EA-10-85

ATS-09-454 RM

	OCD Artesia				
Form 3160-3		1	FC	ORM APPRO	VED
(August 2008) 1 2003				AB NO 1004	
UNITED STATES		_		pires: July 31	, 2010
DEPARTMENT OF THE INTE	RIOR	5	5. Lease Serial N		_
BUREAU OF LAND MANAGE	MENT	L	(YCY1: A 11.	NM-97127	
Form 3160-3 (August 2008) UNITED STATES BUREAU OF LAND MANAGE APPLICATION FOR PERMIT TO DRILL	OR REENTER	1	f Indian, Allo	mee or inde	Name
			7 If Unit or CA	A greement	Name and No
1a Type of Work X DRILL REEN	1	n omtorex	Agreement, i	varne and 140.	
14 Type of Work A PARIED	1 Lik	1	3. Lease Name a	and Well No.	
1b. Type of Well: X Oil Well Gas Well Other	Single Zone Multiple	Zone	Punc	ch BJD Fede	ral #3H
2 Name of Operator		9	API Well No.		
V-4 Petualaum Comparation 02	:575	1	30.0	115.27	UNS
Yates Petroleum Corporation 025 3a Address 3b. Pl	none No (include area code)		0 Field and Poo	ol, or Explorat	tory
100.000				•	·
105 South Fourth Street, Artesia, NM 88210	505-748-1471			signated Bon	
4. Location of well (Report location clearly and In accordance with an At surface	iy State requirements *)		1. Sec., 1., K., N	A., or Bik. Ar	nd Survey or Area
910' FNL and 330' FEL	Surface Hole Location	[San	ction 6, T26S	D27F
At proposed prod zone			Sec		-R27E
14 Distance in miles and direction from the nearest town or post office	Bottom Hole Location	—— 1	2. County or Par	rich	13 State
14 Distance in times and direction from the hearest town or post office		1	z. county of ru	11011) is suite
This well is located approximately 10 miles southwest		117. 6	Eddy Co		New Mexico
15 Distance from proposed* location to nearest	16 No of acres in lease	17 Spac	ing Unit dedicate	ed to this well	i
property or lease line, ft					
(Also to nearest drlg unit line, if any) 330'	1039.31	i		N/2N/2	
18 Distance from proposed location*	19 Proposed Depth	20 BLM	/ BIA Bond No	on file	
to nearest well, drilling, completed,	Priother TVD 6200	1		n novin unu	**************************************
applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.)	TVD 8200' TMD 10622' 22. Aproximate date work w	nll start*	NATIONWIDI 23 Estimate	E BOND #NI ed duration	MB000434
21. Elevations (ener. Micale B1, 1655, R1, GE, etc.)	22. Tiproximate date work w	,	25 Estimate	od darutron	•
3269'	ASAP			45 day	's
	24 Attachments				
The following, completed in accordance with the requirements of Onsho	re Oil and Gas Order No 1 sha	ll be attached	i to this form:		
1 Well plat certified by a registered surveyor.	4 Bond to cover th	ne operations	unless covered h	ov existing ho	nd on file(see
2 A Drilling Plan.	item 20 above)	o operations	amos covered e	ry existing oo	710 OH 1110(00C
3. A Surface Use Plan (if the location is on National-Forest System La					
SUPO must be filed with the appropriate Forest Service Office).	6. Such other site s	pecific infor	mation and/ or p	lans as may b	e required by the
	BLM				
	c (Printed/Typed)			Date	10/15/0000
- Over		Cy Cow	an		10/15/2009
Title Land Regulatory Agent					
Approved By (Signature) . Name	(Printed/Typed)		li	DateNOV	
Approved By (Signature) /S/ Don Peterson Name	- (- · · · · · · - · · - · · · · · · · ·			ן עטארייי	l 3 2009
Title FIELD MANAGER Office	A				
Application approval does not warrant or certify that the applicant holds	CARLSBAD	HELD.	OFFICE	ich would ent	itle the applicant to co
operations thereon.	-	_	-		• •
Conditions of approval, if any, are attached.		YPPROV	AL FOR T	WU YEA	
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a	crime for any person knowingl	y and wilfull	y to make to any	department of	or agency of the Unite
States any false, fictitious or fraudulent statements or representations as t	o any matter within its jurisdic	tion.' 🦴			
* (Instructions on page 2)					

* (Instructions on page 2)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL



APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED**

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

DISTRICT III

State of New Mexico Energy, Minerals and Natural Resources Department Form C-102 Revised October 12, 2005

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.

