Secretary's Potash

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NM-01135

6. If Indian, Allotee or Tribe Name ----------

1a. Type of work: [XX] DRILL [ ] REENTER

7. If Unit or CA Agreement, Name and No. ---------- <302324>

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

8. Lease Name and Well No. LUSK "33" FEDERAL # 6

2. Name of Operator <236435>
PURE ENERGY OPERATING, INC. (LARRY RISLEY 210-226-6700)

9. API Well No. 30-025-39027

3a. Address 153 TREELINE PARK SUITE 220
SAN ANTONIO, TEXAS 79802

3b. Phone No. *(include area code)* 210-226-6700

10. Field and Pool, or Exploratory EAST LUSK DELAWARE

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 700' FNL & 330' FEL SECTION 33 T19S-R32E LEA CO. NM
At proposed prod. zone SAME Unit A

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 33 T19S-R32E

14. Distance in miles and direction from nearest town or post office*
Approximatly 40 miles West Southwest of Hobbs, New Mexico

12. County or Parish LEA CO.

13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
330'	1280	40 NE/4 of NE/4 SEC. 33
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**
1650'	5000'	NMB-000315
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3559' GL	WHEN APPROVED	20 Days

24. Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an 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 authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
Joe T. Janica	Joe T. Janica	03/07/08
Title Permit Engineer		

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/S/ HANSON STUART	/S/ HANSON STUART	JUN 12 2008
Title ACTING 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)

Capitan Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & 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 JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-39027	41520	LUSK DELAWARE-EAST

Property Code	Property Name	Well Number
302324	LUSK 33 FEDERAL	6

OGRID No.	Operator Name	Elevation
236435	PURE ENERGY OPERATING, INC.	3559'

Surface Location

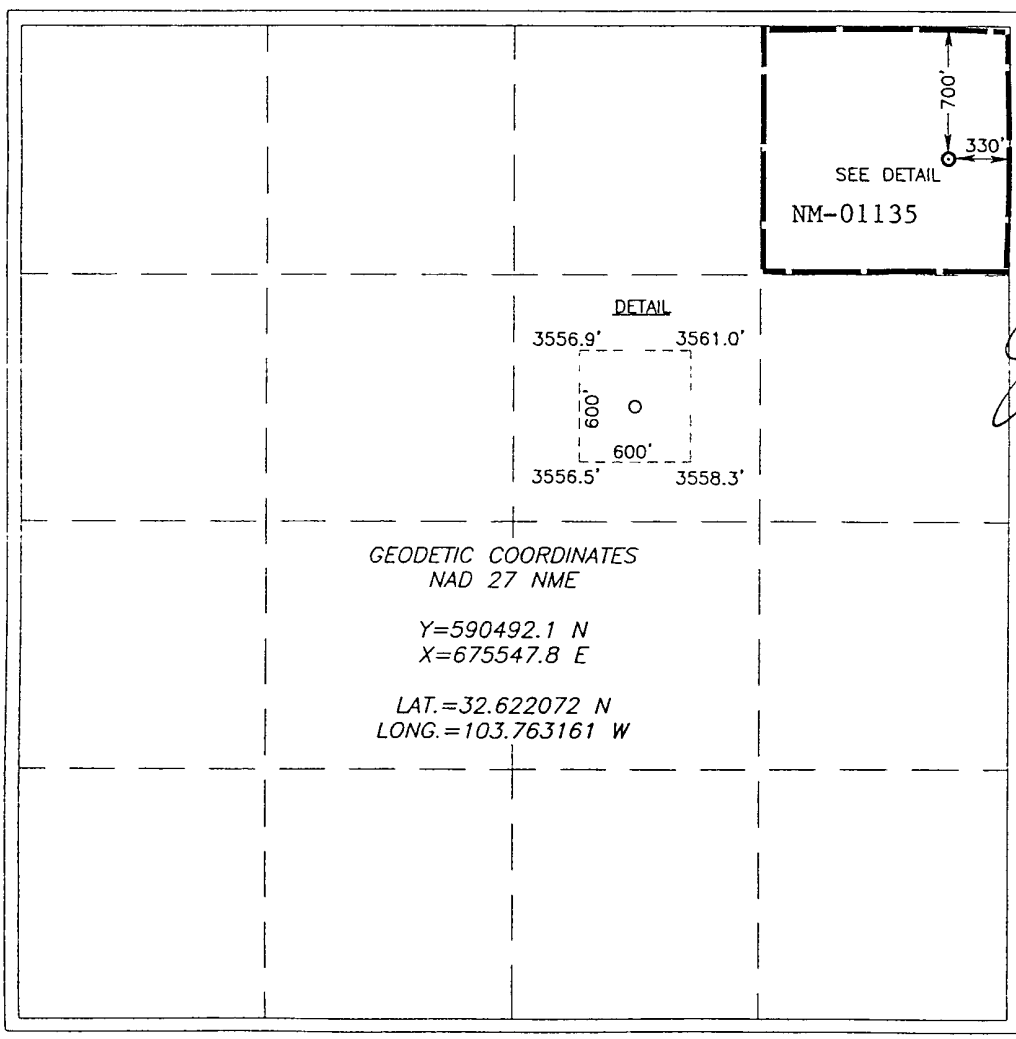
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	19-S	32-E		700	NORTH	330	EAST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

I hereby certify that the information 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 or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Joe T. Janica 03/07/08

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 supervision, and that the same is true and correct to the best of my belief.

