ATS-09-582 KM

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Form 3160-3
(August 2007)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No: **NM-82904**

6. If Indian, Allottee or Tribe Name: **N/A**

7. If Unit or CA Agreement, Name and No: **N/A**

1a Type of Work: [X] DRILL [ ] REENTER

1b Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

8 Lease Name and Well No: **Adeline "ALN" Federal #18H**

2 Name of Operator: **Yates Petroleum Corporation 025575**

9. API Well No: 30-015-37408

3a. Address: **105 South Fourth Street, Artesia, NM 88210**

3b. Phone No *(include area code)*: **505-748-1471**

10 Field and Pool, or Exploratory: **Sand Dunes Delaware South**

4. Location of well *(Report location clearly and In accordance with any State requirements.*)*
At surface: **660' FSL & 1650' FWL, Ut. N, 6-24S-31E**
At proposed prod zone: **330' FNL & 1650' FWL, Ut. C, 6-24S-31E**

11 Sec , T , R., M , or Blk And Survey or Area: **Section 6-T24E-R31E**

14 Distance in miles and direction from the nearest town or post office*: **The well is about 41 miles southeast of Carlsbad, NM.**

12. County or Parish: **Eddy**

13 State: **NM**

15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg. unit line, if any)	16 No. of acres in lease	17 Spacing Unit dedicated to this well
330'	688.29	E2W2 of Section 6-24S-~~30~~ 31E KH
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19. Proposed Depth	20 BLM/ BIA Bond No on file
	7990' VD; 12075'MD	NATIONWIDE BOND #NMB000434
21. Elevations (Show whether DF, KDB, RT, GL, etc)	22. Aproximate date work will start*	23 Estimated duration
3452' GL	ASAP	

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	Printed Name	Date
Cy Cowan	for Cy Cowan	8/19/2009

Title: **Land Regulatory Agent**

Approved By *(Signature)*	Name *(Printed/ Typed)*	Date
/s/ Hanson R. Stewart		NOV 16 2009

Title: **STATE DIRECTOR**

Office: **NM STATE 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 cc 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 Unitec States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* *(Instructions on page 2)*

Carlsbad Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-37408	53818	Sand Dunes Delaware South ✓

Property Code	Property Name	Well Number
11974	ADELINE "ALN" FEDERAL	18H

OGRID No.	Operator Name	Elevation
25575	YATES PETROLEUM CORP.	3452'

Surface Location

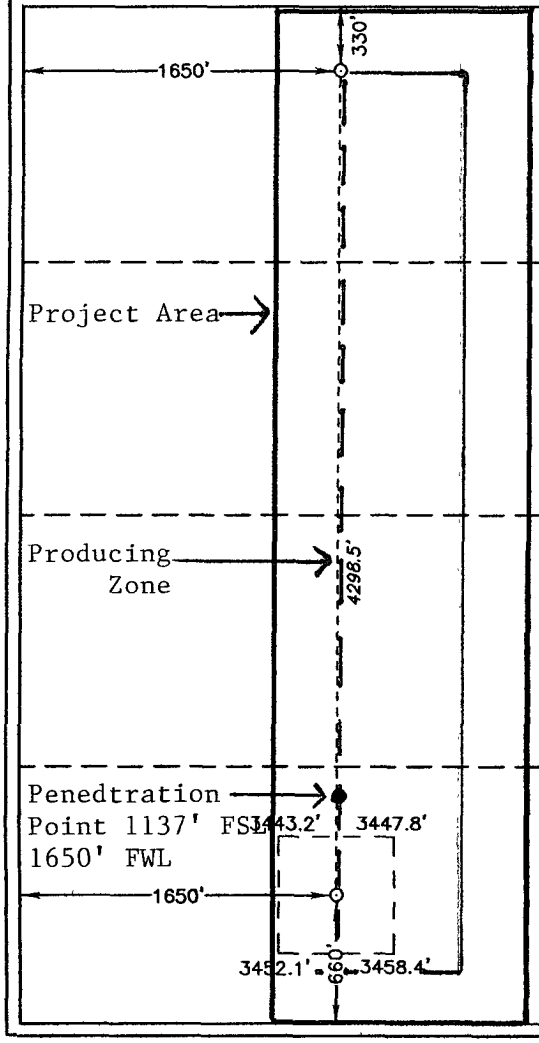
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	6	24 S	31 E		660	SOUTH	1650	WEST	EDDY

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
C	6	24 S	31 E		330	NORTH	1650	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



BOTTOM HOLE LOCATION
Lat – N 32°15'09.99"
Long – W 103°49'13.02"
NMSPCE– N 456072.018
E 699939.626
(NAD–83)

SURFACE LOCATION
Lat – N 32°14'27.28"
Long – W 103°49'13.46"
NMSPCE– N 451773.559
E 699956.102
(NAD–83)

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.