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

1000 Rio Brazos Rd., Asteo, NM 87410 DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87506

Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30.015 x 37405	Pool Code	POOL NAME SPRING
Property Code	Property Name	Well Number
35910	PUNCH "BJD" FEDERAL	3H
OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORP	3269'

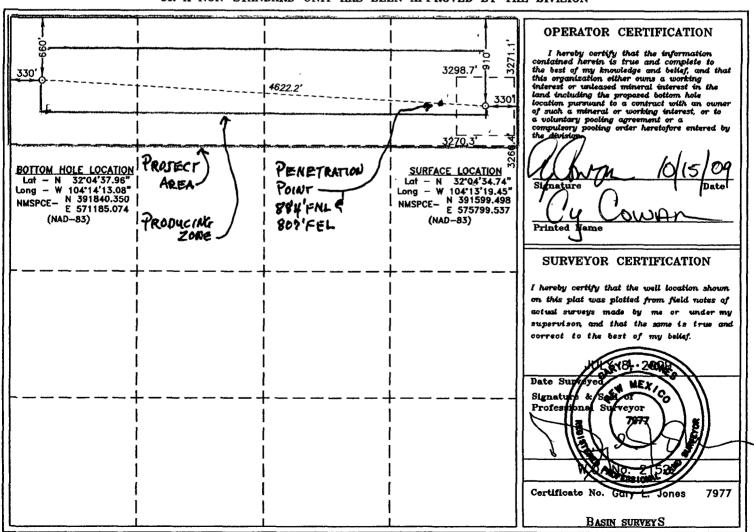
Surface Location

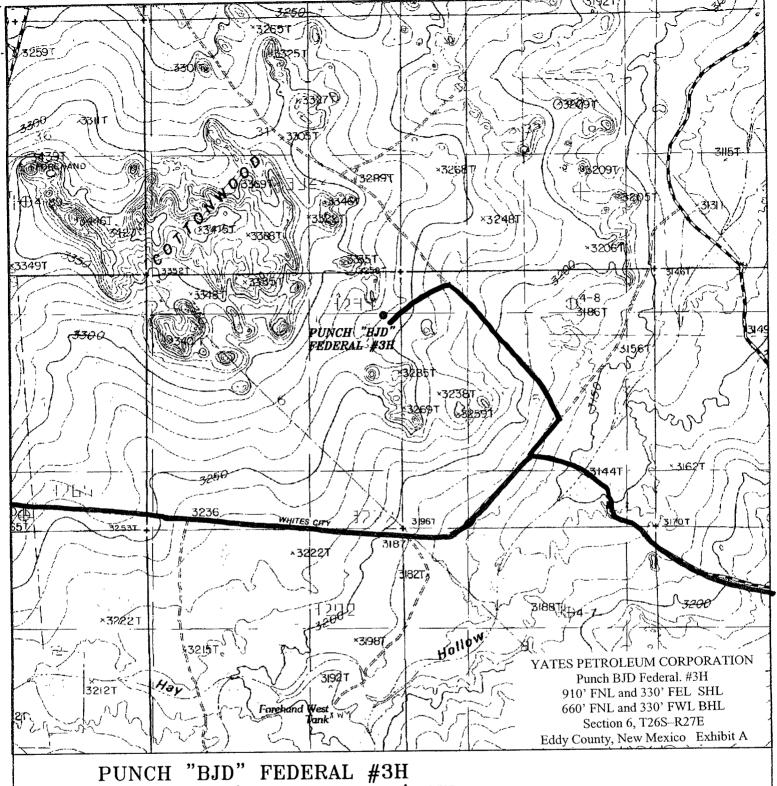
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	6	26 S	27 E		910	NORTH	330	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	6	26 S	27 E		660	NORTH	330	WEST	EDDY
Dedicated Acre	s Joint o	r Infill Co	nsolidation (Code Or	der No.				
160									

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





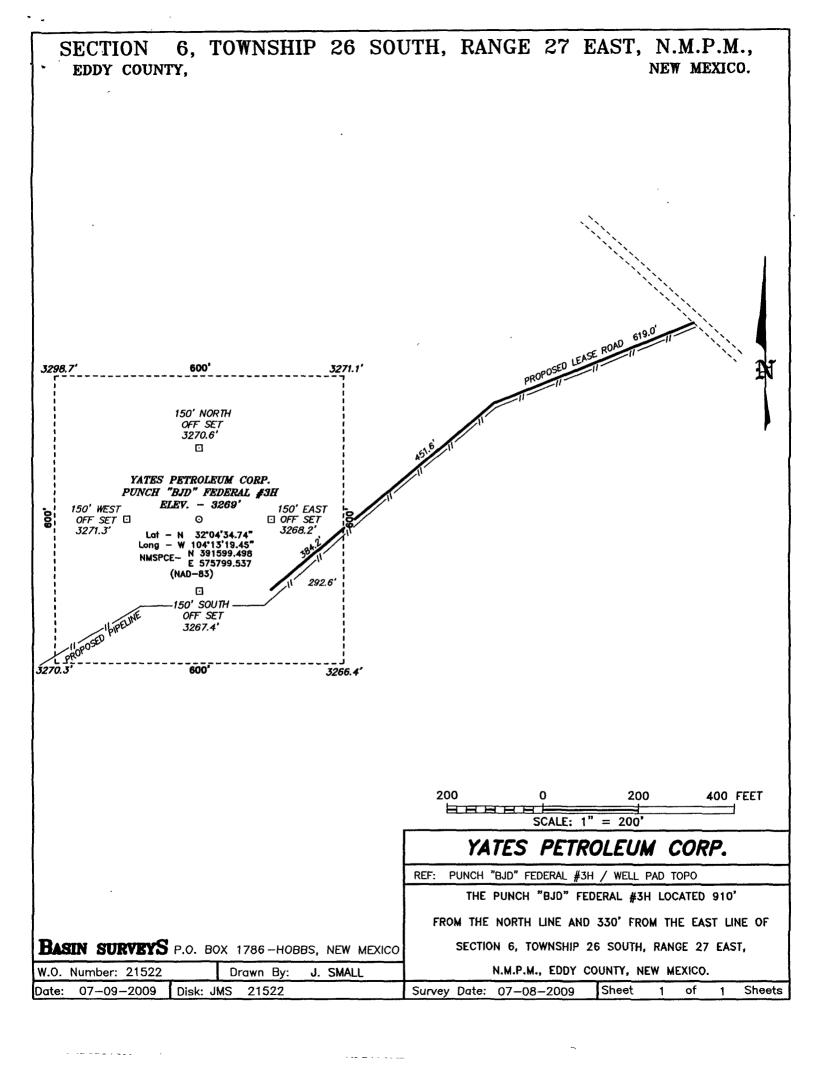
PUNCH "BJD" FEDERAL #3H Located 910' FNL and 330' FEL Section 6, Township 26 South, Range 27 East, N.M.P.M., Eddy County, New Mexico.