FEBRUARY 20, 2008

Date Surveyed DSS

Signature & Seal of Professional Surveyor

3239

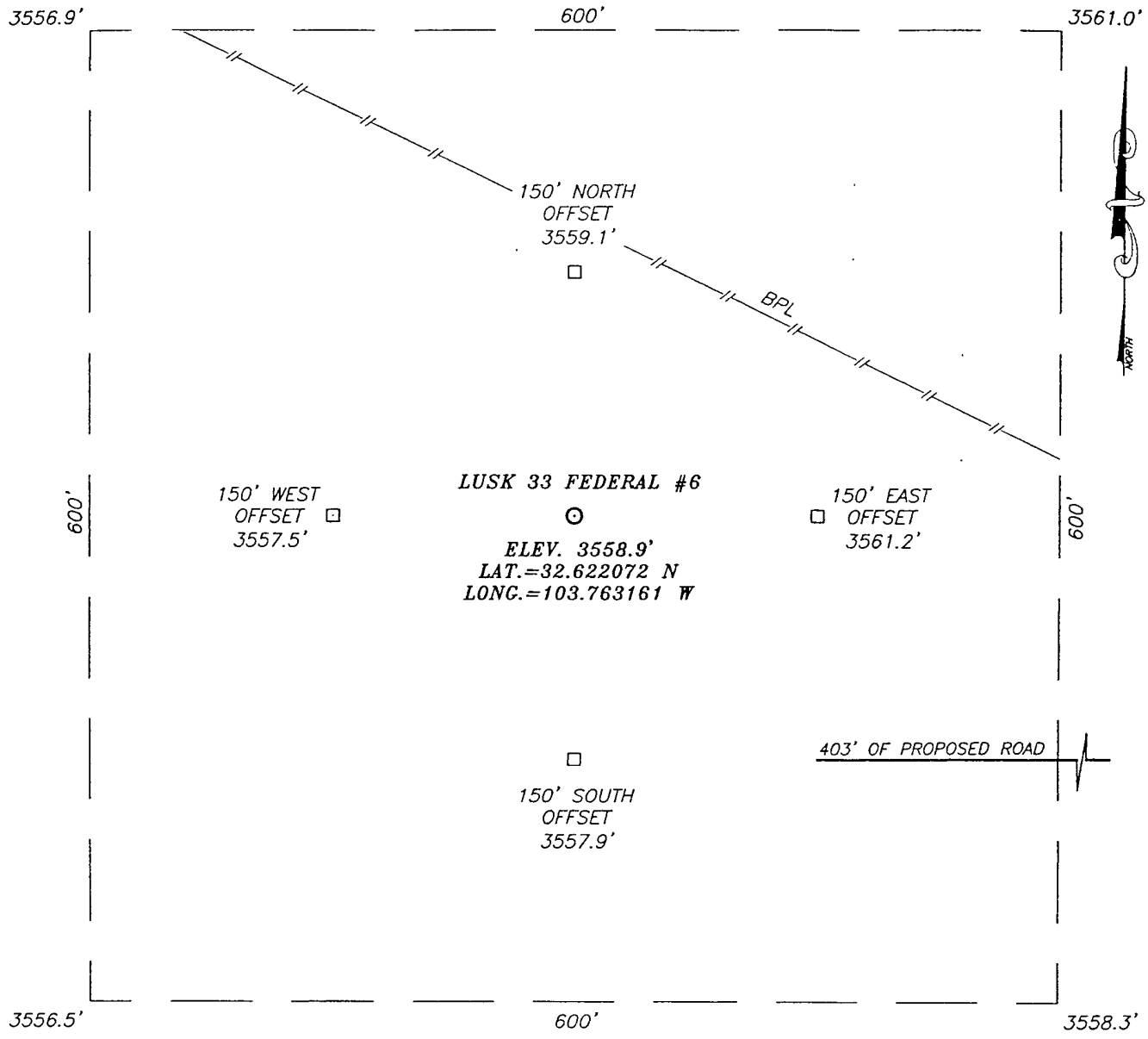
Ronald J. Eidson 2/25/08

08.11.0209

Certificate No. GARY G. EIDSON 12641
RONALD J. EIDSON 3239

SECTION 33, TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #243 AND CO. RD. 126 (MALJAMAR RD.) GO NORTH ON CO. RD. 126 FOR APPROX. 3.9 MILES. TURN RIGHT ON CALICHE ROAD AND GO EAST APPROX. 1.1 MILES. TO A "T". TURN RIGHT ON MEANDERING ROAD APPROX. 1.2 MILES. TURN LEFT AND GO NORTH APPROX. 800 FEET. TURN LEFT ON PROPOSED ROAD SURVEY AND GO WEST APPROX. 403 FEET. THIS LOCATION IS APPROX. 150 FEET NORTHWEST.

100 0 100 200 Feet

Scale: 1"=100'

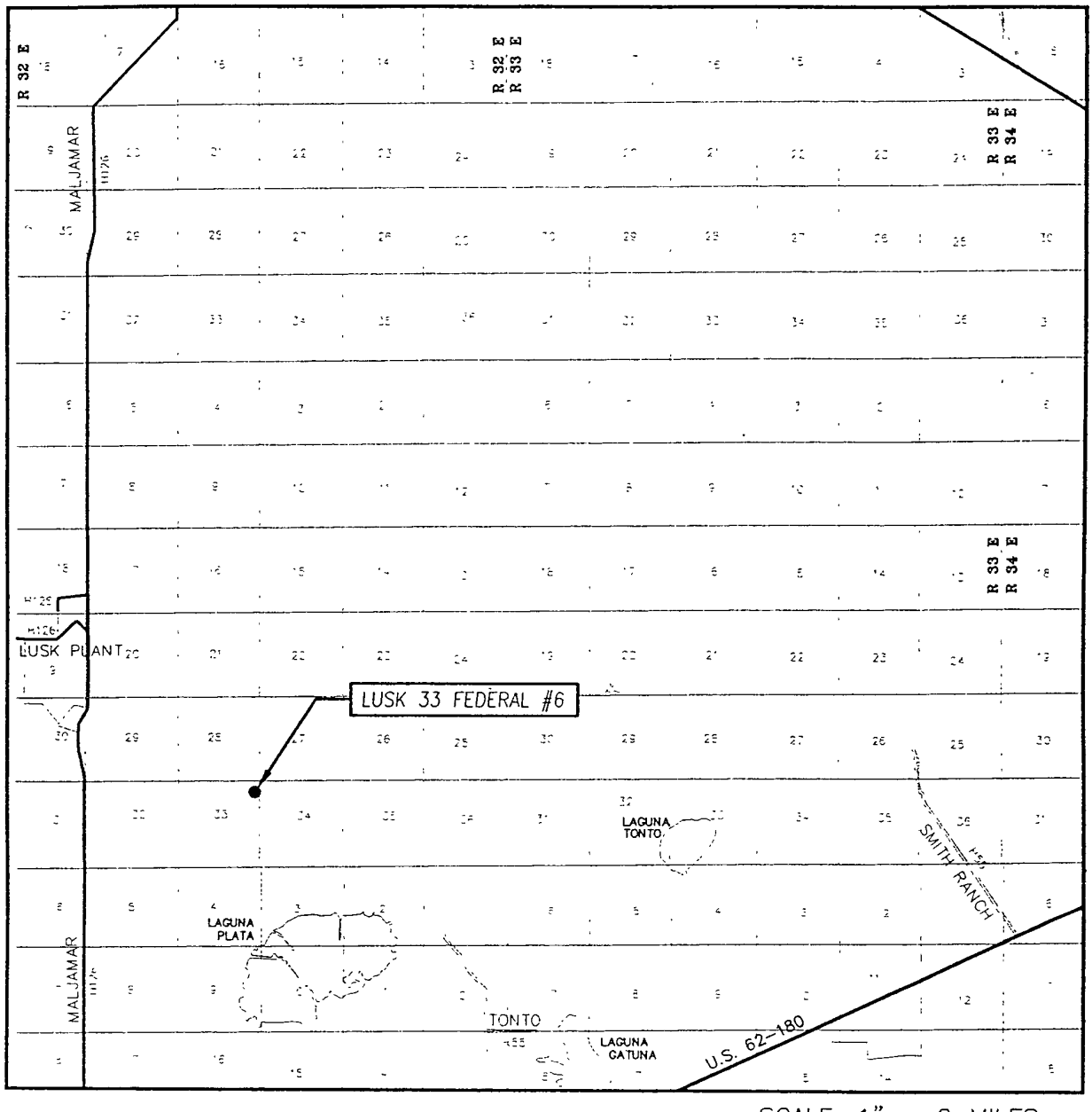
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

PURE ENERGY OPERATING, INC.