8/19/09
Signature Date

Clifton May for Cy Cowan
Printed Name

SURVEYOR CERTIFICATION

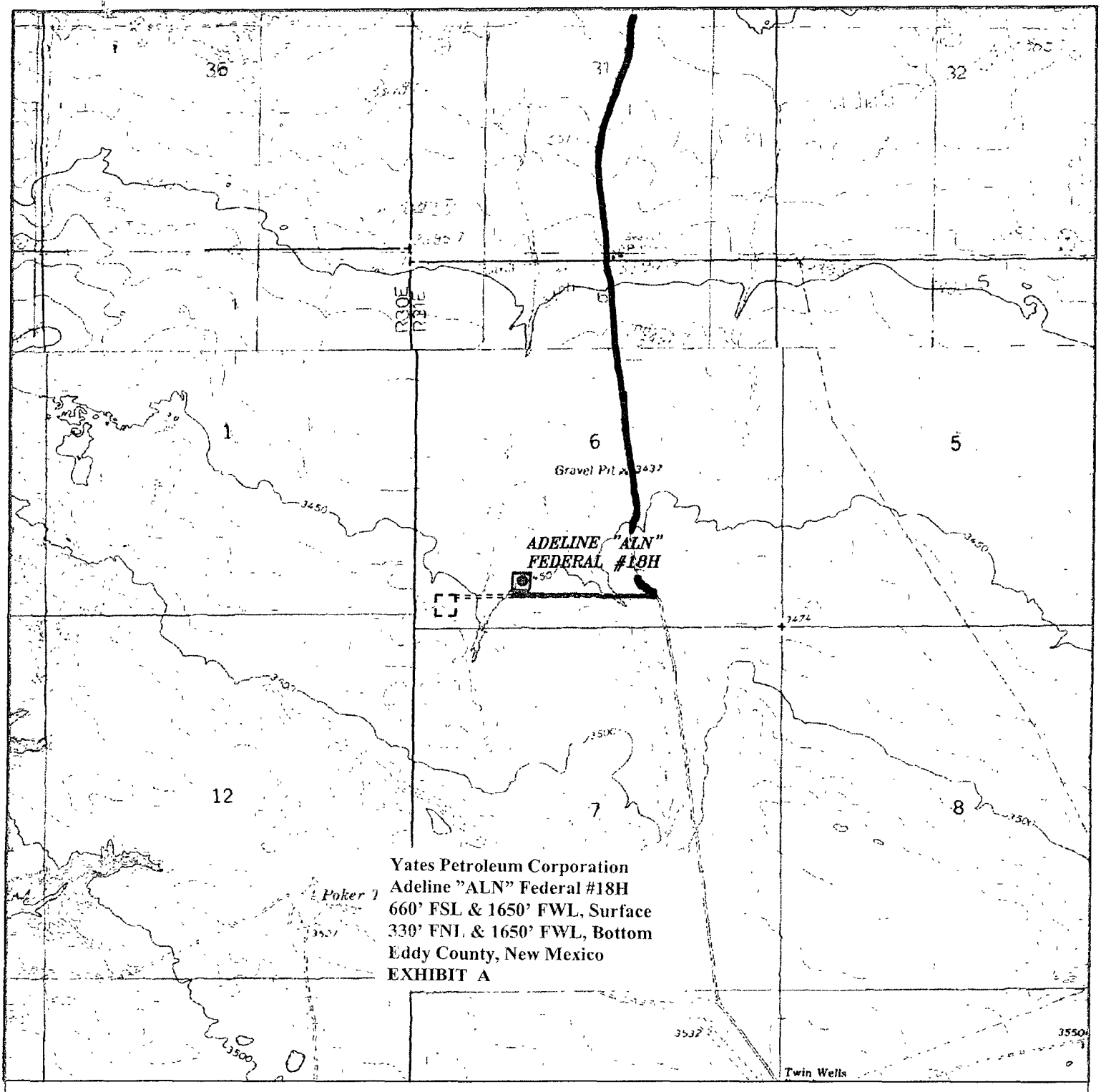
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL SURVEYOR

Date Surveyed: JULY 17, 2009
Signature & Seal of Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS



ADELINE "ALN" FEDERAL #18H

Located 660' FSL and 1650' FWL
Section 6, Township 24 South, Range 31 East,
N.M.P.M., Eddy County, New Mexico.

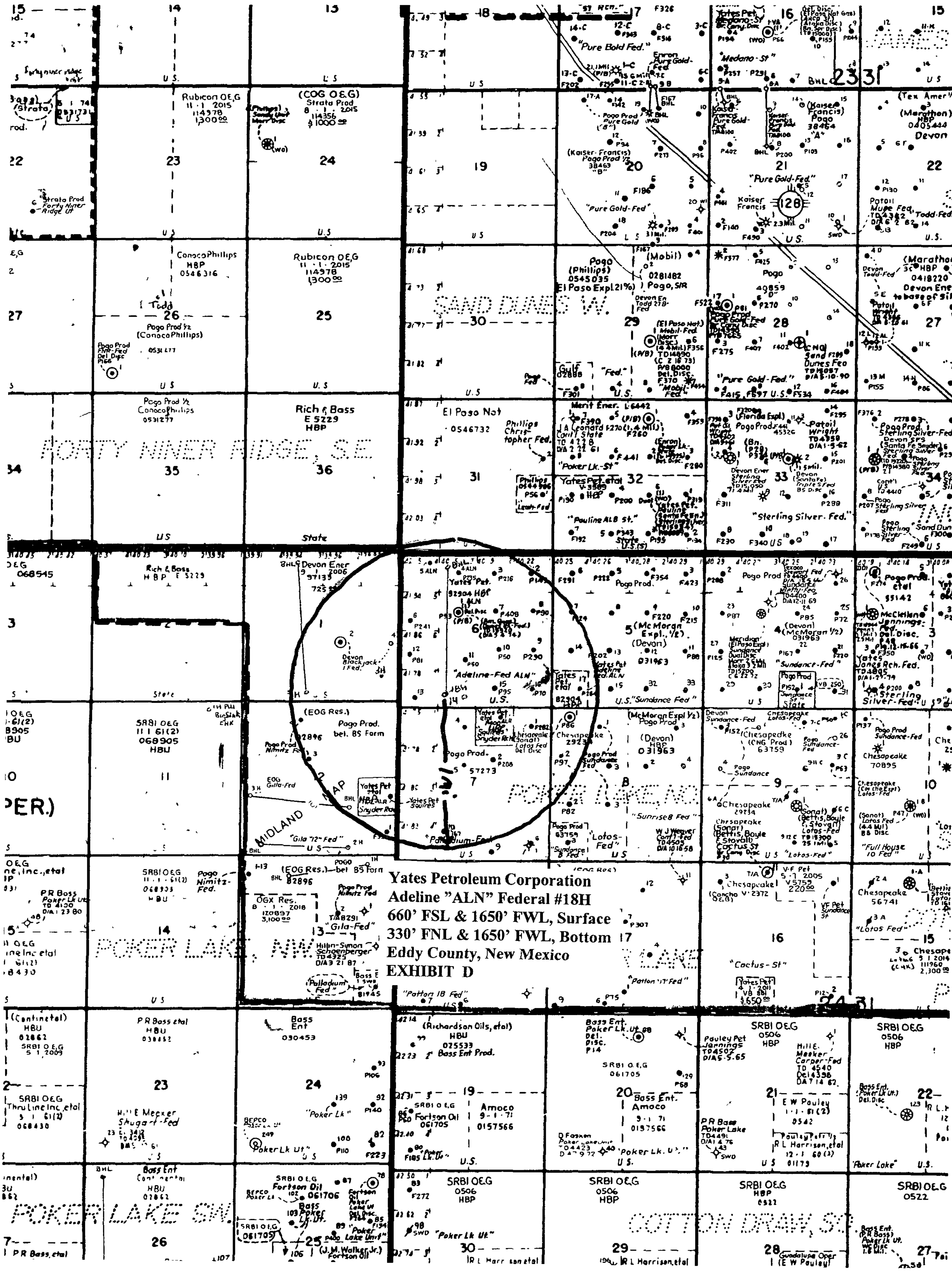
basin surveys
focused on excellence in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: JMS 21592
Survey Date: 07-27-2009
Scale: 1" = 2000'
Date: 07-28-2009

N

YATES PETROLEUM CORP.



