

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

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

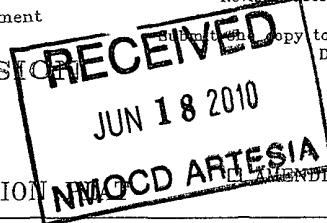
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 15, 2009

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



WELL LOCATION AND ACREAGE DEDICATION

API Number 30-015-37938	Pool Code	Pool Name Wildcat; Bone Spring
Property Code	Property Name PLU ROSS RANCH "32" STATE	Well Number 1H
OGRID No. 147179	Operator Name CHESAPEAKE OPERATING CO.	Elevation 3172'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	32	25 S	30 E		175	SOUTH	400	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	32	25 S	30 E		350	NORTH	400	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

PROPOSED BOTTOM HOLE LOCATION Lat - N 32.09276623° Long - W 103.8960747° NMSPCE- N 397758.664 E 676748.761 (NAD-83)	Project Area	Producing Area 4798.8'	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Bryan Arrant</i> 06/02/2010 Signature Date Bryan Arrant Printed Name			
				Penetration Point & SURFACE LOCATION Lat - N 32.07957779° Long - W 103.8961761° NMSPCE- N 392960.875 E 676736.783 (NAD-83)	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MAY 22 2010 Date Surveyed Signature & Seal Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS	
						Diagram

