#### OPERATOR'S CUPY

FORM APPROVED Form 3160-3 OMB NO. 1004-0137 (February 2005) Expires: March 31,2007 UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NM-121942 SH & VA-3054 BH BUREAU OF LAND MANAGEMENT 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. X DRILL REENTER la. Type of Work 8. Lease Name and Well No. Pinochle "BNP" State Com #2 X Oil Well Gas Well X Single Zone Multiple Zone 1b. Type of Well: 9. API Well No. Name of Operator Yates Petroleum Corporation 3a. Address A Phone No. (include area code) 10. Field and Pool, or Explorator 105 South Fourth Street, Artesia, NM 88210 11. Sec., T., R., M., or Blk. And Survey Location of well (Report location clearly and In accordance with any State requirements.\*) At surface 660' FNL & 330' FWL, Section 22-T25S-28E Sec. 22-25S-28E At proposed prod. zone 660' FNL & 330' FEL, Section 22-T25S-R28E 14. Distance in miles and direction from the nearest town or post office\* 12. County or Parish 13. State NM Approximately 8 miles south of Malaga, NM 15. Distance from proposed\* 16. No. of acres in lease 17. Spacing Unit dedicated to this well location to nearest (Also to nearest drlg. unit line, if any) Fed. 160 & St. 320 N2N2-Sec.22-25S-28E Distance from proposed location\* 19. Proposed Depth 20. BLM/ BIA Bond No. on file to nearest well, drilling, completed, applied for, on this lease, ft. 7500 VD & 11,265 MD NATIONWIDE BOND #NMB000434 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Aproximate date work will start\* 23. Estimated duration 2996 GL 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. I shall be attached to this form: 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by existing bond on file(see item 20 above). 2. ap 3. A Surface Use Plan ( if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/ or plans as may be required by the 25. Signature Name (Printed/ Typed) Date Clifton May 11/1/2010 Title Land Regulatory Approved By (Signature Name (Printed/ Typed) Title Office FIELD MANAGER CARLSBAD FIELD 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 ce operations thereon. <u>APPROVAL FOR TWO YEARS</u> Conditions of approval, if any, are attached.

\* (Instructions on page 2)

Carlsbad Controlled Water Basin

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Approval Subject to General Requirements & Special Stipulations Attached

Fitle 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

CONDITIONS OF APPROVAL

DISTRICT I 1825 N. Prench Dr., Hobbe, NM 88240 DISTRICT II

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised July 16, 2010

Submit one copy to appropriate

1301 W. Grand Avenue, Artesia, NM 88210

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

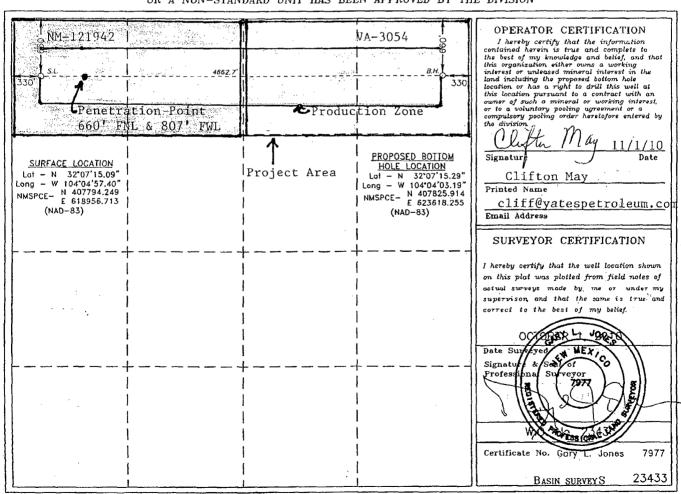
OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 67505

AMENDED REPORT

			WELL LO	CATION	AND ACREA	GE DEDICATI	ON PLAT	LI AMENDED	REPORT
19A	Number			Pool Code		1	Pool Name		
30-0	15-3	8316	534	000	Sar	Lorenzo	Wildcat	Bone Spi	ina
Property	Code				Property Nam	ie		Well No	ımber J
3755	53			PINOCH	HLE "BNP" S	STATE COM		2H	
OGRID N		1	······		Operator Nam	ie		Eleva	
025575				YATES PETROLEUM CORP.			2996		
					Surface Loc	ation		¥	
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
D	22	25 S	28 E	i	660	NORTH	330	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
Α	22	25 S	28 E		660	NORTH	330	EAST	EDDY
Dedicated Acre	s Joint o	or Infill Co	onsolidation (	Code Or	der No.	·	1.00	***************************************	
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



Form 3160-5 (Februar: 2005)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Operato	r Copy	

Temporarily Abandon

☐ Water Disposal

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

SUNDRY	NOTICES	AND	REPORTS	ON	WELLS

Change Plans

Convert to Injection

NM-121942

5. Lease Serial No.

Do not use this abandoned well.	6. If Indian, Allottee or Tabe Name				
SUBMIT IN TI	RIPLICATE – Other ins	structions on page 2.		7. If Unit or CA/Agreement, Name and/o	
1. Type of Well  X Oil Well Gas Well	Other			8. Well Name and No.	
Name of Operator	<u></u>			Pinochle BNP State Com. #2H	
Yates Petroleum Corporatio	n 025575			9. API Well No.	
3a. Address		3b. Phone No. (include	'e area code)		
105 South Fourth Street, Ar	tesia, NM 88210	(505) 748-1471		10. Field and Pool, or Exploratory Area	
4. Location of Well (Footage, Sec.,	T., R., M., or Survey Descrip	otion)		Wildcat Bone Spring	
	660' FNL and 330' F	=WL		11. County or Parish, State	
	Section 22, T25S-R	28E		Eddy County, New Mexico	
12. CHECK THE APP	ROPRIATE BOX(ES) TO	INDICATE NATURE C	F NOTICE, R	EPORT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE C	OF ACTION		
Notice of Intent	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construction	Production Reclamatic		

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

Plug Back

Plug and Abandon

Yates Petroleum Corporation wishes to have BLM approval to start construction of the Pinochle BNP State Com. 2H prior to approval of the APD. This will allow us to start constuction of the location immediately and meet our rig move on date. We are anticipating approval of the APD next week. Thank you.