LUSK 33 FEDERAL #6 WELL
LOCATED 700 FEET FROM THE NORTH LINE
AND 330 FEET FROM THE EAST LINE OF SECTION 33,
TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 02/20/08	Sheet 1 of 1 Sheets	
W.O. Number: 08.11.0209	Dr By: J.R.	Rev 1:N/A
Date: 02/23/08	08110209	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 33 TWP. 19-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 700' FNL & 330' FEL

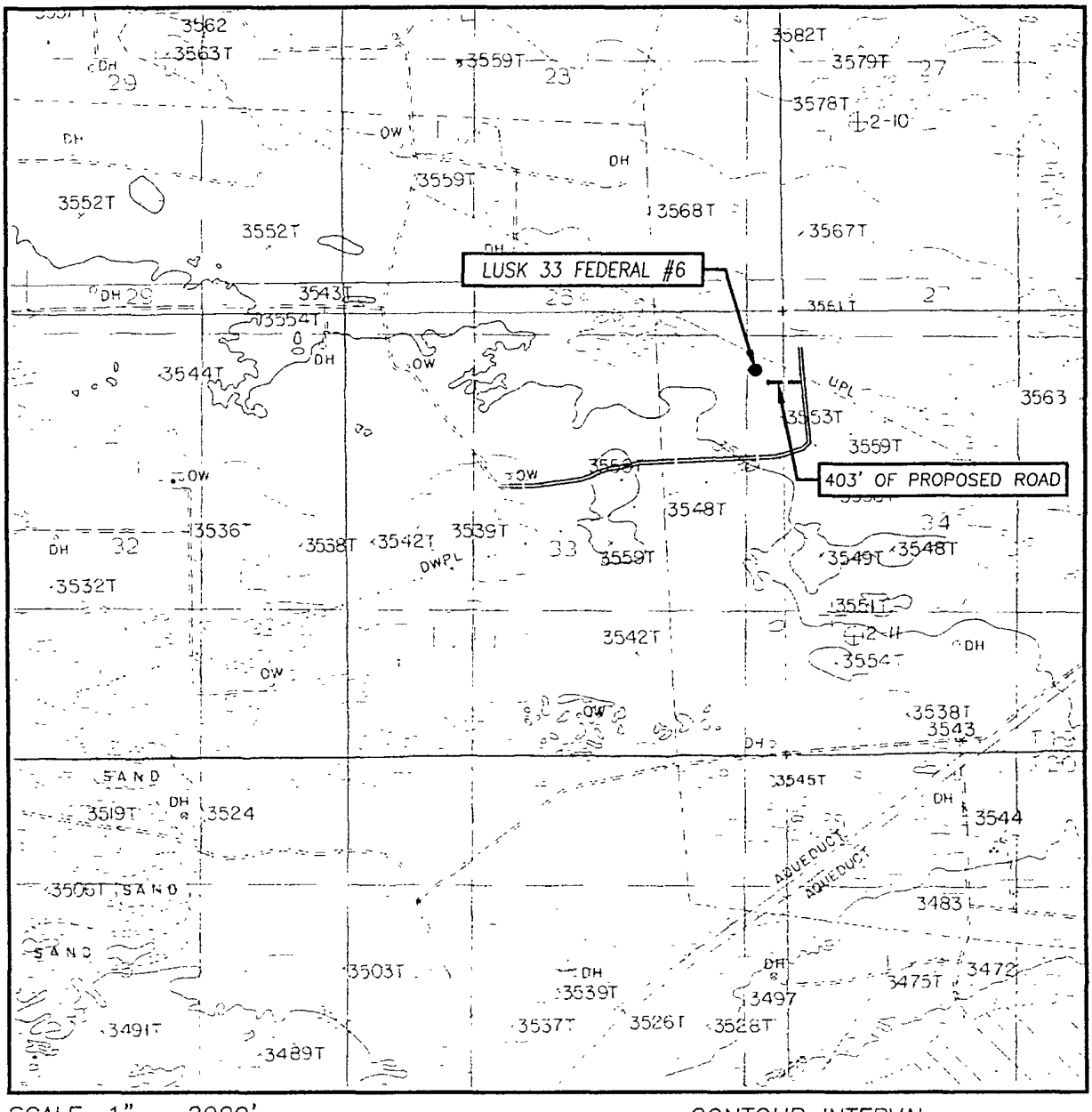
ELEVATION 3559'

OPERATOR PURE ENERGY OPERATING, INC.

LEASE LUSK 33 FEDERAL

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
WILLIAMS SINK, N.M. – 10'
GREENWOOD LAKE, N.M. – 10'

SEC. 33 TWP. 19-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 700' FNL & 330' FEL

ELEVATION 3559'

OPERATOR PURE ENERGY OPERATING, INC.

LEASE LUSK 33 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
WILLIAMS SINK, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

Surface Hole (0- 870')

OBJECTIVE:

The objective of this interval is to drill a 17-1/2" hole to cover the useable water and 25' into Rustler. **This string must be circulated to surface.** **BLM** requires surface casing to be set minimum 870'.

Formation	Depth	Remarks
Minimum Surface Requirements (per TCEQ)	0' – 870' KB	Cement must be circulated to surface. The 72 hr CS must be ≥1200 psi and reach a 500 psi before drilling out. API Free Wtr <6 ml/250 ml.

POTENTIAL WELL PROBLEMS:

Seepage losses & Lost returns

Gravel beds

PROCEDURE:

1) PU 17-1/2" bit and BHA #1. Drill ~ 870' to or 25' into Rustler.
2) Take single shot drift surveys (Totco 0 - 7°) every 500' to TD. Deviation should be limited to <5.0° and DLS < 1.5°/100'.
3) Upon reaching TD, circulate and condition hole for casing. POOH.
4) No open hole in this section.
5) RU casing crew and run the surface casing.
   a) Casing should be strapped, cleaned, visually inspected and drifted prior to running. Use an API drift with the proper OD listed in the "Casing Program".
   b) Hold pre-job safety meeting. Use single joint elevator to PU casing from the V-door to the casing stabber.
   c) Record the type, number and location of centralizers on the daily drilling report. Refer to the "Cementing Section" for the recommended cementing accessory equipment types, depths, etc.
   d) Thread lock all connections from the top of the float collar down. Lightly dope both the pin and box with thread compound.
   e) Limit running speed to 30 – 60 seconds per 45' joint.
6) Circulate at least the greater of 1-1/2 bottom's up prior to pumping cement.
7) Mix and pump cement as per the "Cementing Program" at a rate that allows a consistent slurry density of ±0.1 ppg. Do not over displace. If floats fail to hold, maintain pressure on the casing for ±4 hours.
8) Set 80% of hookload on slips and make rough cut on 13-3/8" casing. NU csg head 13-5/8" 3M x 13-3/8" 3M SOW.
9) NU BOPE as per ***"BOPE REQUIREMENTS"*** as per fig 1. Pressure test the wellhead to 1000#
10) WOC 4 hrs prior to drilling out cement.

Intermediate Hole (870'- 4750')

OBJECTIVE:

The objective of this interval is to drill a 12-1/4" hole to cover the Capitan Reef. TD ~ 4750'

POTENTIAL WELL PROBLEMS:

Seepages losses & lost returns

PROCEDURE:

1) PU 12-1/4" bit and BHA #2.
2) Test casing to 1000 psi. Drill out FC & FS.
3) Take single shot drift surveys (Totco 0 - 7°) every 500' to TD. Deviation should be limited to <5.0° and DLS < 1.5°/100'.
4) Upon reaching TD, circulate and condition hole for casing. POOH.
5) No open hole in this section.
6) RU casing crew and run the intermediate casing.
   a) Casing should be strapped, cleaned, visually inspected and drifted prior to running. Use an API drift with the proper OD listed in the "Casing Program".
   b) Hold pre-job safety meeting. Use single joint elevator to PU casing from the V-door to the casing stabber.
   c) Record the type, number and location of centralizers on the daily drilling report. Refer to the "Cementing Section" for the recommended cementing accessory equipment types, depths, etc.
   d) Thread lock all connections from the top of the float collar down. Lightly dope both the pin and box with thread compound.
   e) Limit running speed to 30 – 60 seconds per 45' joint.
7) Circulate at least the greater of 1-1/2 bottom's up prior to pumping cement.
8) Mix and pump cement as per the "Cementing Program" at a rate that allows a consistent slurry density of ±0.1 ppg. Do not over displace. If floats fail to hold, maintain pressure on the casing for ±4 hours.
9) Set 80% of hookload on slips and make rough cut on 8-5/8" casing. NU 13-5/8" 3M x 11" 3M "B" section.
10) NU BOPE as per ***"BOPE REQUIREMENTS"*** as per fig 1. Pressure test the wellhead to 2500#
11) WOC 4 hours.

