

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-8181 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (505) 748-1283 Fax: (505) 748-0720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

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

RECEIVED

MAR 30 2012

NMOC D ARTESIA

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-40126	Pool Code 96403-97798	Pool Name WILDCAT; BONE SPRING
Property Code 39138	Property Name PLU PIERCE CANYON 16 24 30 STATE	Well Number 1H
OGRID No. 147179	Operator Name CHESAPEAKE OPERATING CO.	Elevation 3355'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	16	24 S	30 E		50	SOUTH	1980	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
B	16	24 S	30 E		100	NORTH	1980	EAST	EDDY

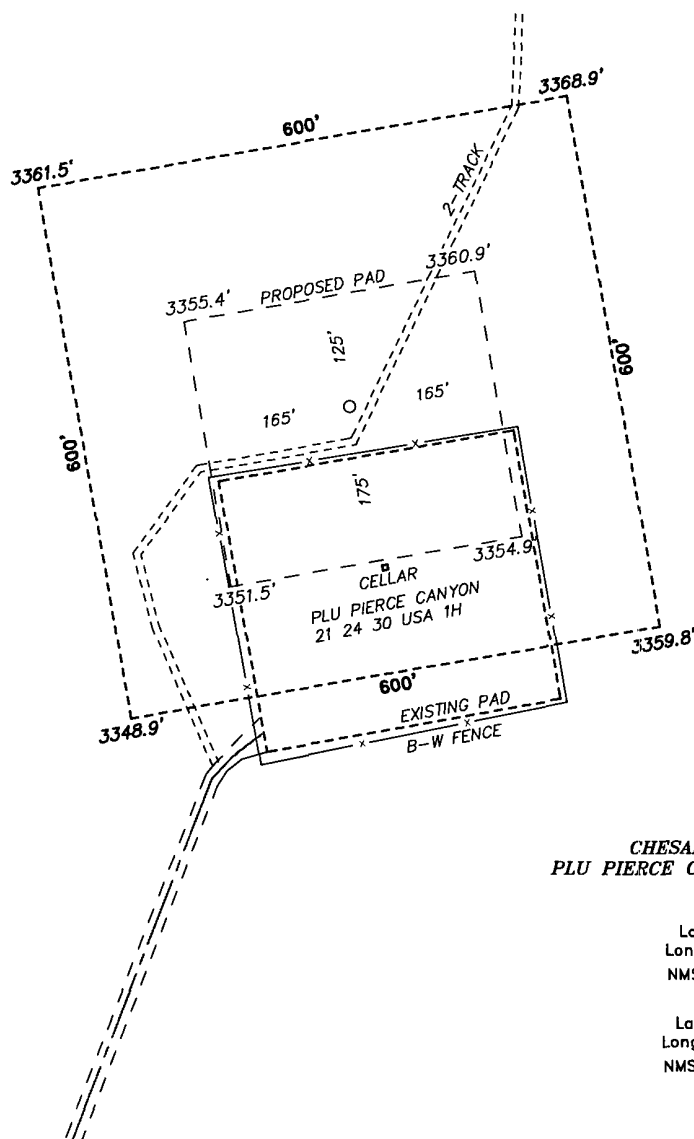
Dedicated Acres 162.26	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

PROPOSED BOTTOM HOLE LOCATION Lat - N 32.224718722° Long - W 103.883937566° NMSPCE- N 445777.093 E 680304.607 (NAD-83) Lat - N 32.224595662° Long - W 103.883451376° NMSPCE- N 445718.160 E 639120.624 (NAD-27)	Project Area	Producing Area	100' B.H.	1980'	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. Signature <u>Bryan Arrant</u> Date <u>02/17/2012</u> Printed Name <u>Bryan Arrant</u> Email Address <u>bryan.arrant@chk.com</u>
SURFACE LOCATION Lat - N 32.210617112° Long - W 103.883988704° NMSPCE- N 440647.066 E 680310.243 (NAD-83) Lat - N 32.210493903° Long - W 103.883503098° NMSPCE- N 440588.244 E 639126.102 (NAD-27)			SL	1980'	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. Date Surveyed <u>FEBRUARY 04, 2012</u> Signature <u>Gary L. Jones</u> Seal of Professional Surveyor <u>7977</u> Certificate No. <u>Gary L. Jones 7977</u> BASIN SURVEYS <u>26087</u>