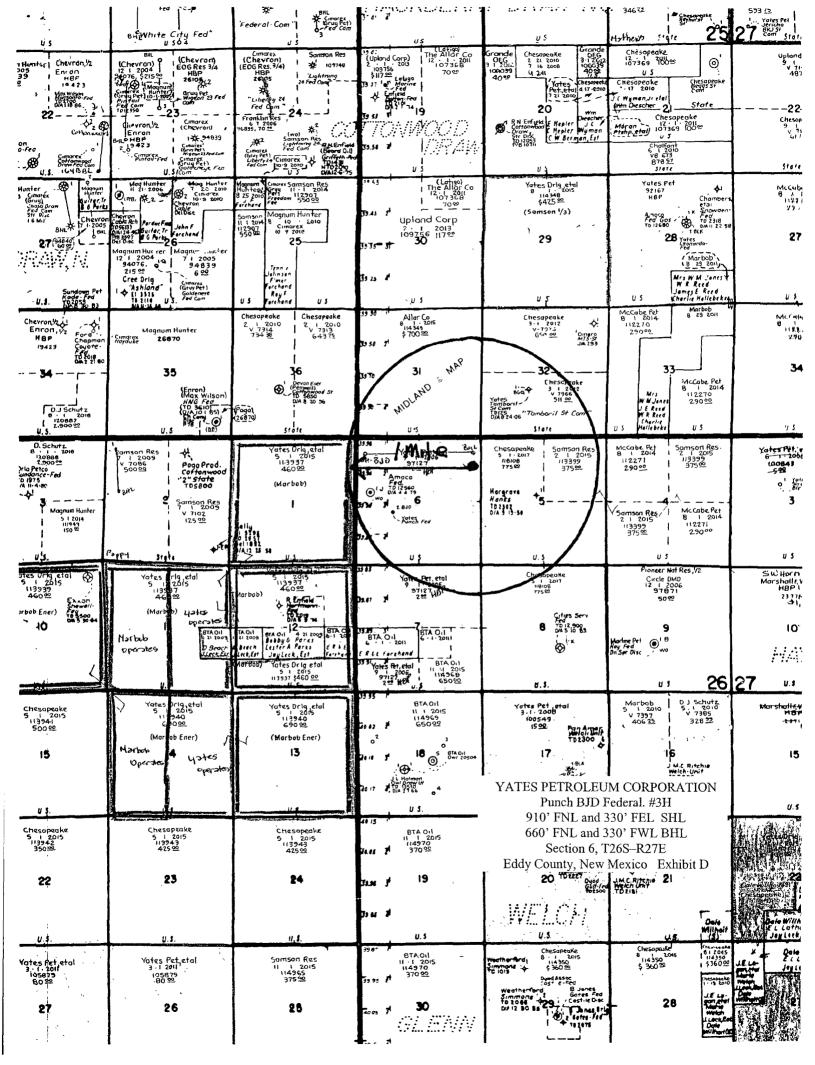


P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 — Office (575) 392-2206 — Fax basinsurveys.com

-	W.O Number JMS 21522	No.
	Survey Date: 07-08-2009	TOTAL PROPERTY.
	Scale 1" = 2000'	Parameter
	Date: 07-09-2008	THE PERSON

YATES PETROLEUM CORP.





