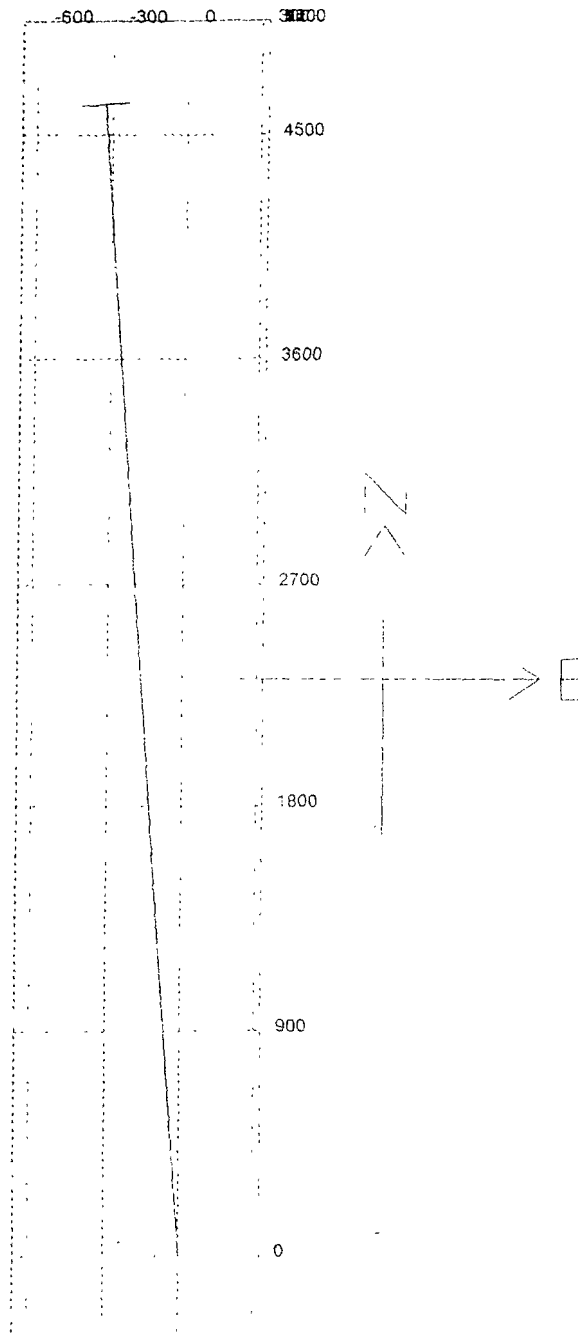
Company: Yates Petroleum Corporation
Well: Corral Draw AQH Federal #4H

