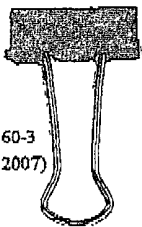


R-111-POTASH

JUL 28 2009

Lm

Form 3160-3
(August 2007)

OCD-ARTESIA

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

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-81952
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Yates Petroleum Corporation 025575		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 105 South Fourth Street, Artesia, NM 88210	3b. Phone No. (include area code) 505-748-1471	8. Lease Name and Well No. Llama AIL Federal Com. #9II
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface Carlsbad Controlled Water Basin 330' FSL & 430' FWL, UL M, SWSW At proposed prod. zone 330' FNL & 430' FWL, UL D, NWNW		9. API Well No. 30-015-37189
10. Field and Pool, or Exploratory Cabin Lake; Livingston Ridge Delaware		11. Sec., T., R., M., or Blk. And Survey or Area Section 7-T22S-R31E
14. Distance in miles and direction from the nearest town or post office* The well is about 47 miles east of Carlsbad, NM.		12. County or Parish Eddy
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 330'		13. State NM
16. No. of acres in lease 1,07.96		17. Spacing Unit dedicated to this well W2W2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. None		19. Proposed Depth 7700' VD & 12115 MD
20. BLM/ BIA Bond No. on file NATIONWIDE BOND #NMB000434		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3261' GL
22. Approximate date work will start* ASAP		23. Estimated duration

24. Attachments

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

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

25. Signature 	Name (Printed/ Typed) Cy Cowan	Date 9/26/08
Title Regulatory Agent		
Approved By (Signature) 	Name (Printed/ Typed) William M. Merhige	Date 7/23/09
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 conduct 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 willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

OCD-ARTESIA

Form 3160-3
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER
DIRECTIONAL DRILLFORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 20105. Lease Serial No
NM-81952
6. If Indian, Allottee or Tribe Name
N/A
7. If Unit or CA Agreement, Name and No
N/A
8. Lease Name and Well No.
Llama AIL Federal Com. #9H
9. API Well No.
30-015-37189
10. Field and Pool, or Exploratory
Livingston Ridge Delaware1a. 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 0255753a. Address
105 South Fourth Street, Artesia, NM 88210
3b. Phone No. (include area code)
505-748-14714. Location of well (Report location clearly and in accordance with any State requirements. *)
At surface
Carlsbad Controlled Water Basin
330' FSL & 430' FWL, UL M, SWSW
At proposed prod. zone
330' FNL & 430' FWL, UL D, NWNW11. Sec., T., R., M., or Blk. And Survey or Area
Section 7-T22S-R31E

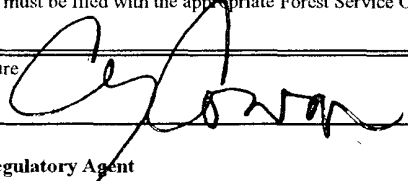
14. Distance in miles and direction from the nearest town or post office*

The well is about 47 miles east of Carlsbad, NM.12. County or Parish
Eddy
13. State
NM15. Distance from proposed* location to nearest property or lease line, ft.
(Also to nearest drlg. unit line, if any) **330'**
16. No. of acres in lease
1,07.96
17. Spacing Unit dedicated to this well
W2W2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **None**
19. Proposed Depth
7700' VD & 12115 MD
20. BLM/ BIA Bond No. on file
NATIONWIDE BOND #NMB000434
21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3261' GL
22. Approximate date work will start*
ASAP
23. Estimated duration

24. Attachments

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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 
Name (Printed/ Typed) **Cy Cowan**
Date **9/26/08**
Title
Regulatory Agent
Approved By (Signature)
Name (Printed/ Typed)
Date
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 conduct operations thereon

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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

* (Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DISTRICT I
1636 N. French Dr., Hobbs, NM 88240

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-37189	Pool Code 8435	Pool Name Cabin Lake ; Livingston Ridge Delaware
Property Code 37765	Property Name LLAMA ALL FEDERAL COM	Well Number 9H
OGRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3261'

Surface Location

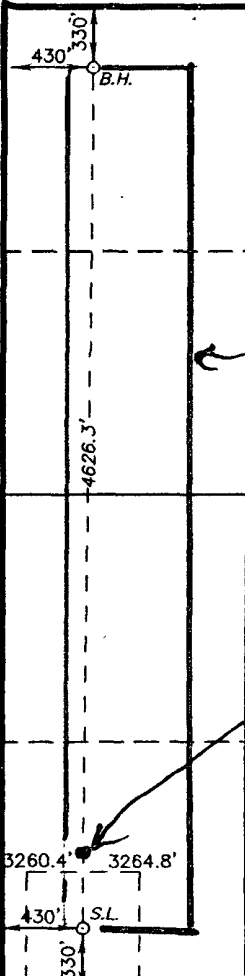
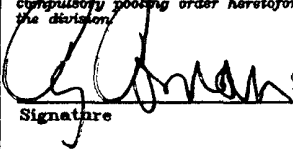
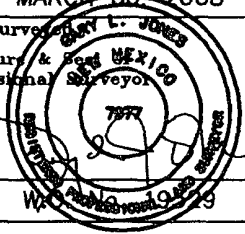
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	7	22 S	31 E		330	SOUTH	430	WEST	EDDY

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	7	22 S	31 E		330	NORTH	430	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
W2W2 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°24'44.74" Long - W103°49'27.09" SPC- N.: 514145.091 E.: 698458.245 (NAD-83)</p> <p>Project Area</p> <p>Producing Area</p> <p>Penetration Point 807' FSL & 430' FWL</p> <p>SURFACE LOCATION Lat - N32°23'58.96" Long - W103°49'27.07" SPC- N.: 509518.868 E.: 698481.514 (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 unitization pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p> 9/25/08 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>MARCH 06 2008</p> <p>Date Surveyed Signature of Gary L. Jones Professional Surveyor</p> <p></p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
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YATES PETROLEUM CORPORATION

Llama ALL Federal #9H

330' FSL and 430' FWL, SHL

330' FNL and 430' FWL, BHL

Section 7-T22S-R31E

Eddy County, New Mexico

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

Rustler	480' TVD	None
Base of Salt	3850' TVD	None
Bell Canyon	3910' TVD	Oil
Cherry Canyon	4820' TVD	Oil
Brushy Canyon	6120' TVD	Oil
Brushy Canyon Marker	7519' TVD	Oil MD
Brushy Sand Target	7973' TVD	Oil MD
TD	12115'	TMD

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

Water: 350' +/-
Oil or Gas: See above

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" and then the 9 5/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Yates request that a variance be given to test the BOP on the surface casing to 1000 psi using the rig pumps. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

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

4. THE PROPOSED CASING AND CEMENTING PROGRAM:-

A. Casing Program: (All New)

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-510'	510'
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	100-3300'	3200'
12 1/4"	9 5/8"	40#	J-55	ST&C	3300- 9550 3950'	650'
8 3/4"	5 1/2"	17#	HCP-110	LT&C	0'-12115'	12115'

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

B. CEMENTING PROGRAM:

← see COA

Surface casing: Lead with 225 sx C Lite (Wt 12.5 Yld 1.96) Tail in w/225 sx Class "C" + 2% CaCl₂ (Wt 14.8 Yld 1.34). TOC surface.