YATES PETROLEUM CORPORATION

Punch "BJD" Federal #3H

910' FNL and 330' FEL, Surface Hole Location 660' FNL & 330' FWL, Bottom Hole Location

Section 6, T26S-R27E Eddy County, New Mexico

1 The estimated tops of geologic markers are as follows:

Castille	490'	Target Zone	6200'-Oil
Delaware	2065'	First Bone Springs	6620'-Oil
Cherry Canyon	2930'	Second Bone Springs	7340'-Oil
Brushy Canyon	4040'	TD Pilot Hole	8200'
Bone Springs	5645'-Oil	Lateral TMD	10622'
Avalon Sand	5770'-Oil		

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

Water: 160; Oil & Gas: See Above

- 3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and 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

<u>Hole Size</u>	Casing Size	Wt./Ft	<u>Grade</u>	Coupling	<u>Interval</u>	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-400, OK	400"
12 1/4"	9 5/8"	36#	J-55	ST&C	0-2150'	2150'
8 3/4" " Contingen	cy Časing Desig	17#	Open Hole	LTC	0-10,622'	8200°,
**8 3/4"	7"	26#	. J-55	LT&C	0-100'	100'
8 3/4"	7"	23#	J-55	LT&C	100-5600'	5500'
8 3/4"	7"	26#	J-55	LT&C	5600-6473'	873'
6 1/8"	4.1/2"	11.6#	HCP-110	LT&C	0-10622	10622'



**Pilot hole will be drilled vertically to 8200'. Well will then be plugged back with 180' plug on bottom and 400'-500' kicked off at approx. 5723' and directionally drilled at 12 degrees per 100' with a 8 3/4" hole to 6473' TMD (6200' TVD). If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 10615' MD (6200 TVD) where 4 1/2" casing will be set and cemented. If 7" casing is not set, then hole size will be reduced to 7 7/8" and drill to 10615' MD(6200' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 884' FNL & 807' FEL, Section 6, T26S-R27E. Deepest TVD in the well is 8200' in the pilot hole. Deepest TVD in the Lateral will be 6200'.

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

B. CEMENTING PROGRAM: See CoA

Surface Casing: Lead in with 425 sx Class 'C' (WT 14.8 YLD 1.34). TOC Surface

Intermediate Casing: Lead in with 530 sx 'C' Lite (WT 12.5 YLD 2.0). Tail in with 200

sx Class 'C' (WT 14.8 YLD 1.34). TOC Surface.

Production Casing: Lead in with 730 sx Lite Crete (WT 9.9 YLD 2.66). Tail in with 1375 sx Pecos Valley Lite (WT 13.0 YLD 1.41) Top of cement 1650'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

Interval	<u>Type</u>	<u>Weight</u>	Viscosity	Fluid Loss
Interval 0-400', 0 K 400'-2150'	Fresh Water	8.6-9.2	33-36	N/C
400'-2150'	Brine Water	10.0	28-29	N/C
2150'-8200'	Cut Brine	9.5-9.7	28-29	N/C
5723'-10622'	Cut Brine	9.5-9.7	29-29	<10-12cc
	(Lateral Section)			

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: See COA

Samples: 10' samples 2150'-TD

Logging: Platform Express-NGT; CMR for Delaware, Dipole Sonic

Coring: None anticipated DST's: None Anticipated

Mudlogging: 2000' or intermediate casing depth if below the Delaware.

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

Maximum Anticipated BHP:

0'-400', 0 191 PSI 400'-2150' 1118 PSI 2150'-8200' 4136 PSI Abnormal Pressures Anticipated: None Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None

Maximum Bottom Hole Temperature: 150 F

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 20 days.

Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 6,473' MD (6,200' TVD). A 6 1/8" hole will then be drilled to 10,622' MD (6,200' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 5500'.

2nd	ntarme	ateihe

	0	ft	to	100	ft	Make up To	rque ft-lbs	Total ft =	100
O.D.		eight		Grade	Threads		mx.		
inches 7	This is to	26 #/ft		J-55	LT&C	3670 275	0 4590		
Collapse Resistance	Inte	rnal Yi	eld		Strength	Body Yield	Drift		
4,320 psi	4,980	psi		36	7 ,000 #	415 ,000 #	6.151	į į	

	100	ft	to	5,600	ft		Make	up Torqi	ue ft-lbs	Total ft =	5,500
O.D.		eight		Grade	Thread			nin.	mx.		
Tinches	1 2	3 #/ft		J-55	LT&	Ç	3130	2350	3910		
Collapse Resistance		nal Yi	eld		Strength		Body Y		Drift		
3,270	4,360	psi		31	3 ,000 #		366	000#	6.25		

	5,600 ft to	6,473 ft	Make up Torque ft-	lbs Total ft = 873
O.D.	Weight	Grade Threads		X.
7 inches	26 #/ft	J-65 LT&C	3670 2750	4590
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift
4,320 psi	4,980 psi	367 ,000 #	415,000#	6.151

Lead w/675sx Lite crete (YLD 2.66 Wt. 9.9) tail w/100sx PVL (YLD 1.41 Wt 13) TOC = Surface

Production

	0	ft	to	10,622	ft	Ma	ake up Tor	que ft-lbs	Total ft =	10,622
O.D.		Veight	, , , , , , , , , , , , , , , , , , , ,	Grade	Threads		min.	mx.		
4.5 inches	1	1,6 #/f	<u> </u>	HCP-110	LT&C	3020	2270	3780	1	
Collapse Resistance	Int	ernal Y	ield	Joint S	trength		dy Yield	Drift	1	
8,650 psi	10,69	i0 psi		279	# 000,	3)	67: ,000 #	3.875		