O.K As per Don Peterson

Amend Surface

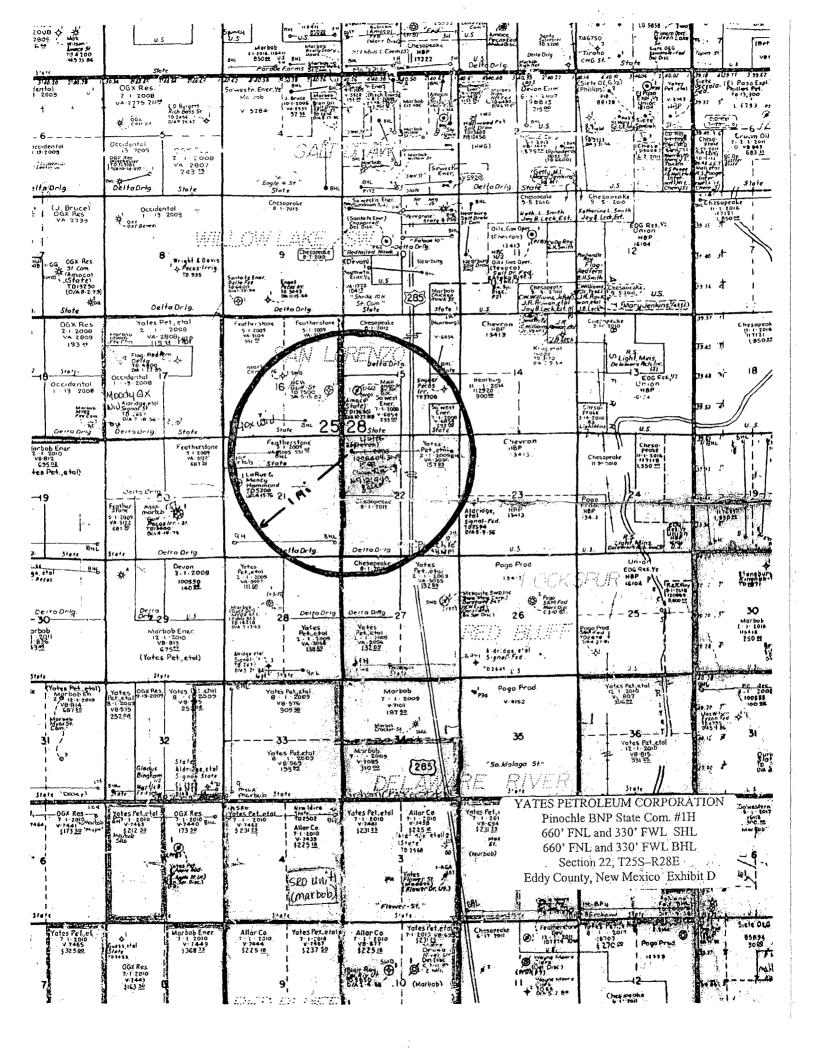
Use Plan.

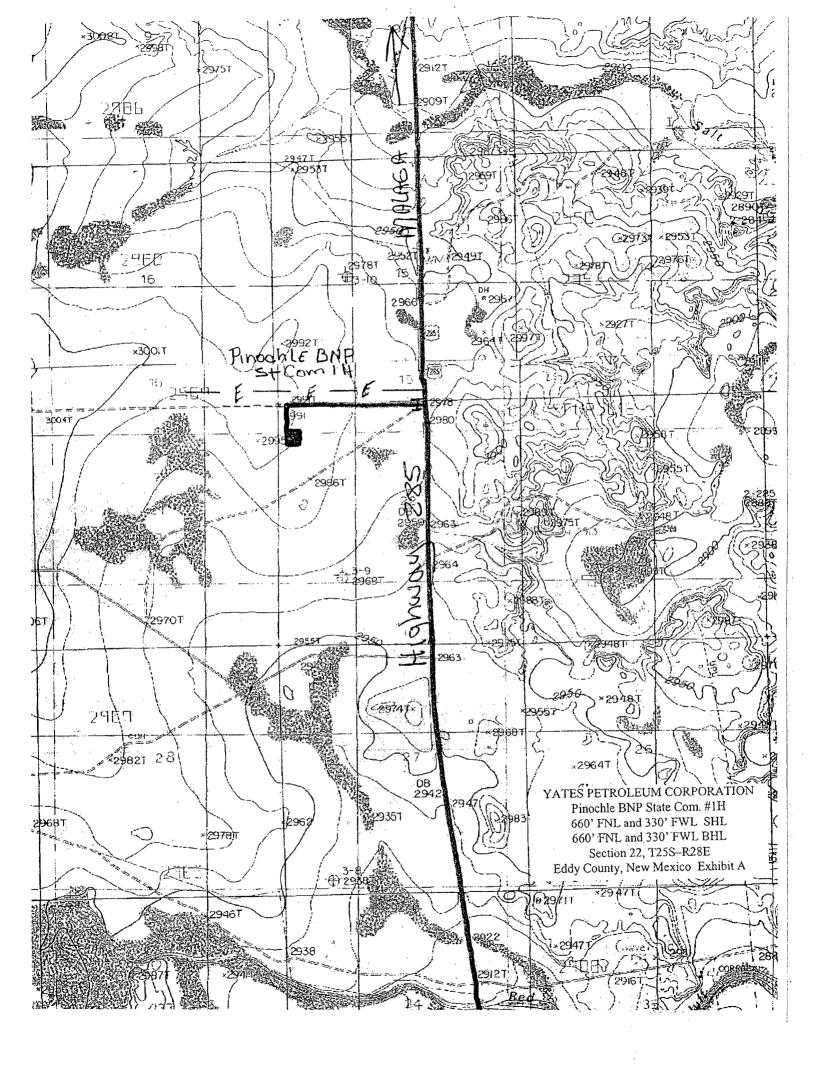
## SEE ATTACHED FOR CONDITIONS OF APPROVAL