Projected Penetration Point
330' FSL & 1980' FEL

SECTION 16, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



CHESAPEAKE OPERATING CO.
PLU PIERCE CANYON 16 24 30 STATE #1H
ELEV. - 3355'

Lat - N 32.210617112°
Long - W 103.883988704°
NMSPCE- N 440647.066
E 680310.243
(NAD-83)
Lat - N 32.210493903°
Long - W 103.883503098°
NMSPCE- N 440588.244
E 639126.102
(NAD-27)

200 0 200 400 FEET
SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF TWIN WELLS AND McDONALD,
GO WEST ON McDONALD FOR 1.3 MILES TO LEASE
ROAD, ON LEASE ROAD GO NORTHERLY 1.6 MILES TO
LEASE ROAD, ON LEASE ROAD GO NORTHERLY 0.1
MILES TO PROPOSED LOCATION.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

CHESAPEAKE OPERATING CO.

REF: PLU PIERCE CANYON 16 24 30 STATE #1H / WELL PAD TOPO

THE PLU PIERCE CANYON 16 24 30 STATE #1H LOCATED 50'

FROM THE SOUTH LINE AND 1980' FROM THE EAST LINE OF

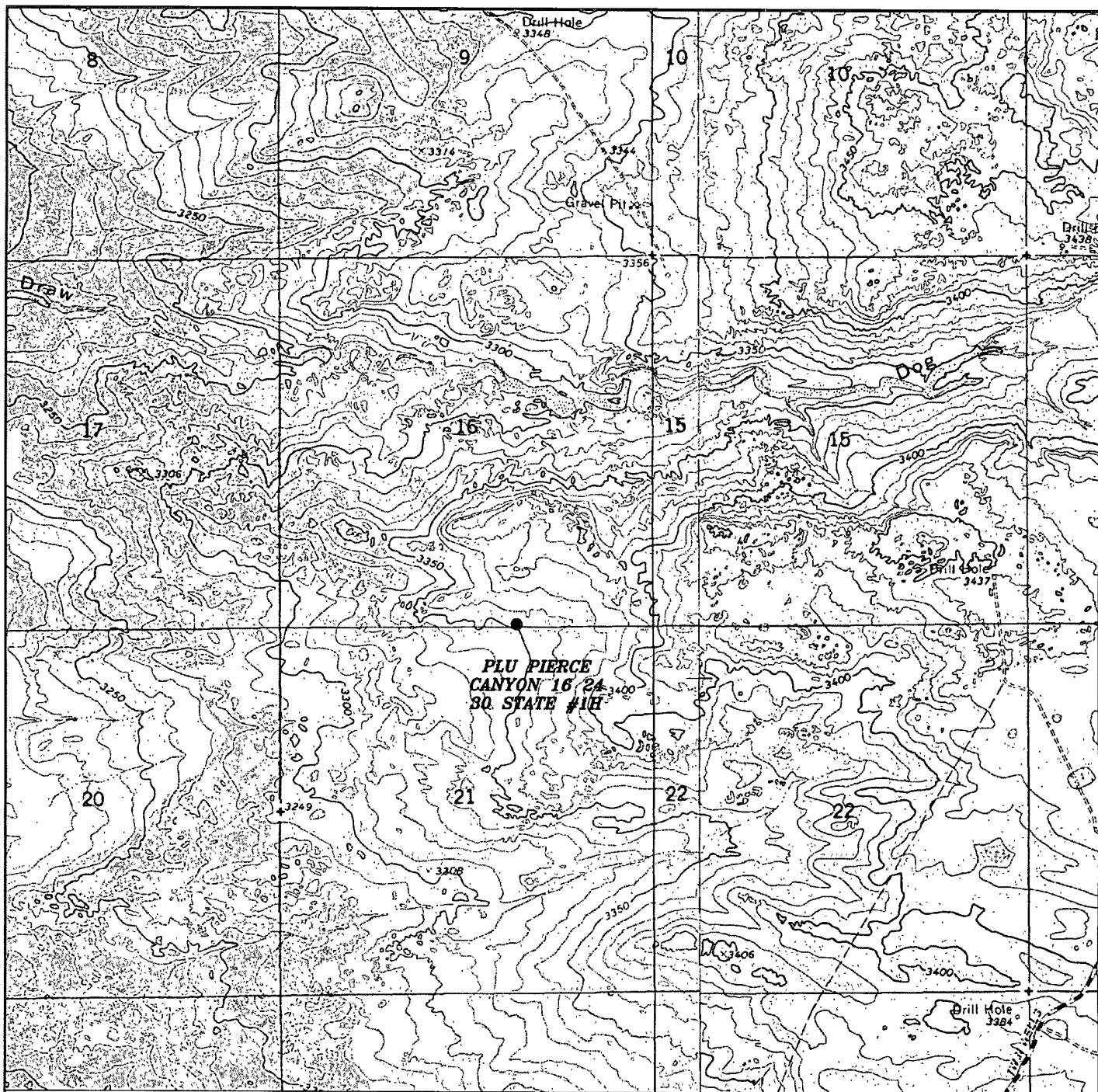
SECTION 16, TOWNSHIP 24 SOUTH, RANGE 30 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