Production Hole (4750'- 5000')

OBJECTIVE:

The objective of this interval is to drill a 7-7/8" hole thru the Delaware Sands. TD will be 5000'.

POTENTIAL WELL PROBLEMS:

Lost returns are possible in the Capitan Reef 2700' – 4700'.

PROCEDURE:

1) PU 7-7/8" bit and BHA #3.
    a. Allow for 100M lbs of overpull at all times.
2) Test casing to 1500 psi. Drill out FC & FS.
3) Take single shot drift surveys (Totco 0 - 7°) every 500' to TD. Deviation should be limited to <5.0° and DLS < 1.5°/100'.
4) Upon reaching TD, circulate and condition hole for logs. POOH.
5) Run open hole logs as per Formation Evaluation Program.
6) TIH to circulate and condition hole.
7) RU casing crew and run the production casing.
    a. Casing should be strapped, cleaned, visually inspected and drifted prior to running. Use an API drift with the proper OD listed in the "Casing Program".
    b. Hold pre-job safety meeting. Use single joint elevator to PU casing from the V-door to the casing stabber.
    c. Record the type, number and location of centralizers on the daily drilling report. Refer to the "Cementing Section" for the recommended cementing accessory equipment types, dehs, etc.
    d. Thread lock all connections from the top of the float collar down. Lightly dope both the pin and box with thread compound.
    e. Limit running speed to 30 – 60 seconds per 45' joint.
8) Circulate at least the greater of 1-1/2 bottom's up prior to pumping cement.
9) Mix and pump cement as per the "Cementing Program" at a rate that allows a consistent slurry density of ±0.1 ppg. Do not over displace. If floats fail to hold, maintain pressure on the casing for ±4 hours.
10) Set 80% of hookload on slips and make rough cut on 5-1/2" casing. NU tbg head 7-1/16" 5M section.
11) Release Rig. Prepare for Completion.

Casing Program:

13-3/8" SURFACE CASING						
Size	**Wt./ft.**	**Grade**	**Conn**	**Top**	**Bottom**	**Length**
13-3/8"	48	H40	STC	0'	870'	870'

Casing Details – J55					
ID:	12.715 In	Collapse Rating:	1730 Psi		+1.3 SF
Drift:	12.559 In	Burst Rating:	770 Psi		+1.5 SF
Connection OD:	14.375 In	Body Yield:	541 K-lbs		
MU Torques:	3220 ft-lbs	Joint Strength:	322 K-lbs		1.6 SF

8-5/8" SURFACE CASING						
Size	**Wt./ft.**	**Grade**	**Conn**	**Top**	**Bottom**	**Length**
8-5/8"	32	J55	LTC	0'	4000'	4000'
8-5/8"	32	K55 HC	LTC	0'	4000'	4750'

Casing Details – J55					
ID:	7.921 In	Collapse Rating:	2530/4130 Psi		+1.2 SF
Drift:	7.797 In	Burst Rating:	3930 Psi		+1.5 SF
Connection OD:	9.625 In	Body Yield:	503 K-lbs		
MU Torques:	3720 ft-lbs	Joint Strength:	417/497 K-lbs		+1.8 SF

5-1/2" PRODUCTION CASING						
Size	**Wt./ft.**	**Grade**	**Conn**	**Top**	**Bottom**	**Length**
5-1/2"	17	L80	LTC	0	5000'	5000'

Casing Details – L80					
ID:	4.892 in	Collapse Rating:	6290 Psi		+1.3 SF
Drift:	4.767 in	Burst Rating:	7740 Psi		+1.2 SF
Connection OD:	6.050 In	Body Yield:	397 K-lbs		
MU Torques:	3410 ft-lbs	Joint Strength:	338 K-lbs		+1.6 SF

Mud Program:

Surface Hole - 17 1/2"								
Interval	**MW**	**Visc.**	**PV**	**YP**	**FL**	**pH**	**% Solids**	**LCM**
20' - 870'	8.8–9.2	34-38	4-8	4-8	NC	9.0– 9.5	<6%	As needed

Drill out from under conductor w/ M-I Gel/Lime.

- M-I Gel and lime w/ 5-7 sx drilling paper for minor seepages
- Use fibrous LCM for lost returns

Monitor hole conditions, cuttings, volume and adjust properties as required

Surface Hole - 12 1/4"								
Interval	**MW**	**Visc.**	**PV**	**YP**	**FL**	**pH**	**% Solids**	**LCM**
870' - 4750'	9.8–10.0	32-36	1	1	12-15	9.5-10.0	<1.5%	As needed

Drill out from under 13 5/8" w/ Brine Water thru reserve pit

- Add drilling paper for seepage losses
- Sweep w/ Salt Gel pills for hole cleaning
- Use lime for pH control
- Use fibrous LCM for lost returns

Monitor hole conditions, cuttings, volume and adjust properties as required

7 7/8" Production Hole								
Interval	**MW**	**Visc.**	**PV**	**YP**	**FL**	**pH**	**% Solids**	**LCM**
4750' – 5000'	8.4-8.6	36-45	2-5	3-6	6-8	9.0 – 10.0	<4%	

MUD UP From under Intermediate

- Take returns to steel pits
- Mud up with M-I Gel/polyPac/My-lo-jel
- Sweep prior to logging/running casing
- Use caustic soda for pH control

PURE ENERGY
SE Lusk 33 Fed #6
Lea County, NM
API:
Proposed Wellbore

330' FEL
700' FNL
Sec 33
Twp 19
R32E

KB: '
GL: '
Surface Location
Lat:
Long:

Conductor Detail ***(Preset w/ rathole rig)***
20" @ 40'
W/
9 sx

Circ cmt to surface

Surface Detail
13-3/8" 48# H40 STC @ 870'
W/
Lead: 435 sx Haliburton Light Premium Plus+
5% Salt + .125#/sx Ploy-E-Flake

Tail: 335 sx Premium Plus + 1% CaCl2

Circ cmt to surface
Perform 1" operation if no circulation

Intermediate Detail
8-5/8" 32# J55 LTC @ 0' – 4000'
8-5/8" 32# K55 HC @ 4000' – 4750'
W/
Lead: 1200 sx Premium Plus + 5% Salt

Tail: 245 sx Premium Plus + 1% CaCl2

Circ cmt to surface

Production Detail
5-1/2" 17# L80 LTC @ 5000'
W/

Lead: 400 sx Halliburton Light Premium + 5% Salt

Tail: 155 sx Premium Plus + 5% Lap-1 + 5% CFR-3
+ 8 #/sx gilsonite + 25 #/sx D-Air 3000 + 125 #/sx Flake

Hole Size	Depth	Formations	Mud Wt.
26"	40'		
		Rustler @ 835'	M-I gel/Lime Spud Mud 8.8-9.2
17 ½"	870'		
		Top Salt @ 968'	
		Bottom Salt @ 2430'	
			Brine Water 9.9 – 10.0
		Capitan Reef @ 2700'	
12 1/4"	4750'		
		Delaware @ 4750'	
			FW PolyPac/ My Lo Jel 8.5 – 8.6
7 7/8"	5000'		

YPO 2/4/08

APPLICATION TO DRILL

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

In response to questions asked under Section II of Bulliten NTL-6, the following information on the above will be provided.