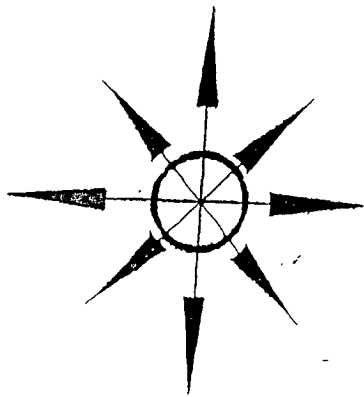


3C

Sectional Drilling Planner - 3D \

Company: Yates Petroleum Corporation
Well: Corral Draw AQH Federal #4H



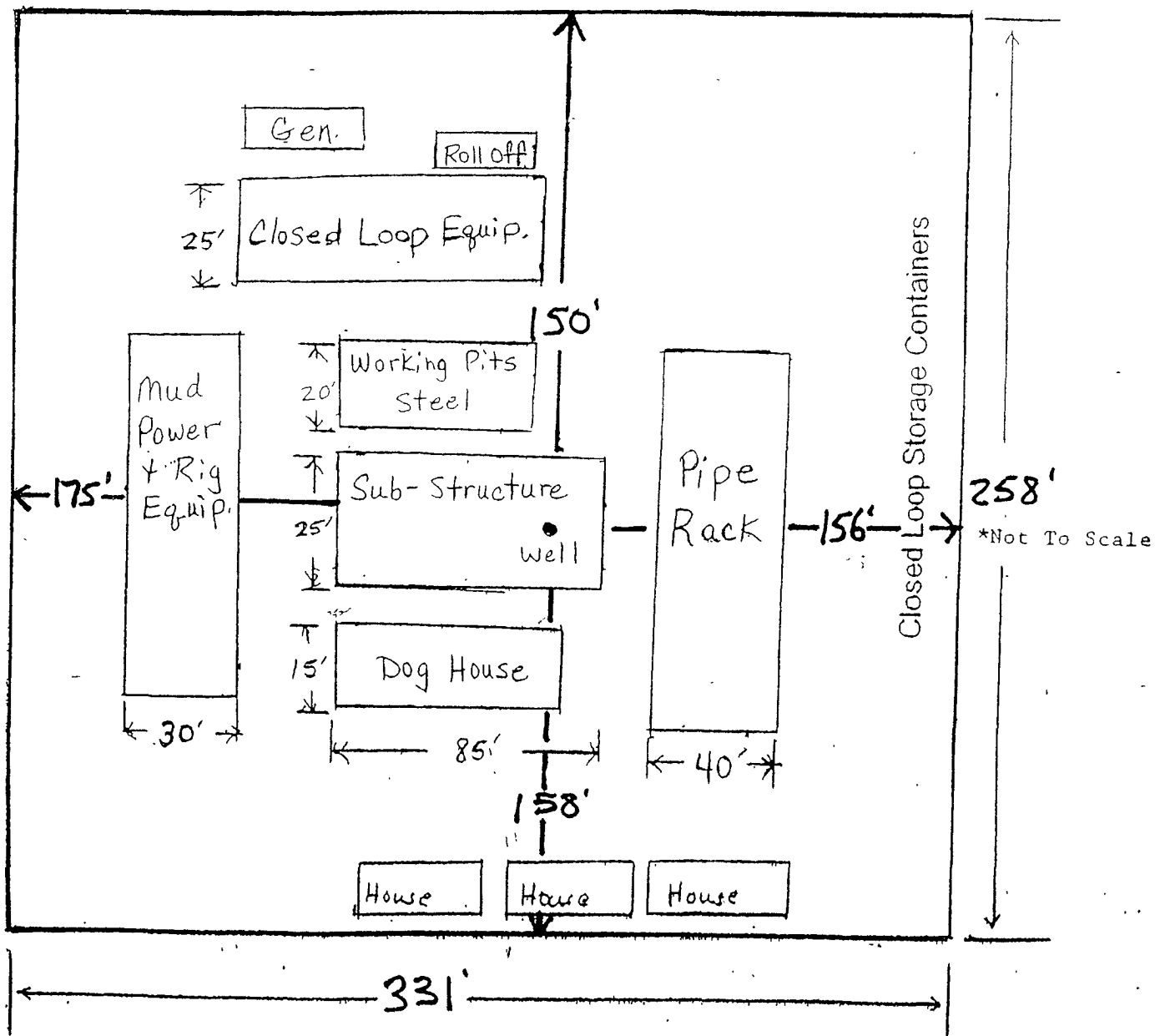


Yates Petroleum Corporation

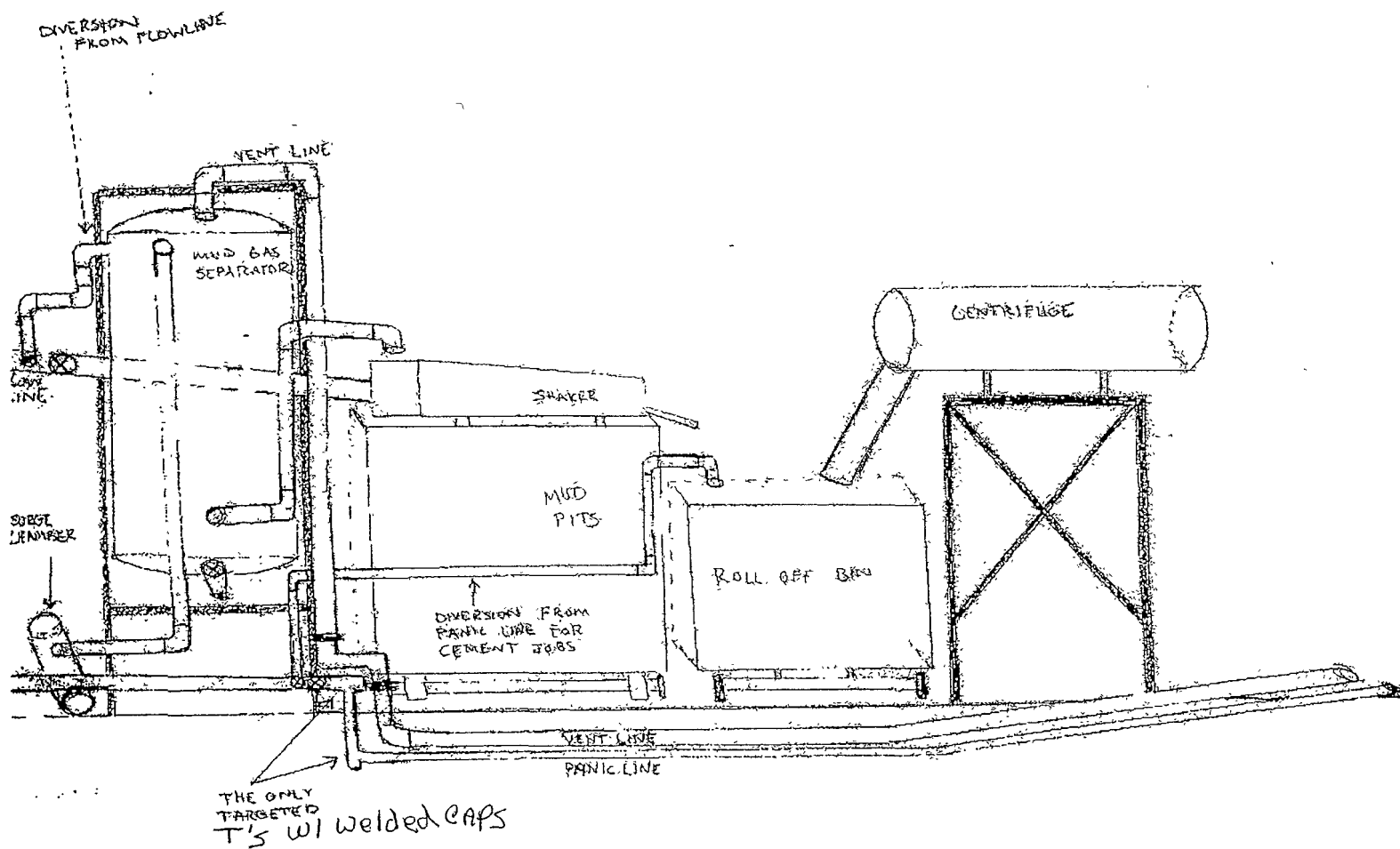
Location Layout for Permian Basin

Closed Loop Design Plan

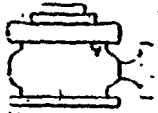
Corral Draw AQH Federal #4H
330' FSL & 990' FWL, Surface Hole
330' FNL & 660' FWL, Bottom Hole
Section 13, T24S-R29E
Eddy County, New Mexico
Exhibit "C"