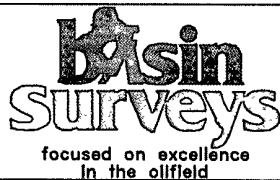
W.O. Number: 26087 Drawn By: J. SMALL

Date: 02-15-2012 Disk: JMS 26087

Survey Date: 02-14-2012 Sheet 1 of 1 Sheets



PLU PIERCE CANYON 16 24 30 STATE #1H
 Located 50' FSL and 1980' FEL
 Section 16, Township 24 South, Range 30 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
 basin-surveys.com

W.O. Number: JMS 26087

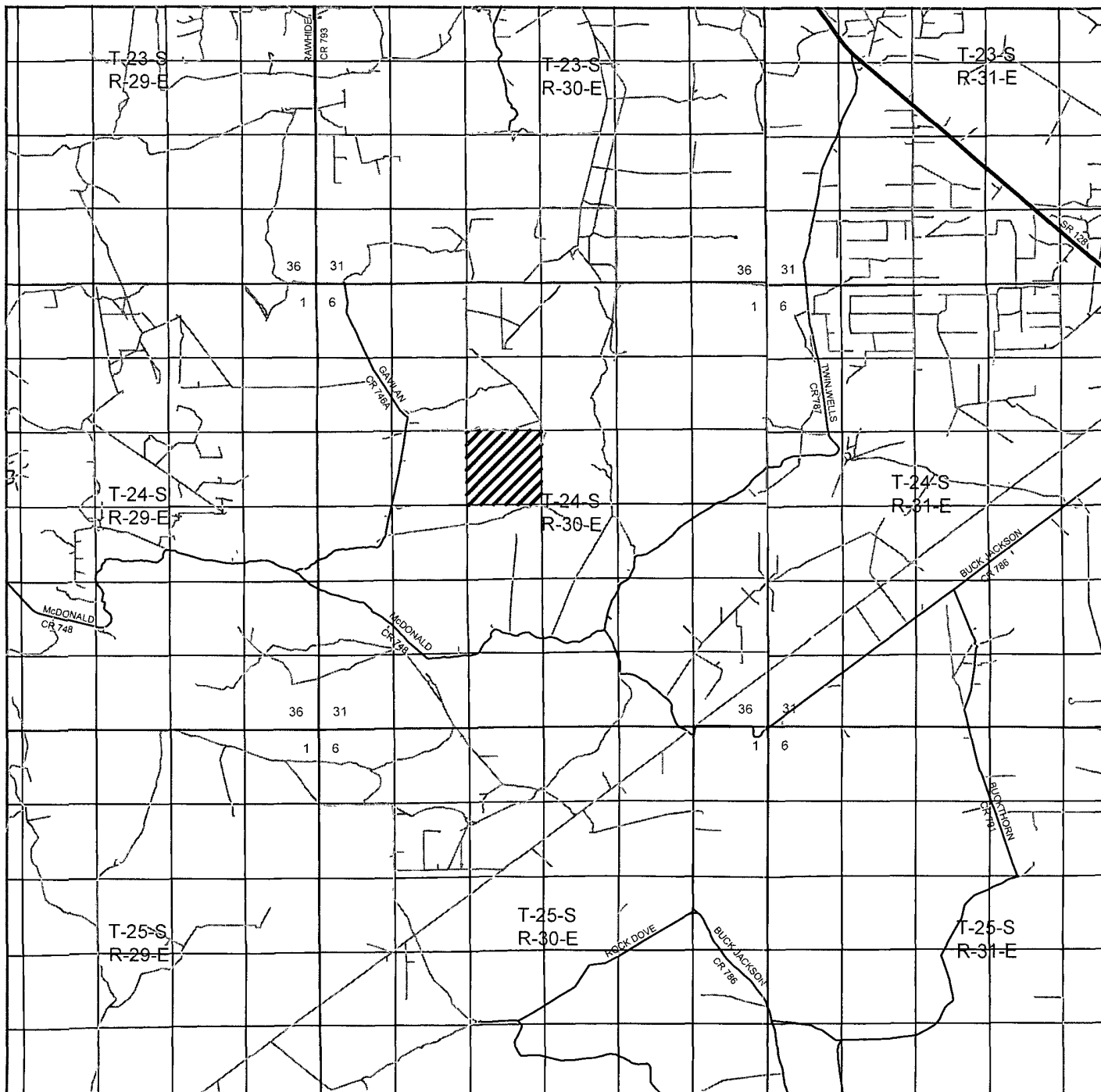
Survey Date: 02-14-2012

Scale: 1" = 2000'

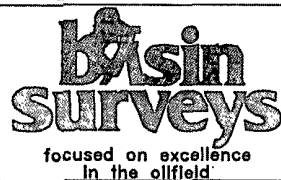
Date: 02-15-2012



**CHESAPEAKE
 OPERATING CO.**



PLU PIERCE CANYON 16 24 30 STATE #1H
 Located 50' FSL and 1980' FEL
 Section 16, Township 24 South, Range 30 East,
 N.M.P.M., Eddy County, New Mexico.



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basinsurveys.com

W.O. Number: JMS 26087

Survey Date: 02-14-2012

Scale: 1" = 2 Miles

Date: 02-15-2012

**CHESAPEAKE
 OPERATING CO.**



Drilling Engineer: Chris Gray

Superintendent: Daniel Gipson

Geologist: Chris Persellin

Well Name: PLU Pierce Canyon 16-24-30 ST 1H
Target: Upper Avalon
County, State: Eddy, NM

Surface Location: 0' FSL 1980' FEL, Section 16, Township 24S, Range 30 E

BH Location: 100 FNL 1980' FEL, Section 16, Township 24S, Range 30 E

SHL Latitude: 32 210617 SHL North: 440647
SHL Longitude: -103 883989 SHL East: 680310
BHL Latitude: 32 22471872 BHL North: 445777
BHL Longitude: -103 8839376 BHL East: 680305
Coordinates: NAD 83 Coordinates: NMSPC