1. LOCATION: 700' FNL & 330' FEL SECTION 33 T19S-R32E LEA CO. NM

2. ELEVATION ABOVE SEA LEVEL: 3559' GL

3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits.

4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.

5. PROPOSED DRILLING DEPTH: 5000'

6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

Rustler Anhydrite	835'	Capitan Reef	2700'
Top Salt	958'	Delaware	4750'
Bottom of Salt	2430'	TD	5000'

7. POSSIBLE MINERAL BEARING FORMATIONS:

Delaware	Oil

8. CASING PROGRAM:

HOLE SIZE	INTERVAL	OD OF CASING	WEIGHT	THREAD	COLLAR	GRADE	CONDITION
26"	0-40'	20"	NA	NA	NA	Conductor	New
17½"	0-870'	13 3/8"	48#	8-R	ST&C	H-40	New
12¼"	0-4750'	8 5/8"	32#	8-R	LT&C	J-55 K-55HC	New
7 7/8"	0-5000'	5½"	17#	8-R	LT&C	L-80	New

APPLICATION TO DRILL

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 870' of 13 3/8" 48# H-40 ST&C casing. Cement with 435 Sx. of Halco Light Premium Plus cement + 5% Salt + .125# Celo-flakes/Sx. Yield 1.92, tail in with 335 Sx. of Premium Plus cement + 1% CaCl, Yield 1.35, circulate cement to surface.
8 5/8"	Intermediate	Set 4750' of 8 5/8" casing as follows: 750' of 8 5/8" 32# K-55 HC LT&C, 4000' of 8 5/8" 32# J-55 LT&C casing. Cement With 1200 Sx. of Premium Plus cement + 5% Salt Yield 2.12. Tail in with 245 Sx. of Premium Plus cement + 1% CaCl, Yield 1.34, circulate cement to surface.
5½"	Production	Set 5000' of 5½" L-80 LT&C casing. Cement with 435 Sx. of Halco Light Premium Plus cement + 5% Salt, Yield 2.12, tail in with 180 Sx. of Premium Plus cement + .5% Lap-1, + .5% CFR-3 + 8# Gilsonite/Sx. + .25#/Sx. D-Air 3000, + .125# Flocele/Sx., Yield 1.48, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nipped up on the 8 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of the hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" ~~5000~~ 3000 PSI working pressure choke manifold with dual adjustable chokes. No abnormal pressure or temperatures are expected while drilling this well.

See COA

TC per Joe Lanier

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-870'	8.8-9.2	34-38	NC	Fresh water spud mud, add paper to control seepage
870-4750'	9.8-10.2	32-36	12-15cc	Brine water add paper to control seepage, use lime for pH control, use high viscosity sweeps to clean hole.
4750-5000'	8.4-8.6	36-45	6-8 cc	Return to steel pits with fresh water mud up with M-1 Gel/polyPac/My-lo-jel, use Caustic Soda for pH control.

See COA

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, cores, open hole logs, and casing, the viscosity and/or water loss may have to be adjusted to meet thes needs.

APPLICATION TO DRILL

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Dual Laterolog, SNP,LDT, Gamma Ray , Caliper from 4750' back to 13 3/8" casing shoe. Gamma Ray Neutron from 13 3/8" casing shoe back to surface. Dual Induction SNP LDT Gamma Ray Caliper from TD back to 8 5/8" casing shoe 4750'±.

B. Rig up mud logger on hole at 2000'± and keep on hole to TD.

C. No DST"s or cores are planned at this time.

13. POTENTIAL HAZARDS:

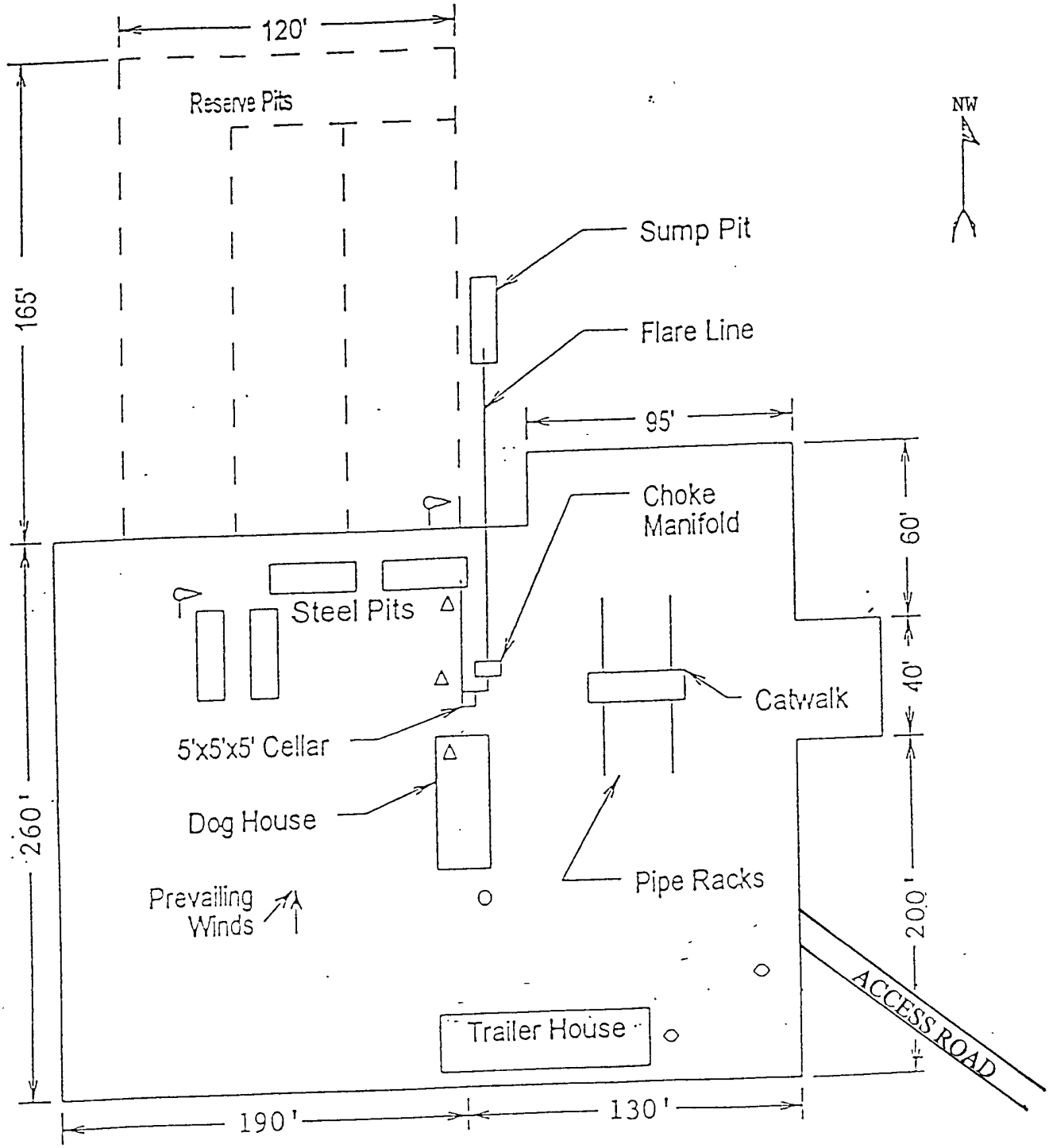
No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If H^2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 2500 PSI, and Estimated BHT 140°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 18 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production..