222

Chesapeake Operating Inc			Proposed Drilling Program																																																																																																																			
Well : PLU Ross Ranch 32 State 1H Field : Delaware Basin North County : Eddy State : NM Surf Locat : Section 32-25S-30E, 175' FSL & 400' FEL Lat: 32.07957779 Long: -103.8961761 (NAD83) BH Locat : Section 32-25S-30E, 350' FNL & 400' FEL Lat: 32.09276623 Long: -103.8960747 (NAD83) KB Elev : 3,194' [Latshaw 6] Grd Elev : 3,172' [Plat]																																																																																																																						
13 3/8" Surface Casing: Lead 131 bbls, 425 sks 400' fill, 13.5 ppg, 1.73 Yld, 150% Excess on OH. *Must achieve 500 psi compressive strength in 18 hrs 8 5/8" Intermediate Casing: Lead: 289 bbls, 2650' fill, 890 sxs, 12.0 ppg, 1.82 yield, Tail: 119 bbls, 1000' fill, 486 sxs 14.2 ppg, 1.37 yield (150% OH excess) *Both lead and tail must achieve 500 psi compressive strength in 18 hrs *Consider 2 stage job if losses occurred 5 1/2" Production Casing: 2nd Stage Lead 205 sx, 67 bbl, 12.0 ppg, 1.83 yield TOC @ 3,150', 200% OH Excess Tail 100 sx, 24 bbl, 14.8 ppg, 1.33 yield 5 1/2" Production Casing: 1st Stage Lead 338 sxs, 110 bbl, 2550' fill, 12.0 ppg, 1.83 yld, Tail. 905 sxs, 280 bbl, 6,498' fill, 13.2 ppg, 1.74 yield TOC @ 4,450', 40% OH Excess Mud logging intervals: 17 1/2" Spud mud 8.4 - 8.7 VIS: 28-32 FL: NC 11" WBM 8.7 - 10.0 ppg VIS: 28 - 30 FL: NC Native Brine 7 7/8" 8.4 - 8.7 ppg VIS: 28-29 FL: NC PH: 9.5 - 10.0 KCl Water 9.0 - 9.5 ppg VIS: 34-38 FL: 12-20 PH: 9.5 - 10.0 Cut brine			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Wellhead Equipment</th> </tr> </thead> <tbody> <tr> <td>Tree Connection</td> <td></td> </tr> <tr> <td>Backpressure Valve</td> <td></td> </tr> <tr> <td>Tubing Spool</td> <td>11" 5M x 7 1/16" 10K</td> </tr> <tr> <td>Casing Spool</td> <td>13-5/8" 5M x 11" 5M</td> </tr> <tr> <td>Bradenhead</td> <td>13-3/8" SOW x 13-5/8" 5M</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">Logging Program</th> </tr> <tr> <th>Company</th> <th>Log Type</th> <th>Interval</th> </tr> </thead> <tbody> <tr> <td>XX</td> <td>PILOT HOLE Triple Combo (Dual Induction for resistivity) with Spectral Gamma Ray from TD - Surf Csg Dipole Sonic and Sidewall cores(optional)</td> <td></td> </tr> <tr> <td>XX</td> <td>MWD-GR on BHA from KOP to TD</td> <td></td> </tr> <tr> <td colspan="3">Mud logging personnel at intermediate casing shoe to TD</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="7" style="text-align: center;">Tubular Detail</th> </tr> <tr> <th></th> <th>Size</th> <th>Wt</th> <th>Grd</th> <th>Conn.</th> <th>From.</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>Surface</td> <td>13-3/8"</td> <td>48#</td> <td>H-40</td> <td>STC</td> <td>0'</td> <td>400'</td> </tr> <tr> <td>Inter</td> <td>8-5/8"</td> <td>32#</td> <td>J-55</td> <td>LTC</td> <td>0'</td> <td>3,650'</td> </tr> <tr> <td>Prod</td> <td>5 1/2"</td> <td>20.0#</td> <td>L-80</td> <td>LTC</td> <td>0'</td> <td>Lateral TD</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="7" style="text-align: center;">Lateral Directional Plan</th> </tr> <tr> <th></th> <th>MD</th> <th>INC</th> <th>AZM</th> <th>TVD</th> <th>BUR</th> <th>DLS</th> </tr> </thead> <tbody> <tr> <td>KOP</td> <td>8,466'</td> <td>0</td> <td>0</td> <td>8,466'</td> <td>0</td> <td>0</td> </tr> <tr> <td>EOB</td> <td>9,108'</td> <td>89.9</td> <td>0.14</td> <td>8,875'</td> <td>14.0</td> <td>14.0</td> </tr> <tr> <td>TD</td> <td>13,498'</td> <td>89.9</td> <td>0.14</td> <td>8,883'</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Vendors</th> </tr> </thead> <tbody> <tr> <td>Rig</td> <td>Latshaw 6</td> </tr> <tr> <td>Directional</td> <td>Black Viper</td> </tr> <tr> <td>Mud</td> <td>Alliance</td> </tr> <tr> <td>Cement</td> <td>Schlumberger</td> </tr> <tr> <td>Wellhead</td> <td>Sunbelt</td> </tr> <tr> <td>Wireline Logging</td> <td>XX</td> </tr> <tr> <td>Mud Logging</td> <td>XX</td> </tr> </tbody> </table> **Mud logging at intermediate casing shoe *Potentially productive zone 8,875' TVD @ 0' VS w/0.10 deg down-dip, incl. 89.9 deg. Azi, 0.14 deg. Target Window 20' above and below target line 7-7/8" lateral Hole Well TD at 13,498' MD, 8,883' TVD, 4,798' VS. Pilot Hole TD 9,000'			Wellhead Equipment		Tree Connection		Backpressure Valve		Tubing Spool	11" 5M x 7 1/16" 10K	Casing Spool	13-5/8" 5M x 11" 5M	Bradenhead	13-3/8" SOW x 13-5/8" 5M	Logging Program			Company	Log Type	Interval	XX	PILOT HOLE Triple Combo (Dual Induction for resistivity) with Spectral Gamma Ray from TD - Surf Csg Dipole Sonic and Sidewall cores(optional)		XX	MWD-GR on BHA from KOP to TD		Mud logging personnel at intermediate casing shoe to TD			Tubular Detail								Size	Wt	Grd	Conn.	From.	To	Surface	13-3/8"	48#	H-40	STC	0'	400'	Inter	8-5/8"	32#	J-55	LTC	0'	3,650'	Prod	5 1/2"	20.0#	L-80	LTC	0'	Lateral TD	Lateral Directional Plan								MD	INC	AZM	TVD	BUR	DLS	KOP	8,466'	0	0	8,466'	0	0	EOB	9,108'	89.9	0.14	8,875'	14.0	14.0	TD	13,498'	89.9	0.14	8,883'	0	0	Vendors		Rig	Latshaw 6	Directional	Black Viper	Mud	Alliance	Cement	Schlumberger	Wellhead	Sunbelt	Wireline Logging	XX	Mud Logging	XX
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Drawn by: CG Date: Rev #0: 06/11/10 AFE No: 148149 Property No: 623046 Drilling Engineer: Yemi Ajijolaiya Drilling Superintendent: Cecil Luttrull Geologist: Robert Martin																																																																																																																						