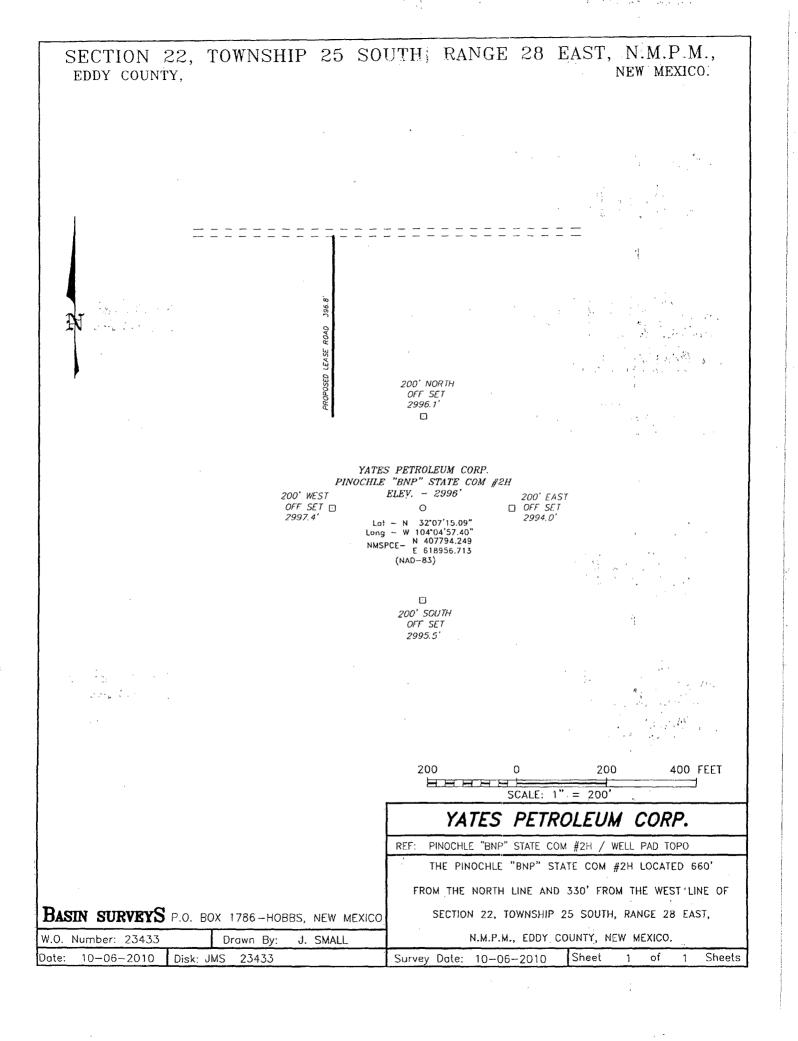
Final Abandonment Notice

Regulatory Agent / Land Department
November 19, 2010
OR STATE USE
LPET Date 11/19/10
CFO

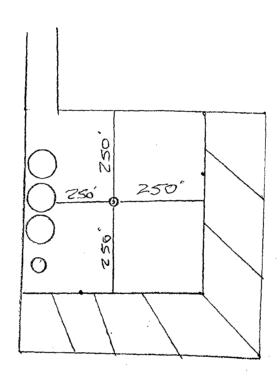
galges factitious or fraudulent statements or representations as to any matter within its jurisdiction.







YATES PETROLEUM CORPORATION
Pinochle BNP State Com. #1H
660' FNL and 330' FWL SHL
660' FNL and 330' FWL BHL
Section 22, T25S-R28E
Eddy County, New Mexico



Not To Scale Reclaimed Area Area Actual Reclaimed Area Tank May Not Belike This Tank Submittal.

#### YATES PETROLEUM CORPORATION

Pinochle "BNP" State Com. #2H

660' FNL and 330' FWL, Section 22-25S-28E, Surface Hole Location 660' FNL & 330' FEL, Section 22-25S-28E, Bottom Hole Location Eddy County, New Mexico

The estimated tops of geologic markers are as follows:

•	Vertical		Vertical	MD
Castile	965'	Avalon Shale Target	6850'	7123'
Delaware	2550'	FBSG	7150'	
Cherry Canyon	3400'	TD (Pilot Hole)	7500'	
Brushy Canyon	4680'	TD (Lateral)		11265'
Bone Spring	6200'			

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

Water: 16

160'

Oil or Gas: Zones: 2550'Oil, 3400' Oil, 4680' Oil, 6200' Oil & 6850'Oil.