Intermediate Casing: Lead in with 1065 sx C Lite (Wt 12.6 Yld 2.0). Tail in w/250 sx C (Wt 14.8 Yld 1.34). TOC surface.

Production Casing: Stage I TOC 5600'; 2350 sx Pecos VILt (Wt 13.0 Yld 1.41).

Stage II DV tool placed approx. 5600' TVD on production casing. TOC Surface. Lead with 950 sx LiteCrete (Wt 9.90 Yld 2.78). Tail in with 100 sx Pecos VILt (Wt 13.0 Yld 1.41)

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	Type	Weight	Viscosity	Fluid Loss
0-510'	Fresh Water	8.60-9.20	32-34	N/C
510'-3950'	Brine Water	10.00-10.20	28-28	N/C
3950'-12115'	Cut Brine	8.50-8.80	28-29	N/C

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: Every 10' from surface casing to TD.

Logging: Platform HALS: CMR.

Coring: Sidewall cores as warranted.

DST's: As warranted.

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

Anticipated BHP: Depths are TVD.

From: 0 TO: 510' Anticipated Max. BHP: 245 PSI

From: 510' TO: 3950' Anticipated Max. BHP: 2100 PSI

From: 3950' TO: 7700' Anticipated Max. BHP: 3525 PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None

H₂S Zones Anticipated: H₂S is anticipated. H₂S plan is attached.

8. ANTICIPATED STARTING DATE:

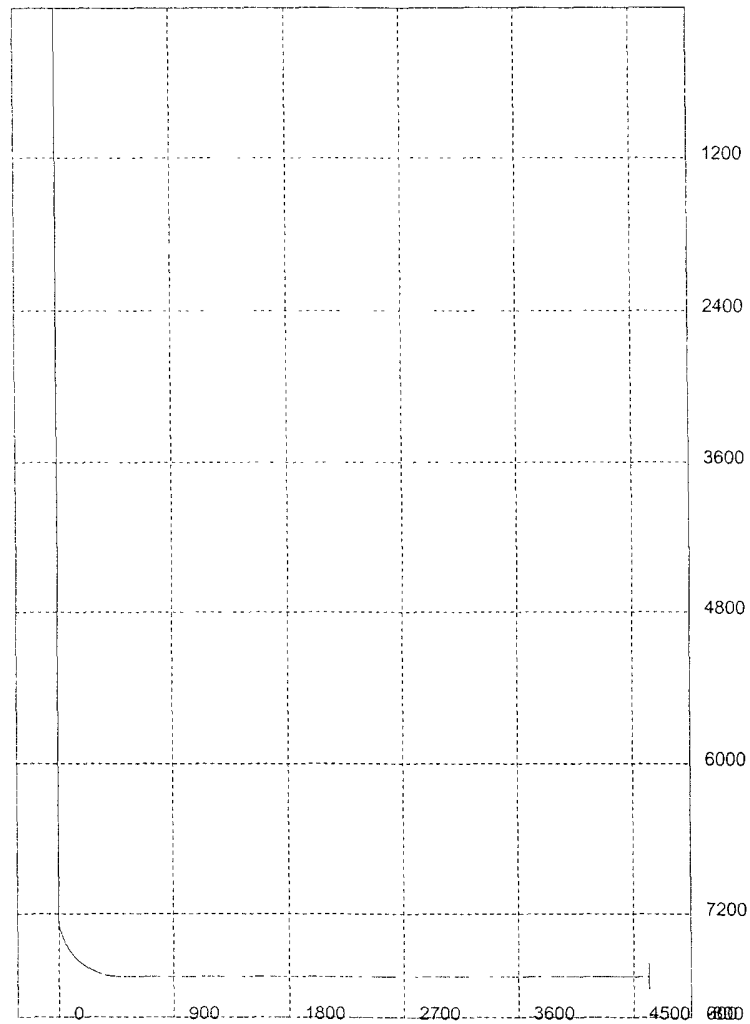
Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 45 days.

MD	Inclination	Azimuth	TVD	N/S	E/W	D/S	Toolface	Ref (HS/GN)	
0	0	0	0	0	0	0			
480.00	0	0	480.00	0	0	0			RUSTLER
3,850.00	0	0	3,850.00	0	0	0			BASE OF SALT
3,910.00	0	0	3,910.00	0	0	0			BELL CANYON
4,820.00	0	0	4,820.00	0	0	0			CHERRY CANYON
6,120.00	0	0	6,120.00	0	0	0			BRUSHY CANYON
7223	0	0	7223	0	0	12	0	GN	KOP
7225	0 24	0	7225	0	0	12	0	HS	
7250	3 24	0	7249.99	0.76	0	12	0	HS	
7275	6.24	0	7274.9	2.83	0	12	0	HS	
7300	9.24	0	7299.67	6.2	0	12	0	HS	
7325	12 24	0	7324.23	10.85	0	12	0	HS	
7350	15 24	0	7348.51	16.79	0	12	0	HS	
7375	18 24	0	7372.45	23.99	0	12	0	HS	
7400	21 24	0	7395.97	32.43	0	12	0	HS	
7425	24 24	0	7419.03	42.1	0	12	0	HS	
7450	27 24	0	7441.55	52.95	0	12	0	HS	
7475	30 24	0	7463.46	64.97	0	12	0	HS	
7500	33 24	0	7484.72	78.12	0	12	0	HS	
7519	35.52	0	7500.4	88.85	0	12	0	HS	BRUSHY CANYON MARKER
7525	36 24	0	7505.26	92.37	0	12	0	HS	
7550	39 24	0	7525.03	107.67	0	12	0	HS	
7575	42 24	0	7543.97	123.98	0	12	0	HS	
7600	45 24	0	7562.03	141.26	0	12	0	HS	
7625	48 24	0	7579.16	159.47	0	12	0	HS	
7650	51 24	0	7595.32	178.54	0	12	0	HS	
7675	54 24	0	7610.45	198.44	0	12	0	HS	
7700	57 24	0	7624.52	219.1	0	12	0	HS	
7725	60 24	0	7637.49	240.47	0	12	0	HS	
7750	63 24	0	7649.33	262.48	0	12	0	HS	
7775	66 24	0	7660	285.09	0	12	0	HS	
7800	69 24	0	7669.46	308.23	0	12	0	HS	
7825	72 24	0	7677.71	331.82	0	12	0	HS	
7850	75 24	0	7684.71	355.82	0	12	0	HS	
7875	78 24	0	7690.44	380.15	0	12	0	HS	
7900	81 24	0	7694.9	404.75	0	12	0	HS	
7925	84 24	0	7698.05	429.55	0	12	0	HS	
7950	87 24	0	7699.91	454.47	0	12	0	HS	
7973.05	90.01	0	7700.46	477.52	0	0			BRUSHY SAND
12115.54	90.01	0	7700	4620	0	0			LATERAL TD

Well will be drilled vertically to approx 7223'. At 7223' well will be kicked off and directionally drilled at 12 degrees per 100' with a 8 3/4" hole to 12,115' MD 7,700' TVD where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 807' FSL and 430' FWL, 7-22S-31E. Deepest TVD in the well is 7700.46' in the lateral. NO PILOT HOLE.