RECEIVED
 JUN 18 2010
 NMOC D ARTESIA

Accepted for record - NMOC D

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

WELL : PLU Ross Ranch 32 State 1H

RIG : Latshaw 6

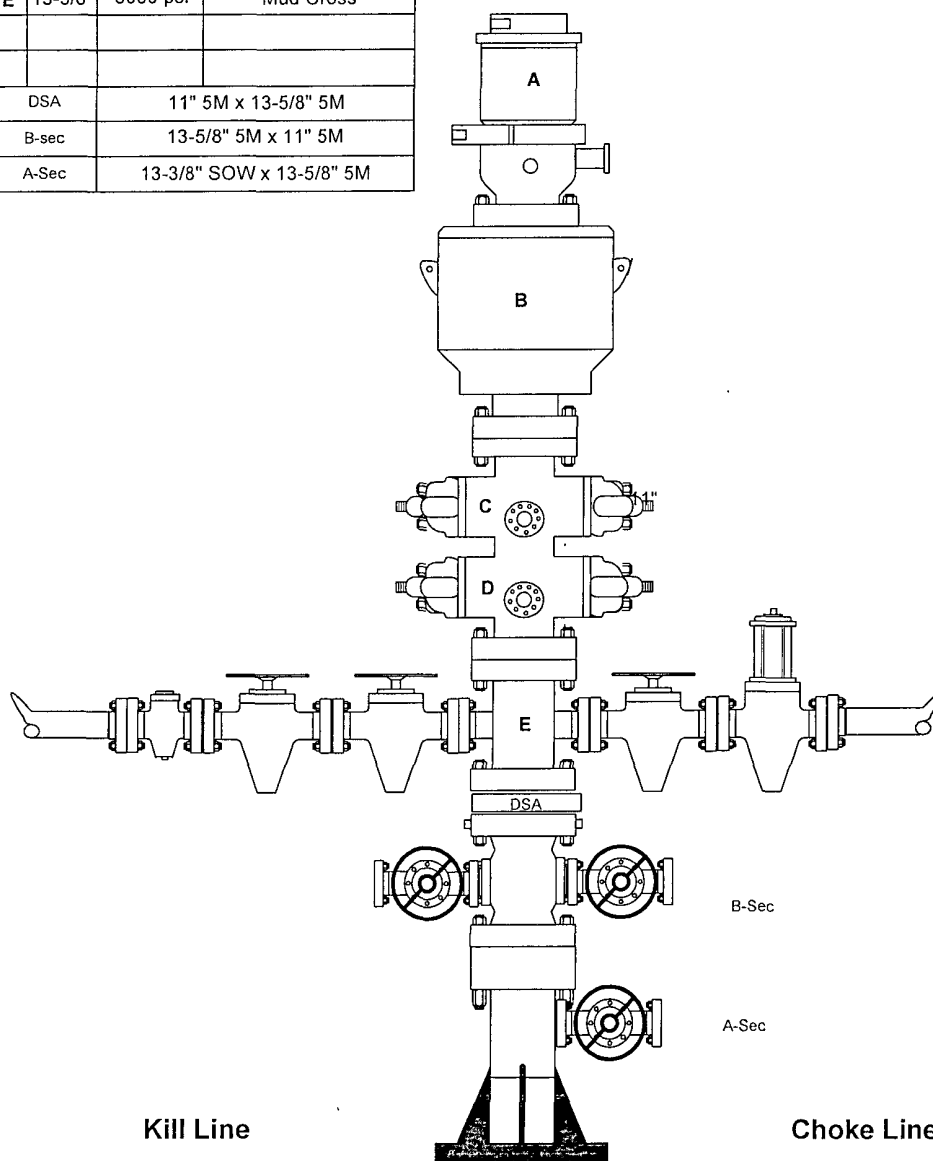
COUNTY : Eddy

STATE: New Mexico

OPERATION: Drill out below 13-3/8" Casing to TD

RECEIVED
JUN 18 2010
NMOCD ARTESIA

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500 psi	Rot Head