Yates Petroleum Corporation
Adeline "ALN" Federal #18H
660' FSL & 1650' FWL, Surface
330' FNL & 1650' FWL, Bottom
Eddy County, New Mexico
EXHIBIT D

YATES PETROLEUM CORPORATION
Adeline "ALN" Federal #18H
660' FSL and 1650' FWL, Surface Hole
330' FNL & 1650' FWL, Bottom Hole
Section 6-T26S-R31E
Eddy County, New Mexico

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

Rustler	535'	Brushy Canyon Mkr	7780'-oil
Top of Salt	910'	Target Basil Sand	7990'-oil
Base of Salt	3940'	TVD	7990'
Bell Canyon	4175'	Lateral TMD	12075'
Cherry Canyon	5160'-oil		
Brushy Canyon	6855'-oil		

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

Water: 160'
Oil or Gas: Oil Zones: 5160', 6855', 7780', and 7990'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and on the 9 5/8" casing and rated for 3000# BOP System. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

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

5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: All new casing to be used See COA 6201

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-850'	850'
12 1/4"	9 5/8"	40#	J-55	ST&C	0-100'	100'
12 1/4"	9 5/8"	36#	J-55	ST&C	100'-3400'	3300'
12 1/4"	9 5/8"	40#	J-55	ST&C	3400'-4100'	700'
**8 3/4"	5 1/2"	17#	HCP-110	LT&C	0'-12075'	12075'

**This well will be drilled vertically to 7513'. At 7513' well will be kicked off and directionally drilled at 12 degrees per 100' with a 8 3/4" hole to 8263' MD (7990' TVD). If hole conditions dictate, 7" casing will be set and cemented. A 6 1/8" hole will then be drilled to 12075' MD (7990'TVD) where 4 1/2 casing will be set and cemented.
If 7" casing is not set then the hole will be reduced to 7 7/8" and drilled to 12075' MD (7990' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 1137' FSL and 1650' FWL of Section 6, T24S-R31E. Deepest TVD in the lateral will be 7990'.

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

B. CEMENTING PROGRAM:

Surface Casing: Lead with 475 sacks C Lite (YLD 1.96 WT. 12.50). Tail in with 200 sacks Class C (YLD 1.34 WT 14.80) TOC surface.

Intermediate Casing: Lead with 1125 sacks of C Lite (YLD 2.00 WT 12.50) Tail in with 225 sacks Class C (YLD 1.34 WT 14.80). TOC surface

Production Casing: DV Tool at 7400' Stage One: 1250 sacks Pecos Valley Lite (YLD 1.41 WT 13.00). TOC 7400'
Second Stage: DV Tool at 5400'. Cement with 725 sacks Pecos Valley Lite (YLD 1.41 WT 13.00). Top of Cement at 5400'.
Third Stage: Lead in with 285 sacks Lite Crete (YLD 2.66 WT 9.90). Tail in with 100 sacks Pecos Valley Lite (YLD 1.41WT 13.00). TOC about 3600'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
0-850	Fresh Water	8.60-9.20	28-32	N/C
850-4100	Brine Water	10.00-10.00	28-29	N/C
4100-7513	Cut Brine	8.60-8.80	28-29	N/C
7513-12075	Cut Brine(Lateral Section)	8.60-8.80	28-32	10-12

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

7. EVALUATION PROGRAM:

Samples: Thirty foot samples to 5000'. Every 10' from 5000' to TD
Logging: Platform Hals; CMR
Coring: None anticipated
DST's: None Anticipated
Mudlogging: Yes: From out of surface casing.

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

0'-850'	407 PSI
850'-4100'	2132 PSI
4100'-7990'	3656 PSI

Abnormal Pressures Anticipated: None
Lost Circulation Zones Anticipated: None.
H2S Zones Anticipated: None Anticipated
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			
535	0	0	535	0	0	0			RUSTLER
910	0	0	910	0	0	0			TOP OF SALT
3,940	0	0	3,940	0	0	0			BASE OF SALT
4,175	0	0	4,175	0	0	0			BELL CANYON
5,160	0	0	5,160	0	0	0			CHERRY CANYON
6,855	0	0	6,855	0	0	0			BRUSHY CANYON
7513	0	0	7513	0	0	12	0	GN	KOP
7525	1.44	0	7525	0.15	0	12	0	HS	
7550	4.44	0	7549.96	1.43	0	12	0	HS	
7575	7.44	0	7574.83	4.02	0	12	0	HS	
7600	10.44	0	7599.52	7.9	0	12	0	HS	
7625	13 44	0	7623.98	13.08	0	12	0	HS	
7650	16.44	0	7648.13	19 52	0	12	0	HS	
7675	19 44	0	7671.91	27.22	0	12	0	HS	
7700	22 44	0	7695.26	36.15	0	12	0	HS	
7725	25 44	0	7718.1	46.3	0	12	0	HS	
7750	28.44	0	7740.39	57.62	0	12	0	HS	
7775	31 44	0	7762.05	70.1	0	12	0	HS	
7796	33.96	0	7779.72	81.44	0	12	0	HS	BRUSHY CANYON MARKER
7800	34.44	0	7783.03	83.69	0	12	0	HS	
7825	37.44	0	7803.27	98.36	0	12	0	HS	
7850	40.44	0	7822.71	114.07	0	12	0	HS	
7875	43.44	0	7841.3	130.78	0	12	0	HS	
7900	46.44	0	7859	148.44	0	12	0	HS	
7925	49 44	0	7875.74	167	0	12	0	HS	
7950	52.44	0	7891 49	186.41	0	12	0	HS	
7975	55.44	0	7906.21	206.61	0	12	0	HS	
8000	58.44	0	7919 84	227.56	0	12	0	HS	
8025	61.44	0	7932 37	249.2	0	12	0	HS	
8050	64.44	0	7943.74	271 46	0	12	0	HS	
8075	67 44	0	7953.93	294.29	0	12	0	HS	
8100	70.44	0	7962.91	317.61	0	12	0	HS	
8125	73 44	0	7970.66	341.38	0	12	0	HS	
8150	76 44	0	7977.16	365.52	0	12	0	HS	
8175	79.44	0	7982.38	389.96	0	12	0	HS	
8200	82.44	0	7986.32	414.65	0	12	0	HS	
8225	85 44	0	7988.95	439.5	0	12	0	HS	
8250	88 44	0	7990.29	464 47	0	12	0	HS	
8263.06	90.01	0	7990.47	477.52	0	12	0	HS	TARGET-BASAL SAND
12075.54	90.01	0	7990	4290	0	0			LATERAL TD