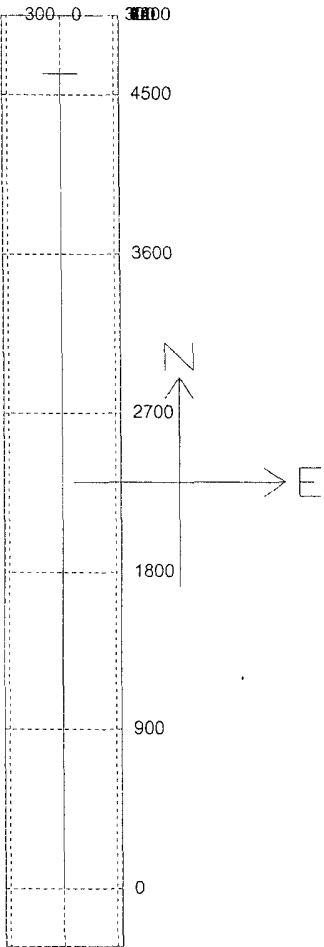
3D³ Directional Drilling Planner - 3D View

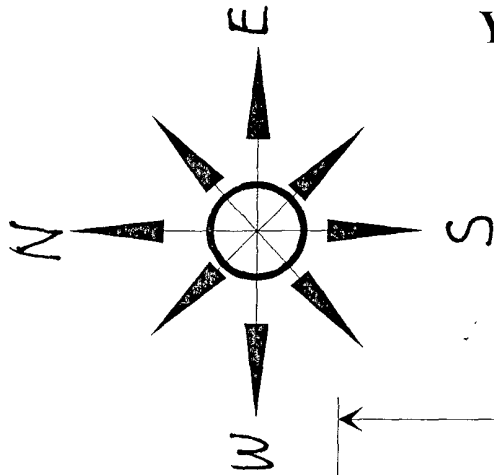
Company: Yates Petroleum Corporation
Well: Llama ALL Federal Com. #9H



3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation
Well: Llama ALL Federal Com. #9H



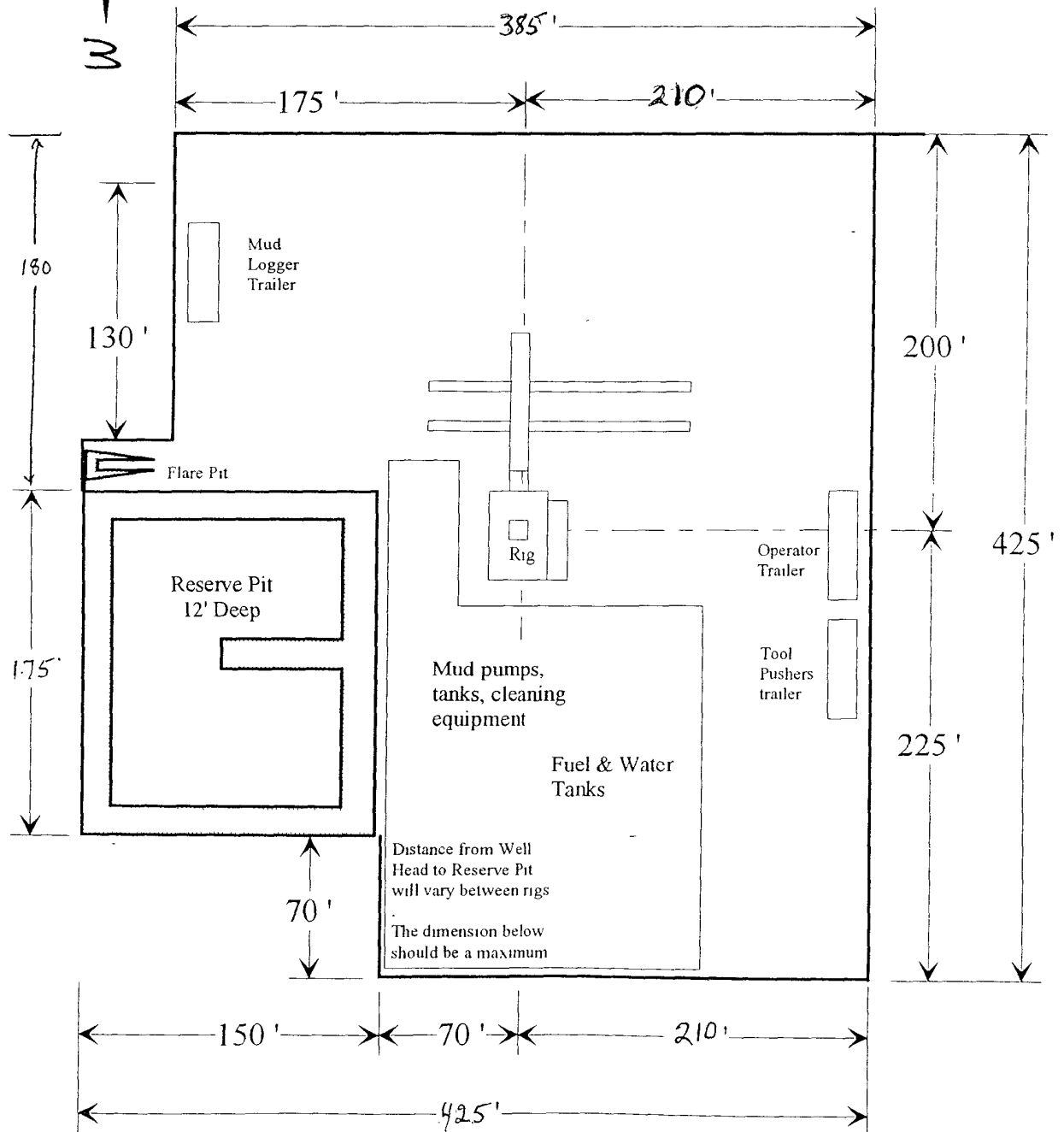


Yates Petroleum Corporation

Location Layout for Permian Basin

Horizontal Drill Site

YATES PETROLEUM CORPORATION
 Llama ALL Federal Com. #9H
 330 FSL and 430 FWL Surface Location
 330' FNL and 430' FWL Bottom Hole
 Section 7, T22S-R31E
 Eddy County, New Mexico Exhibit B