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



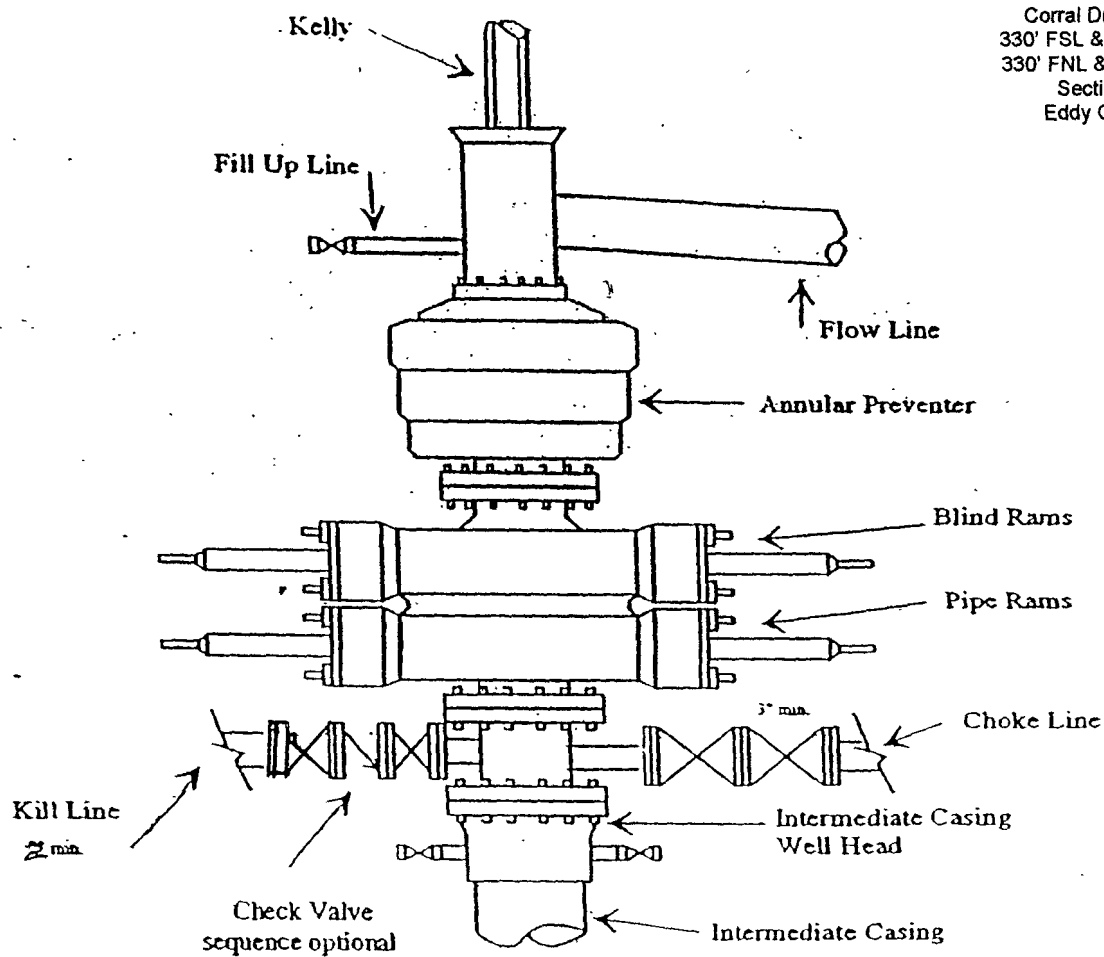
Corral Draw AQH Federal #4H
330' FSL & 990' FWL, Surface Hole
330' FNL & 660' FWL, Bottom Hole
Section 13, T24S-R29E
Eddy County, New Mexico
Exhibit "C-1"



Yates Petroleum Corporation

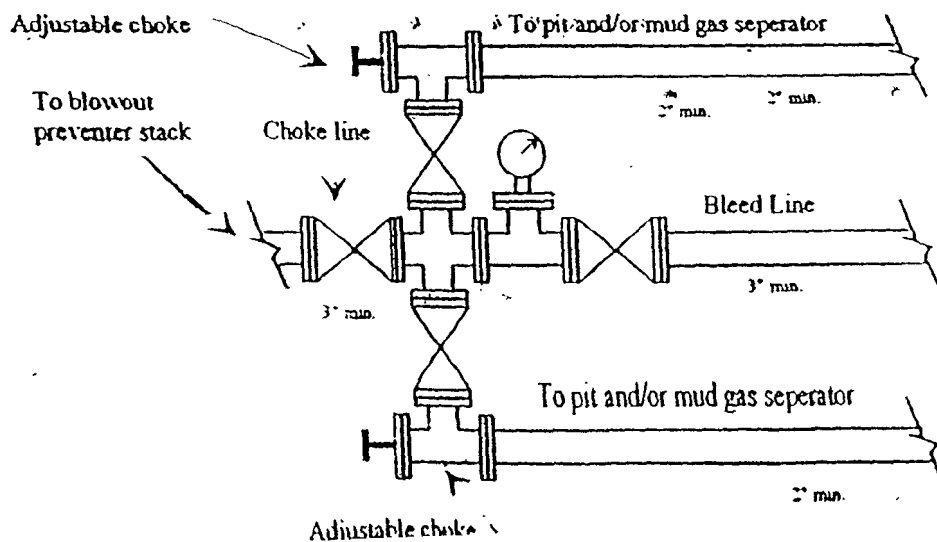
BOP-3

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



Corral Draw AQH Federal #4H
330' FSL & 990' FWL, Surface Hole
330' FNL & 660' FWL, Bottom Hole
Section 13, T24S-R29E
Eddy County, New Mexico
Exhibit "B"