Drilling Rig: Patterson 62

Directional: Phoenix

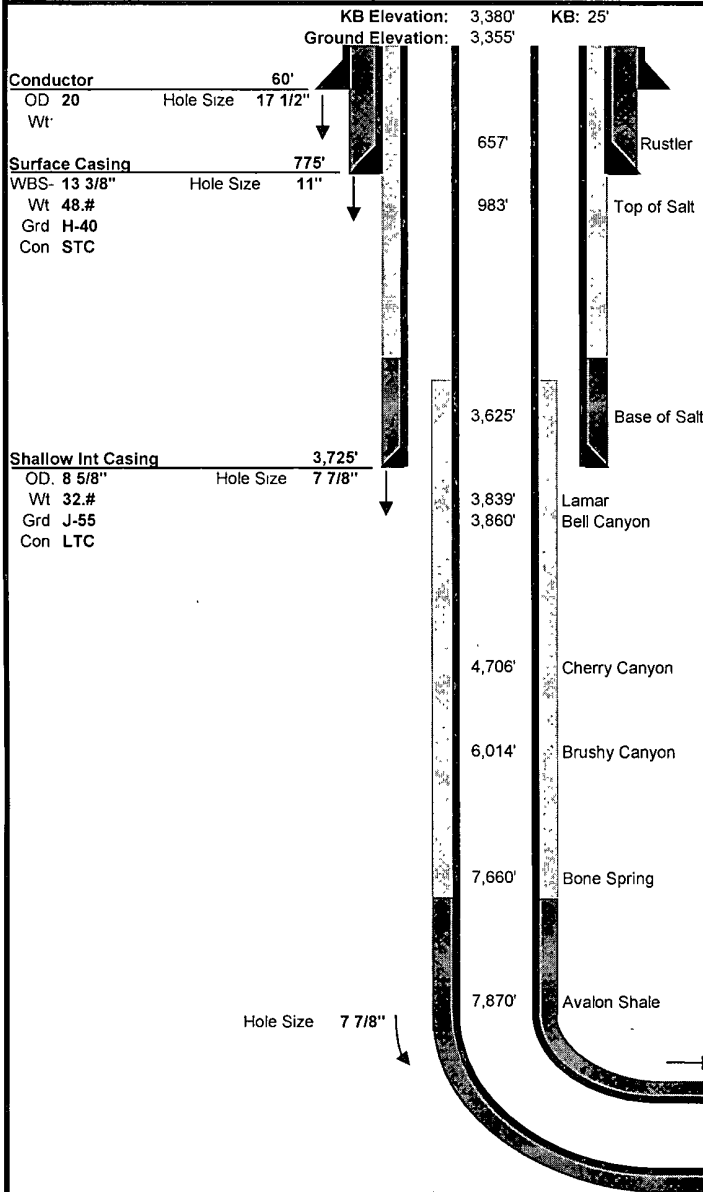
Drilling Mud: Nova

Cement: Schlumberger

Wellhead: Sunbelt

Property Number: 643695

AFE Number: 161955



Wellhead Equipment	
A Section	13-3/8" x 13-5/8" 5K SOW (Multibowl)
B Section	N/A (Multibowl)
C Section	11" 5K X 7-1/16" 10K w/10k gate valve
D Section	N/A
Required BOP Stack	13-5/8" 5K- Double, Annular, Rot Head w/orbit valve

Mud				
Depth	Type	Weight	F. Vis	FL
0' - 775'	Spud Mud	8.4 - 8.7	32 - 34	NC - NC
775' - 3,725'	Brine	9.5 - 10.1	28 - 29	NC - NC
3,725' - 7,587'	Cut Brine	8.3 - 9	28 - 29	NC - NC
7,587' - 8,330'	Cut Brine	8.3 - 9	28 - 29	NC - NC
8,330' - 12,990'	Cut Brine	8.3 - 9	28 - 29	NC - NC