DV tool placed at approx. 5500' and cemented with one stage up to dv tool. After completion procedures, the

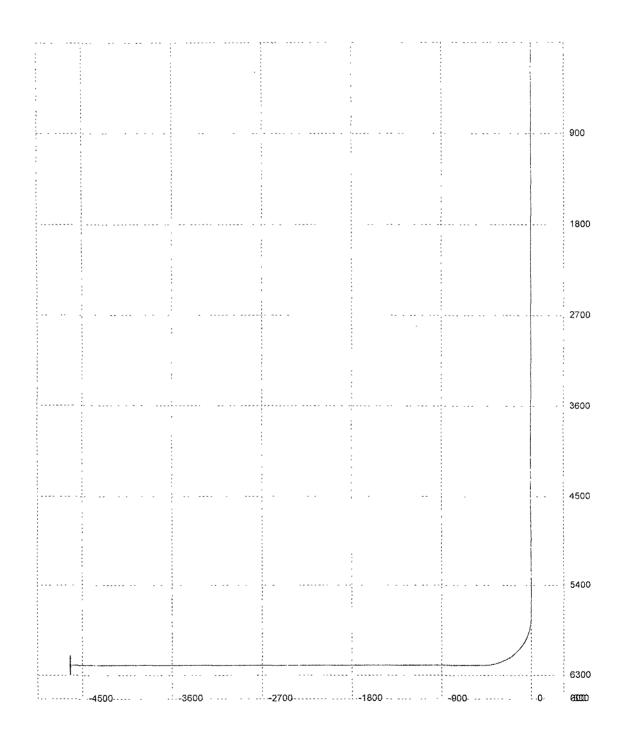
Cemented w/685sx PVL (YLD 1.41 Wt 13) TOC= 5500'

^{4 1/2&}quot; casing will be cut and pulled at 5500'.

M.D.	*Inclination	Azimuth	T.V.D.	N±/S=11.2	E+/W-	ADLAS.	ToolFace //	T.F. Ref [HS/GN]	at the second of the second
0	0	0	0	0	0	0			
490	0	0	490	0	0	0			CASTILLE
2,065	0	0	2,065	0	0	0			DELAWARE
2,930	0	0	2,930	0	0	0			CHERRY CANYON
4,040	0	0	4,040	0	0	0			BRUSHY CANYON
5,645	0	0	5,645	0	0	0			BONE SPRINGS
5723	3450	0 22	5723	元》。 0 小概是	75KOK.F.	型 412 全型	273	CONTROL OF STREET	KOP
5725	0.24	273.1	5725	0	0	12	0	HS	
5750	3.24	273.1	5749.99	0.04	-0.76	12	. 0	HS	
5770	5.64	273.1	5769.92	0.12	-2.31	12	360	HS	AVALON SAND
5775	6.24	273.1	5774.9	0.15	-2.82	12	360	HS	
5800	9.24	273.1	5799.67	0.33	-6.19	12	0	HS	
5825	12.24	273.1	5824.23	0.59	-10 84	12	360	HS	
5850	15.24	273.1	5848.51	0,91	-16,77	12	0	HS	
5875	18.24	273.1	5872.45	1.3	-23.96	12	360	HS	
5900	21,24	273.1	5895,97	1.75	-32.39	12	0	HS	
5925	24.24	273.1	5919.03	2.27	-42.04	12	0	HS	
5950	27.24	273.1	5941.54	2.86	-52.88	12	360	HS	
5975	30,24	273.1	5963,46	3,51	-64.88	12	0	HS	
6000	33,24	273.1	5984.72	4.22	-78.01	12	0	HS	
6025	36.24	273.1	6005.26	4.99	-92.23	12	360	HS	
6050	39,24	273.1	6025.03	5.82	-107,51	12	360	HS	
6075	42.24	273.1	6043.97	6.7	-123.8	12	360	HS	
6100	45.24	273.1	6062.03	7.63	-141.06	12	0	HS	
6125	48.24	273.1	6079.16	8.62	-159.24	12	360	HS	
6150	51.24	273.1	6095.32	9.65	-178.28	12	0	HS	
6175	54.24	273.1	6110.45	10.72	-198.15	12	360	HS	
6200	57.24	273.1	6124.52	11.84	-218.78	12	0	HS	
6225	60.24	273.1	6137.49	12.99	-240.12	12	0	HS	
6250	63.24	273.1	6149.33	14.18	-262.1	12	360	HS	
6275	66.24	273.1	6160	15.4	-284.68	12	360	HS	
6300	69,24	273.1	6169.46	16.65	-307.78	12	360	HS	
6325	72.24	273.1	6177.71	17.93	-331.34	12	360	HS	
6350	75.24	273.1	6184.71	19.23	-355.3	12	360	HS	
6375	78.24	273.1	6190.44	20.54	-379.6	12	0	HS	
6400	81.24	273.1	6194,9	21.87	-404.16	12	360	HS	
6425	84.24	273.1	6198.05	23.21	-428.92	12	0	HS	
6450	87.24	273.1	6199.91	24.56	-453.81	12	0	HS	
6473.05		273.1	6200,46	25.8				HS HS	
10622.29	90.01	273.1	6200	250	4620	MR 20	加速数学 艺		LATERALITO