Well will be drilled vertically to 7513'. At 7513' well will be kicked off at 12 degrees per 100' with a 8 3/4" hole to 8263' MD (7,990' TVD). If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 12,075' MD (7,990' TVD) where 4 1/2" casing will be set and cemented. If 7" is not set, then hole size will be reduced to 7 7/8' and drilled to 12,075' MD (7,990' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 1137' FSL and 1650' FWL, 6-24S-31E. Deepest TVD in the well is 7990' in the lateral

Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 8,263' MD (7,990' TVD) A 6 1/8" hole will then be drilled to 12,075' MD (7,990' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 7400'

2nd Intermediate

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

100 ft to 5,900 ft				Make up Torque ft-lbs			Total ft = 5,800
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
7 inches	23 #/ft	J-55	LT&C	3130	2350	3910	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
3,270	4,360 psi	313 ,000 #		366 ,000 #		6.25	

5,900 ft to 8,263 ft				Make up Torque ft-lbs			Total ft = 2,363
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
7 inches	26 #/ft	J-55	LT&C	3670	2750	4590	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
4,320 psi	4,980 psi	367 ,000 #		415 ,000 #		6.151	

DV tools placed at 7400' & 5400'.
Stage I: Cemented w/185sx PVL (YLD 1.41 Wt 13) TOC= 7400'
Stage II: Cemented w/425sx PVL (YLD 1.41 Wt 13) TOC= 5400'
Stage III: Cemented w/150sx Lite Crete (YLD 2.66 Wt 9.9), tail w/100sx PVL (YLD 1.41 Wt 13) TOC= 3600'

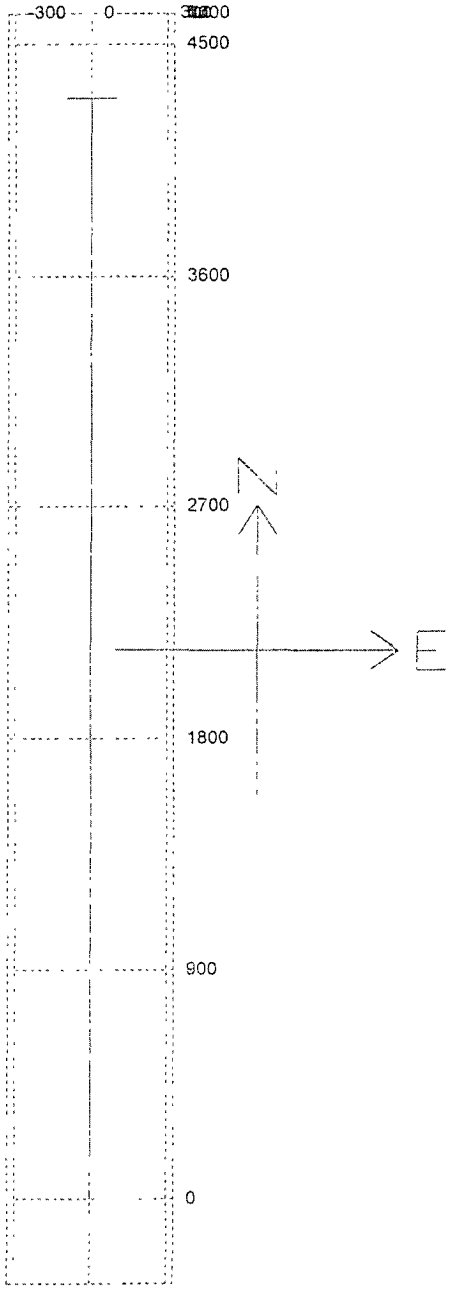
Production

0 ft to 12,075 ft				Make up Torque ft-lbs			Total ft = 12,075
O.D.	Weight	Grade	Threads	opt.	min.	mx.	
4.5 inches	11.6 #/ft	HCP-110	LT&C	3020	2270	3780	
Collapse Resistance	Internal Yield	Joint Strength		Body Yield		Drift	
8,650 psi	10,690 psi	279 ,000 #		357 ,000 #		3.875	

DV tool placed at approx. 7400' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 7400'.
Cemented w/625sx PVL (YLD 1 41 Wt 13) TOC= 7400'