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Delaware formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

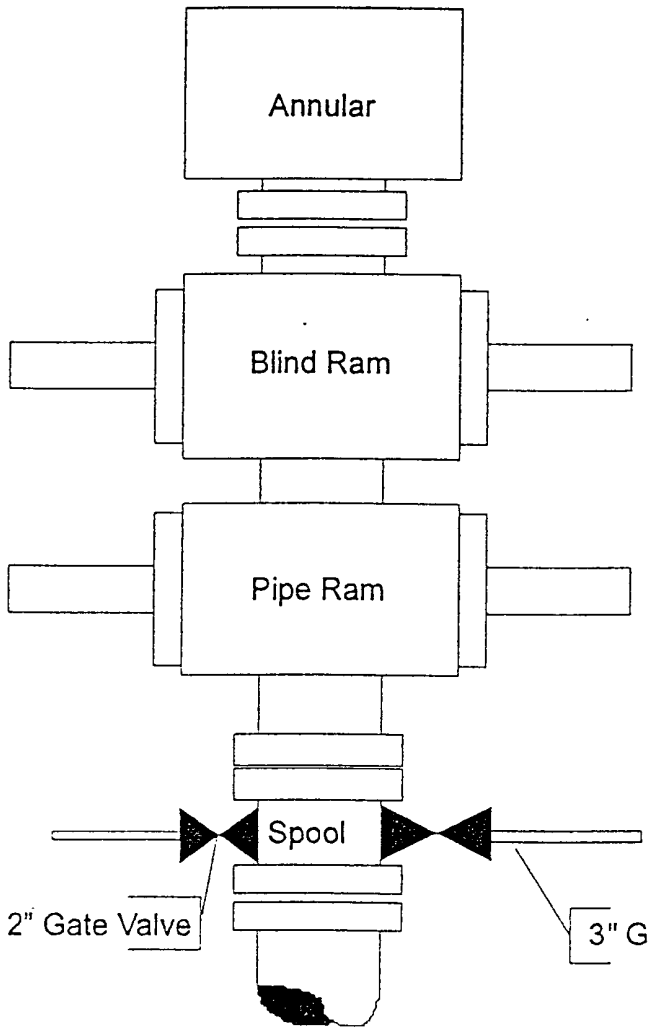


- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale s
- ○ Briefing Areas
- ○ Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

