### OCD Artesia RECEIVED

ATS-16-102

Form 3160-3 (June 2015)

JAN 1 0 2019

**UNITED STATES** 

FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018

DEPARTMENT OF THE I		•		5. Lease Serial No.			
BUREAU OF LAND MAN		_	A O.C.D		- Talka Nama	<del></del>	
APPLICATION FOR PERMIT TO D	ORILL	OR REENTER		6. If Indian, Allotee of			
	REENT	ER		7. If Unit or CA Agreement, Name and No.			
	Other Single 2	Cone Multiple Zone		8. Lease Name and V Punch BJD Federal	759	70	
2. Name of Operator  Yates Petroleum Corporation EOG Y Reserv	به دو	2551	5	9. API Well No. <b>30-0</b> /	15-45619	,	
3a. Address 105 South Fourth Street, Artesia NM., 88210	3b. F	Phone No. <i>(include area cod</i> 575-748-1471	e)	10. Field and Pool, or Undesignated, Bon	e Springs	7818 34M	
Location of Well (Report location clearly and in accordance     At surface 411' FNL & 1568' FEL	with ar	ny State requirements.*)		11. Sec., T. R. M. or	Blk. and Survey or A	rea	
At proposed prod. zone 2310' FNL & 660' FEL , S	ec.7	1		Section 6, T26S - R	27E		
<ol> <li>Distance in miles and direction from nearest town or post of 24 Miles to Loving NM.</li> </ol>	fice*			12. County or Parish Eddy	13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16.1	No of acres in lease	17. Spacii E2E2 16	ng Unit dedicated to th Oacres	is well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	1	Proposed Depth b: 7,560' / MD: 14,762'		BIA Bond No. in file 0434 / NMB 000920			
21 Elevations (Show whether DF, KDB, RT, GL, etc.)	22. /	Approximate date work will	start*	23. Estimated duration	in .		
GL - 3291'	24	. Attachments	<del></del> :	30 Days			
The following, completed in accordance with the requirements (as applicable)			l, and the F		ie per 43 CFP 3162 i	3-3, ·	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syst SUPO must be filed with the appropriate Forest Service Office</li> </ol>		Item 20 above).  5. Operator certific	cation.	s unless covered by an mation and/or plans as	-		
35. Signature		Name (Printed/Typed) Rene P Bela			Datc 9/28/15		
Title Land Regulatory Agent							
Approved by (Signature) Cody Layton		Name (Printed/Typed)	MANAGE	R	Date 12/12/20	18	
Title Land Regulatory Agent Application approval does not warrant or certify that the application approval does not warrant or certify that the application approved the application application approved the application approved the application approved the application applica		Office CARLSBAD	FIELDO	FFICE	/		
Application approval does not warrant or certify that the application applicant to conduct operations thereon.  Conditions of approval, if any, are attached.	ant hold	Is legal or equitable title to the	hose rights	in the subject lease what APPROV	Ich would entitle the AL FOR TW	IO YEARS	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212,	make i	t a crime for any person kno	wingly and	willfully to make to a	ny department or age	ncy	

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

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

RW 1-15-19

\*(Instructions on page 2)

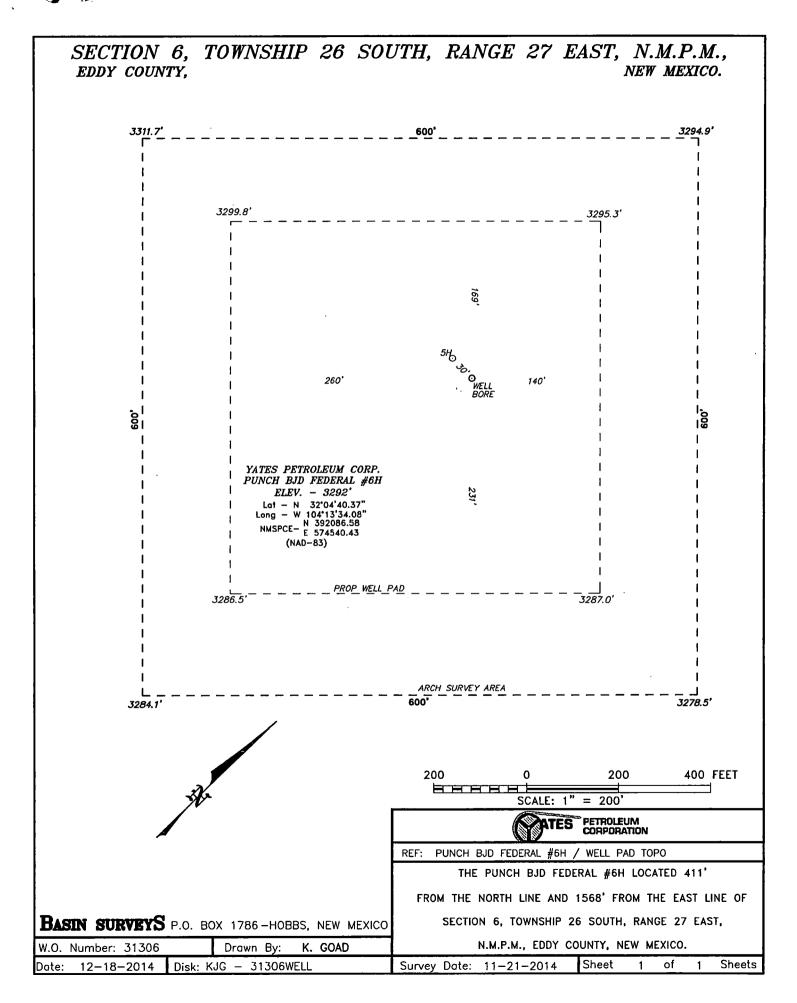
BUREAU OF LAND MOUT CARLEBAD FELD DEFICE

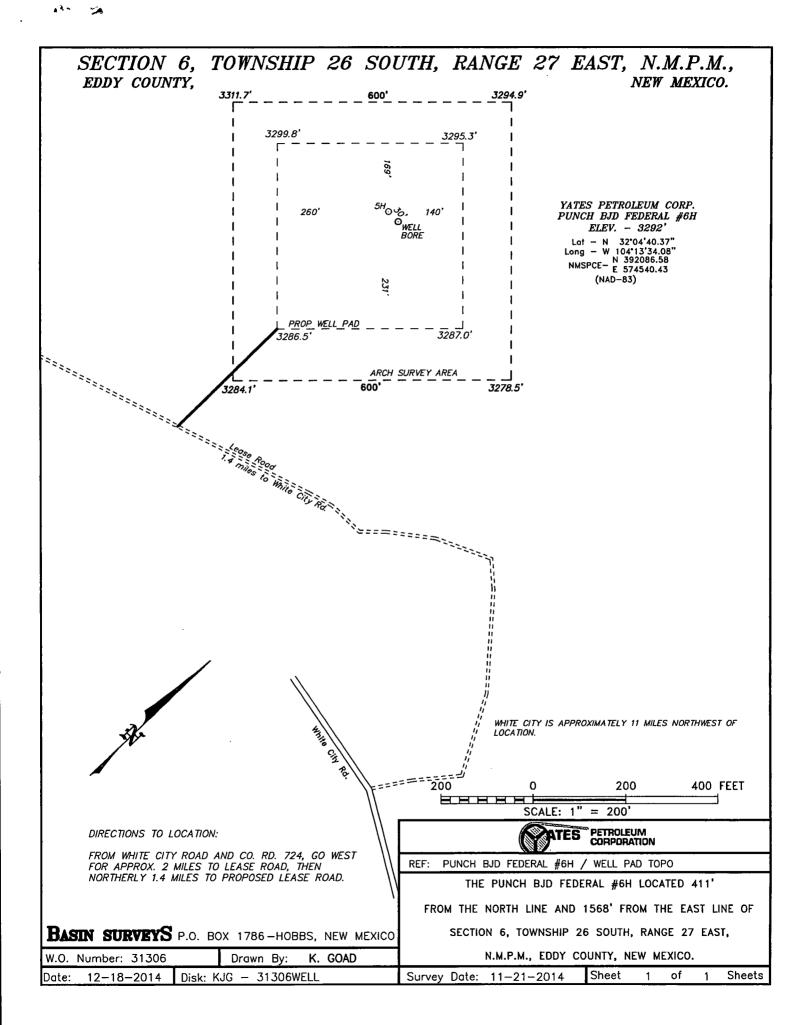
Apprecial Soft and to General Beginsomsula & Special organizations Attached CARCO

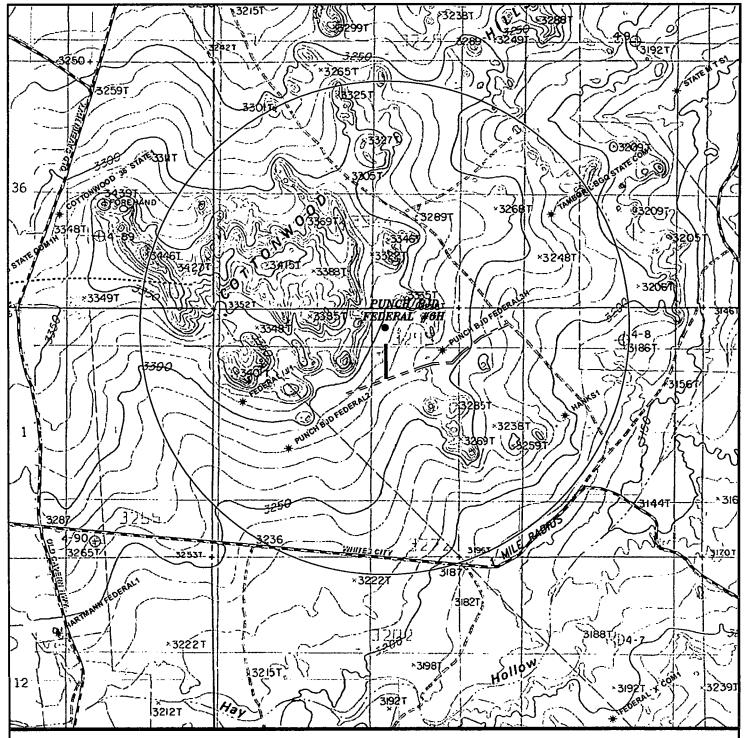
2015 OCT -3 AV 2: 23

The state of the s

والمراوي والمواجه والمواجه والمعاولة والمواجه







PUNCH BJD FEDERAL #6H Located 411' FNL and 1568' FWL Section 6, Township 26 South, Range 27 East, N.M.P.M., Eddy County, New Mexico.