3D³ Directional Drilling Planner - 3D View

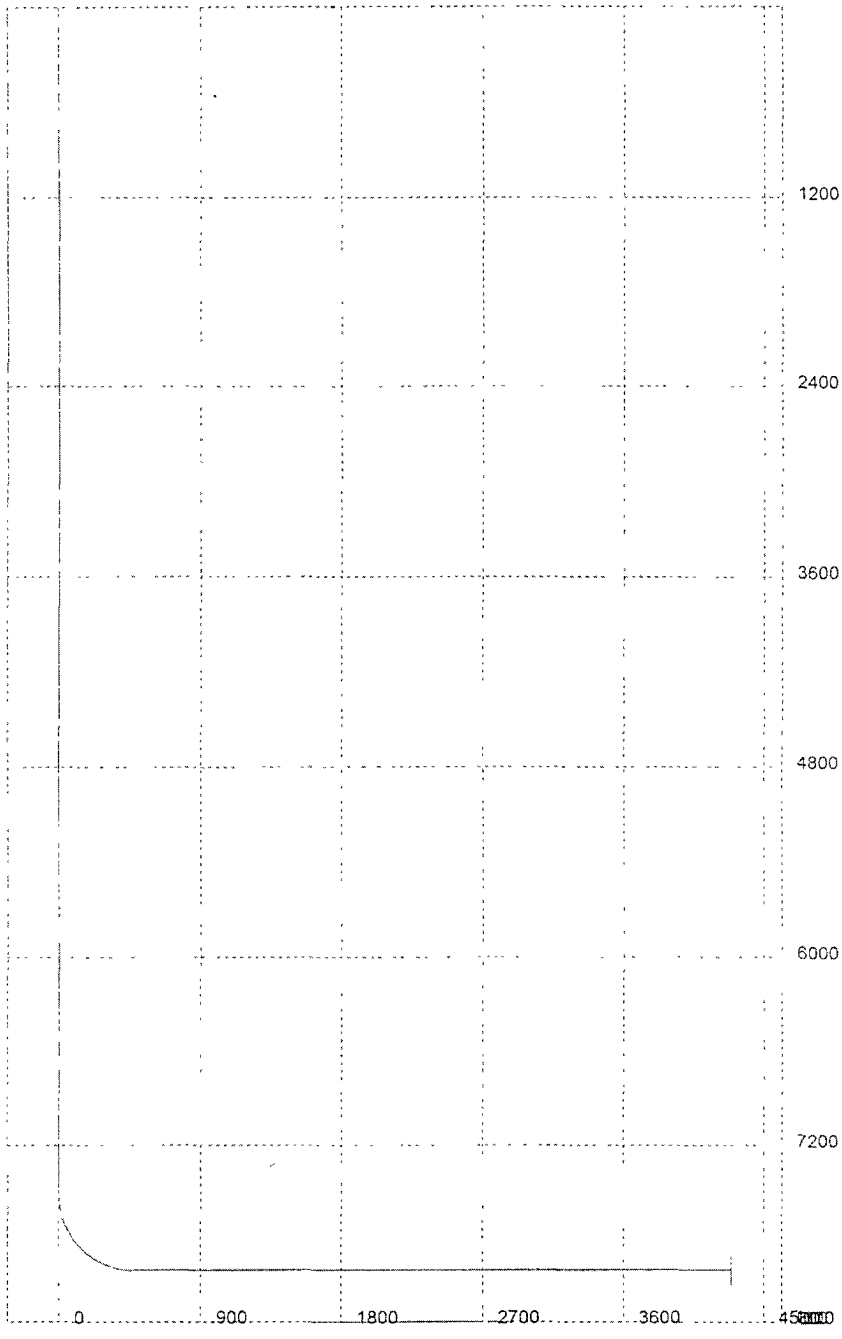
Company: **Yates Petroleum Corporation**
Well: **Adeline ALN Federal #18H**



File: G:\drilling toolbox wellplans\Horizontal\adeline18h.wpp

3D³ Directional Drilling Planner - 3D View

Company: **Yates Petroleum Corporation**
Well: **Adeline ALN Federal #18H**



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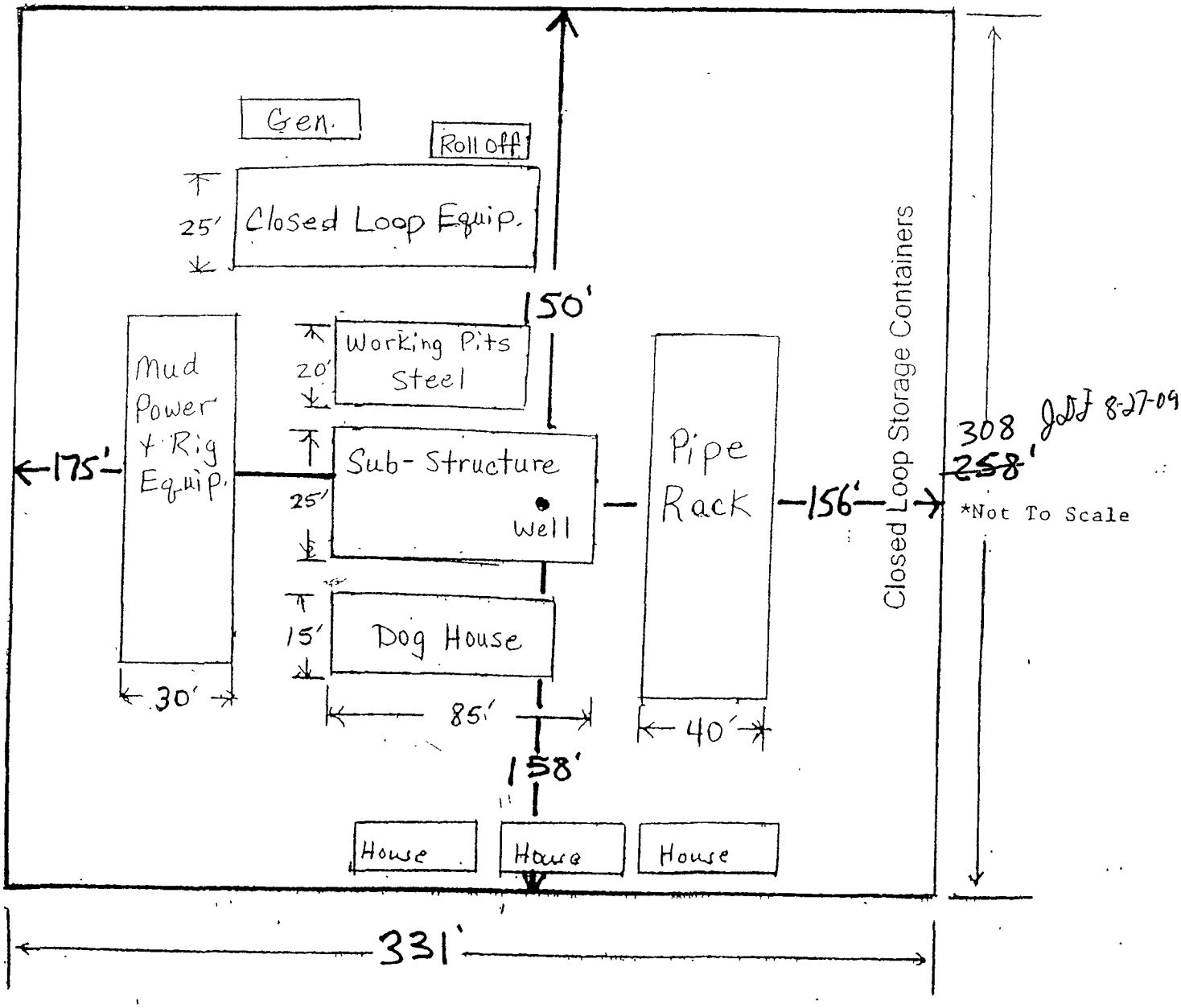
Yates Petroleum Corporation