B	13-5/8"	5000 psi	Annular
C	13-5/8"	5000 psi	Pipe Rams
D	13-5/8"	5000 psi	Blind Rams
E	13-5/8"	5000 psi	Mud Cross
DSA		11" 5M x 13-5/8" 5M	
B-sec		13-5/8" 5M x 11" 5M	
A-Sec		13-3/8" SOW x 13-5/8" 5M	



SIZE	PRESSURE	DESCRIPTION
2"	5000 psi	Check Valve
2"	5000 psi	Gate Valve
2"	5000 psi	Gate Valve

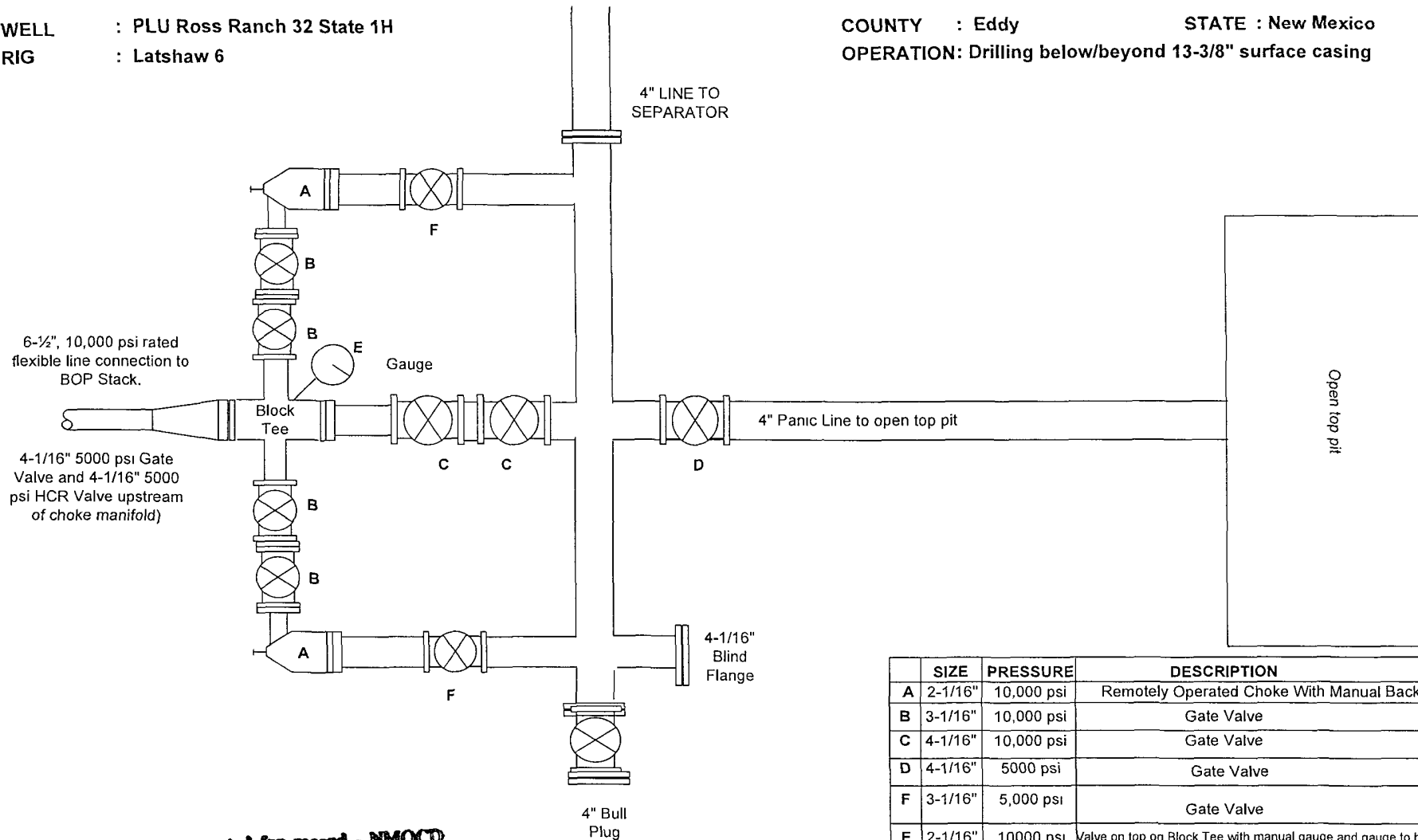
SIZE	PRESSURE	DESCRIPTION
4"	5000 psi	Gate Valve
4"	5000 psi	HCR Valve