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



MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation
Corral Draw AQH Federal #4H
330' FSL and 990' FWL (Surface)
330' FNL and 660' FWL (Bottom Hole)
Section 13-T24S-R29E
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 36 miles east of Malaga, 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 approximately 4 miles to Rawhide Road (CR-793) Mississippi Potash Mine Shaft #5 is here. Turn south here on CR-793 and go approximately 3.4 miles. Follow County road to the left and go east for approx. .2 of a mile. Turn south on county road and follow it for approx. 5.4 miles. Turn west on lease road and go approx. .5 of a mile to Bass' Poker Lake Unit #215 well location. The new road will start here going west for approx. 1.1 of a mile to the southeast corner of the proposed well location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 1.1 of a mile in length going west to the southeast corner of the drilling pad. The road will lie in a westerly direction.
- 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. One 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 no 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 electric power can be brought in if needed. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will acquire any materials from the closest source at the time of construction of the 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 sytem 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 C shows the relative location and dimensions of the well pad and the location of the drilling equipment, rig orientation and access road approach.
- B. The closed loop sytem 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. Form C-144 attached.
- C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION

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

Corral Draw AQH Federal #4H
Page Three

accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP: Federal surface, Administered by the Bureau of Land Management, Carlsbad, New Mexico.

12. OTHER INFORMATION:

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

(Exhibits Attached)

Exhibit A	Topographic Map and Road Plat
Exhibit B	BOP Schematic
Exhibit C	Location Layout
Exhibit C-1	Closed Loop System Diagram
Exhibit D	One Mile Radius

CERTIFICATION
YATES PETROLEUM CORPORATION
Corral Draw AQH Federal #4H

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

Executed this 8th day of July, 2009

Printed Name Cy Cowan

Signature 

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

E-mail (optional) cy@yatespetroleum.com

Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

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

E-mail (optional) _____

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corporation
LEASE NO.:	NM88136
WELL NAME & NO.:	Corral Draw AQH Federal # 4H
SURFACE HOLE FOOTAGE:	330' FSL & 990' FWL
BOTTOM HOLE FOOTAGE:	330' FNL & 660' FWL
LOCATION:	Section 13, T. 24 S., R 29 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
 - Aplomado Falcon
 - Cave/Karst
 - VRM
 - Cultural
- ☒ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Medium cave/karst
 - Logging requirements
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☒ **Reseeding Procedure/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Cave/Karst

Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad. All sides will be bermed.

Tank Battery Liners and Berms:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

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

Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

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

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Visual Resources Management

To minimize the visual impacts the following COA(s) will apply:

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color Shale Green, Munsell Soil Color No. 5Y 4/2"

Low-profile tanks not greater than eight feet high shall be used to minimize visual impacts to the natural features of the landscape.

The proposed construction will be limited to the approved pad size.

Any existing tanks will be replaced with a low profile tank and painted the same color as the proposed tanks.

Upon completion of the well and installation of the production facilities (if the well is a producer) the pad will be reclaimed back to a size necessary for production operations only. The edges will be recontoured and the extra caliche and pad material will be hauled off-site. The BLM may require additional reclamation depending upon vegetation recovery.

The reclaimed area will be recontoured and reseeded according to vegetation and soil type.



EXHIBIT NO. 1

Date of Issue:

7/21/2009

Bureau of Land Management, Carlsbad Field Office
620 E. Greene Street Carlsbad, NM 88220

Cultural and Archaeological Resources

BLM Report No.

06-NM-523-
848

NOTICE OF STIPULATIONS

Historic properties in the vicinity of this project are protected by federal law. In order to ensure that they are not damaged or destroyed by construction activities, the project proponent and construction supervisors shall ensure that the following stipulations are implemented.