- 3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and rated for 3000# BOP System. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.
- 4. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when Kelly is not in use.
- 5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: All new casing to be used

per operator.	Hole Size 17 1/2" 12 1/4"	<u>Casing Size</u> 13 <del>3/4</del> ″≯⁄8 9 5/8″	<u>Wt./Ft</u> 48# 36#	<u>Grade</u> J-55 J-55	Coupling ST&C LT&C	<u>Interval</u> 0-400' 0'-2400'	Length 400' 2400'
	8 3/4"					2400' to 75	00' Pilot
	8 1/2"	5 1/2"	17#	P-110	LT&C	0-7200'	7200'
	8 1/2"	5 1/2"	17#	L-80	LT&C	7200'-1126	5' 4065'

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

B. CEMENTING PROGRAM:

Surface Casing: Cement with 425 sacks Class C (Yld 1.34Wt. 14.80). .TOC surface.

Intermediate Casing: Lead with 650 sacks of C Lite (Yld 1.96 Wt 12.60). Tail in with 200 sacks Class C (YLD 1.34 WT 14.80 YLD). TOC surface

Production Casing: Production cement to be done in two stages with stage tools at approximately 5500'.

Stage One: 11265'-5500'; cement with 1950 sacks Pecos Valley Lite (YLD 1.41 WT 13.00). TOC 5500'.

Pinochle "BNP" State Com. #2H Page Two

Stage Two: 5500' -1900': lead with 625 sacks Lite Crete (YLD 2.66 WT 9.9), tail in with 100 sacks Pecos Valley Lite (YLD 1.41 WT 13.00) TOC 1900'.

Pilot hole drilled vertically to 7500'. A 400'-500' kick off plug will be set and dressed off, Then kicked off at approximately 6373' and directionally drilled at 12 degrees per 100' with a 8 3/4" hole to 7123' MD (6850' TVD). If hole dictates, 7" casing will be run and cemented. A 6 1/8" hole will then be drilled to 11,265' MD (6850' TVD) where 4 1/2" casing will be set and cemented. If 7" is not ran , then hole size will be reduced to 8 1/2" and drilled to 11265 MD (6850' TVD). The penetration point of producing zone will be encountered at 660' 'FNL & 807' FWL, 22-55S-27E. Deepest TVD in the well is 7500' in the pilot hole. Deepest TVD in the lateral will be 6850'.

#### 6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	<u>Type</u>	Weight	Viscosity	Fluid Loss
1nterval 2540	Fresh Water	8.60-9.20	29-36	N/C
400'-2400*	Brine Water	10.00-10.20	28-30	N/C
2400'-7500'	Cut Brine(Pilot Hole)	8.80-9.20	28-29	N/C
6373'-11265'	Cut Brine(Lateral Section	on) 8.80-9.30	28-34	<15

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

#### 7. EVALUATION PROGRAM:

Samples: Every 10' from intermediate casing to TD Logging: Platform Hals. CMR for Delaware. See CoA

Logging: Platform Hals, CMR for Delaware. See Co None anticipated

DST's: None Anticipated

Mudlogging: Yes

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

Maximum Anticipated BHP:

0'-400' 190 PSI 400'-2400' 1273 PSI 2400'-7500' 3627 PSI

Abnormal Pressures Anticipated: None Lost Circulation Zones Anticipated: None. H2S Zones Anticipated: None Anticipated Maximum Bottom Hole Temperature: 150 F

#### 9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 20 days.

#### Contingency Casing Design

If note conditions dictate, 7" casing will be set at 7,123' MD (6,850' TVD). A 6 1/8" hole will then be drilled to 11,265' MD (6,850' TVD) where 4 1/2" casing will be set and comențed with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 6300'

#### 2nd Intermediate

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

	100 ft to	5,900 ft	Make up Torque ft-lbs	Total ft =	5,800
O.D.	Weight	Grade Threads	opt. min, mx,		
7 inches	23 #/ft	J-55 LT&C	3130 2350 3910	]	
Collapse Resistanca	Internal Yield	Joint Strength	Body Yield Drift	1	
3,270	<b>4,3</b> 60 psi	313 ,000 #	366,000# 6.25		

	5,900 ft to	7,123 ft	Make up Torque ft-lbs	Total ft = 1,223
O.D.	Weight		opt. min. mx.	
7 inches	26 #/ft	J-55 LT&C	3670 2750 4590	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift	
<b>4,320</b> psi	<b>4,9</b> 80 psi	367 ,000 #	415 ,000 # 6.151	

DV tool placed at approx. 5500'.

Stage I: Cemented w/350sx PVL (YLD 1.41 Wt 13) TOC= 5500'

Stage II: Cemented w/350sx Lite Crete (YLD 2.66 Wt 9.9), tail w/100sx PVL (YLD 1.41 Wt 13) TOC= 1900\*

#### Production

	0 ft to	11,265 ft	Make up Torque ff-lbs	Total ft = 11,265
O.D. 4.5 inches	Weight 11.6 #/ft	Grade Threads	opt. min. mx.	
Collapse Resistance	Internal Yield	Joint Strength	Body Yield Drift	
8,650 psi	10,690 psi	279 ,000 #	367,000 # 3.875	:

DV tool placed at approx. 6300' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 6300'.