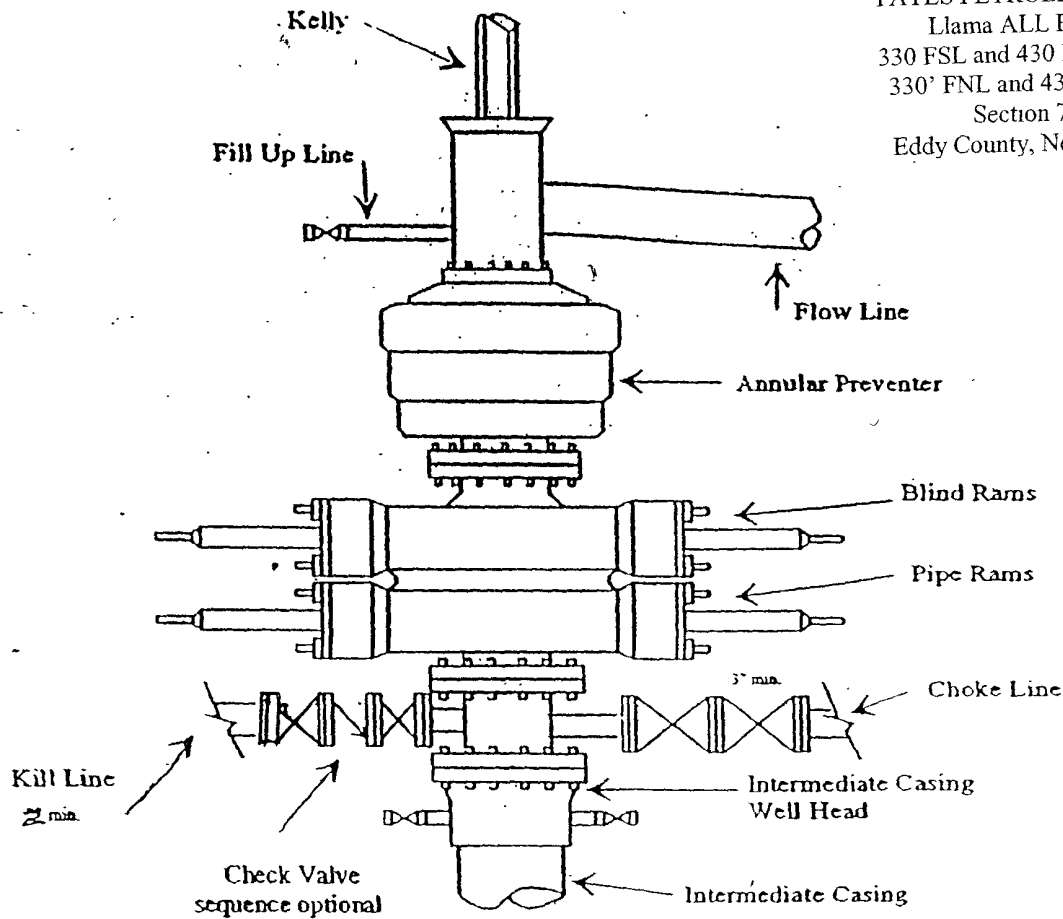


Yates Petroleum Corporation

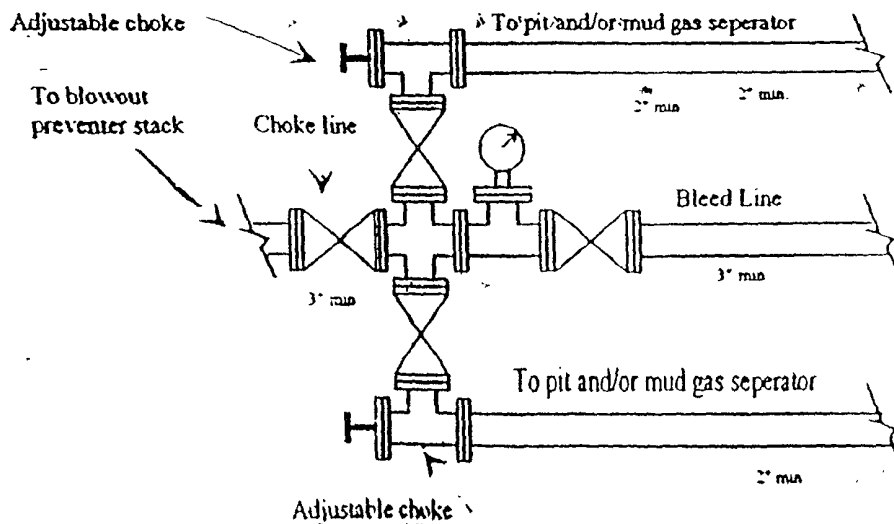
BOP-3

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

YATES PETROLEUM CORPORATION
Llama ALL Federal Com. #9H
330 FSL and 430 FWL Surface Location
330' FNL and 430' FWL Bottom Hole
Section 7, T22S-R31E
Eddy County, New Mexico Exhibit C



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



MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION
Llama ALL Federal #9H
330' FSL and 430' FWL, SHL
330' FNL and 430' FWL. BHL
Section 7-T22S-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 well site is located approximately 47 miles east of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go East of Carlsbad on Highway 62-180 to Hwy 31. Turn south on Hwy 31 and go to Hwy 128 (Jal Highway). Turn east and go approx. 10.7 miles to the WIPP road. Turn left on WIPP Rd. and go approx. 4.6 miles to just past a cattle guard. Turn left here on a pipe line road and go approx. 1.5 miles. There will be a compressor and a lease road going to the right. Turn right here and follow lease road approx. 1.5 to the Llama ALL Federal #1 well location. Continue going east on lease road for approx. 0.1 of a mile to the southwest corner of the proposed well location.

2. PLANNED ACCESS ROAD:

- A. There will be no new access road as the existing lease road goes to the southwest
- B. Existing roads will be maintained in the same or better condition than is presently exist.

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. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Dirt contractor will locate nearest pit and obtain any permits and materials needed for construction.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the temporary drill pits.
- B. The temporary drilling pit 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, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. A closed loop system will be used to drill this well. It 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. 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 Surface, Administered by Bureau of Land Management, Carlsbad, New Mexico
12. OTHER INFORMATION:
 - A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
 - B. The primary surface use is for grazing.

CERTIFICATION
YATES PETROLEUM CORPORATION
Llama ALL Federal #9H

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 25th day of September, 2008.