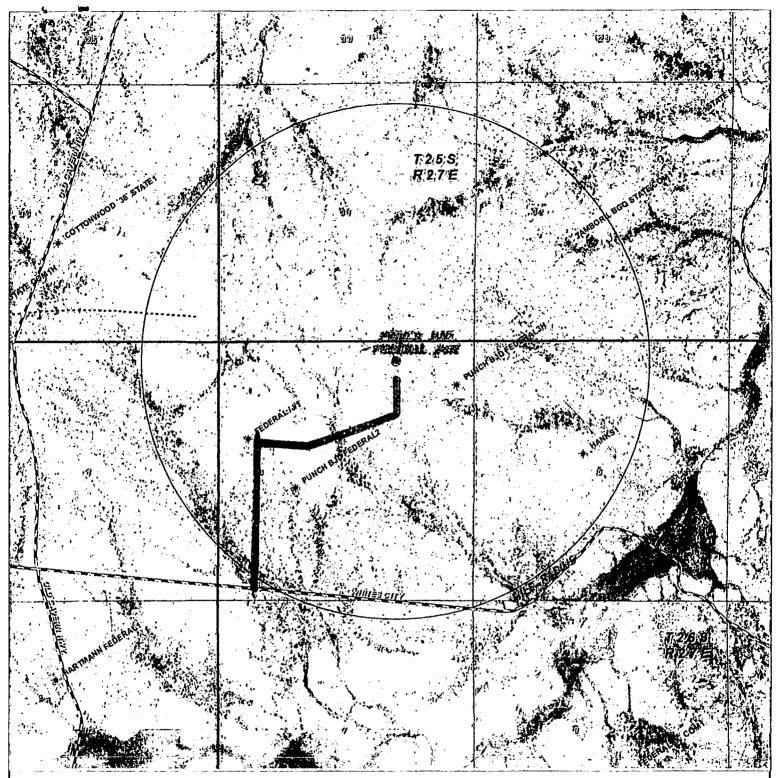


In the oilfield

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

7	0' 1000' 2000' 3000' 4000'	
	SCALE: 1" = 2000'	1
۱	W.O. Number: KJG - 31306	1
•	Survey Date: 11-21-2014	4
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	





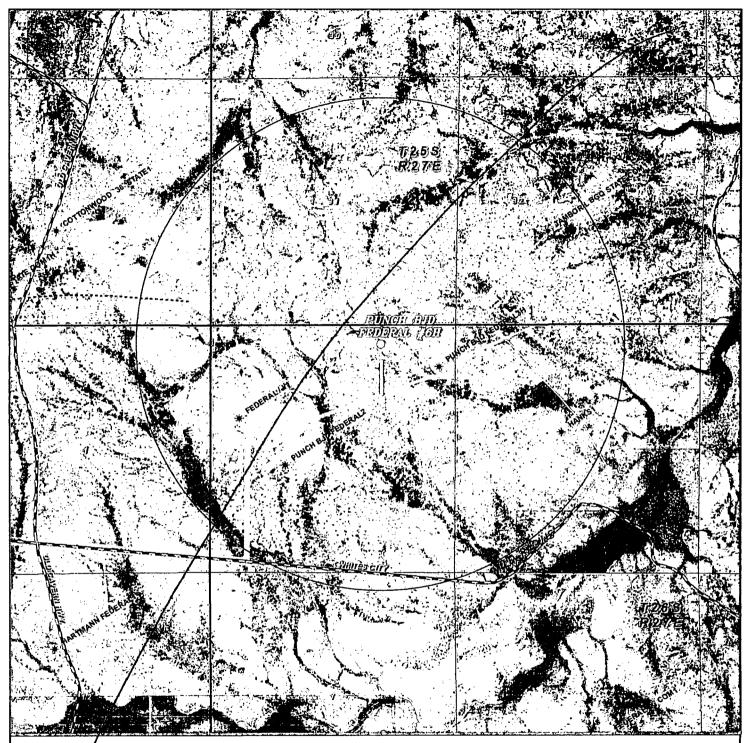
PUNCH BJO FEDERAL #6H
Located 411' FNL and 1568' FWL
Section 6, Township 26 South, Range 27 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Offico (575) 392-2206 - Fox

-:-		
7	0' 1000' 2000' 3000' 4000'	
	SCALE: 1" = 2000'	
,	W.O. Number: KJG - 31306	۱ ۹
۱,	Survey Date: 11-21-2014	9
	YELLOW TINT - USA LAND BLUE TINT - STATE LAND	,
겍	NATURAL COLOR - FEE LAND	





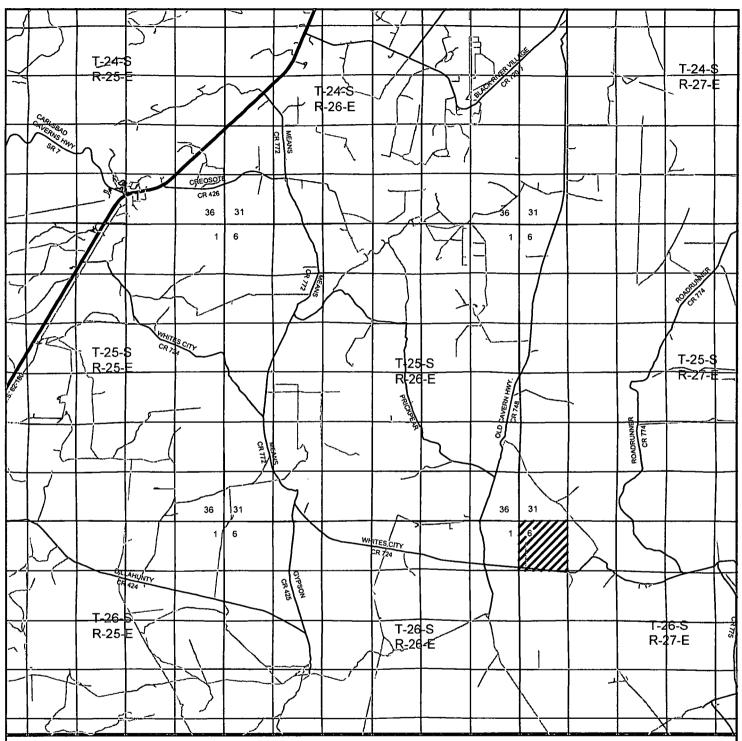
PUNCH BJD FEDERAL #6H
Located 411' FNL and 1568' FWL
Section 6, Township 26 South, Range 27 East,
N.M.P.M., Eddy County, New Mexico.



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

7	0' 1000' 2000' 3000' 4000'	
Ï	SCALE: 1" = 2000'	,
	W.O. Number: KJG - 31306	
I	Survey Date: 11-21-2014	ď
	YELLOW TINT — USA LAND	
ᅦ	BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	





PUNCH BJD FEDERAL #6H
Located 411' FNL and 1568' FWL
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

/	0' 1000' 2000' 3000' 4000'	,
	SCALE: 1" = 2000'	1
	W.O. Number: KJG - 31306	4
1	Survey Date: 11-21-2014	9
	YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND	



#### YATES PETROLEUM CORPORATION

Punch BJD Federal #6H 411' FNL & 1568' FEL, Surface Hole, Section 6 –T26S-R27E 2310' FNL & 660' FEL, Bottom Hole, Section 7 –T26S-R27E Eddy County, New Mexico

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

Castile	372'	Brushy Canyon Marker	5356'
Top of Salt	1317'	Bone Springs LM	5693' Oil
Base of Salt	1885'	Avaion Shale	5793' Oil
Lamar	2060'	Bone Springs 1/SD	6614' Oil
Bell Canyon	2110' Oil	Bone Springs 2/SD	7387' Oil
Cherry Canyon	3177' Oil	Target SBS/SD	7914' Oil
Manzanita Marker	3356'	MD: 14762' TVD: 7560	
Brushy Canyon	4223' Oil		

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

Water: Approx. 0' - 400'

Oil or Gas: Oil Zones: See above

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13.375 casing and a 5000 PSI BOPE will be installed on the 9.625" casing. Pressure tests to 3000 PSI and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. Test will be conducted by an Independent Tester, utilizing a test plug in the well head. Test will be held for 10" on each segment of the system tested. Any leaks will be repaired at the time of test. Annular preventer will be tested to 50% of rated working pressure. Accumulator system will be inspected for correct pre charge pressures, and proper functionality, prior to connection to the BOP system. 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.

#### 4. Auxiliary Equipment:

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when Kelly is not in use.
- 5. THE PROPOSED CASING AND CEMENTING PROGRAM:
  - A. Casing Program: (All New)

Hole Size	Casing Size	Wt./Ft	<u>Grade</u>	Coupling	<u>interval</u>	<u>Length</u>
17 1/2" 12 1/4"	13 3/8" 9 5/8"	48# 36#	H-40/J-55 Hy J-55	LT&C	0-400' 0-2100'	400' 2100'
8 3/4"	5 1/2"	17#	P-110	LT&C	2100-7914'	5814'
8 1/2"	5 1/2"	17#	P-110	Buttress Thread	7914'-14762'	6848'

#### Punch BJD Federal #6H Page Two

#### B. CEMENTING PROGRAM:

Surface Casing: 0' - 400' Lead with 415 sacks of 50/50 Poz Class C +2% CaCl (YLD 1.34, WT.14.2, H2O gal/sx 6.2). Casing designed with 100% excess. TOC-Surface

Intermediate Casing: 0'-2100' Lead with 515 sacks of PozC 35:65:6 (YLD 2.0, WT 12.5, H2O gal/sx 11.0). Tail with 210 sacks PozC 50/50 + 2% CaCl2 (YLD 1.34 WT 14.2, H2O gal/sx 6.2). Casing designed with 100% excess. TOC-Surface

Production Casing: 1600'-14762': Lead with 610 sacks of PozC 35:65:6 (YLD 2.73, WT 9.0, H2O gal/sx 8.98). Tail in with 1910 sacks of Pecos Valley Lite, (WT 13.5, YLD 1.36, H2O gal/sx 6.2). Additives being: .4% D112 Fluid Loss, 22.5 lb./sack D151 CaCO3, 1.5 lb/sack D174 Extender, .01 lb./sack D177 Retarder, .6 lb./sack D800 Retarder, .15 lb./sack D46 Antifoam Agent, 3 lbs./sack D042 LCM Extender, 1% D044 Salt, .125 lb./sack D130 LCM, 2% D167 Fluid Loss Material. Casing is designed with 35% excess. TOC-1600'

# The control of the second control of the control of

: :	0.01	$(\gamma, \gamma, i, \gamma, i) = 0$	1451	~	AAA tallaA	Viscosity	
			Interval	<u>Type</u>	<u>vveignt</u>	VISCOSITY	<u>Fluid Loss</u>
			0-400'	Fresh Water	8.6-9.2	32-34	N/C
			400'-2100'	Brine Water	10.0-10.20	28-29	N/C
			2100'-14762'	Cut Brine	8.8-9.2	28-32	N/C

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

#### 7. Evaluation Program:

Samples: 10' Samples surface to TD (14762').

Logging: Gamma Ray Neutron 30 Degree deviation to Surface, Neutron Density-30 Degree deviation to intermediate casing, Laterolog – 30 Degree devieation to intermediate casing, CMR 30 Degree deviation to intermediate casing. Horizontal-Mwd-

DST's: None Cores: None

Mudlogger: Yes, Below surface casing.