Cemented w/675sx PVL (YLD 1.41 Wt 13) TOC= 6300'

enm
Petrol
Yates

Co: Yates Petroleum	Units: Feet, ", 1100ft	VS Az: 90.00	Tgt TVD: 6850.00
Drillers: 0	Elevation:	Tgt Radius: 0.00	Tgt MD: 0.00
Well Name: Pinochle BNP State Com. #2H	Northing:	Tgt N/S: 0.00	Tgt Displ.: 0.00
Location: 0	Easting:	Tgt E/W: 4620.00	Method: Minimum Curvature

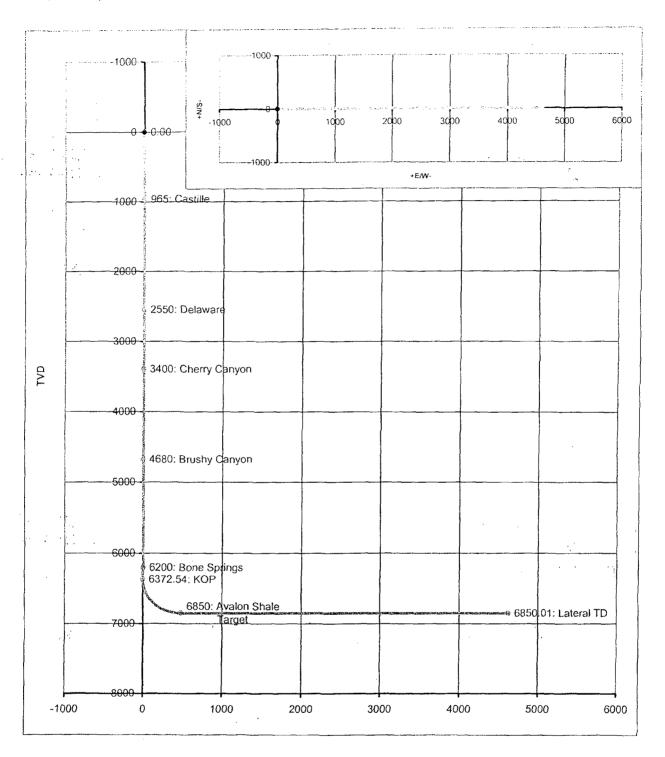
Pinochle BNP St Com

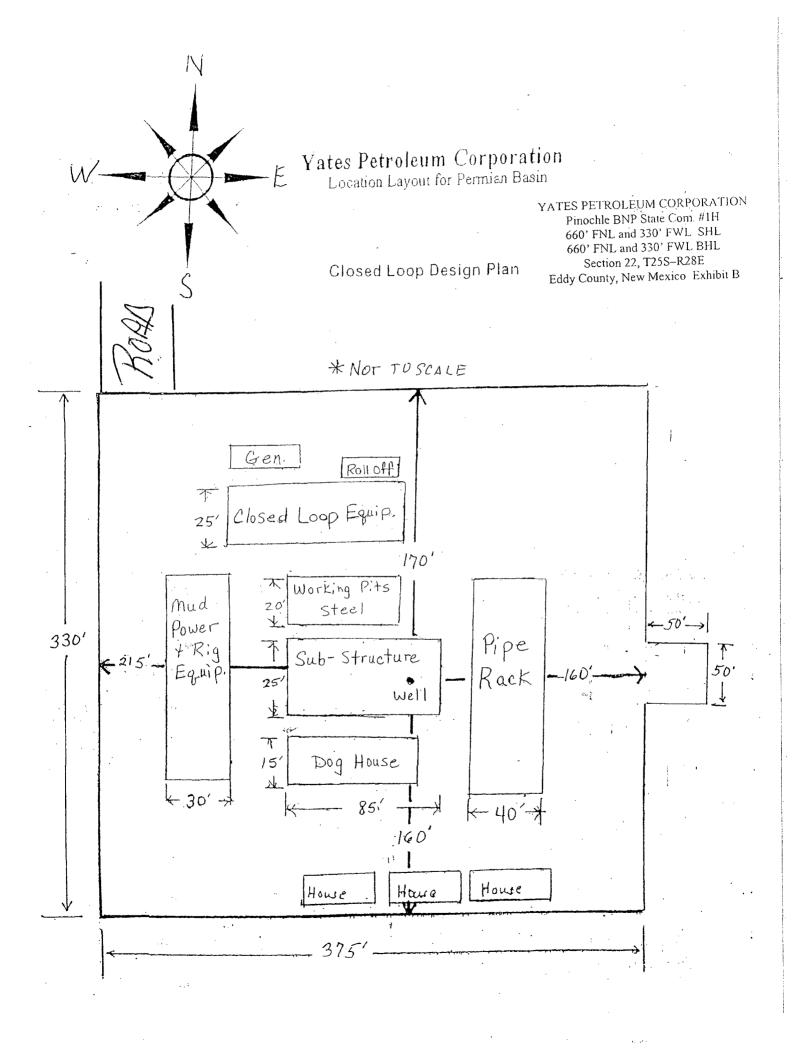
yatespetroleum.com

DLS Comments		0.00 Castille	0.00 Delaware	0.00 Cherry Canyon	0.00 Brushy Canyon	0.00 Bone Springs	0.00 KOP	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00 Avalon Shale Target	0.00 Lateral TD
* "WR		0.00	00.0	00.0	0.00	0.00	1.41	0.00	00.00	0.00	0.00	00.0	00:00	00.0	0.00	00'0	0.00
BR		00.0	00:0	00.0	00:0	00.0	00.0	12.00	12.00	12.00	12.00	12.00	12:00	12.00	12.00	12.00	0.00
+E/W-	0.00	00.0	00.0	00.00	0.00	00.0	00.0	0.79	16.91	53.17	107.96	178.91	262.90	356.27	454.94	477.46	4620.00
+N/S+								:					0.07	0.01	10.0	0.01	00.0
NS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	16.91	53.17	107,96	178.91	262.90	356.27	454.94	477.46	4620.00
, QVL	0.00	965.00	2550.00	3400.00	4680.00	6200.00	6372.54	6399.98	6498.49	6591.49	6674.93	6745.14	6799.07	6834.36	6849.47	6850.00	6850.01
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<b>⊺</b> io.	300.0	965.00	1585.00	850.00	1280.00	1520.00	6372.54	27.46	100.00	100.00	100.00	100.00	100.00	100.00	100.00	750.00	4142,54
GW .	0000	965.00	,2550.00	3400.00		6200.00	6372.54	6400.00	00 0059	6600.00	6700'00 100'00	6800.00	00'0069	7000.00	.7100.00	7122.53	311265.07
No.	0.7	-		က	Ţ.	5		7	8	O	0.00	7	12	13	14	15	16

per operator Hop = 6373 120/100'