Pilot hole drilled vertically to 8200'. Well will be plugged back with 180' plug on bottom and 400'-500' kick off plug at approx.5723' and directionally drilled at 12 degrees per 100' with a 8 3/4" hole to 6473' MD (6,200' TVD). If hole conditions dictate, 7" casing will be set. A 6 1/8" hole will then be drilled to 10,622' MD (6,200' TVD) where 4 1/2" casing will be set and cemented if 7" is not set, then hole size will be reduced to 7 7/8" and drilled to 10,622' MD (6,200' TVD) where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 884' FNL and 807' FEL, 6-26S-27E. Deepest TVD in the well is 8200' in the pilot hole. Deepest TVD in the lateral will be 6200'.

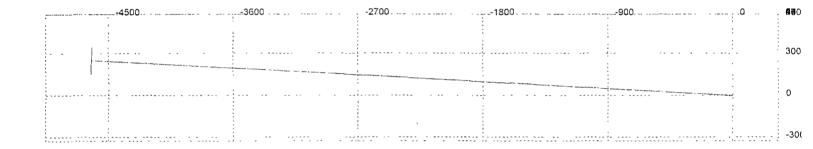
Well: Punch BJD Federal #3H



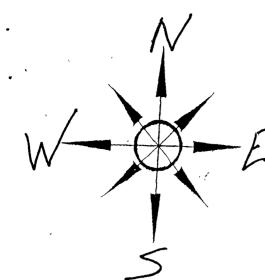
3D³ Directional Drilling Planner - 3D View

Company: Yates Petroleum Corporation

.Well: Punch BJD Federal #3H



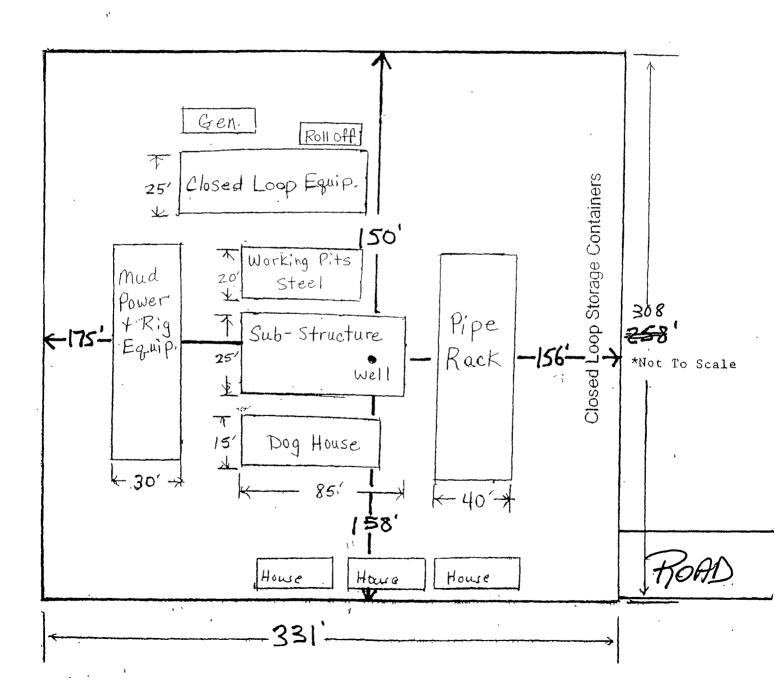
File: G:\drilling toolbox wellplans\Horizontal\punch3h.wpp

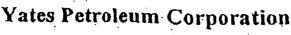


Yates Petroleum Corporation Location Layout for Permian Basin

YATES PETROLEUM CORPORATION Punch BJD Federal. #3H 910' FNL and 330' FEL SHL 660' FNL and 330' FWL BHL Section 6, T26S-R27E Eddy County, New Mexico Exhibit B