Location Layout for Permian Basin

Closed Loop Design Plan

Yates Petroleum Corporation
Adeline "ALN" Federal #18H
660' FSL & 1650' FWL, Surface
330' FNL & 1650' FWL, Bottom
Eddy County, New Mexico
EXHIBIT C

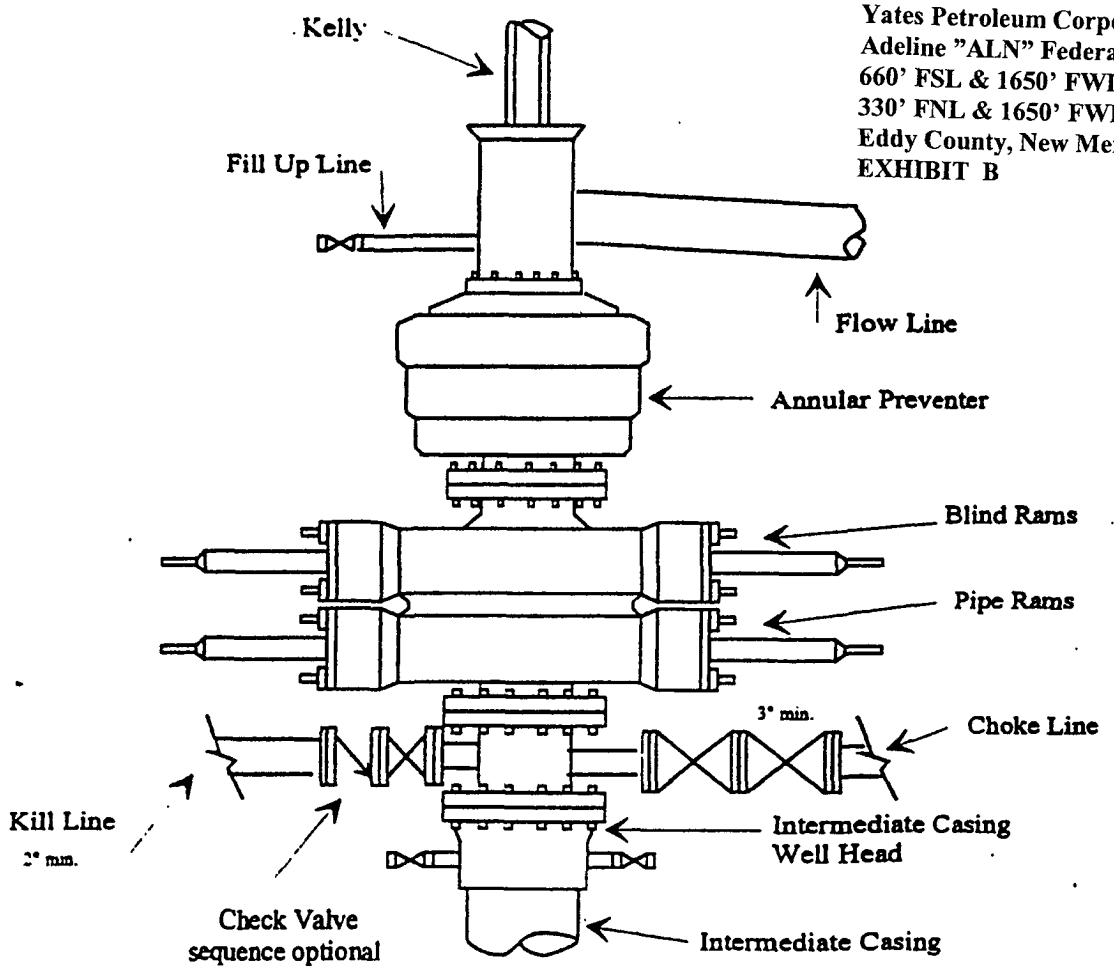


Yates Petroleum Corporation

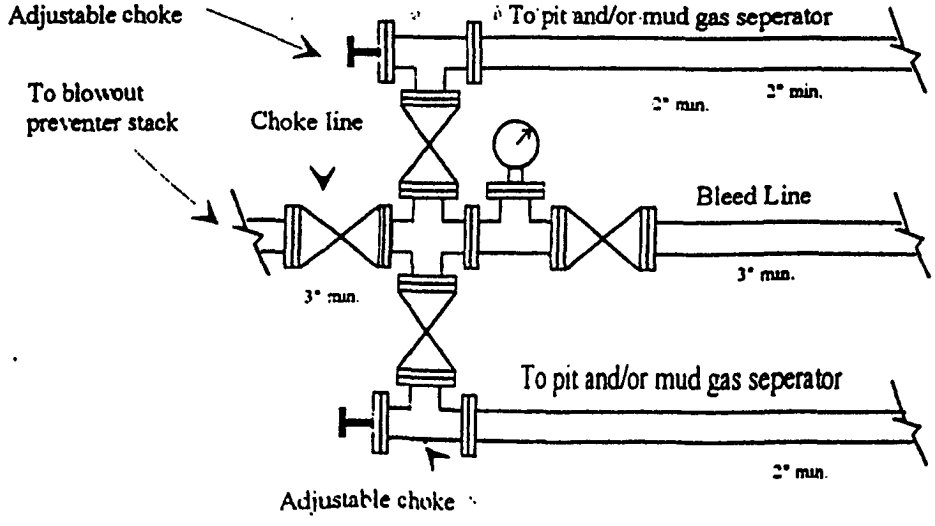
BOP-3

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

Yates Petroleum Corporation
Adeline "ALN" Federal #18H
660' FSL & 1650' FWL, Surface
330' FNL & 1650' FWL, Bottom
Eddy County, New Mexico
EXHIBIT B