Project Name:	Corral Draw AQH Federal No. 4H Location
Required	1). A 3-day preconstruction call-in notification. Contact BLM Inspection and Enforcement at
Required	2. Professional archaeological monitoring. Contact your project archaeologist, or BLM's Cultural Resources Section at (575) 234- 5917, 5967, or 5986, for assistance.
A. <input checked="" type="checkbox"/>	These stipulations must be given to your monitor at least 5 days prior to the start of construction.
B. <input checked="" type="checkbox"/>	No construction, including vegetation removal or other site prep may begin prior to the arrival of the monitor.
	3. Cultural site barrier fencing. (Your monitor will assist you).
A. <input type="checkbox"/>	A temporary site protection barrier(s) shall be erected prior to all ground-disturbing activities. The minimum barrier(s) shall consist of upright wooden survey lath spaced no more than ten (10) feet apart and marked with blue ribbon flagging or blue paint. There shall be no construction activities or vehicular traffic past the barrier(s) at any time.
B. <input type="checkbox"/>	A permanent, 4-strand barbed wire fence strung on standard "T-posts" shall be erected prior to all ground-disturbing activities. No construction activities or vehicle traffic are allowed past the fence.
Required	4. The archaeological monitor shall:
A. <input type="checkbox"/>	Ensure that all site protection barriers are located as indicated on the attached map(s).
B. <input checked="" type="checkbox"/>	Ensure that all activities remains outside of LA 115520 including all motorized vehicles, foot traffic, equipment, etc.
C. <input type="checkbox"/>	Ensure that all reroutes are adhered to avoid cultural site no.(s) LA
D. <input type="checkbox"/>	Ensure the proposed is/are located as shown on the attached map(s).
E. <input checked="" type="checkbox"/>	Submit a brief monitoring report within 30 days of completion of monitoring.
	If subsurface cultural resources are encountered during the monitoring, all activities shall cease and a BLM-CFO archaeologist shall be notified immediately.
Other:	

Site Protection and Employee Education: It is the responsibility of the project proponent and his construction supervisor to inform all employees and subcontractors that cultural and archaeological sites are to be avoided by all personnel, vehicles, and equipment; and that it is illegal to collect, damage, or disturb cultural resources on Public Lands.

For assistance, contact
BLM Cultural Resources:

Bruce Boeke (575) 234-5917

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 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Although this is a closed loop system and no reserve pits will be utilized at this time, the v-door will be on the east side of the location.

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

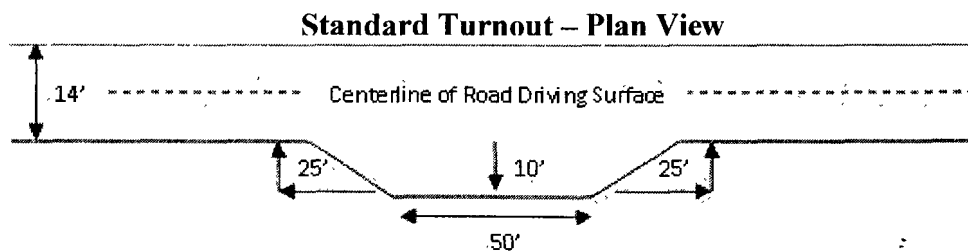
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

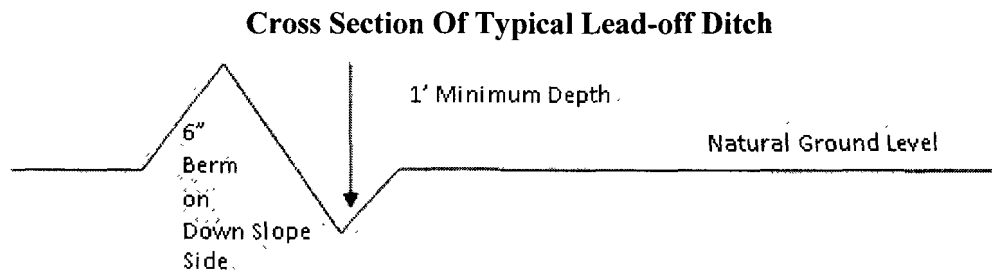
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