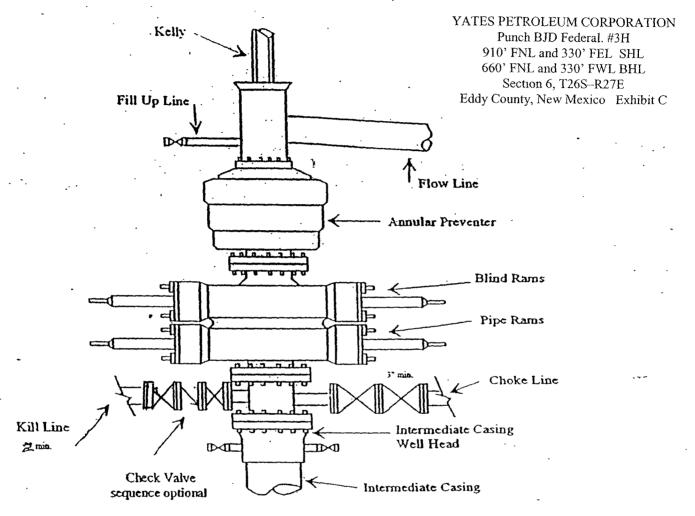
Closed Loop Design Plan



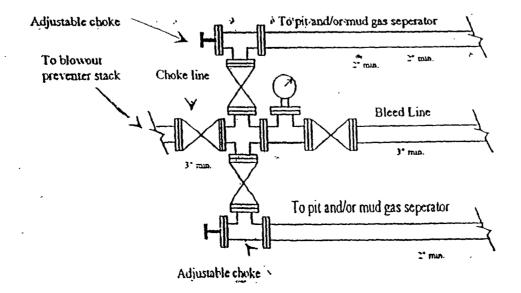


BOP-3

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

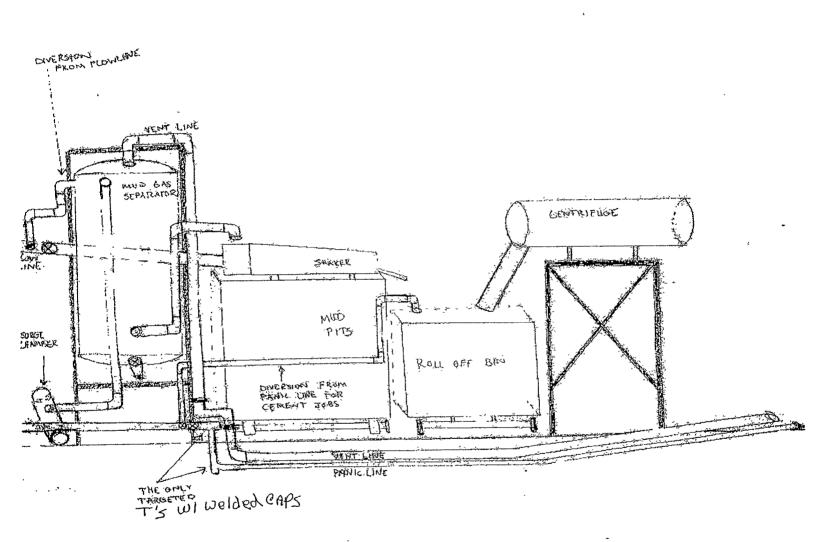


Typical 3,000 psi choke manifold assembly with at least these minimum features



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

YATES PETROLEUM CORPORATION
Punch BJD Federal. #3H
910' FNL and 330' FEL SHL
660' FNL and 330' FWL BHL
Section 6, T26S-R27E
Eddy County, New Mexico Exhibit E



MULTI-POINT SURFACE USE AND OPERATIONS PLAN YATES PETROLEUM CORPORATION

Punch "BJD" Federal #3H 910' FNL & 330' FEL, Surface Hole 660' FNL & 330' FWL, Bottom Hole Section6-T26S-R27E 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 10 miles southwest of Malaga, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go south of Malaga for approximately 10.7 miles to Whites City Road. Turn left on Whites City Road and go approximately 9 miles. The new road to the well location will start here following and upgrading an old two track road. Turn right here on the two track road going to the northeast for approximately .2 of a mile then follow the road to the left in a northwesterly direction for approximately .9 of a mile. At this point the new road will go left. The new road construction will start here going southwest for approximately .3 of a mile to the southeast corner of the well location.

2. PLANNED ACCESS ROAD.

- A. The proposed new access will be approximately 1.4 miles in length.
- 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 one side. Traffic turnouts may be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

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

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power until an electric line can be built, if needed.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

• • Punch "BJD" Federal #3H Page 2

6. SOURCE OF CONSTRUCTION MATERIALS:

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

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. A closed loop system will be used to drill this well and reserve pits will not be used.
- B. The closed loop system will be constructed, maintained and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division—the "Pit Rule" 19.15.17 NMAC. Form C-144 attached.
- C. Drilling fluids will be removed after drilling and completions is 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 closed loop system, and the location of the drilling equipment, rig orientation and access road approach.
- B. The closed loop system will be constructed, maintained and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division the "Pit Rule" 19.15.17 NMAC.
- C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is 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.
- D. All pits will be filled level after they have evaporated and dried. Pit reclamation will meet 19.15.17 requirements.
- 11. SURFACE OWNERSHIP: Federal Lands managed by the supervision of the Carlsbad BLM.