Accepted for record - NMOCD

SCHEMATIC OF CHOKE MANIFOLD SHOWING CLOSED LOOP SYSTEM

WELL : PLU Ross Ranch 32 State 1H
RIG : Latshaw 6

COUNTY : Eddy STATE : New Mexico
OPERATION: Drilling below/beyond 13-3/8" surface casing



Accepted for record - NMOCD

	SIZE	PRESSURE	DESCRIPTION
A	2-1/16"	10,000 psi	Remotely Operated Choke With Manual Backup
B	3-1/16"	10,000 psi	Gate Valve
C	4-1/16"	10,000 psi	Gate Valve
D	4-1/16"	5000 psi	Gate Valve
F	3-1/16"	5,000 psi	Gate Valve
E	2-1/16"	10000 psi	Valve on top og Block Tee with manual gauge and gauge to hydraulic choke

RECEIVED
JUN 18 2010
NMOCD ARTESIA

RECEIVED
JUN 18 2010
NAME

JUN 18 2010

NA

Accepted for record - NMOCD

Chesapeake Energy Corporation

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well PLU Ross Ranch 32 State 1H
Company:	Permian District	TVD Reference:	Well 2 @ 3194.0ft
Project:	Poker Lake	MD Reference:	Well 2 @ 3194.0ft
Site:	PLU Ross Ranch 32 State 1H	North Reference:	Grid
Well:	PLU Ross Ranch 32 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	PLU Ross Ranch 32 State 1H		
Design:	Plat		

Project	Poker Lake, Eddy County, NM		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	PLU Ross Ranch 32 State 1H		
Site Position:		Northing:	392,962.69 ft
From:	Lat/Long	Easting:	676,735.78 ft
Position Uncertainty:	0.0 ft	Slot Radius:	0.000 in
		Latitude:	32° 4' 46.48004400 N
		Longitude:	103° 53' 46.23396000 W
		Grid Convergence:	0.23 °

Well	PLU Ross Ranch 32 State 1H		
Well Position	+N/-S	0.0 ft	Northing: 392,962.69 ft
	+E/-W	0.0 ft	Easting: 676,735.78 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	3,172.0 ft
		Latitude:	32° 4' 46.48004400 N
		Longitude:	103° 53' 46.23396000 W
		Ground Level:	3,172.0 ft

Wellbore	PLU Ross Ranch 32 State 1H				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	4/13/2010	7.85	60.04	48,620

Design	Plat				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	0.14	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,466.1	0.00	0.00	8,466.1	0.0	0.0	0.00	0.00	0.00	0.00	
9,108.2	89.90	0.14	8,875.3	408.5	1.0	14.00	14.00	0.00	0.14	
13,497.5	89.90	0.14	8,883.0	4,797.8	12.0	0.00	0.00	0.00	0.00	PLU RR32S1H-BHL-F