3000psi -
BOPE



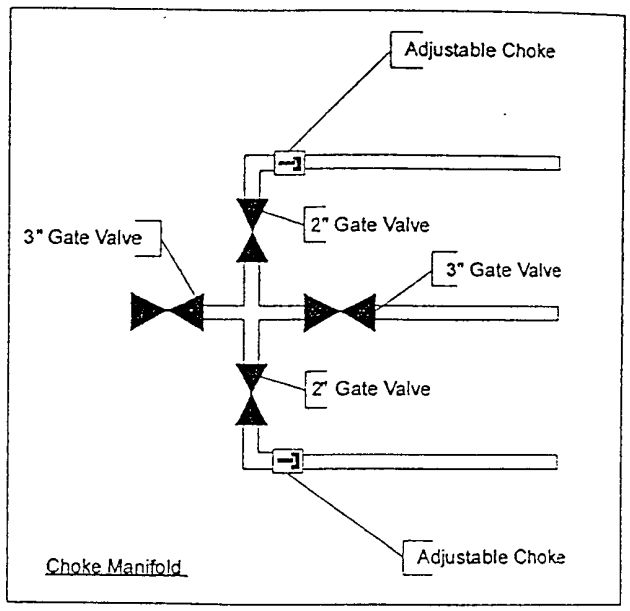


EXHIBIT "E"
SKETCH OF BOP & CHOKE MANIFOLD

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

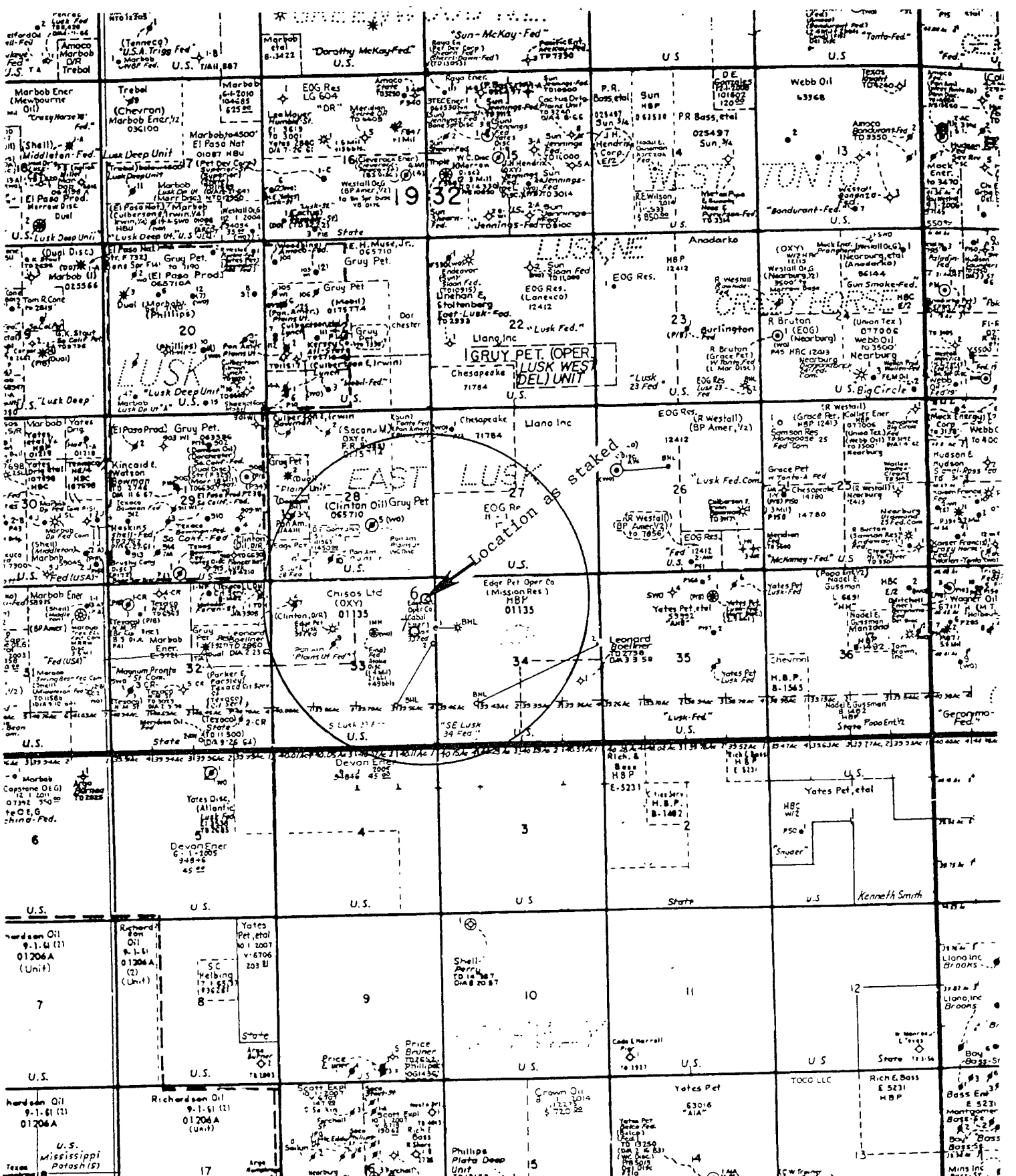


EXHIBIT "A-1"
ONE MILE RADIUS MAP

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

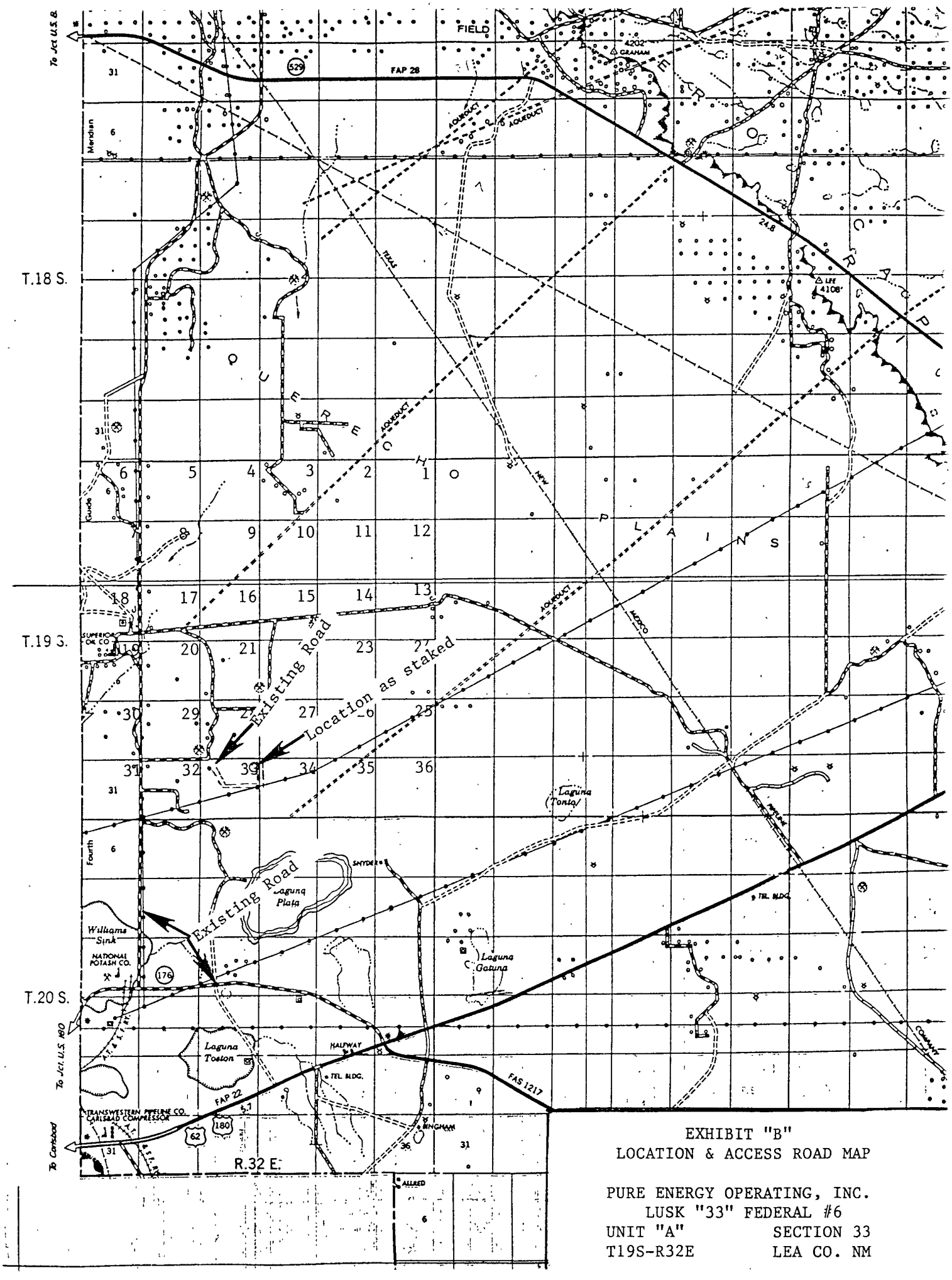


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

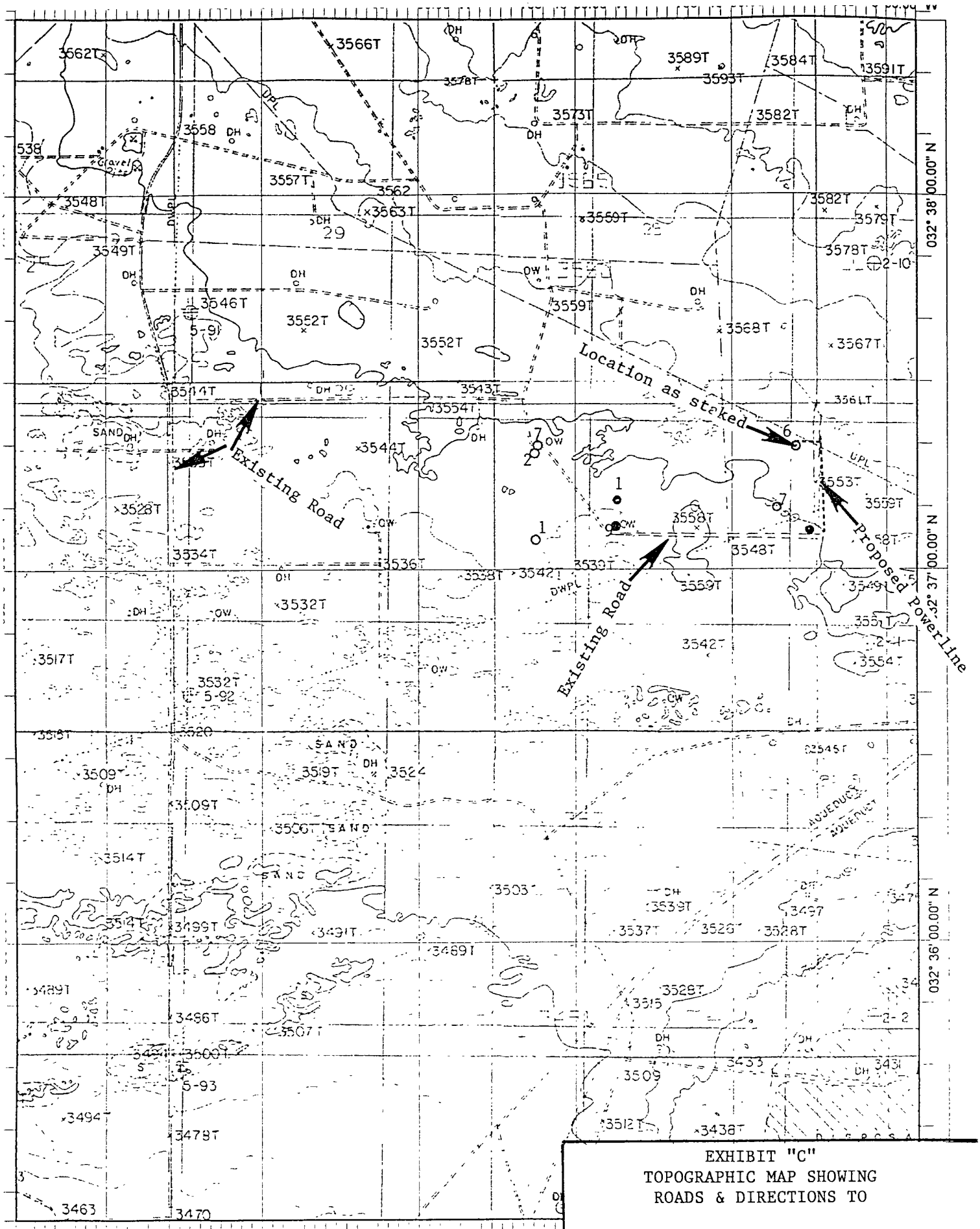


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

PURE ENERGY OPERATING, INC.
LUSK "33" FEDERAL #6
UNIT "A" SECTION 33
T19S-R32E LEA CO. NM

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	PURE ENERGY OPERATING INC.
LEASE NO.:	NM-01135
WELL NAME & NO.:	Lusk 33 Federal #6
SURFACE HOLE FOOTAGE:	700'FNL & 330' FEL
BOTTOM HOLE FOOTAGE	Same
LOCATION:	Section 33, T. 19 S., R. 32 E., NMPM
COUNTY:	Lea 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.