# Punch BJD Federal #6H Page Three

more than the second of the se

Martines (1997) 1. Out of the second 1. Out the second second

Serial Programmes

San State Commence

ATVENTED OF TOOL OF THE CO.

8. Abnormal Conditions, Bottom hole pressure and potential hazards: Anticipated BHP:

From:	0	TO:	400'	Anticipated Max. BHP:	191	PSI
From:	400'	TO:	2100'	Anticipated Max. BHP: 1	114	PSI
From:	2100'	TO:	7480'	Anticipated Max. BHP: 36	26	PSI

No abnormal pressures or temperatures are anticipated. H2S is not anticipated on this well.

#### 5. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 65 days to drill the well with completion taking another 30 days.



# Yates Petroleum Corp.

Eddy County, NM (Nad-83 2015) Punch BJD Federal #6H Punch BJD Federal #6H

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

21 September, 2015





Yates Petroleum Corp. Project: Eddy County, NM (Nad-83 2015) Site: Punch BJD Federal #6H Well: Punch BJD Federal #6H Wellbore: Wellbore #1

Plan: Design #1 (Punch BJD Federal #6H/Wellbore #1)

## Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSect	Taro
Sec							Dieg	irace	vsect	larg
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	
3	2950.00	3.00	90.00	2949.93	0.00	3,93	2,00	90,00	0.49	
4	7032,00	3.00	90.00	7026.34	0.00	217,56	0.00	0.00	27,33	
5	7914,30	90,16	140,00	7579,57	-425,56	603,72	10,00	50,03	498,03	
6	8921,10	90.16	180,27	7576.63	-1353,08	938.82	4.00	89.93	1460.31	
7	14762.02	90.16	180.27	7560.00	-7193.91	911.06	0.00	0.00	7251.37	PBH

PBHL (PBJDF #6H/WB #1 Design #1)

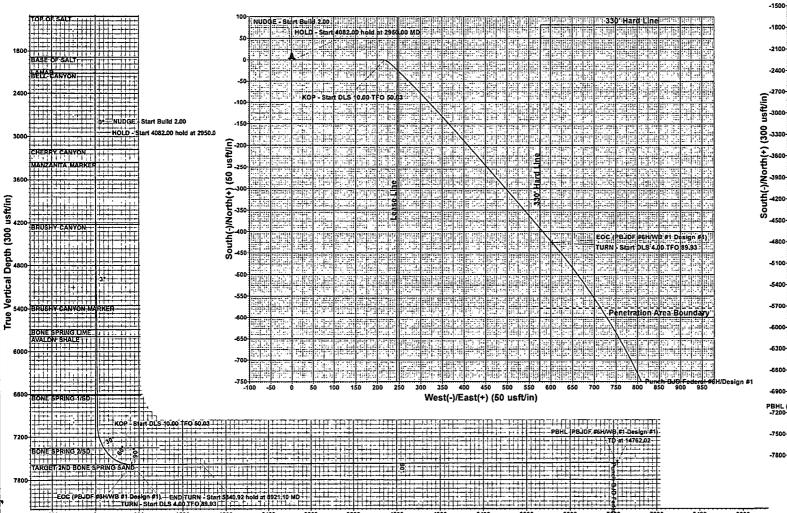
Azimuths to Grid North True North: -0.06° Magnetic North: 7.37°

Magnetic Field Strength: 47959.6snT Dip Angle: 59.84\* Date: 9/18/2015 Model: IGRF2015

WELL DETAILS: Punch BJD Federal #6H

Ground Elevation:: 3291.00 RKB Elevation: KB @ 3316.00usft Rig Name:

Northing Easting Latittude Longitude 392086.80 574570.56 32° 4' 40.371 N 104° 13' 33.726 W



PROJECT DETAILS: Eddy County, NM (Nad-83 2015) Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsold: GRS 1980

Lease Line

Punch BJD Federal #6H/Design #1 PBJDF #6HMB #1 Design #1)

TD at 14762.02 330 Hard Line

West(-)/East(+) (300 usft/in)

EOC (PBJDF #6HAVB #1 Design #1)

END TURN - Start 5840.92 hold at

TURN - Start DLS 4.00 TRO 89.93

-900 -600 -300 O 300 600 900 1200 1500 1800 2100

Zone: New Mexico Eastern Zone System Datum: Mean Sea Level Local North: Grid

Vertical Section at 172.78° (300 usft/in)

Terra Directional Services LLC 322 Spring Hill Drive, Suite A300. Spring, Tx 77386 Phone: 432-425-7532



1200





Database: Company: EDM 5000.1 Single User Db

Yates Petroleum Corp.

Project:

Eddy County, NM (Nad-83 2015)

Site:

Punch BJD Federal #6H Punch BJD Federal #6H

Well: Wellbore: Design:

Weilbore #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

**Survey Calculation Method:** 

Well Punch BJD Federal #6H

KB @ 3316.00usft KB @ 3316.00usft

Grid

Minimum Curvature

Design #1

Project

Eddy County, NM (Nad-83 2015)

Map System:

US State Plane 1983

Geo Datum: Map Zone:

North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site

Punch BJD Federal #6H

Site Position:

Northing:

392,086.80 usft

Latitude:

32° 4' 40.371 N

From:

Map

Longitude:

Position Uncertainty:

Easting: Slot Radius:

574,570.56 usft 13-3/16"

**Grid Convergence:** 

104° 13' 33,726 W 0.06

Well

Punch BJD Federal #6H

Well Position

+N/-S +E/-W 0.00 usft 0.00 usft

0.00 usft

Northing: Easting:

392,086.80 usft 574,570.56 usft Latitude: Longitude: 32° 4' 40.371 N

**Position Uncertainty** 

0.00 usft

Wellhead Elevation:

0.00 usft

**Ground Level:** 

104° 13' 33.726 W 3,291.00 usft

Wellbore

Wellbore #1

Magnetics

**Model Name** 

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF2015

9/18/2015

7.43

59.84

47,960

Design

Design #1

**Audit Notes:** 

Version:

Phase:

Tie On Depth:

PLAN

+E/-W

0.00

Vertical Section:

Depth From (TVD) (usft) 0.00

+N/-S (usft) 0.00

(usft) 0.00

Direction (°) 172.78

lan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,950.00	3.00	90,00	2,949.93	0.00	3.93	2.00	2.00	0.00	90.00	
7,032.00	3.00	90.00	7,026.34	0.00	217.56	0.00	0.00	0.00	0.00	
7,914.30	90.16	140.00	7,579.57	-425.56	603.72	10.00	9.88	5.67	50.03	
8,921.10	90.16	180.27	7,576.63	-1,353.08	938.82	4.00	0.00	4.00	89.93	
14,762.02	90.16	180.27	7,560.00	-7,193.91	911.06	0.00	0.00	0.00	0.00	PBHL (PBJDF #6H





Database: Company: EDM 5000.1 Single User Db Yates Petroleum Corp.

Project: Site: Eddy County, NM (Nad-83 2015)

Punch BJD Federal #6H Punch BJD Federal #6H

Well: Wellbore:

Wellbore #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Punch BJD Federal #6H

KB @ 3316.00usft KB @ 3316.00usft

Grid

Design:	Design #1								
Planned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Tum
Depth (usft)	inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (*/100usft)
0.00	0.00	0.00	0.00	0,00	0,00	0.00	0.00	0.00	0.00
100,00		0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00		0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00		0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
372.00		0.00	372.00	0.00	0.00	0.00	0.00	0.00	0.00
CASTILE L									
400,00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00		0.00	500.00	0,00	0.00	0.00	0.00	0.00	0.00
600.00		0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00		0,00	700.00	0.00	0.00	0,00	0.00	0.00	0.00
800.00		0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
				2.22	0.00	0.00	0.00	0.00	0.00
900.00		0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00		0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00		0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00		0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,317.00	0.00	0.00	1,317.00	0.00	0.00	0.00	0.00	0.00	0.00
TOP OF SA	<b>NLT</b>								
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00		0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,885.00		0.00	1,885.00	0.00	0.00	0.00	0.00	0.00	0.00
BASE OF S		0.00	1,000.00	0.00		5.55			
1,900.00		0.00	1,900,00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00 2,060.00		0.00	2,060.00	0.00	0.00	0.00	0.00	0.00	0.00
LAMAR	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
0.400.00	0.00	0.00	2 400 00	0.00	0,00	0.00	0.00	0.00	0.00
2,100.00		0.00	2,100.00	0.00		0.00	0.00	0.00	0.00
2,110,00		0.00	2,110.00	0.00	0.00	0.00	0.00	0.00	0.00
BELL CAN		2.22	0.000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00		0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00		0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00		0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00		0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
NUDGE - S	tart Build 2.00								
2,900.00	2.00	90.00	2,899.98	0.00	1.75	0.22	2.00	2.00	0.00
2,950.00		90.00	2,949.93	0.00	3.93	0.49	2,00	2.00	0.00
HOLD - Sta	art 4082.00 hold at	t 2950.00 MD							
3,000.00	3.00	90.00	2,999.86	0.00	6.54	0.82	0.00	0.00	0.00
3,100.00	3.00	90.00	3,099.73	0.00	11,78	1.48	0.00	0.00	0.00
3,177.38	3.00	90.00	3,177.00	0.00	15.83	1.99	0.00	0.00	0.00
CHERRY									
3,200.00		90.00	3,199.59	0.00	17.01	2.14	0.00	0.00	0.00
1			•		22.24	2.79	0.00	0.00	0.00
3,300.00		90.00	3,299.45	0.00				0.00	0.00
3,355.62		90.00	3,355.00	0.00	25.15	3.16	0.00	0.00	0.00
	A MARKER				<b>67</b> 46	2.45	0.00	0.00	0.00
3,400.00		90.00	3,399.31	0.00	27.48	3.45	0.00	0.00	0.00
3,500.00	3.00	90.00	3,499.18	0.00	32.71	4.11	0.00	0.00	0.00





Database: Company: Project: EDM 5000.1 Single User Db Yates Petroleum Corp. Eddy County, NM (Nad-83 2015)

Punch BJD Federal #6H

Well: Wellbore:

Site:

Punch BJD Federal #6H

Wellbore: Design: Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference:

North Reference:

**Survey Calculation Method:** 

Well Punch BJD Federal #6H

KB @ 3316.00usft KB @ 3316.00usft

Grid

ed Survey									
Measured	Im all restlers	A salama - Alba	Vertical Depth	ANI P	AC1144	Vertical Section	Dogleg Rate	Build Rate	Tum Rate
Depth (usft)	Inclination (°)	Azimuth (°)	(usft)	+N/-S (usft)	+E/-W (usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
		90.00		0.00	37.94	4.77	0.00	0.00	0.00
3,600.00			3,599.04						
3,700.00		90.00	3,698.90	0.00	43.18	5.42	0.00	0.00	0.00
3,800.00		90.00	3,798.77	0.00	48.41	6.08	0.00	0.00	0.00
3,900.00		90.00	3,898.63	0.00	53.65	6.74	0.00	0.00	0.00
4,000.00	3,00	90.00	3,998.49	0.00	58.88	7.40	0.00	0.00	0.00
4,100.00	3.00	90.00	4,098.36	0.00	64.11	8.06	0.00	0.00	0.00
4,200.00	3.00	90.00	4,198.22	0.00	69.35	8.71	0.00	0.00	0.00
4,222.81	3.00	90.00	4,221.00	0.00	70.54	8.86	0.00	0.00	0.00
BRUSHY C	CANYON								
4,300.00	3.00	90.00	4,298.08	0.00	74.58	9.37	0.00	0.00	0.00
4,400.00		90.00	4,397.94	0.00	79.81	10.03	0.00	0.00	0.00
4,500.00		90.00	4,497.81	0.00	85.05	10.69	0.00	0.00	0.00
4,600.00	3.00	90.00	4,597.67	0.00	90.28	11.34	0.00	0.00	0.00
4,700.00		90.00	4,697.53	0.00	95.51	12.00	0.00	0.00	0.00
4,800.00		90.00	4,797.40	0.00	100.75	12.66	0.00	0.00	0.00
4,900.00		90.00	4,897.26	0.00	105.98	13.32	0.00	0.00	0.00
5,000.00		90.00	4,997.12	0.00	111.21	13.97	0.00	0.00	0.00
5,100.00		90.00	5,096.99	0.00	116.45	14.63	0.00	0.00	0.00
5,100.00		90.00	5,096.99 5,196.85	0.00	121.68	15.29	0.00	0.00	0.00
			5,196.65	0.00	121.00	15.29	0.00	0.00	0.00
5,300.00		90.00	5,296.71	0.00	120.92	16,32	0.00	0.00	0.00
5,356.37		90,00	3,333.00	0.00	129.07	10,32	0,00	0.00	0.00
	CANYON MARKER				444.5	40.00			
5,400.00	3.00	90.00	5,396.57	0.00	132.15	16.60	0.00	0.00	0.00
5,500.00	3.00	90.00	5,496.44	0.00	137.38	17.26	0.00	0.00	0.00
5,600.00	3.00	90.00	5,596.30	0.00	142.62	17.92	0.00	0.00	0.00
5,692.83		90.00	5,689.00	0.00	147.47	18.53	0.00	0.00	0.00
BONE SPE									
5,700.00	3.00	90.00	5,696.16	0.00	147.85	18.58	0.00	0.00	0.00
5,792.96	3.00	90.00	5,789.00	0.00	152.72	19.19	0.00	0.00	0.00
AVALON S	HALE								
5,800.00	3.00	90.00	5,796.03	0.00	153.08	19.23	0.00	0.00	0.00
5,900.00		90.00	5,895.89	0.00	158.32	19.89	0.00	0.00	0.00
6,000.00		90.00	5,995.75	0.00	163.55	20.55	0.00	0.00	0.00
6,100.00		90.00	6,095.61	0.00	168.78	21.21	0.00	0.00	0.00
6,200.00		90.00	6,195.48	0.00	174.02	21.86	0.00	0.00	0.00
•									
6,300.00		90.00	6,295.34	0.00	179.25	22.52	0.00	0.00	0.00
6,400.00		90.00	6,395.20	0.00	184.49	23.18	0.00	0.00	0.00
6,500.00		90.00	6,495.07	0.00	189.72	23.84	0.00	0.00	0.00
6,600.00		90.00	6,594.93	0.00	194,95	24.49	0.00	0.00 0.00	0.00
6,614.09		90,00	6,609.00	0.00	195,69	24.59	0.00	0,00	0.00
BONE SPF	KING 1/SD								
6,700.00		90.00	6,694.79	0.00	200.19	25.15	0.00	0.00	0.00
6,800.00	3.00	90.00	6,794.66	0.00	205.42	25.81	0.00	0.00	0.00
6,900.00	3,00	90.00	6,894.52	0.00	210.65	26.47	0.00	0.00	0.00
7,000.00		90.00	6,994.38	0.00	215.89	27.12	0,00	0.00	0.00
7,032.00		90.00	7,026.34	0.00	217.56	27.33	0.00	0.00	0.00
=	t DLS 10.00 TFO 5								
7,050.00		108.38	7,044.30	-0.22	218.68	27.69	10.00	7.66	102.10
7,050.00		125.35	7,044.30	-0.22 -3.09	223.70	31.17	10.00	9.29	33.95
7,150.00		130.67	7,142.94	-9.28	231.46	38.29	10.00	9.78	10.64
			•	-9.20 -18.74	241.92	48.99	10.00	9.90	5,15
7,200.00		133,25	7,190.89			63.19	10.00	9.94	3.13
7,250.00	23,83	134.78	7,237.45	-31.40	254.98			<del>3</del> .34	
7,300.00	28.81	135.81	7,282.25	-47.17	270.56	80.79	10.00	9.96	2.06





Database: Company: Project

EDM 5000.1 Single User Db Yates Petroleum Corp.

Eddy County, NM (Nad-83 2015) Punch BJD Federal #6H

Well: Wellbore:

Site:

Punch BJD Federal #6H

Welibore #1 Design #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Punch BJD Federal #6H

KB @ 3316.00usft KB @ 3316.00usft

Grid

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
7,350.00	33.80	136.56	7,324.96	-65.91	288,53	101,64	10.00	9.97	1.49
7,386.98	37.49	136.99	7,355.00	-81.61	303.28	119.07	10.00	9.98	1.18
BONE SPRII	NG 2/SD								
7,400.00	38.79	137.13	7,365.24	-87.50	308.76	125.60	10.00	9.98	1.05
7,450.00	43.78	137.59	7,402.81	-111.77	331,10	152.48	10.00	9.98	0.92
7,500.00	48.77	137.98	7,437.36	-138,52	355.36	182.07	10.00	9.98	0.77
7,550.00	53.76	138.31	7,468.63	-167.56	381.38	214.15	10,00	9.99	0.66
7,600.00	58.76	138.60	7,496.40	-198.67	408.94	248,48	10.00	9.99	0.58
7,650.00	63.75	138.86	7,520.44	-231.61	437.85	284.79	10.00	9.99	0.52
7,700.00	68.75	139.10	7,540.57	-266.13	467.87	322.81	10.00	9.99	0.48
7,750.00	73.74	139.32	7,556.64	-301.97	498.79	362.24	10.00	9.99	0.45
7,800.00	78.74	139.54	7,568.53	-338.85	530.37	402.80	10.00	9.99	0.43
7,850.00	83.73	139.74	7,576.15	-376.49	562.36	444.16	10.00	9.99	0.41
7,900.00	88.73	139.94	7,579.43	-414.61	594.52	486.02	10.00	9.99	0.40
7,914.30	90.16	140.00	7,579.57	-425.56	603.72	498.03	10.00	9.99	0.40
•	Start DLS 4.00		·						
8,000.00	90.16	143.43	7,579.33	-492.81	656,81	571.43	4.00	0.00	4.00
8,100.00	90.17	147.43	7,579.05	-575.14	713.54	660,23	4.00	0.00	4.00
8,200.00	90.17	151.43	7,578.75	-661.22	764.39	752.02	4.00	0.00	4.00
8,300.00	90.17	155.43	7,578.46	-750.64	809.12	846.35	4.00	0.00	4.00
8,400.00	90.17	159.43	7,578.16	-842.96	847.49	942.76	4.00	0.00	4.00
8,500.00	90.17	163.43	7,577.86	-937.73	879.34	1,040.78	4.00	0.00	4.00
8,600,00	90.17	167.43	7,577.57	-1,034.49	904.49	1,139.94	4.00	0.00	4.00
8,700.00	90.17	171.43	7,577.27	-1,132.78	922.83	1,239.75	4.00	0.00	4.00
8,800.00	90.17	175.43	7,576.98	-1,232.10	934.28	1,339.72	4.00	0.00	4.00
8,900.00	90.16	179.43	7,576.69	-1,331.98	938.76	1,439.37	4.00	0.00	4.00
8,921.10	90.16	180.27	7,576.63	-1,353.08	938.82	1,460.31	4.00	0.00	4.00
END TURN	- Start 5840.92 h								
9,000.00	90.16	180.27	7,576.40	-1,431.98	938.44	1,538.53	0.00	0.00	0.00
9,100.00	90.16	180.27	7,576.12	-1,531.97	937.97	1,637.68	0.00	0.00	0.00
9,200.00	90.16	180.27	7,575.83	-1,631.97	937.49	1,736.83	0.00	0.00	0.00
9,300.00	90.16	180.27	7,575.55	-1,731.97	937.02	1,835.97	0.00	0.00	0.00
9,400.00	90.16	180.27	7,575.26	-1,831.97	936,54	1,935.12	0.00	0.00	0.00
9,500.00	90.16	180.27	7,574.98	-1,931.97	936.07	2,034.27	0.00	0.00	0.00
9,600.00	90.16	180.27	7,574.69	-2,031.97	935.59	2,133.41	0.00	0.00	0.00
9,700.00	90.16	180.27	7,574.41 7,574.12	-2,131.97 -2,231.98	935.12 934.64	2,232.56	0.00 0.00	0.00 0.00	0.00 0.00
9,800.00	90.16	180.27		-2,231.96		2,331.71			
9,900.00	90.16	180.27	7,573.84	-2,331.96	934.17	2,430.85	0.00	0.00	0.00
10,000.00	90.16	180.27	7,573.56	-2,431.96	933.69	2,530.00	0.00	0.00	0.00
10,100.00	90.16	180.27	7,573.27	-2,531.96 2,631.06	933.21	2,629.14	0.00	0.00	0.00
10,200.00	90.16	180.27 180.27	7,572.99 7,572.70	-2,631.96 -2,731.96	932.74 932.26	2,728.29 2,827.44	0.00 0.00	0.00 0.00	0.00 0.00
10,300.00	90.16					•			
10,400.00	90.16	180.27	7,572.42	-2,831.95	931.79	2,926.58	0.00	0.00	0.00
10,500.00	90.16	180.27	7,572.13	-2,931.95	931.31	3,025.73	0.00	0.00	0.00
10,600.00	90.16	180.27	7,571.85	-3,031.95	930.84	3,124.88	0.00	0.00	0.00
10,700.00	90.16	180.27	7,571.56	-3,131.95 -3,231.95	930.36	3,224.02	0.00	0.00 0.00	0.00 0.00
10,800.00	90.16	180.27	7,571.28	-3,231.95	929.89	3,323.17	0.00		
10,900.00	90.16	180.27	7,570.99	-3,331.95	929.41	3,422.32	0.00	0.00	0.00
11,000.00	90.16	180.27	7,570.71	-3,431.95	928.94	3,521.46	0.00	0.00	0.00
11,100.00	90.16	180.27	7,570.42	-3,531.94	928,46	3,620.61	0.00	0.00	0.00
11,200.00	90.16	180.27	7,570.14 7,569.86	-3,631.94 3,731.94	927.99 927.51	3,719.75 3,818.90	0.00 0.00	0.00 0.00	0.00 0.00
11,300.00	90.16	180.27	7.309.00	-3,731.94	827.31	3.010.80	0.00	0.00	0.00