Cement							
Slurry	Top	Btm	Wt	Yld	%Exc	Bbl	Sx
Surface							
Single Slurry	0'	775'	13.5	1.73	200	280	909
Shallow Int							
Lead	0'	3,225'	12.0	1.99	200	396	1118
Tail	3,225'	3,725'	14.2	1.37	200	71	290
Production							
Lead	3,225'	7,587'	12.4	2.11	75	224	597
Tail	7,587'	12,990'	14.5	1.27	75	294	1299

Directional Plan						
Target Line:	8057' @ 0' VS w/89.2 deg inclination					
Target Window:	20' above, 20' below, 50' left, 50' right					
	MD	INC	AZM	TVD	VS	DLS
KOP	7,587'	0.00	0.00	7,587'	0'	0.00
EOB	8,330'	89.20	359.94	8,064'	471'	12.00
TD	12,990'	89.20	359.94	8,129'	5,130'	0.00
Hardlines:	Lateral- 330' from parallel lease lines Vertical- Actual Lease Lines					
Notes:	Please note SHL and BHL distance from lease lines					

LOGS	Type	Logs	Interval	Vendor
	Mud Log	2 man Mudlog	Int Csg to TD	Suttles
	OH	Triple Combo	Curve to Int Csg	TBD
	OH	GR/Neutron	Int Cas to Surf	TBD
	LWD	MWD Gamma	Curve and Lateral	Phoenix

Chesapeake Minimum BOPE Requirements

Wellname: PLU Pierce Canyon 16-24-30 ST 1H

Operation: Intermediate and Production Hole Sections

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

Permian District-Minimum Requirements

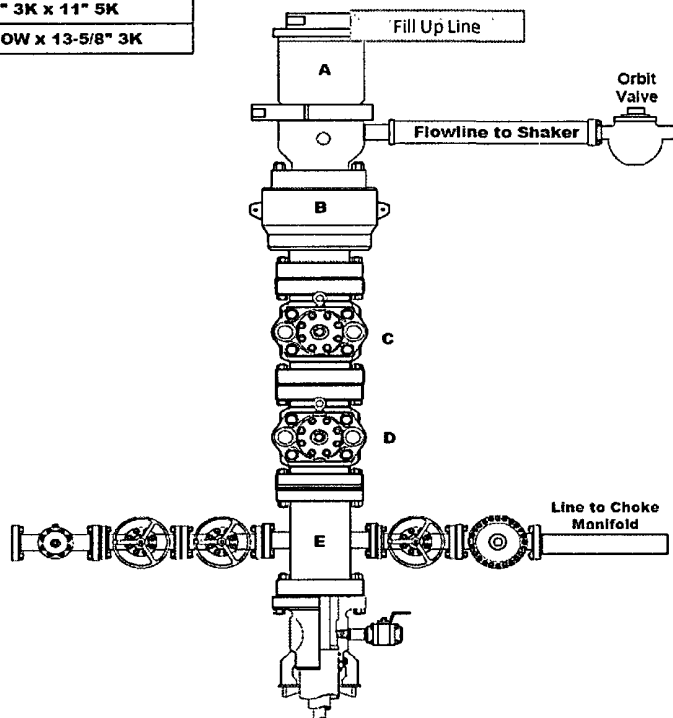
FIELD : Avalon

OPERATION: Intermediate and Production Hole Sections

SIZE	PRESSURE	DESCRIPTION
A	500	Rotating Head
B	13 5/8" 5,000	Annular
C	13 5/8" 5,000	Pipe Ram
D	13 5/8" 5,000	Blind Ram
E	13 5/8" 5,000	Mud Cross
F		
DSA	As required for each hole size	
C-Sec		
B-Sec	13-5/8" 3K x 11" 5K	
A-Sec	13-3/8" SOW x 13-5/8" 3K	

Test Notes:

- Pressure test to rating of BOP or wellhead every 21 days.
- Function test on trips
- H2S service trim required