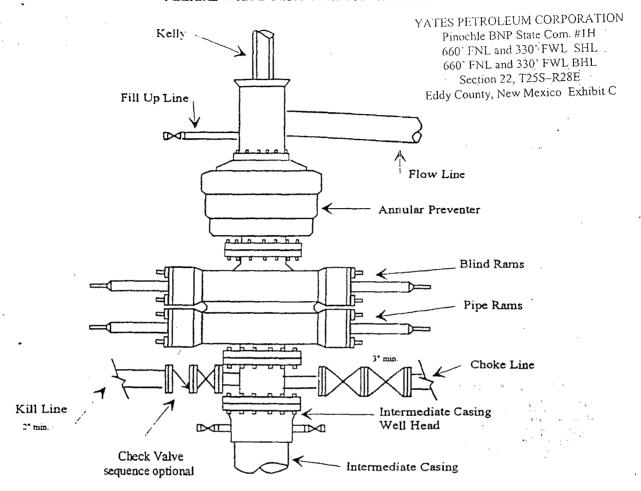
www.trantlogistics.com



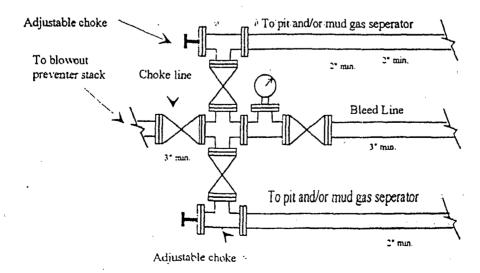


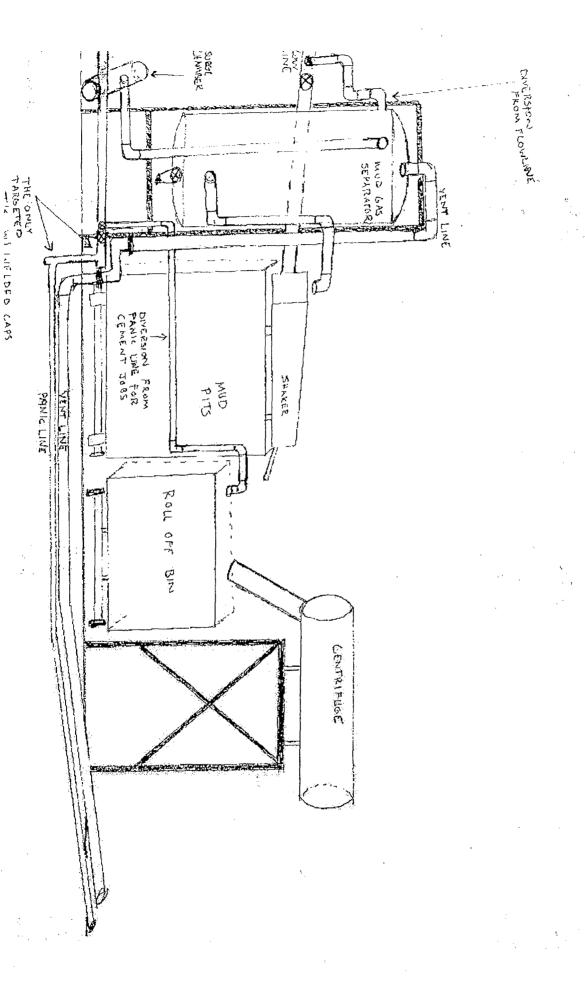
### Yates Petroleum Corporation

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



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





YATES PETROLEUM CORPORATION
Pinochle BNP State Com. #1H
660' FNL and 330' FWL SHL
660' FNL and 330' FWL BHL
Section 22, T25S-R28E
Eddy County, New Mexico Exhibit E

#### MULTI-POINT SURFACE USE AND OPERATIONS PLAN YATES PETROLEUM CORPORATION

Pinochle "BNP" State Com. #2H 660' FNL & 330' FWL, Surface Hole 660' FNL & 330' FEL, Bottom Hole Section 22-T25S-R28E 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 8 miles south of Malaga, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: From Malaga, NM go South on highway 285 for approximately 8 miles. There will be a powerline crossing HWY 285 approximately this at this point. Just past the powerline there will be a cattle guard on the right side of the highway. Turn right here crossing cattle guard and follow lease road for approximately 0.5 of a mile. The new road will start here going south for approximately 0.1 of a mile to the northwest corner of the proposed well location.

#### 2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 0.1 of a mile in length from the point of origin to the northwest corner of the drilling pad.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on both sides. Two to three traffic turnouts may be needed.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

#### LOCATION OF EXISTING WELL:

- A. There is drilling activity within a one-mile radius of the well site.
  - B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are no production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power until an electric line can be built, if needed.