Database: Company: Project:

EDM 5000.1 Single User Db Yates Petroleum Corp. Eddy County, NM (Nad-83 2015)

Punch BJD Federal #6H

Well:

Site:

Punch BJD Federal #6H Wellbore #1

Wellbore:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Punch BJD Federal #6H

KB @ 3316.00usft KB @ 3316.00usft

Grid

ilgn:	Design #1								
anned Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(fleu)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
11,500.00	90.16	180.27	7,569.29	-3,931.94	926.56	4,017.19	0.00	0.00	0.00
11,600.00	90.16	180,27	7,569.00	-4,031.94	926.09	4,116.34	0.00	0.00	0.00
11,700.00		180.27	7,568.72	-4,131.93	925,61	4,215.49	0.00	0.00	0.00
11,800.00		180.27	7,568.43	-4,231.93	925.14	4,314.63	0.00	0.00	0.00
11,900.00	90.16	180,27	7,568.15	-4,331.93	924.66	4,413.78	0.00	0.00	0.00
12,000,00		180.27	7,567.86	-4,431.93	924.19	4,512.93	0.00	0.00	0.00
12,100.00	90,16	180.27	7,567.58	-4,531.93	923.71	4,612.07	0.00	0.00	0.00
12,200.00		180.27	7,567.29	-4,631.93	923.24	4,711.22	0.00	0.00	0.00
12,300.00		180.27	7,567.01	-4,731.93	922.76	4,810.36	0.00	0.00	0.00
12,400.00	90.16	180.27	7,566.72	-4,831.92	922.28	4,909.51	0.00	0.00	0.00
12,500.00	90.16	180.27	7,566.44	-4,931.92	921.81	5,008.66	0.00	0.00	0.00
12,600.00	90.16	180.27	7,566.15	-5,031.92	921.33	5,107.80	0.00	0.00	0.00
12,700.00		180.27	7,565.87	-5,131.92	920.86	5,206.95	0.00	0.00	0.00
12,800.00		180.27	7,565.59	-5,231.92	920.38	5,306.10	0.00	0.00	0.00
12,900.00	90.16	180.27	7,565.30	-5,331.92	919.91	5,405.24	0.00	0.00	0.00
13,000.00	90.16	180.27	7,565.02	-5,431.91	919.43	5,504.39	0.00	0.00	0.00
13,100.00	90.16	180.27	7,564.73	-5,531.91	918,96	5,603.54	0.00	0.00	0.00
13,200.00	90.16	180.27	7,564.45	-5,631.91	918.48	5,702.68	0.00	0.00	0.00
13,300.00	90.16	180.27	7,564.16	-5,731.91	918.01	5,801.83	0.00	0.00	0.00
13,400.00	90.16	180.27	7,563.88	-5,831.91	917.53	5,900.97	0.00	0.00	0.00
13,500.00	90,16	180.27	7,563.59	-5,931.91	917.06	6,000.12	0.00	0.00	0.00
13,600.00	90.16	180.27	7,563.31	-6,031.91	916,58	6,099.27	0.00	0.00	0.00
13,700.00	90.16	180.27	7,563.02	-6,131.90	916.11	6,198.41	0.00	0.00	0.00
13,800.00	90.16	180.27	7,562.74	-6,231.90	915.63	6,297.56	0.00	0.00	0.00
13,900.00	90.16	180.27	7,562.45	-6,331.90	915.16	6,396.71	0.00	0.00	0.00
14,000.00		180.27	7,562.17	-6,431.90	914.68	6,495.85	0.00	0.00	0.00
14,100.00	90.16	180.27	7,561.88	-6,531.90	914.21	6,595.00	0.00	0.00	0.00
14,200.00		180.27	7,561.60	-6,631.90	913.73	6,694.15	0.00	0.00	0.00
14,300.00	90.16	180.27	7,561.32	-6,731.90	913.26	6,793.29	0.00	0.00	0.00
14,400.00		180.27	7,561.03	-6,831.89	912.78	6,892.44	0.00	0.00	0.00
14,500.00		180.27	7,560.75	-6,931.89	912.31	6,991.58	0.00	0.00	0.00
14,600.00	90.16	180,27	7,560.46	<b>-</b> 7,031.89	911.83	7,090.73	0.00	0.00	0.00
14,700.00		180.27	7,560.18	-7,131.89	911.35	7,189.88	0.00	0.00	0.00
14,762.02	90,16	180,27	7,560.00	-7,193.91	911.06	7,251.37	0.00	0.00	0.00
TD at 1476	2.02								

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL (PBJDF #6H/WB ; - plan hits target cent - Point	0.00 er	0.00	7,560.00	-7,193.91	911.06	384,892.89	575,481.62	32° 3' 29.169 N	104° 13' 23.222 W	
EOC (PBJDF #6H/WB # - plan hits target cent - Point	0.00 er	0.00	7,579.57	-425.56	603.72	391,661.24	575,174.28	32° 4' 36.154 N	104° 13' 26.714 W	



# TDS

### Planning Report



Database: Company: EDM 5000.1 Single User Db Yates Petroleum Corp.

Project

Eddy County, NM (Nad-83 2015)

Site:

Punch BJD Federal #6H

Well:

Punch BJD Federal #6H Wellbore #1

Wellbore: Design:

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well Punch BJD Federal #6H

KB @ 3316.00usft

KB @ 3316.00usft Grid

mations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	372.00	372.00	CASTILE LM/SD		0.00	
	1,317.00	1,317.00	TOP OF SALT		0.00	
	1,885.00	1,885.00	BASE OF SALT		0.00	
	2,060.00	2,060.00	LAMAR		0.00	
	2,110.00	2,110.00	BELL CANYON		0.00	
	3,177.38	3,177.00	CHERRY CANYON		0.00	
	3,355.62	3,355.00	MANZANITA MARKER		0.00	
	4,222.81	4,221.00	BRUSHY CANYON		0.00	
	5,356.37	5,353.00	BRUSHY CANYON MARKER		0.00	
	5,692.83	5,689.00	BONE SPRING LIME		0.00	
	5,792.96	5,789.00	AVALON SHALE		0.00	
	6,614.09	6,609.00	BONE SPRING 1/SD		0.00	
	7,386.98	7,355.00	BONE SPRING 2/SD		0.00	

Plan Annotations					
Me	Measured Vert		Vertical Local Coordinates		
	epth usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
2	2,800,00	2,800.00	0.00	0.00	NUDGE - Start Build 2.00
	2,950.00	2,949.93	0.00	3.93	HOLD - Start 4082.00 hold at 2950.00 MD
-	7,032.00	7,026.34	0.00	217.56	KOP - Start DLS 10.00 TFO 50.03
-	7.914.30	7,579.57	-425.56	603.72	EOC/TURN - Start DLS 4.00 TFO 89.93
	3.921.10	7,576.63	-1,353.08	938.82	END TURN - Start 5840.92 hold at 8921.10 MD
14	,762.02	7,560.00	-7,193.91	911.06	TD at 14762.02



Certificate of Warranty, Schedule B, ECCN, Origin and CE Marking

January 27, 2014

We hereby certify that the material shipped for Nomac Drilling Corporation purchase order 333594 is new and unused and is free of any defects as to their design, material and workmanship.

We also warrant the goods to be consistent with the generally accepted standards of the material of the type ordered. Which is API Spec 7K.

The goods are warranted for a period of 1 year (12 months) from the date of delivery.

We certify that the material of this order is of American origin.

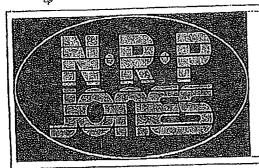
ECCN - EAR99

Schedule B - 4009.22.0500

EIN-731185740

Thank You, Juan Ortiz

14401 # 23558



# 255 W 1100 N Nephi, UT 84648 1-800-453-1480

# Certificate of Compliance

Date:

2014-01-17

Test#:

Entored by:

bwentz

10,000/15,000

Assal Dosc: Assot#:

Tested by:

bwentz

Chip ID:

NLD-009R

Owner:

E004010079CF031D NRP Jones

Initial Location: Site\NEPHI

Wilness:

dnelson

City:

Manufacturer	NRP JONES
Extended Desc	N/A
Model	5040-4840-B
Application Group	Choke & Kill
Date of MidAssembly	2014-01-17
Assembled By	Brad Wonlz
Orlg Date Sold	2014-01-04
Hose Date of Mir	2014-01-04
Locn Dosc	N/A
inside Dia.	3"
Lengih	40'
Cut Length	N/A
Working Pressure	10000 PSI
Test Pressure	15000 PSI
Coupling A	26.0054
Coupling A Model	N/A
Allach Melhod A	Bullt-in
Coupling A Add-On	4 1/6" RTJ FLANGE
Coupling B	26-0054
Coupling B Model	N/A
Allach Method B .	Built-In
Coupling B Add-On	4 1/6" RTJ FLANGE
Factory Ref #	M0102747
Distributor Ref #	NIA
EndUser Rol (I	N/A
Slandard	N/A
Notes	N/A

Order #	M0102747
Cust POII	N/A
Sodal Number	NLD-009R
Yest Pressure	16,000 PSI
Test Timo	15 MIN.
Tost Number	N/A
Inspection Instruction	N/A
Certification Result	PASS
Gonerate Alort?	
Comments	N/A
TimeSlamp	2014-01-17 13:16:58 -07:00



01-17-14 13:44:26 82 SEC(TBF) Į.J. 56435 5.2 3 8 -19006. Es=5 F5I 'n. -9990. PSI 8,4 15000 Ý 7.

Hose Inspection Report

	Hose Inspec		The second of th			
General Inform	iation	Hose Specificat	ions			
ustomer	tomer Nomac		5040-48			
Ogte Assembled	1/17/2014	Certification	ISO9001:2000			
ocation Assembled	NRP/Utah	Hose Grade	H2S			
ales Order#	197113	Hose Working Pressure	10,000 PSI			
Customer Purchase Order#	333592	Hose Lot#				
Hose Assembly Serial #	NLD-009R	Hose Date Code				
Pick Ticket Line Item	0010	Hose I.D. (Inches)	3.0			
Hose Assembly Length (Fee: & Inches)	40'	Hose O.D. (inches)	5.84			
	Fift	ings				
End A		End B				
Stem (Part and Revision #)	26-0054	Stem (Part and Revision #)	26-0054			
Connection (Part #)	4-1/16 10K	Connection (Pon #)	4-1/16 10k			
	Commo	on Extras				
Cables (yes/no)	N	Safety Clamps (yes/no)	N			
Chains (yes/no)	N	Safety Clamps Patches (yes/no)	N			
Lifting Collars (yes/no)	N	Safety Clamps Protection (yes/no)	N			
Thread Protectors (yes/no)	N	Customer Label (is it attached to ferulie?)	N			
Hydrostatic Test Re	quirements	Assembly infor	mation			
Hose Tested (yes/no)	Υ					
Test Pressure (psi)	15,000 PSI	Noted Damage:				

**5040** CHORE & MILL MOSE

Part Number	Hose t.D (in)	Mose O.D. (in)	Fiateti » W.P.(pei)	Test Pressure (ysi)	Win. Elend Radius	Wt. Per Foot (lbs)	List Price
5040-32	2.0	4.68	10000	15000	48	22.4	POR
5040-40	2.50	5.34	10000	15000	52	27.4	POR
5040-48	3.00	5.84	10000	15000	56	28.8	POR

Tube:

Black, oil and abrasion resistant HMBR for H2S sevice.