Printed Name Cy Cowan

Signature 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 575-748-4372

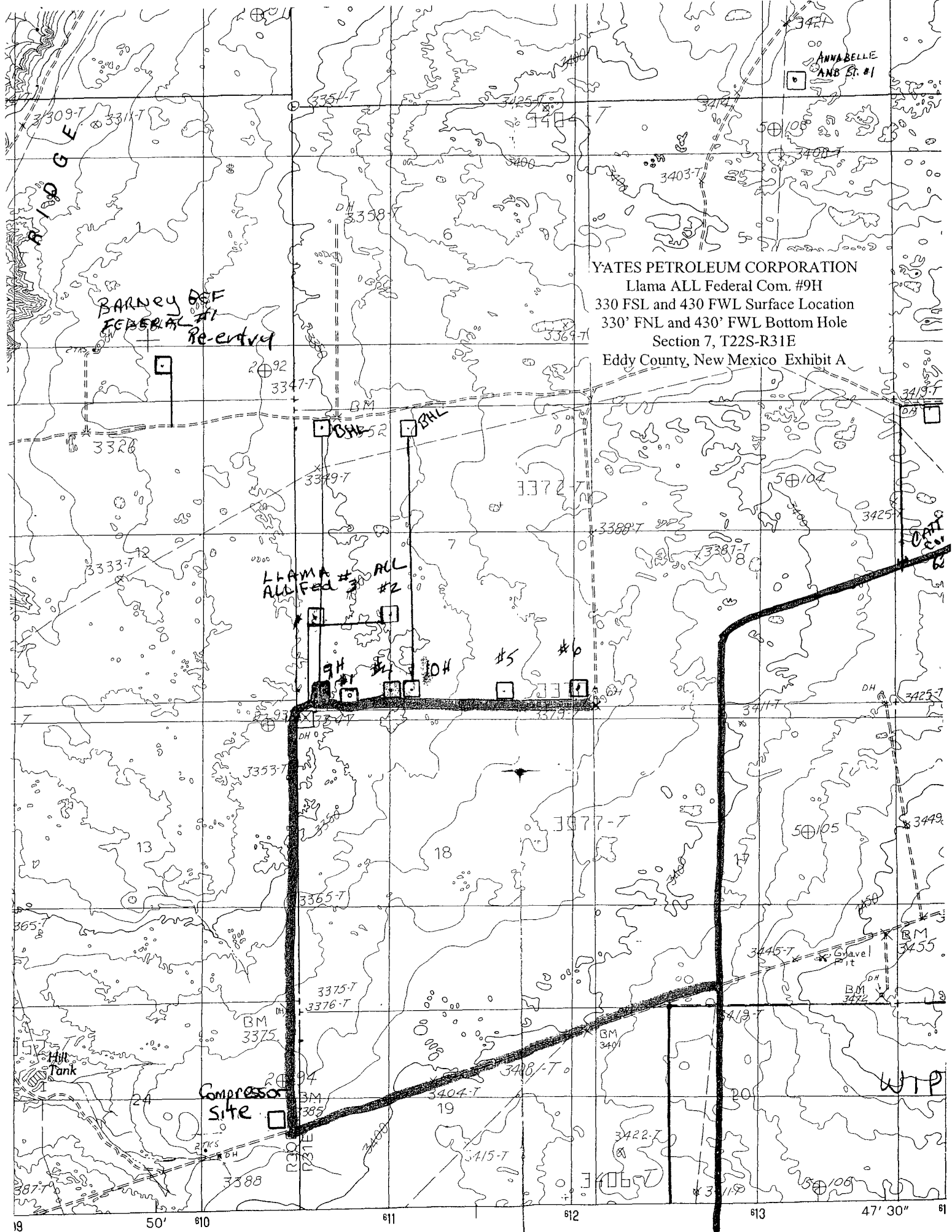
E-mail (optional) cyc@ypcnm.com

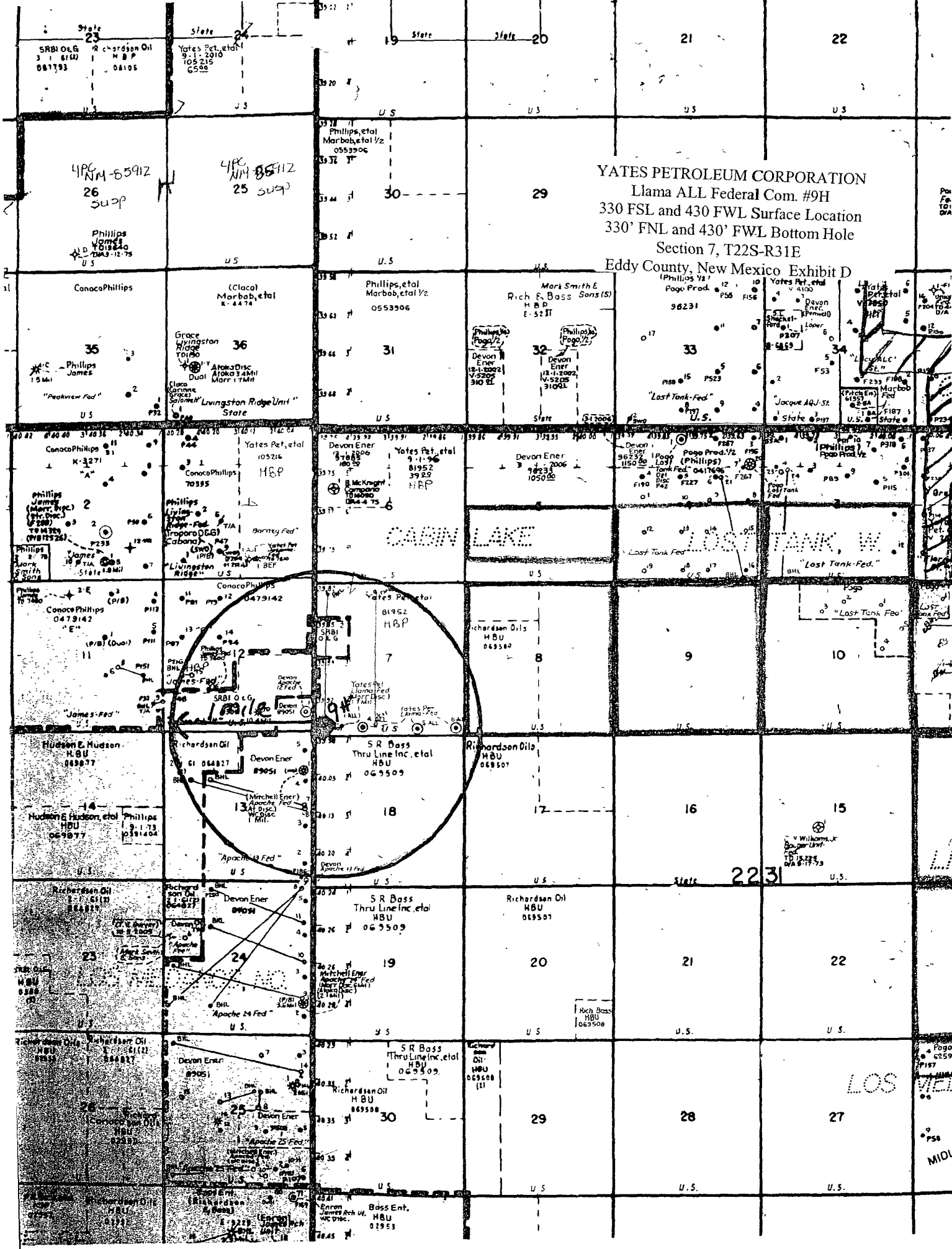
Field Representative (if not above signatory) Tim Bussell