#### 5. LOCATION AND TYPE OF WATER SUPPLY:

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

#### 6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits that may be required.

#### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. This well will be drilled with a closed loop system
- B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division the "Pit Rule" 19.15.17 NMAC.
- C. Drilling fluids will be removed after drilling and completions are completed.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. 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, pulling unit orientation and access road approach.
- B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division the "Pit Rule" 19.15.17 NMAC.
- 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. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible

## Pinochle BNP State Com #2H Page Three

#### 11. SURFACE OWNERSHIP:

Private Surface Owners: Judy & Joseph Landes, P.O. Box 344, Eunice, NM 88231. Yates Petroleum Corporation has entered into a surface use agreement with the Landes' to drill this well.

Mineral Estate: Managed by the Bureau of Land Management, 620 East Greene Street, Carlsbad, NM 88220.

#### 12. OTHER INFORMATION:

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

Millora

Hang Brown

#### Plans for Interim and Final Surface Reclamation.

- 1. Well location will be contoured to resemble the original topography as closely as possible. Surface reclamation measures will be taken to avoid new erosion on the well location and the area surrounding the well location. These measures will be overseen by Yates' personnel following a structured plan for the reclamation of each individual site.
- 2. Major drainage systems will be avoided as determined at the onsite with the BLM. Minor drainages may be rerouted around the well site within the  $600' \times 600'$  cleared area to avoid moving the well location.
- 3. Segregation of topsoil or like soils will be placed in low lift rows rather than in a stockpile just off the caliche well pad. Placement of these lift rows will be determined at the BLM onsite or at the time of construction by Yates Personnel.
- 4. Yates will use prudent oil field practices when constructing well locations and related facilities. Yates personnel will determine the size of the well location needed for safe working conditions for personnel during all aspects on the drilling and production process.
- 5. Back fill requirements for above ground reserve pits will be met by using cut, fill, and contouring of available top soil and like soils from the pit area. Should additional material be needed it will be brought in from a BLM approved source.
- 6. All topsoil will be spread over the area reclaimed during interim reclamation using a front end loader. For final reclamation enough topsoil will be evenly distributed between the interim reclaimed area and the final reclaimed area. This method of soil stabilization should help maintain the productivity and viability of the topsoil.
- 7. Soil treatments will be determined at the time of final reclamation by Yates' Environmental Specialist or other designated personnel to meet BLM final reclamation goals.
- 8. Reseeding of disturbed areas will be accordance with the seed mixtures attached to the approved APD as Conditions of Approval. Planting and soil preparation will be done during the rainy season between June 1st and September 1st.
- 9. Yates' personnel will control weeds during the productive period through final abandonment of the well. Yates may also use the option to hire a third party to be in charge of weed control or participate in the Chaves Soil and Water District program to pool monies for weed control.
- 10. Well pads, roads and related facilities with caliche or other surfacing material will be picked up or turned over at the time of final abandonment. These materials may be used on other projects in the area if possible or placed back in the caliche pit or other designated site. Buried pipelines will be left in place after being bled down and purged. Above surface support equipment will be removed or cut down below plow depth and removed. Pipeline right-of-ways will be reseeded according to BLM Best Management Practices.

## CERTIFICATION YATES PETROLEUM CORPORATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that 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 1st day of November , 20 10	<b>-</b> '
Printed Name Clifton May	
Signature Clifty Mby	- L .
Position Title <u>Land Regulatory Agent</u>	
Address 105 South Fourth Street, Artesia, NM 88210	,
Telephone <u>575-748-4347</u>	de la companya de la La companya de la co
E-mail (optional) cliff@yatespetroleum.com	
Field Representative (if not above signatory) Tim Bussell	
Address (if different from above) Same	
Telephone (if different from above) 575-748-4221	

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:

Yates Petroleum Corp
NM121942
2H Pinochle BNP State Com
660' FNL & 330' FWL
Section 22, T. 25 S., R. 28 E., NMPM
COUNTY:

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#### I. GENERAL PROVISIONS

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

#### II. PERMIT EXPIRATION

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

#### III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

#### IV. NOXIOUS WEEDS

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

#### V. SPECIAL REQUIREMENT(S)

#### **Communitization Agreement**

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

#### VI. CONSTRUCTION

#### A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

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

#### B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 4 inches in depth. The topsoil will be used for interim and final reclamation.

#### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

#### E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

#### F. ON LEASE ACCESS ROADS

#### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty (20) feet.

#### Surfacing

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

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

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

#### Crowning

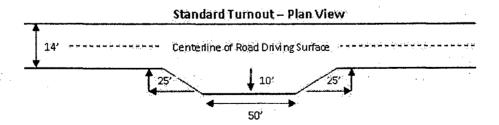
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

#### Ditching

Ditching shall be required on both sides of the road.

#### **Turnouts**

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

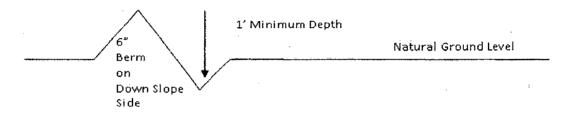


#### Drainage

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

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

#### 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

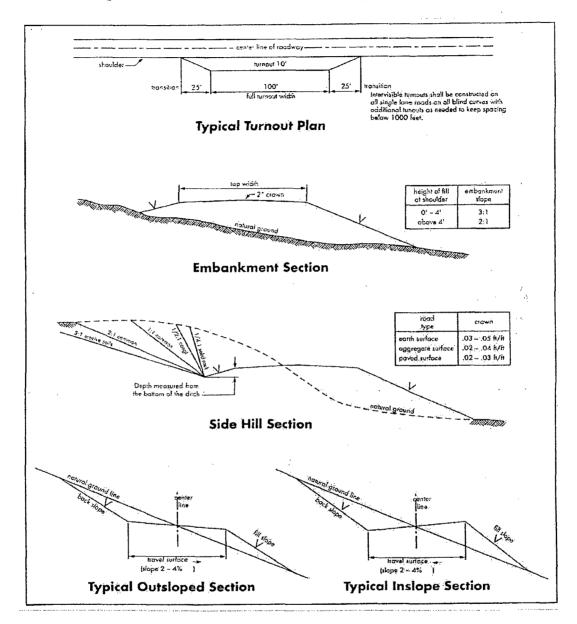
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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
  - Eddy County
    Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 1. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 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. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The bottom of Salt shall be recorded on the Completion Report.