Accepted for record - NMOCD

Chesapeake Energy Corporation

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well PLU Ross Ranch 32 State 1H
Company:	Permian District	TVD Reference:	Well 2 @ 3194.0ft
Project:	Poker Lake	MD Reference:	Well 2 @ 3194.0ft
Site:	PLU Ross Ranch 32 State 1H	North Reference:	Grid
Well:	PLU Ross Ranch 32 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	PLU Ross Ranch 32 State 1H		
Design:	Plat		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Chesapeake Energy Corporation

Planning Report

Database: Drilling Database
 Company: Permian District
 Project: Poker Lake
 Site: PLU Ross Ranch 32 State 1H
 Well: PLU Ross Ranch 32 State 1H
 Wellbore: PLU Ross Ranch 32 State 1H
 Design: Plat

Local Co-ordinate Reference: Well PLU Ross Ranch 32 State 1H
 TVD Reference: Well 2 @ 3194.0ft
 MD Reference: Well 2 @ 3194 0ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,466.1	0.00	0.00	8,466.1	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	4.75	0.14	8,500.0	1.4	0.0	1.4	14.00	14.00	0.00
8,600.0	18.75	0.14	8,597.6	21.7	0.1	21.7	14.00	14.00	0.00
8,700.0	32.75	0.14	8,687.5	65.0	0.2	65.0	14.00	14.00	0.00
8,800.0	46.75	0.14	8,764.2	128.8	0.3	128.8	14.00	14.00	0.00
8,900.0	60.75	0.14	8,823.2	209.3	0.5	209.3	14.00	14.00	0.00
9,000.0	74.75	0.14	8,860.9	301.6	0.8	301.6	14.00	14.00	0.00
9,100.0	88.75	0.14	8,875.2	400.3	1.0	400.3	14.00	14.00	0.00
9,108.2	89.90	0.14	8,875.3	408.5	1.0	408.5	14.00	14.00	0.00
9,200.0	89.90	0.14	8,875.5	500.3	1.2	500.3	0.00	0.00	0.00
9,300.0	89.90	0.14	8,875.7	600.3	1.5	600.3	0.00	0.00	0.00
9,400.0	89.90	0.14	8,875.8	700.3	1.7	700.3	0.00	0.00	0.00
9,500.0	89.90	0.14	8,876.0	800.3	2.0	800.3	0.00	0.00	0.00
9,600.0	89.90	0.14	8,876.2	900.3	2.2	900.3	0.00	0.00	0.00
9,700.0	89.90	0.14	8,876.4	1,000.3	2.5	1,000.3	0.00	0.00	0.00
9,800.0	89.90	0.14	8,876.5	1,100.3	2.7	1,100.3	0.00	0.00	0.00
9,900.0	89.90	0.14	8,876.7	1,200.3	3.0	1,200.3	0.00	0.00	0.00
10,000.0	89.90	0.14	8,876.9	1,300.3	3.2	1,300.3	0.00	0.00	0.00
10,100.0	89.90	0.14	8,877.1	1,400.3	3.5	1,400.3	0.00	0.00	0.00
10,200.0	89.90	0.14	8,877.2	1,500.3	3.7	1,500.3	0.00	0.00	0.00
10,300.0	89.90	0.14	8,877.4	1,600.3	4.0	1,600.3	0.00	0.00	0.00
10,400.0	89.90	0.14	8,877.6	1,700.3	4.2	1,700.3	0.00	0.00	0.00
10,500.0	89.90	0.14	8,877.8	1,800.3	4.5	1,800.3	0.00	0.00	0.00

Chesapeake Energy Corporation

Planning Report

Database: Drilling Database
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Site: PLU Ross Ranch 32 State 1H
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Wellbore: PLU Ross Ranch 32 State 1H
Design: Plat