Address (if different from above) Same

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

E-mail (optional) _____





YATES PETROLEUM CORPORATION
Llama ALL Federal Com. #9H
330 FSL and 430 FWL Surface Location
330' FNL and 430' FWL Bottom Hole
Section 7, T22S-R31E
Eddy County, New Mexico Exhibit D

CABIN LAKE

LOST TANK, W

223


















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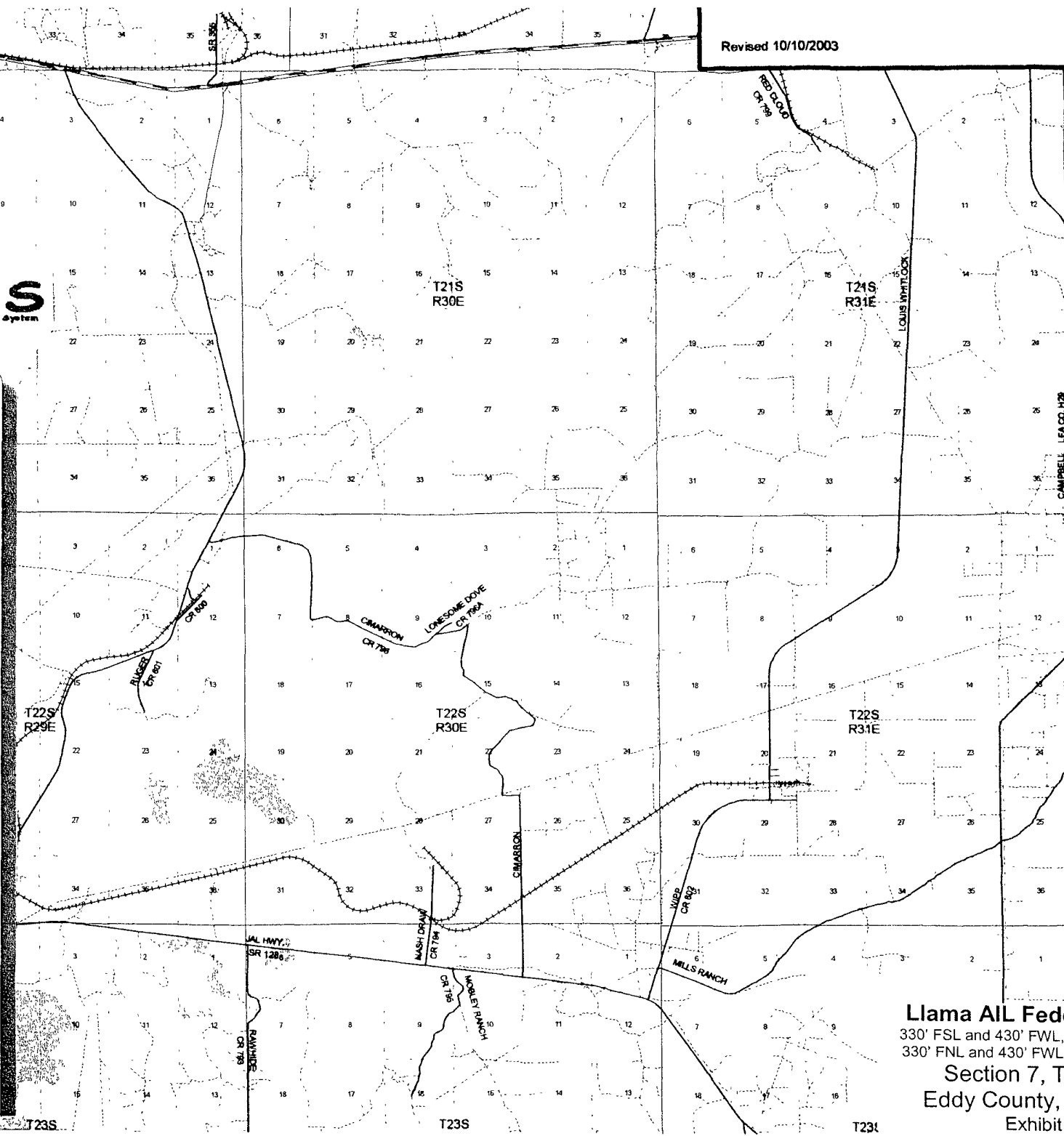
MIOU

Revised 10/10/2003

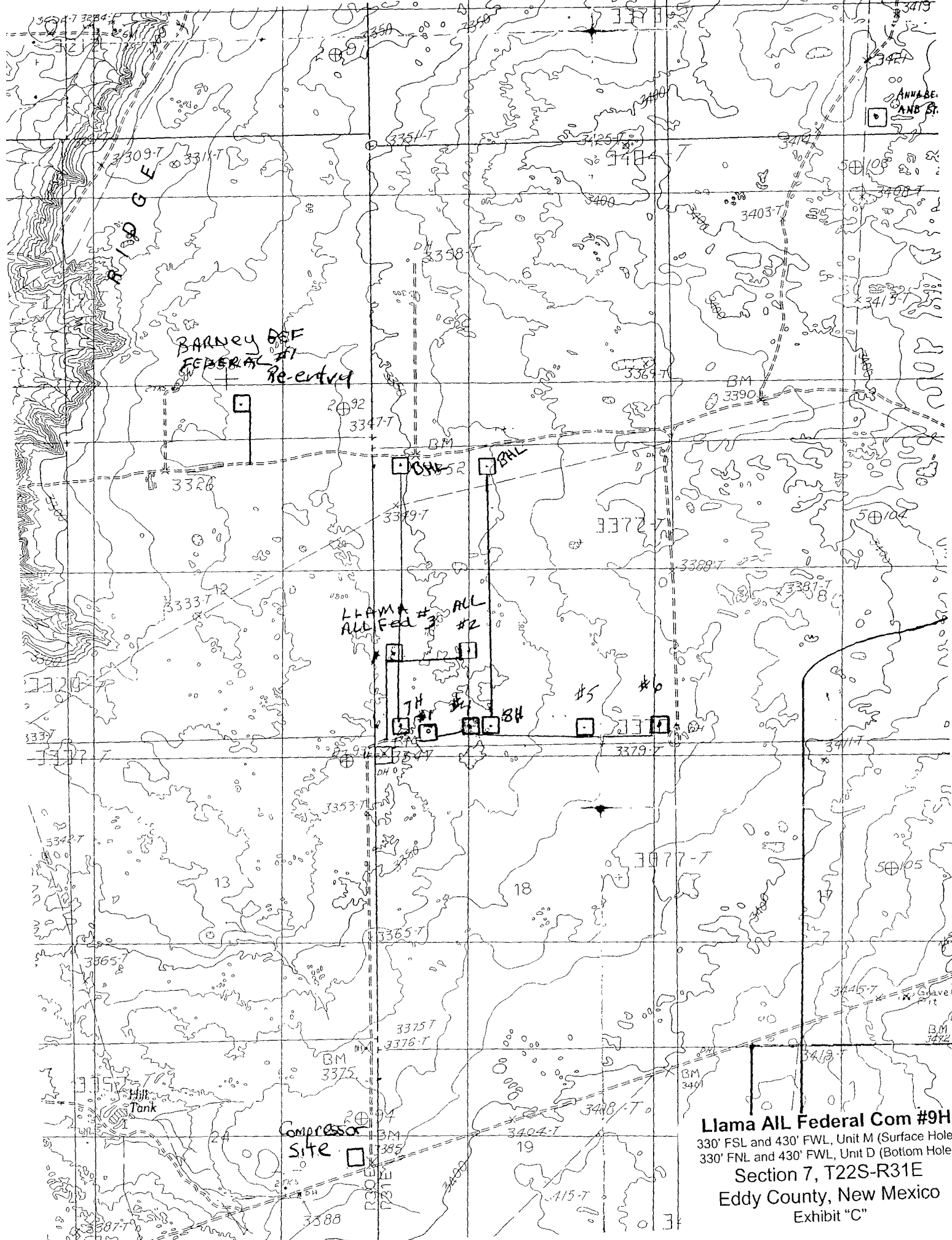
CGIS
Cooperative Geographic Information System