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 15 through June 15 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.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Hobbs Field Station at (505) 393-3612 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

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. RESERVE PITS

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

The reserve pit shall be constructed 165' X 120' on the NorthWest 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.

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

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.

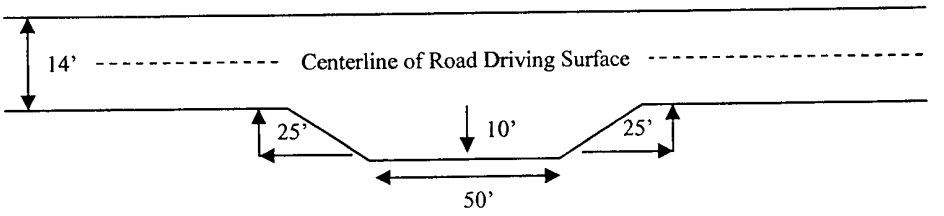
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing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

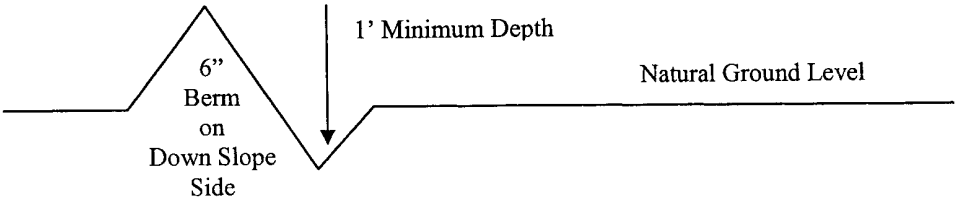


Drainage

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 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ 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.

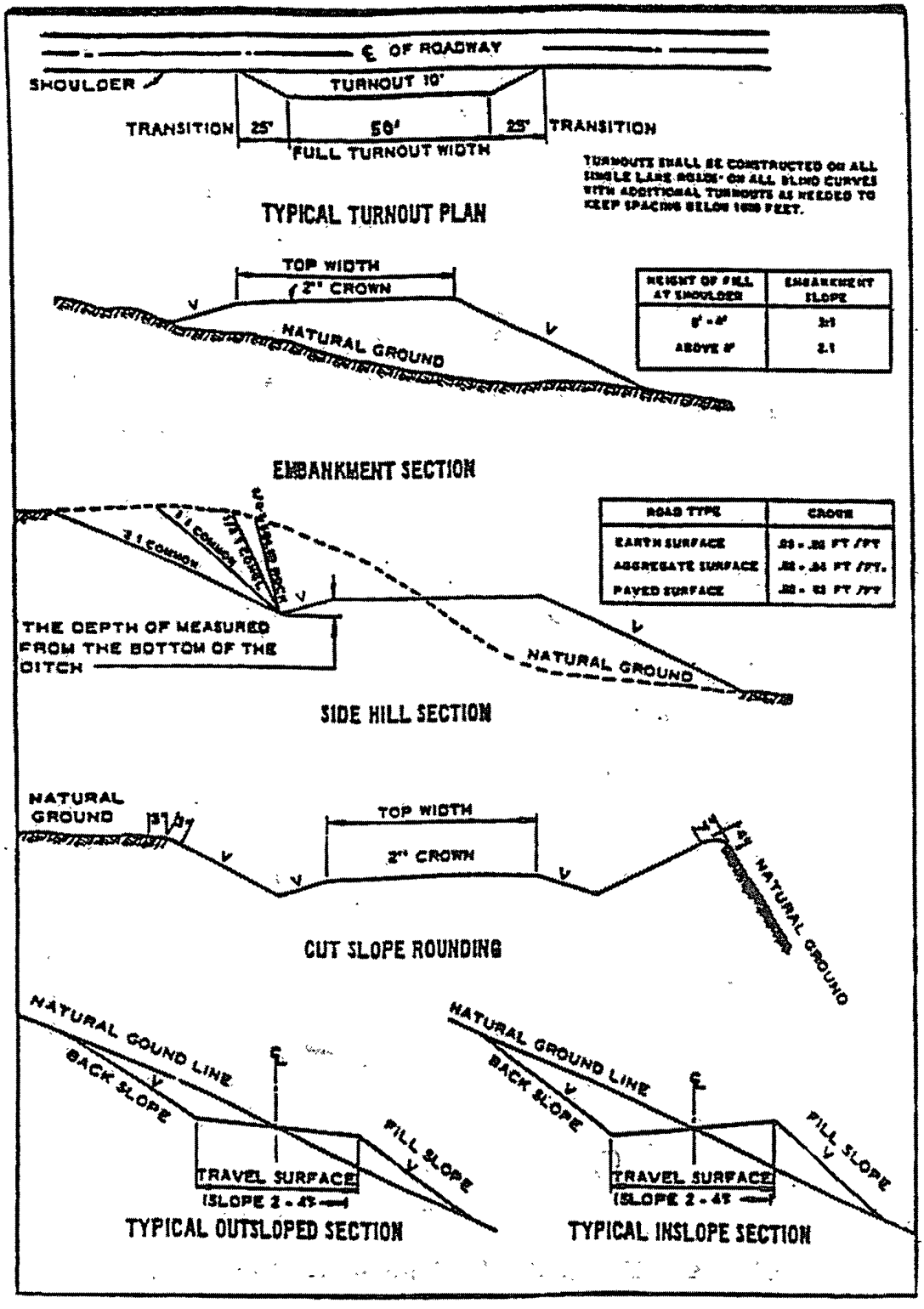
A gate shall be constructed and fastened securely to H-braces.

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

☒ **Lea County**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Yates** formation. **H2S has been reported in nearby sections measuring 200-3000 ppm in gas streams and 200-3000 ppm in STVs from wells producing from the Yates and Delaware formations. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work.

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

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string.

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

Possible lost circulation in the Artesia Group and the Capitan Reef.
Possible water flows in the Artesia and Salado Groups.

1. The **13-3/8** inch surface casing shall be set **at approximately 870 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 will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

    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.

When the Capitan Reef is anticipated, the mud system will be switched to a fresh water mud and used until the intermediate casing is set. The intermediate casing is to be set in the base of the Capitan Reef, which could occur as shallow as 4270'.

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is:

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

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

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

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

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.

D. DRILL STEM TEST

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

WWI 052008

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

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

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

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

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

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

b. Activities of other parties including, but not limited to:

(1) Land clearing.
(2) Earth-disturbing and earth-moving work.
(3) Blasting.
(4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full

expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of **25** feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

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

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

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

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

route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his hehalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

(March 1989)

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b.

A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

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

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

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

service to an active, adjoining facility or facilities.

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

11. Special Stipulations:
- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.
- See attached reclamation plans.

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 2, for Sandy Sites

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

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The see 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
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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