#### B. CASING

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

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

Wait on cement (WOC) time prior to drilling out 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. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. 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 Delaware Formation Possible H2O flows in Salado and Delaware Mountain Groups

- 1. The 13-3/8 inch surface casing shall be set at approximately 400 feet 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - 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 9-5/8 inch intermediate casing shall be set at approximately 2540 feet and 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.

Pilot hole is required to have a plug at the bottom of the hole. If two plugs are set, the BLM is to be contacted (575-361-2822) prior to tag of bottom plug, which shall be Class C and a minimum of 200' in length. Operator can set one Class C plug from bottom of pilot hole to kick-off point and save the WOC time for tagging the first plug.

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. Operator should have plans as to how they will achieve circulation on the next stage.
  - b. Second stage above DV tool, cement shall:
  - Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

#### Contingency casing program:

- 4. The minimum required fill of cement behind the 7 inch intermediate casing is:
  - Cement should tie-back at least 500 feet into 9-5/8 inch casing string. Operator shall provide method of verification.

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

- 5. The minimum required fill of cement behind the 4-1/2 inch production casing is:
  - Cement to come to DV tool depth of 6300 feet. Operator shall provide method of verification.
- 6. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

#### C. PRESSURE CONTROL

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

- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.
  - a. For surface casing only: If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug or when the cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. BOP/BOPE testing can begin after the above conditions are satisfied.
  - b. The tests shall be done by an independent service company utilizing a test plug **not** a **cup** or **J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) prior to initiating the test.
  - c. The results of the test shall be reported to the appropriate BLM office.
  - d. 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.
  - e. 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.

#### E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

EGF 112910

#### VIII. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES

#### **Placement of Production Facilities**

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

#### **Containment Structures**

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

#### **Painting Requirement**

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

- B. PIPELINES not requested in APD
- C. ELECTRIC LINES not requested in APD

#### IX. 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.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation 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 that is free of contaminants 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.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below. Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

#### X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 3, for Shallow 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 <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

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

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

Species	<u>lb/acre</u>
Plains Bristlegrass (Setaria magrostachya)	1.0
Green Spangletop (Leptochloa dubia)	2.0
Side oats Grama (Bouteloua curtipendula)	5.0

<sup>\*</sup>Pounds of pure live seed:

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

#### PECOS DISTRICT CONDITIONS OF APPROVAL

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WELL NAME & NO.:
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BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:

Yates Petroleum Corp
NM121942
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LOCATION:
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County, New Mexico

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The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 4 inches in depth. The topsoil will be used for interim and final reclamation.

#### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

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Surfacing of the well pad is not required.

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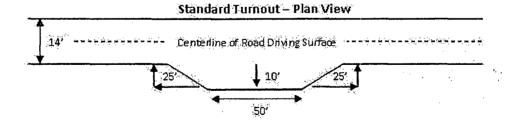
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#### **Turnouts**

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

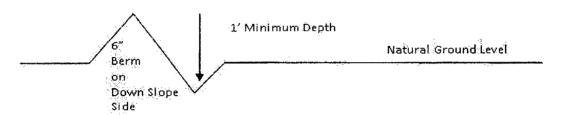


#### Drainage

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

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

#### 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: 
$$\frac{400'}{404}$$
 + 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

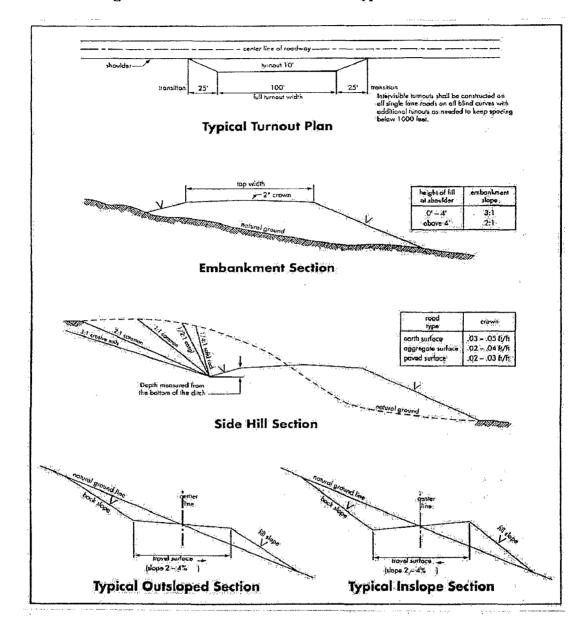
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



#### A. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

#### VII. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES

#### **Placement of Production Facilities**

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

#### **Containment Structures**

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

#### Painting Requirement

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

- B. PIPELINES not requested in APD
- C. ELECTRIC LINES not requested in APD

#### VIII. 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.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation 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 that is free of contaminants 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.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

#### X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 3, for Shallow 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 <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

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

made before completion of at least one full growing season after seeding.

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

Species	<u>lb/acre</u>
Plains Bristlegrass (Setaria magrostachya)	1.0
Green Spangletop (Leptochloa dubia)	2.0
Side oats Grama (Bouteloua curtipendula)	5.0

<sup>\*</sup>Pounds of pure live seed:

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