Map Legend

-  Pecos River
-  Section
-  Township
- Roads**
 -  2 LANE
 -  4 LANE
 -  CANAL
 -  PRIVATE
 -  RAILROAD
 -  TRAIL
- FEMA**
 -  A
 -  AE
 -  AH
 -  AO
 -  AO D1
 -  AO D2
 -  Flood Way AE
 -  X 500
- 20' Contours**
 - 2850 - 3100
 - 3101 - 3420
 - 3421 - 3700
 - 3701 - 4080
 - 4081 - 4380
 - 4381 - 4700
 - 4701 - 5000
 - 5001 - 5320
 - 5321 - 5640
 - 5641 - 5980
 - 5981 - 6300
 - 6301 - 6780
 - 6781 - 7100
 - 7101 - 7480



Llama AIL Federal Com #9H
330' FSL and 430' FWL, Unit M (Surface Hole)
330' FNL and 430' FWL, Unit D (Bottom Hole)
Section 7, T22S-R31E
Eddy County, New Mexico
Exhibit "A-2"



Llama AIL Federal Com #9H
330' FSL and 430' FWL, Unit M (Surface Hole)
330' FNL and 430' FWL, Unit D (Bottom Hole)
Section 7, T22S-R31E
Eddy County, New Mexico
Exhibit "C"



Llama AIL Federal Com #9H

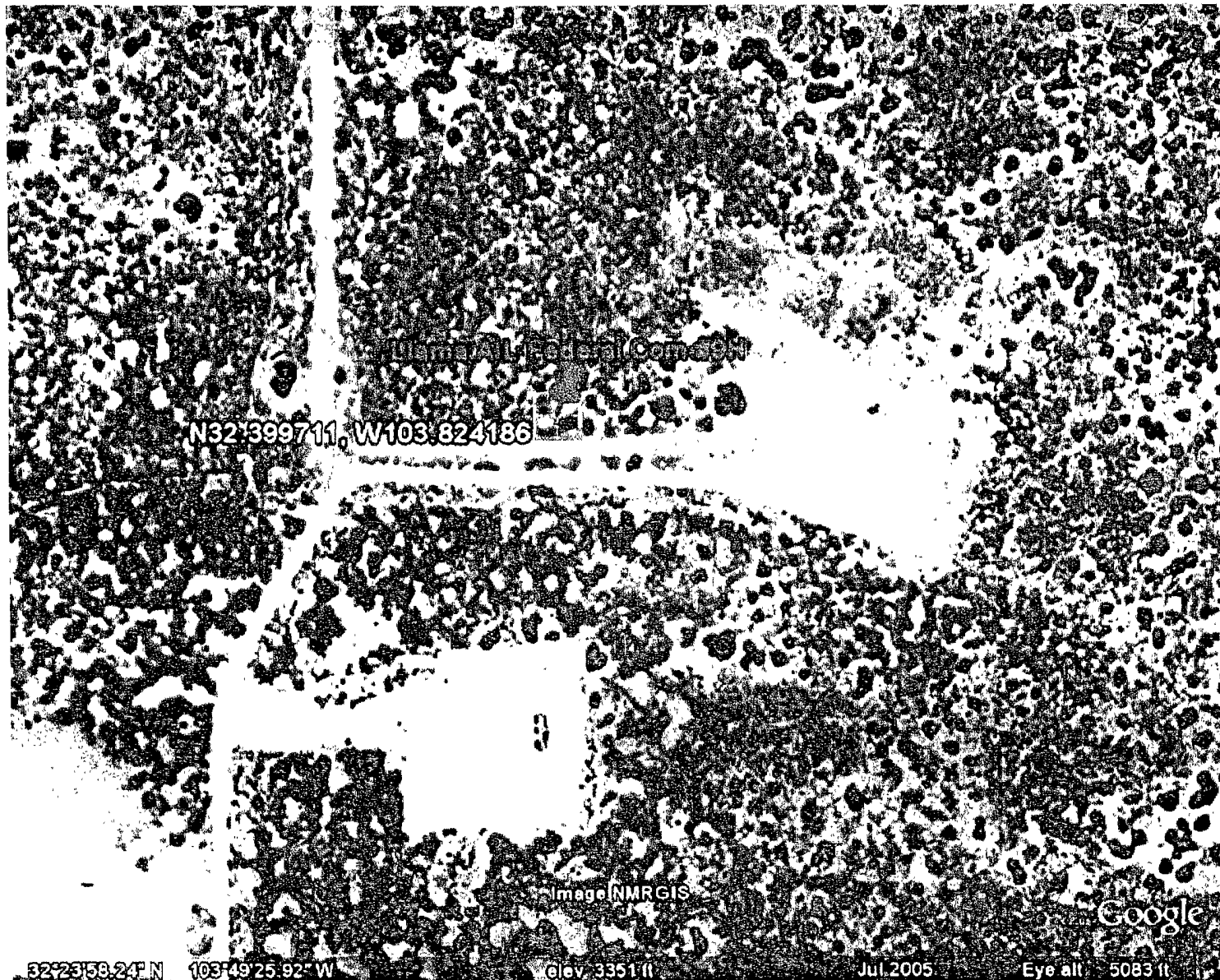
330' FSL and 430' FWL, Unit M (Surface Hole)

330' FNL and 430' FWL, Unit D (Bottom Hole)

Section 7, T22S-R31E

Eddy County, New Mexico

Exhibit "C-1"



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Yates Petroleum Corp
LEASE NO.:	NM-81952
WELL NAME & NO.:	Llama AIL Federal #10H
SURFACE HOLE FOOTAGE:	330' FSL & 1980' FWL
BOTTOM HOLE FOOTAGE:	330' FNL & 1980' FWL
LOCATION:	Section 7, T. 22 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

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

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

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

For the purpose of: Protecting Lesser Prairie-Chickens:

1. Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.
2. 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 (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 8 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

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

The reserve pit shall be constructed 175' X 150' on the West side of the well pad.