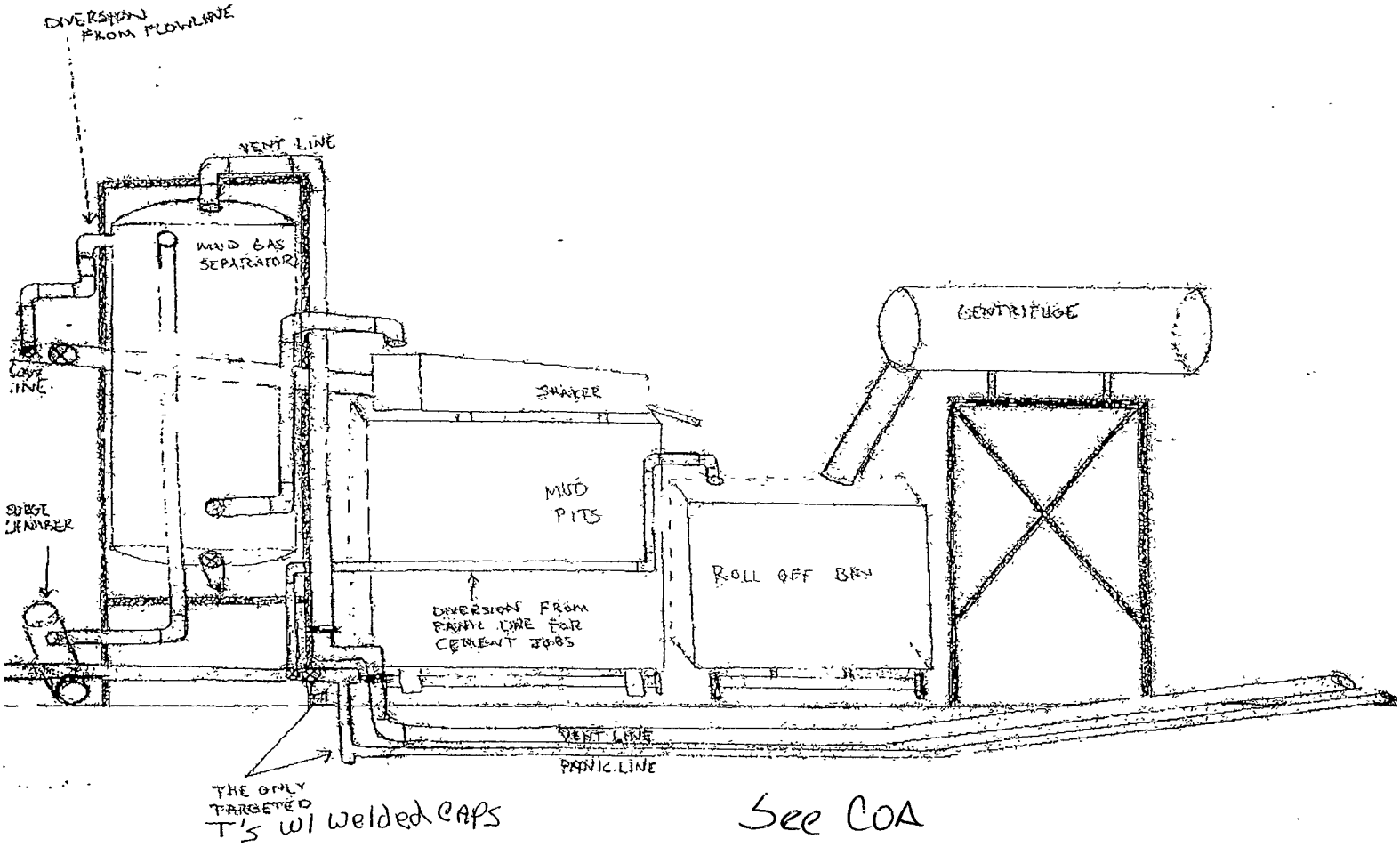


Typical 3,000 psi choke manifold assembly with at least these minimun features



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

Yates Petroleum Corporation
Adeline "ALN" Federal #18H
660' FSL & 1650' FWL, Surface
330' FNL & 1650' FWL, Bottom
Eddy County, New Mexico
EXHIBIT C1



YATES PETROLEUM CORPORATION
Adeline "ALN" Federal #18H
660' FSL & 1650' FWL, Surface Hole8
330' FNL & 1650' FWL, Bottom Hole
Section 6-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 41 miles southeast of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Starting at the BLM Office in Carlsbad, go east on highway 62/180 to Hwy 31. Turn south on Hwy 31 and go to Hwy 128. Turn left on Hwy 128and go approximately 12 miles to Twin Wells Road. Turn right on Twin Wells Road and go approximately 4 miles. Turn right here on existing lease road and go approximately 0.4 of a mile. The proposed Adeline "ALN" Federal #18H well location will be on the right side of the road.

2. PLANNED ACCESS ROAD.

A. There will be no new road as the edge of the pad will come up to the road.
B. Existing roads will be maintained in the same or better condition that they are in now.

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 Surface and Federal Minerals 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
Adeline "ALN" Federal #18H

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 18th day of August, 2009.

Printed Name Clifton May

Signature Clifton May

Position Title Land Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372—call Cy Cowan with any questions

E-mail (optional) cyc@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.:	NM82904
WELL NAME & NO.:	ADELINE ALN FEDERAL 18H
SURFACE HOLE FOOTAGE:	660' FSL & 1650' FWL
BOTTOM HOLE FOOTAGE	330' FNL & 1650' FWL
LOCATION:	Section 6, T. 24 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

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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.

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, 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 feet 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 shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Closed Loop System: v-door east

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.