12. OTHER INFORMATION:

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

CERTIFICATION YATES PETROLEUM CORPORATION Punch BJD Federal #3H

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; and an someone under employment of Yates Petroleum Corporation has full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this15th	aay of	October	2009
Signature	Pora		
Name Cy Cowan			
Position Title Lan	d Regulatory Ag	gent	
Address105 South I	Fourth Street, A	tesia, New Mex	cico 88210
Telephone(505) 748-4	372		
Field Representative (if no	t above signator	ry) <u>Tim I</u>	Bussell, Drilling Supervisor
Address (if different from	above) <u>Sam</u>	e as above.	
Telephone (if different fro	m above) <u>(505</u>	748-4221	
E-mail (optional) cy(a	yates petroleun	ncorporation.com	m

PECOS DISTRICT CONDITIONS OF APPROVAL

`	
OPERATOR'S NAME:	Yates Petroleum Corp
LEASE NO.:	NM97127.
	3H Punch BJD Federal
SURFACE HOLE FOOTAGE:	910' FNL & 330' FEL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 6, T.26 S., R 27 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below. **General Provisions** Permit Expiration Archaeology, Paleontology, and Historical Sites **Noxious Weeds** Special Requirements Construction Notification **Topsoil** Closed Loop System Federal Mineral Material Pits Well Pads Roads 🔀 Road Section Diagram Drilling Logging Requirements Production (Post Drilling) Well Structures & Facilities Pipelines -Electric Lines

Reseeding Procedure/Interim Reclamation

| Final Abandonment/Reclamation

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S).

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. CLOSED LOOP SYTEM

Closed Loop System: v-door northwest

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

F. · ON LEASE ACCESS ROADS

Road Width

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

Surfacing

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

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

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

Crowning

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

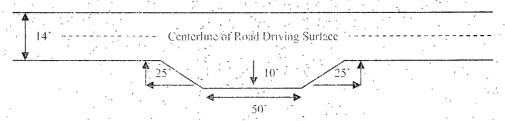
Ditching

Ditching shall be required on both sides of the road.

Turnouts

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

Standard Turnout - Plan View

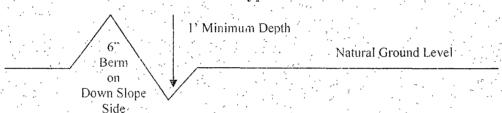


Drainage

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

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

Cross Section of 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:
$$\frac{400!}{496} + 100! = 200!$$
 lead-off ditch interval

Culvert Installations

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

Cattleguards

An appropriately sized catrleguard(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

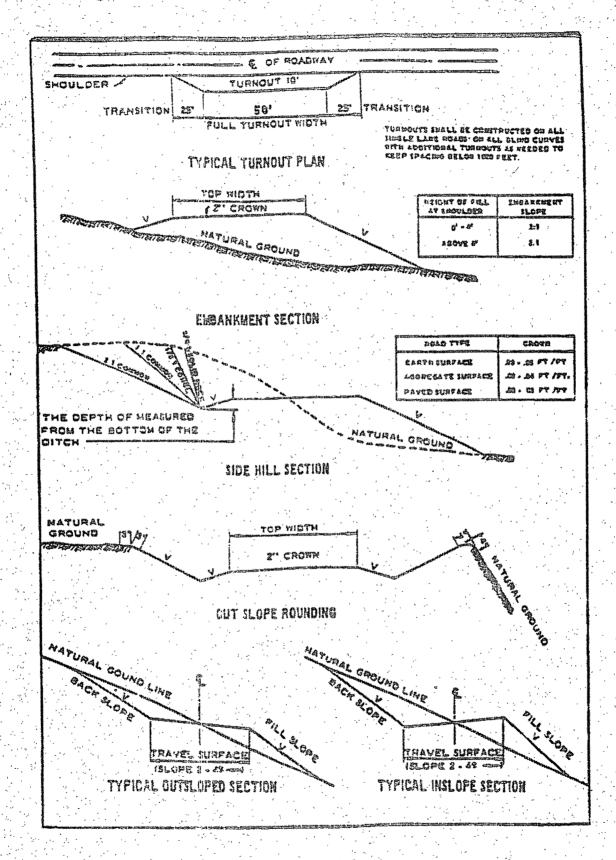
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting:

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 the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The top and bottom of Salt are to be recorded on the Completion Report.

B. CASING

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

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

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

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

Medium Cave/Karst.

Possible lost circulation in the Delaware Mountain Group.

- 1. The 13-3/8 inch surface casing shall be set at approximately 400 feet and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

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

Pilot hole plug is approved as is, but the bottom plug must be tagged and depth reported on the Subsequent Sundry detailing the casing activity.

5.	The minimum required fill of cement behind the 4-1/2 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.
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.
•	DDECCHIDE COMPLOT
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. Piping from choke manifold to flare to be as straight as possible.
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 RLM office.

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

shall provide method of verification.

lead cement slurry due to cave/karst.

Contingency Casing

Cement should tie-back at least 500 feet into previous casing string. Operator

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

Wait on cement (WOC) time for a primary cement job is to include the

4. The minimum required fill of cement behind the 7 inch second intermediate casing is:

d. The BOP/BOPE test shall include a tow 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.

CRW 110609

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

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

Containment Structures

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

Painting Requirement.

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

B. PIPELINES

C. ELECTRIC LINES

IX. INTERIM RECLAMATION & RESEEDING PROCEDURE

A. INTERIM RECLAMATION

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

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

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

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

B. RESEEDING PROCEDURE

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

Seed Mixture 1, for Loamy 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 regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/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 lovegrass (Eragrostis intermedia).	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0

^{*}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.