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

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

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

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

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

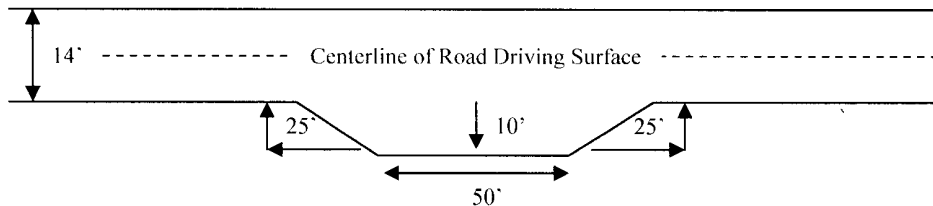
Ditching

Ditching shall be required on both sides of the road.

Turnouts

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

Standard Turnout – Plan View

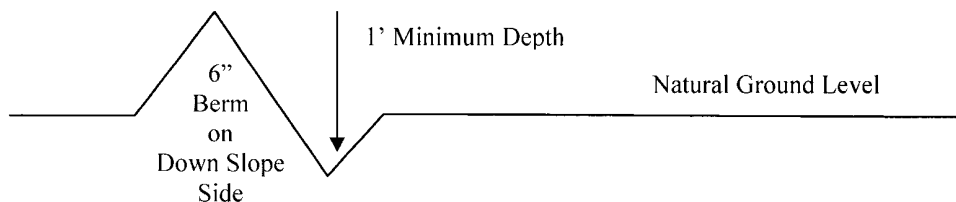


Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Culvert Installations

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

Cattleguards

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

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

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

Fence Requirement

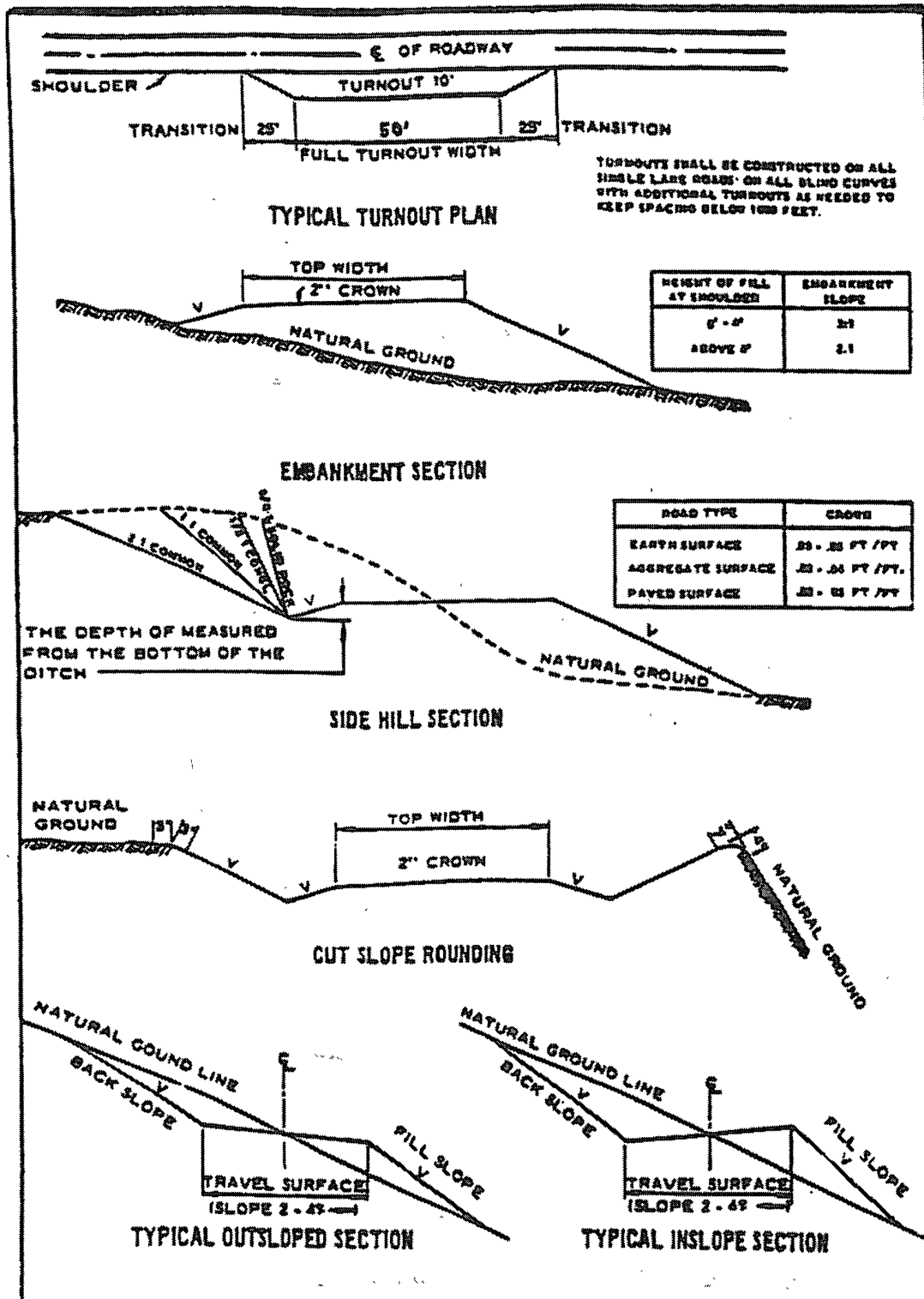
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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

Public Access

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

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

☒ **Eddy County**

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

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the **Delaware** formation. **If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
4. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface. The logs shall be run at a speed which allows the logs to be legible and no faster than manufacturer of the logging tools recommended speed. (R-111-P area only)

B. CASING

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

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

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

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

**Possible lost circulation in the Delaware and Bone Spring formations.
Possible brine/water flows in the Salado and Castile Groups.**

1. The **13-3/8** inch surface casing shall be set **at approximately 510 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job 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 R-111-P 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 above DV tool, cement shall:
 - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
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.
5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

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.
 - e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILL STEM TEST

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

E. WIPP Requirements

The proposed well is located within 330' of the WIPP Land Withdrawal Area boundary. As a result, Yates Petroleum Corporation is required to submit daily logs and deviation survey information to the Department of Energy per requirements of the Joint Powers Agreement. Information from this well will be included in the Quarterly Drilling Report. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed. Any future entry into the well for purposes of completing additional drilling will require supplemental information.

Yates Petroleum Corporation can email the required information to Ms. Susan McCauslin at susan.mccauslin@wipp.ws or fax to her attention at 575-234-6003.

WWI 110308

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

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

Containment Structures

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

Painting Requirement

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

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

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

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

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

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

B. RESERVE PIT CLOSURE

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

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

**Four-winged Saltbush 5lbs/A

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

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed
(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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.