Reinforcement; Multiple plies of bias laid textile cord for extra strength and flexibility.

Spirally wound, high tensile, multiple strand cables to provide unsurpassed ruggedness and reliability to withstand sudden high

pressure.

Covert

Special flame resistant : Illeoprene (CR) with optional stainless steel

armor.

Temperature:

-40 to 212° F.

Fittinge:

integral connection flanged or hubbed.

Stranding:

NRP Choke & Kill Hose, MADE IN USA.

# a Commitment to Quality

In 1999, NRP-Jones' 240,000 sq. ft. hose manufacturing facility earned ISO 9001 registration for its quality management system. The scope of registration covers both the design and manufacture of its wide range of hose and extruded rubber products. NRP has now earned registration to the most recent ISO 9001:2000 standards. Achieving ISO 9001 registration is consistent with the company's philosophy that competitive prices and quality products are equally important to customers.

The ISO 9001 quality system substantiates management's commitment to quality. Additionally, this system is reducing cost and increasing efficiency, allowing NRP-Jones to provide products that meet customers' quality and price expectations.

Trust MRP-Jones to provide reliable products at prices that will have a positive impact on your bottom line.... the personalized world-class service is just part of the package!

# Warranty Statement

NRP-JONES warrants that its products shall be free from defects in unterials and workmanship when properly used and applied under normal conditions. Our liability on proven defective material is expressly limited to original net purchase price, less service received on a pro-rated basis, or at the option of NRP-JONES the replacement of such item, upon its authorized return.

All claims for defective goods must be received in writing within a maximum of 12 months from date of sale by MRP-JONES to be considered. Seller's advance written authorization is required for the return of any product.

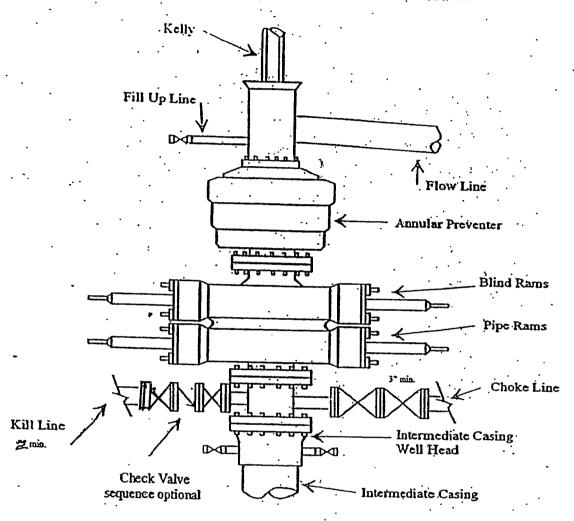
Merchandise damaged as a result of enrelessness, mishandling, or misapplication is specifically excluded from the above warranty, as are all implied warranties, on any consequential injury, property damage and/or loss of profit which may be claimed to have been incurred through the sale or ose of any such products or parts thereof which might be defective.

Except as otherwise expressly provided above, seller makes no representation or warranty of any kind, express or implied, with respect to the goods sold as to merchantability, fitness for a particular purpose, or any other matter with respect to the goods, whether used alone or in combination with other products.

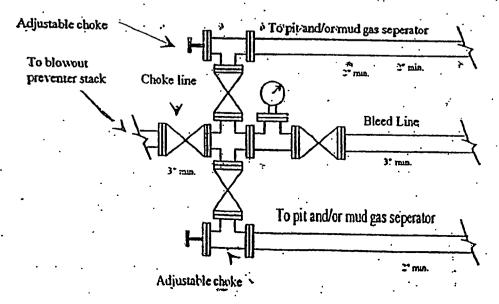


# Yates Petroleum Corporation

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

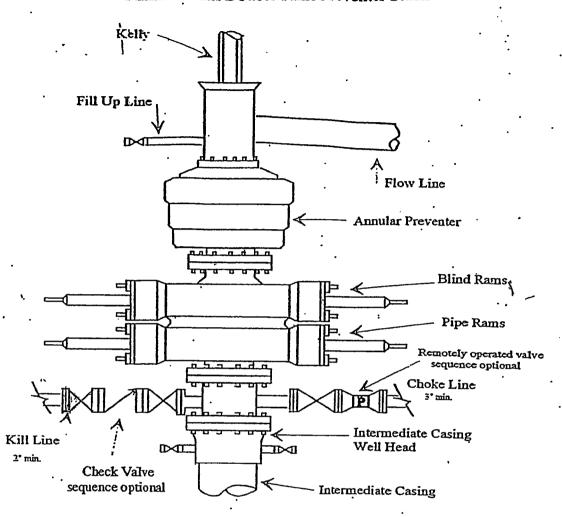


Typical 3,000 psi choke manifold assembly with at least these minimum features

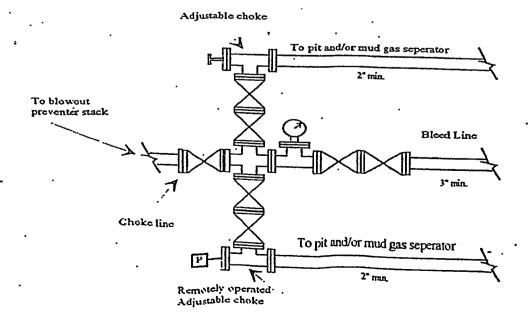


# Yates Petroleunr Corporation

Typical 5.000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack

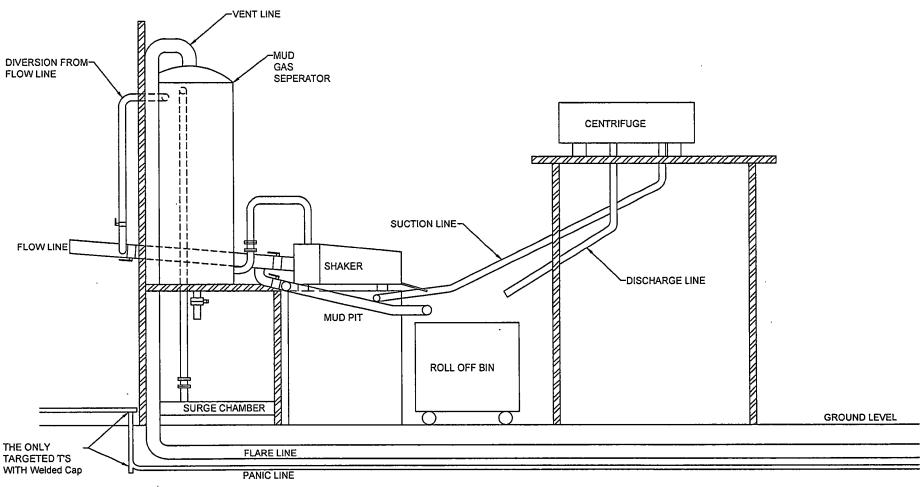


Typical 5,000 psi choke manifold assembly with at least these minimum features



# YATES PETROLEUM CORPORATION

Piping from Choke Manifold to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H2S wells and 150' from wellhead for wells expected to encounter H2S.

# Yates Petroleum Corporation Closed Loop System

## Equipment Design Plan

Closed Loop System will consist of:

- 1 double panel shale shaker
- 1 (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System
- 1 minimum centrifugal pump to transfer fluids
- 2-500 bbl. FW Tanks
- 1-500 bbl. BW Tank
- 1 half round frac tank 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.
- 1 Set of rail cars / catch bins

Certain wells will use an ASC Auger Tank

## Operation Plan

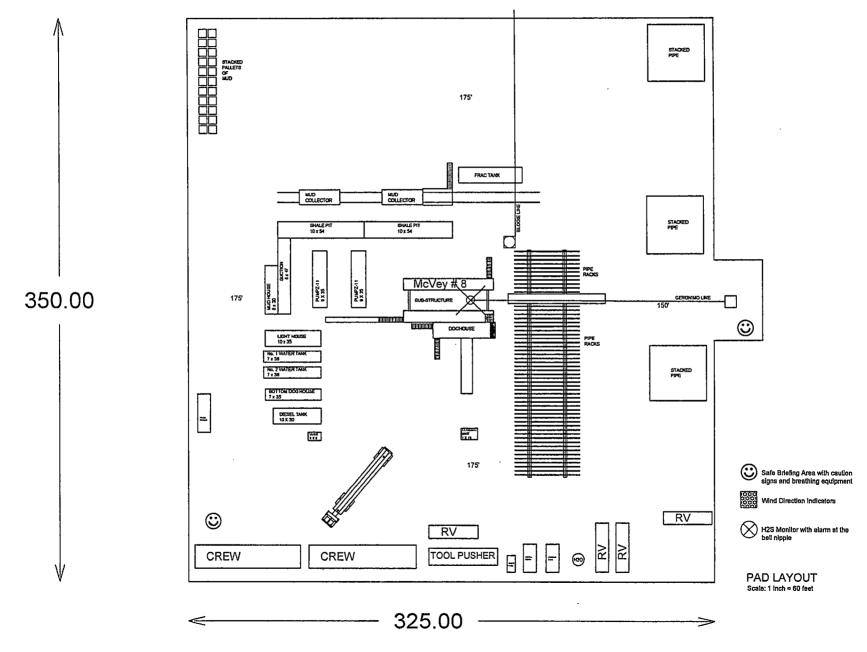
All equipment will be inspected at least hourly by rig personnel and daily by contractors' personnel.

Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

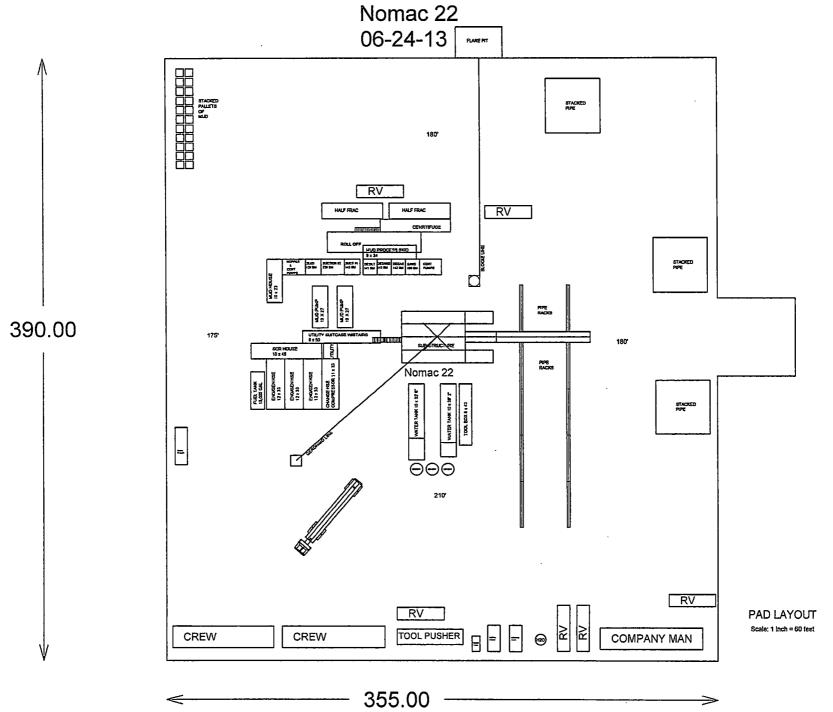
## Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, Lea Land Farm, CRI or Sundance Services Inc.