Local Co-ordinate Reference: Well PLU Ross Ranch 32 State 1H
TVD Reference: Well 2 @ 3194 0ft
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North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,600.0	89.90	0.14	8,877.9	1,900.3	4.7	1,900.3	0.00	0.00	0.00
10,700.0	89.90	0.14	8,878.1	2,000.3	5.0	2,000.3	0.00	0.00	0.00
10,800.0	89.90	0.14	8,878.3	2,100.3	5.2	2,100.3	0.00	0.00	0.00
10,900.0	89.90	0.14	8,878.5	2,200.3	5.5	2,200.3	0.00	0.00	0.00
11,000.0	89.90	0.14	8,878.6	2,300.3	5.7	2,300.3	0.00	0.00	0.00
11,100.0	89.90	0.14	8,878.8	2,400.3	6.0	2,400.3	0.00	0.00	0.00
11,200.0	89.90	0.14	8,879.0	2,500.3	6.2	2,500.3	0.00	0.00	0.00
11,300.0	89.90	0.14	8,879.2	2,600.3	6.5	2,600.3	0.00	0.00	0.00
11,400.0	89.90	0.14	8,879.3	2,700.3	6.7	2,700.3	0.00	0.00	0.00
11,500.0	89.90	0.14	8,879.5	2,800.3	7.0	2,800.3	0.00	0.00	0.00
11,600.0	89.90	0.14	8,879.7	2,900.3	7.2	2,900.3	0.00	0.00	0.00
11,700.0	89.90	0.14	8,879.9	3,000.3	7.5	3,000.3	0.00	0.00	0.00
11,800.0	89.90	0.14	8,880.0	3,100.3	7.7	3,100.3	0.00	0.00	0.00
11,900.0	89.90	0.14	8,880.2	3,200.3	8.0	3,200.3	0.00	0.00	0.00
12,000.0	89.90	0.14	8,880.4	3,300.3	8.2	3,300.3	0.00	0.00	0.00
12,100.0	89.90	0.14	8,880.6	3,400.3	8.5	3,400.3	0.00	0.00	0.00
12,200.0	89.90	0.14	8,880.7	3,500.3	8.7	3,500.3	0.00	0.00	0.00
12,300.0	89.90	0.14	8,880.9	3,600.3	9.0	3,600.3	0.00	0.00	0.00
12,400.0	89.90	0.14	8,881.1	3,700.3	9.2	3,700.3	0.00	0.00	0.00
12,500.0	89.90	0.14	8,881.3	3,800.3	9.5	3,800.3	0.00	0.00	0.00
12,600.0	89.90	0.14	8,881.4	3,900.3	9.7	3,900.3	0.00	0.00	0.00
12,700.0	89.90	0.14	8,881.6	4,000.3	10.0	4,000.3	0.00	0.00	0.00
12,800.0	89.90	0.14	8,881.8	4,100.3	10.2	4,100.3	0.00	0.00	0.00
12,900.0	89.90	0.14	8,882.0	4,200.3	10.5	4,200.3	0.00	0.00	0.00
13,000.0	89.90	0.14	8,882.1	4,300.3	10.7	4,300.3	0.00	0.00	0.00
13,100.0	89.90	0.14	8,882.3	4,400.3	11.0	4,400.3	0.00	0.00	0.00
13,200.0	89.90	0.14	8,882.5	4,500.3	11.2	4,500.3	0.00	0.00	0.00
13,300.0	89.90	0.14	8,882.7	4,600.3	11.5	4,600.3	0.00	0.00	0.00
13,400.0	89.90	0.14	8,882.8	4,700.3	11.7	4,700.3	0.00	0.00	0.00
13,497.5	89.90	0.14	8,883.0	4,797.8	12.0	4,797.8	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PLU RR32S1H-TL 0VS-	0.00	0.00	8,875.0	0.0	0.0	392,962.69	676,735.78	32° 4' 46" N	100° 44' 00" W
- hit/miss target									
- Shape									
- plan misses target center by 169.9ft at 8800.0ft MD (8764.2 TVD, 128.8 N, 0.3 E)									
- Point									
PLU RR32S1H-BHL-Pla	0.00	0.00	8,883.0	4,797.8	12.0	397,760.48	676,747.74	32° 5' 33.95842800" N	100° 45' 53.68892000" W
- plan hits target center									
- Point									

Accepted for record - NMOC