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

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



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

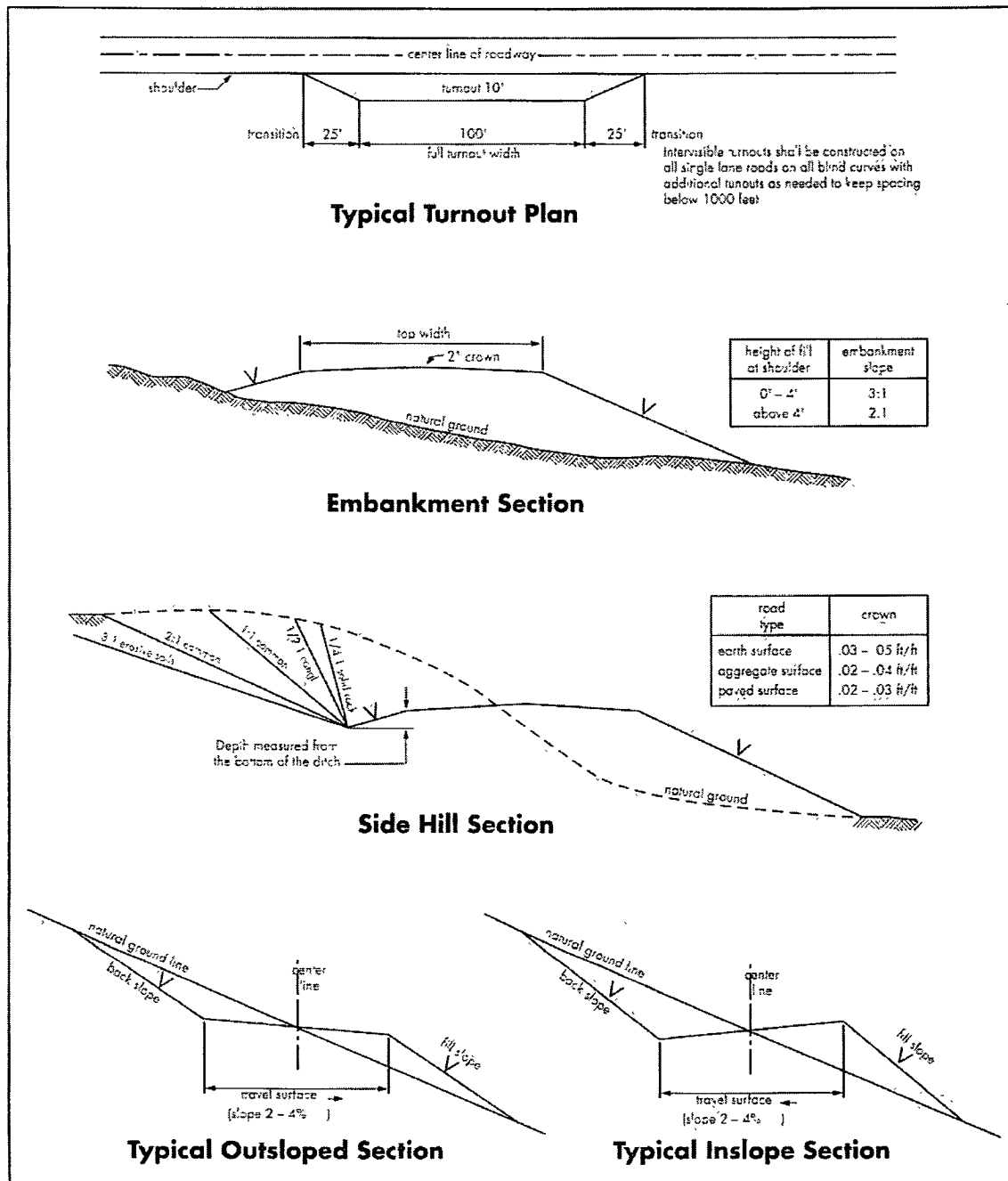
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



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 the area, 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 is 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. The Rustler top and top and bottom of Salt is 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 and Bone Spring formations.

1. The 13-3/8 inch surface casing shall be set **at approximately 535 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 must be set 25' above the top of the salt. Freshwater mud is to be used to the setting depth.**
 - 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 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: **The intermediate should be set in the Fletcher Anhydrite or Lamar Limestone at approximately 3150 feet.**
 - ☒ 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.**

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 first DV tool, cement shall:
 - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with third stage cement job.
 - c. Third stage above second DV tool, cement shall:
 - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. 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.
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.

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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

VRM Facility Requirement

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

VIII. INTERIM RECLAMATION & RESEEDING PROCEDURE

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.

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

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

B. RESEEDING PROCEDURE

Once the well is drilled, all completion procedures are accomplished, and all trash removed, reseed the entire location and all surrounding disturbed areas as follows:

Seed Mixture 2, for Sandy 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>
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sand love grass (<i>Eragrostis trichodes</i>)	1.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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