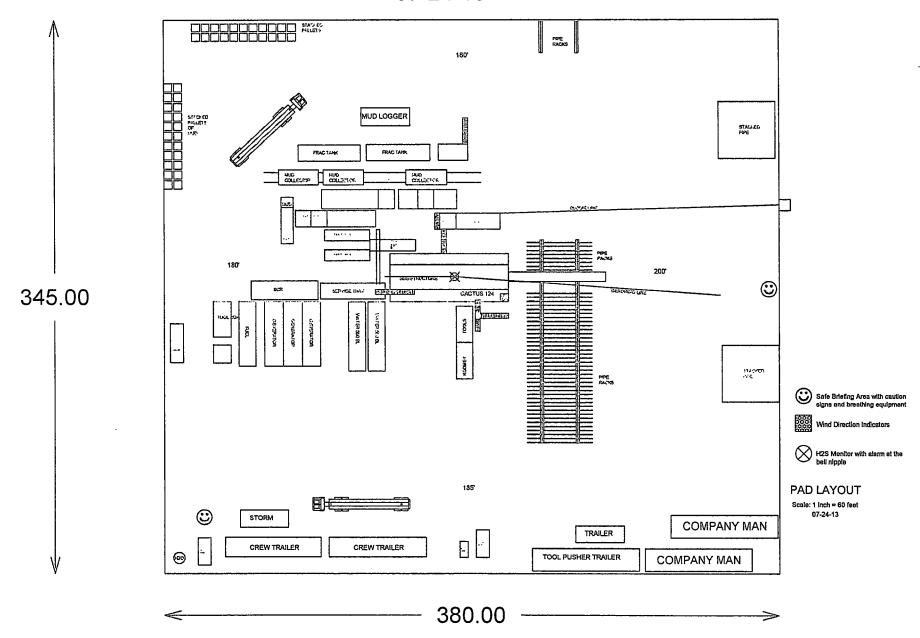
# YATES PETROLEUM CORPORATION McVay # 8 10-09-13



# YATES PETROLEUM CORPORATION



# YATES PETROLEUM CORPORATION CACTUS 124 07-24-13

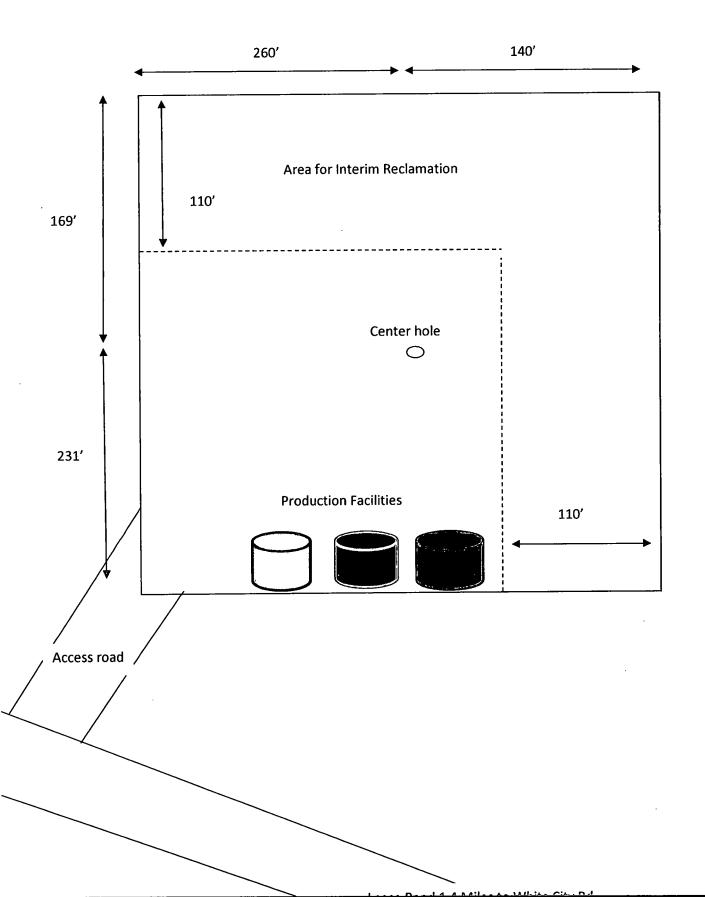


## Punch BJD Federal #6H

# Interim Reclamation Well Pad Layout

Example\*\*dimensions and locations may vary depending on discussions between Yates Petroleum Corporation and the BLM at the time of Interim reclamation.

North



#### 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' x 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.



Whitlock, Jerald <dwhitloc@blm.gov>

### **Punch BJD Federal 6H Deficiencies**

1 message

Rene Bela < RBela@yatespetroleum.com>

Fri. Jul 15, 2016 at 3:46 PM

To: "dwhitloc@blm.gov" <dwhitloc@blm.gov>, "pcmurphy@blm.gov" <pcmurphy@blm.gov>, "Ballard, Bob

(bballard@blm.gov)" <bballard@blm.gov>, "clayton@blm.gov" <clayton@blm.gov>

Cc: Armando Lopez <ArmandoL@yatespetroleum.com>, Christopher Gurule <CGurule@yatespetroleum.com>, Cy Cowan <Cy@yatespetroleum.com>, Travis Hahn <THahn@yatespetroleum.com>

Punch BJD Federal 6H, LEASE NM97127

411' FNL & 1568' FEL, Sec. 6, T26S, R27E, SHL, Eddy County, NM

## **APD Deficiencies**

- ♠ Supply a legible map that shows and identifies the proposed well site and access route to the proposed well from a state or county maintained road (i.e. County Road 221).
- ♣ Planned Access Road "A." Please correct the length of the proposed access road.
- Attached are the deficiencies for the Punch #6 as requested. The length of road is corrected on the surface use plan and the map id's the well site and access route. If you need anything else for this location, please don't hesitate to drop me a line.

Rene P. Bela

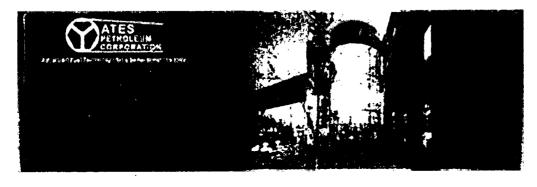
Associate Land Regulatory Representative

Yates Petroleum Corporation

105 South 4th Street 88210

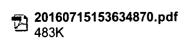
575-748-4302 dl

575-616-1418 cell



This message may contain confidential information and is intended for the named recipient only. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message, which arise as a result of e-mail transmission. If verification is required please request a hard-copy version.

#### 2 attachments



surface use plans punch fed #6.doc 38K

2/2

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

Punch BJD Federal #6H 411' FNL & 1568' FEL Section 1-T26S-R26E Eddy County, New Mexico

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:

Attached exhibit 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 11 miles southeast of White City New Mexico and the access route to the location is indicated in green on the attached exhibit.

DIRECTIONS: From white City road and CO. RD 724, go west for approx. 2 miles to lease road, then northerly 1.4 miles to proposed lease road.

#### 2. PLANNED ACCESS ROAD:

- A. The existing lease roads, (approx. 3600') and county roads are to allow access and the new road constructed will be approx. 3284.1' in length.
- B. The road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The road will be bladed with drainage on both sides. Traffic turnouts will be every 1000'.
- 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 attached 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, located on the Punch BJD Federal #6H at this time.
- B. In the event that the well can be used, the necessary production facilities will be installed on the existing pad or a sundry asking for a flowline to the Punch BJD Federal #6H will be submitted. If the well is able to be used a 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 the attached exhibit.

#### 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.

#### 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.
- 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. No oil will be produced during drilling operations.
- 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 attached shows the relative location and dimensions of the well pad, the closed loop design plan, the location of the drilling equipment, orientation and access road approach of three of the rigs Yates Petroleum is currently using. It is yet to be determined which drilling rig will drill this well, a 400' x 400' area has been staked, all drilling rigs being used by Yates Petroleum Corporation at this time will fit within these dimensions. At the time the determination is made a Sundry notice will be submitted with the appropriate information. (Approximately 3.5 acres).
- 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. 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.
- C. 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' x 600' cleared area to avoid moving the well location.
- D. Segregation of topsoil or like soils will be placed in low lift rows on one or two sides of the cliché pad where the top soil is more spread out to preserve the seed bed better 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.

- E. 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.
- F. 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.
- G. 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.
- H. 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.
- I. 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.
- J. 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 Eddy Soil and Water District program to pool monies for weed control.
- K. Well pads, roads and related facilities with caliche or other surfacing material will be picked up 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.
- L. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the State of New Mexico will be complied with and will be accomplished as expeditiously as possible.
- 11. SURFACE OWNERSHIP: Federal Land
- 12. OTHER INFORMATION:
  - A. The primary use of the surface is for grazing.

Minerals: USA-Federal-NM-97127

Administered by: Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street

Carlsbad, NM 88220-6292

B. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, and historical and cultural sites.

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

Punch BJD Federal #6H 200' FNL & 1320' FEL Section 1-T26S-R26E Eddy County, New Mexico

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:

Attached exhibit is a partion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed well site is located approximately 11 miles southeast of White City New Mexico and the access route to the location is indicated in green on the attached exhibit.

DIRECTIONS: From white City road and CO. RD 724, go west for approx. 2 miles to lease road, then northerly 1.4 miles to proposed lease road.

#### 2. PLANNED ACCESS ROAD:

- A. The existing roads are county roads to allow access and the new road constructed will be the approx.' in length.
- B. The road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The road will be bladed with drainage or both sides. Traffic turnouts will be every 1000'.
- 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 attached shows existing wells within a one-mileradius of the proposed well site.

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

- A. There are production facilities, located on the Punch BJD Federal #6H at this time.
- B. In the event that the well can be used, the necessary production facilities will be installed on the existing pad or a sundry asking for a flowline to the Punch BJD Federal #6H will be submitted. If the well is able to be used a 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 the attached exhibit.

#### SOURCE OF CONSTRUCTION MATERIALS: 6.

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.

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

Aclosed loop system will be used to drill this well and reserve pits will not be used. A.