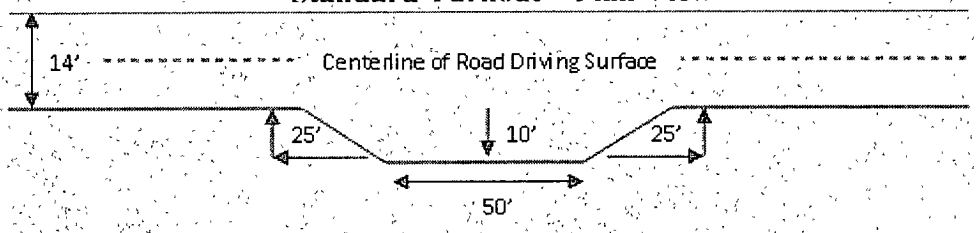
Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

Standard Turnout – Plan View

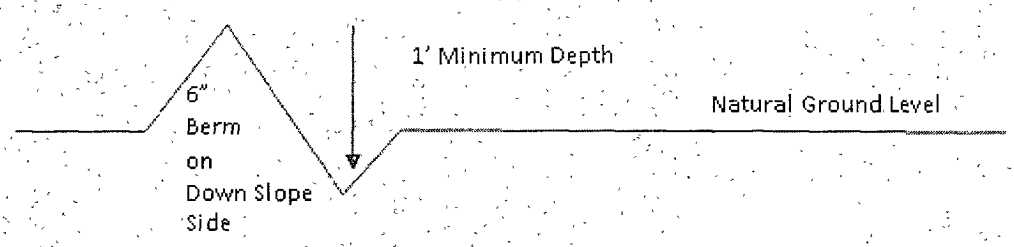


Drainage

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

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

Cross Section Of Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 400'/4% + 100' = 200' 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

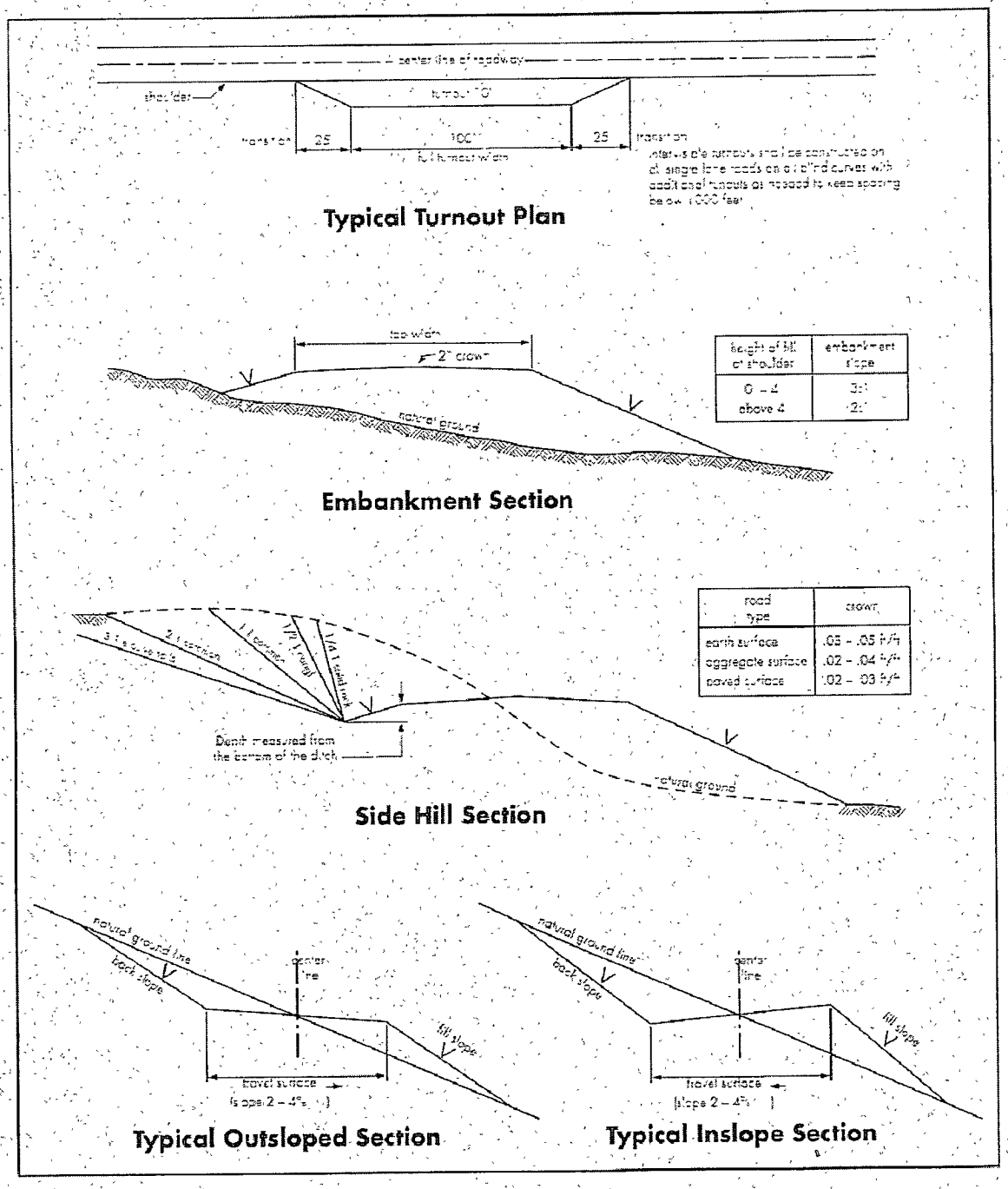
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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 as a hazard 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.

Secretary's Potash.
Possible lost circulation in the Delaware and Bone Springs formations.
Possible water flows in the Castile, Salado, Delaware and Bone Spring formations.

1. The **13-3/8** inch surface casing shall be set **at approximately 620 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.**

    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 **9-5/8** inch intermediate casing is:

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

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 to second 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 DV tool, cement shall:

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

Contingency casing program:

4. The minimum required fill of cement behind the **7** inch intermediate 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 to second 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 DV tool, cement shall:

☒ Cement should tie-back at least **500** feet into previous casing string. Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Secretary's Potash.**

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

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

☒ Cement to come to DV tool depth. Operator shall provide method of verification.

6. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17. **Piping from choke manifold and to flare to be as straight as possible.**

2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

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

    b. The results of the test shall be reported to the appropriate BLM office.

    c. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

    d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

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

RGH 092309

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

B. PIPELINES

C. ELECTRIC LINES

IX. 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.

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.

B. RESEEDING PROCEDURE

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

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:

Species	lb/acre
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

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.