The closed loop system will be constructed, maintained and closed in compliance with the В. State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division—the "Pit Rule" 19.15.17 NMAC. Form C-144.

C.

Drilling fluids will be removed after drilling and completions are completed.

Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted. D.

E.

No oil will be produced during drilling operations.

Current laws and regulations pertaining to the disposal of human waste will be complied F.

All trash, junk, and other waste materials will be contained in trash cages or bins to prevent G. scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not approved.

#### ANCILLARY FACILITIES: NONE 8.

#### Andreas 9. The WELLSITE LAYOUT: Will be

Exhibit attached shows the relative location and dimensions of the well pad, the closed loop design plan, the location of the drilling equipment, orientation and access road approach of three of the rigs Yates Petroleum is currently using. It is yet to be determined which drilling rig will drill this well, a 400' x 400' area has been staked, all drilling rigs being used by Yates Petroleum Corporation at this time will fit within these dimensions. At the time the determination is made a Sundry notice will be submitted with the appropriate information. (Approximately 3.5 acres).

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 B. Division—the "Pit Rule" 19.15.17 NMAC

A 600' x 600' area has been staked and flagged C.

#### PLANS FOR RESTORATION: 10.

After finishing drilling and/or completion operations, all equipment and other material not A. 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.

Well location will be contoured to resemble the original oppography as closely as possible. B. 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.

Major drainage systems will be avoided as determined at the onsite with the BLM. Minor C. drainages may be rerouted around the well site within the 600' x 600' cleared area to avoid moving the well location.

Segregation of topsoil or like soils will be placed in low lift rows on one or two sides of the D. cliché pad where the top soil is more spread out to preserve the seed bed better 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.

- E. 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.
- F. 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.
- G. 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.
- H. 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.
- I. 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.
- J. 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 Eddy Soil and Water District program to pool monies for weed control.
- K. Well pads, roads and related facilities with caliche or other surfacing material will be picked up 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 out down below plaw depth and removed. Pipeline right-of-ways will be reserved according to BLM Best Management Practices.
  - L. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the State of New Mexico will be complied with and will be accomplished as expeditiously as possible.
- 11. SURFACE OWNERSHIP: Federal Land
- 12. OTHER INFORMATION:
  - A. The primary use of the surface is for grazing.

Minerals: USA-Federal-NM-97127

Administered by: Bureau of Land Management

Carlsbad Field Office 620 E. Greene Street Carlsbad, NM 88220-6292

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 #6H

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 the 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.

2015

<u>\_</u>d i i pirano 

<u>.</u> was after become

day of Sentember

Executed this

91.1

Executed this <u>50</u> _ day of50ptomoci	
Signature	,
en af i «Name <u>a sea man Rene P:Belanda se en de </u>	1
and the property of the company of the property of the propert	gri -
Position Title Land Regulatory Agent	
Address 105 South Fourth Street, Artesia, New Mexico 88210	
the first of the second of the	
Telephone (575) 748-4120	
Field Representative (if not above signatory) Tim Bussell, Drilling Sup	ervisor_
Address (if different from above) Same as above	
Telephone (if different from above) (575) 748-4221	



#### **United States Department of the Interior**

# TAKE PRIDE INAMERICA

#### **BUREAU OF LAND MANAGEMENT**

New Mexico State Office P.O. Box 27115 Santa Fe, New Mexico 87502-0115 www.blm.gov/nm

3106 (921-js)

December 1, 2016

#### **Notice**

EOG Y Resources, Inc. Attn: Kathy H. Porter 105 S. 4<sup>th</sup> Street Artesia, NM 88210

U.S. Specialty Insurance Company 13403 Northwest Freeway Houston, TX 77040-6094

# Name Change Recognized Yates Petroleum Corporation to EOG Y Resources, Inc. Bond Rider Accepted

We received acceptable evidence of the name change from Yates Petroleum Corporation to EOG Y Resources, Inc. effective November 1, 2016.

The oil and gas leases identified on the enclosed exhibit have been noted as to the name change. These lease numbers were obtained from our Legacy Rehost System (LR2000). If you identify additional leases, please contact this office and we will note our records accordingly. We have not abstracted the lease files to determine if the entity affected by the name change holds an interest in the leases nor have we attempted to identify leases where the entity is the operator on the ground.

We are notifying the Office of Natural Resources Revenue (ONRR) and all Bureau of Land Management offices of the name change by copies of this notice. If additional documentation for changes of operator is required by our Field Offices, they will contact you.

There are Four BLM bonds affected by this name change:

Yates Petroleum Corporation is a principal on the following bonds held by the BLM Wyoming State Office:

• BLM Statewide Bond Number: <u>WYB000404</u>

Surety Number: B002818 Amount: \$4,594,173

Surety: U.S. Specialty Insurance Company

• BLM Individual Bond Number: WYB001919

Surety Number: B009716

Amout: \$10,000

Surety: U.S. Specialty Insurance Company

For requirements concerning this bond, please contact Angela Montgomery in the Wyoming State Office at 307-775-6299.

Yates Petroleum Corporation is the principal on the following bond held by the BLM New Mexico State Office:

BLM Statewide Bond Number: NMB000920

Surety Number: B007414

Amount: \$150.000

Surety: U.S. Specialty Insurance Company

For requirements concerning this bond, please contact Julie Ann Serrano in the New Mexico State Office at 505-954-2149.

On November 14, 2016, we received Bond Rider No. 2, for BLM Nationwide Bond No. NMB000434 changing the name from Yates Petroleum Corporation to EOG Y Recourses, Inc. The rider has been examined and found satisfactory and is accepted effective November 16. 2016, the date filed in this office.

If you have any questions, please contact Julie Ann Serrano at (505) 954-2149.

Gloria Baca

Supervisory Land Law Examiner

Glove & Baca

Branch of Adjudication

Enclosure List of Leases

cc:

Electronic Copies (wencl):
BLM\_Bond\_Surety
BLM\_Fluids\_Forum
BLM\_Wyoming State Office

ONRR
Roswell FO
Carlsbad FO
IAC Name Change Log
Name Change Log Book

#### **PECOS DISTRICT** CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | Yates Petroleum Corporation LEASE NO.: NMNM-97127 WELL NAME & NO.: | Punch BJD Federal 6H SURFACE HOLE FOOTAGE: 0411' FNL & 1568' FEL **BOTTOM HOLE FOOTAGE** 2310' FNL & 0660' FEL Sec. 07, T. 26 S., R 27 E. Section 06, T. 26 S., R 27 E., NMPM LOCATION: **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
Cave/Karst
☐ Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
□ Drilling
Cement Requirements
High Cave/Karst
Logging Requirements
Waste Material and Fluids
☐ Production (Post Drilling)
Well Structures & Facilities
☐ Interim Reclamation
Final Abandonment & Reclamation

COUNTY:

#### 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)

#### **Cave and Karst**

\*\* Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

#### **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

#### No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

#### **Pad Berming:**

The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g. caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)

#### **Tank Battery Liners and Berms:**

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

#### **Leak Detection System:**

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

#### **Automatic Shut-off Systems:**

Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

#### Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

#### **Directional Drilling:**

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cavebearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

#### **Abandonment Cementing:**

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

#### **Pressure Testing:**

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

#### 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) 234-5909 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 strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area 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. EXCLOSURE FENCING (CELLARS & PITS)

#### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

#### G. 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-five (25) 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**

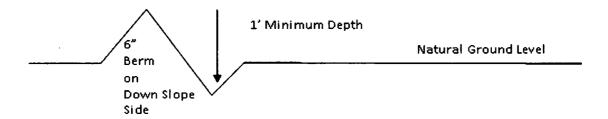
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

#### 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

#### **Cattleguards**

An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattleguards on the access road route 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 cattleguards that are in place and are utilized during lease operations.

#### Fence Requirement

Where entry is granted 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 fences.

#### **Public Access**

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

#### **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road
- 4. Revegetate slopes

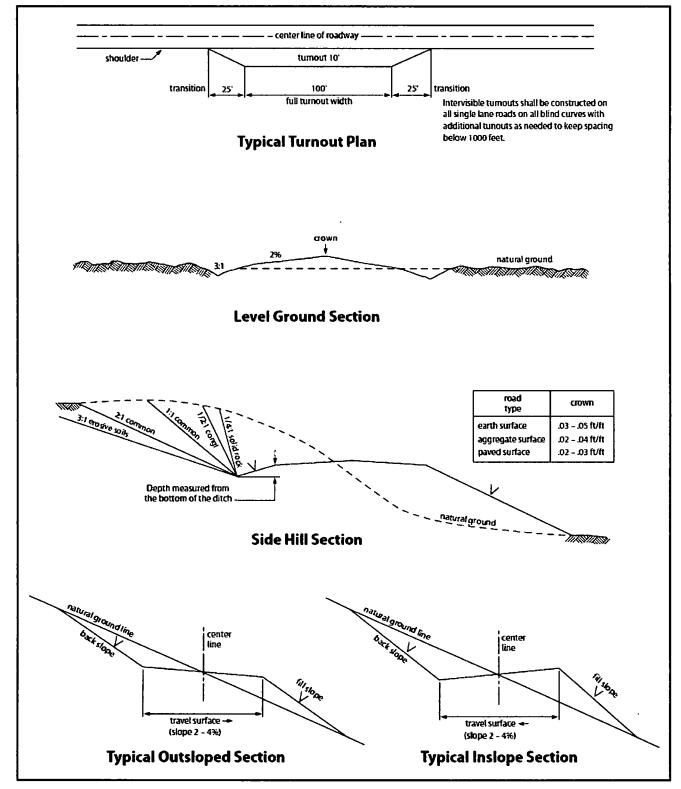


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

#### VII. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

#### **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, 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 is 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) shall 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 Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

The initial wellhead installed on the well will remain on the well with spools used as needed.

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

#### Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

#### High Cave/Karst

Possibility of water flows in the Salado and Castile Possibility of lost circulation in the Castile, Salado, and Delaware

A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH. THEREFORE, ONE INCH OPERATIONS ARE NOT SUFFICIENT TO PROTECT CAVE KARST RESOURCES. A CASING DESIGN THAT HAS A ONE INCH JOB PERFORMED DOES NOT COUNT AS A SOLID SHEATH. IF THE PRIMARY CEMENT JOB ON THE SURFACE CASING DOES NOT CIRCULATE, THEN THE NEXT TWO CASING STRINGS MUST BE CEMENTED TO SURFACE.

- 1. The 13-3/8 inch surface casing shall be set at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with 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 minimum required fill of cement behind the 9-5/8 inch intermediate casing, which shall be set at approximately 2000 feet (in the Lamar Limestone or the basal anhydrite of the Castile Formation), 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.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

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

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

#### 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 53.

- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. 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.
- 4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 5. 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, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- 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 (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- d. The results of the test shall be reported to the appropriate BLM office.
- e. 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.
- f. 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. This test shall be performed prior to the test at full stack pressure.

#### 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.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 091916

#### 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.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **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** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

#### 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 1 for Loamy Sites**

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 shall 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 shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall 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 shall 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). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

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

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

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

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