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	5,000	Check Valve
2"	5,000	Gate Valve
2"	5,000	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
3"	5,000	Gate Valve
3"	5,000	HCR Valve
3"	5,000	Steel Line Only

Chesapeake Minimum BOPE Requirements

Wellname: PLU Pierce Canyon 16-24-30 ST 1H

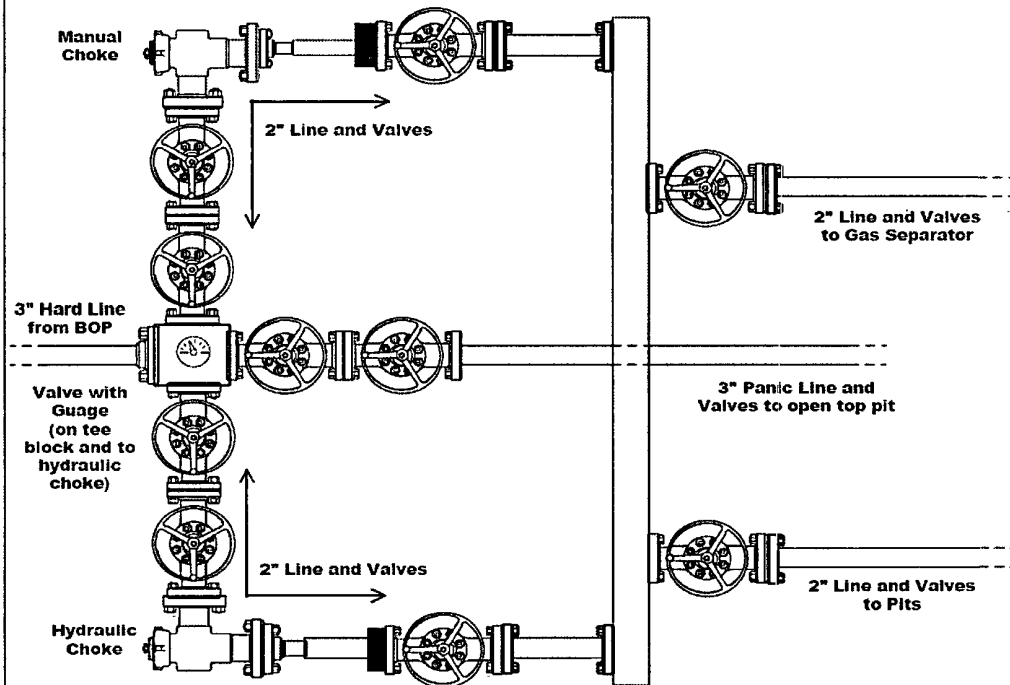
Operation: Intermediate and Production Hole Sections

CHOKE MANIFOLD SCHEMATIC

CHESAPEAKE OPERATING INC

Permian District

Avalon Minimum Requirements



Choke Manifold

SIZE	PRESSURE	DESCRIPTION
2" or 3"	5,000	Gate Valves
3"x15'		Gas Separator
8"		Gas Separator vent line (anchored)

Permian District

Poker Lake

PLU Pierce Canyon 16-24-30 ST

Well #1

Wellbore #1

Plan: Plat

Standard Planning Report

27 March, 2012

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU,Pierce Canyon 16-24-30 ST	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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,Pierce Canyon 16-24-30 ST		
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Site Position:		Northing:	440,647.00 usft	Latitude:	32 210617
From:	Map	Easting:	680,310.00 usft	Longitude:	-103.883990
Position Uncertainty:	0 00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.24 °

Well:	Well #1				
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Well Position	+N/-S	0.00 ft	Northing:	440,647.00 usft	Latitude:	32 210617
	+E/-W	0.00 ft	Easting:	680,310.00 usft	Longitude:	-103.883990
Position Uncertainty		0 00 ft	Wellhead Elevation:		Ground Level:	0.00 ft

Wellbore:	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	1/13/2012	7.65	60 13	48,557

Design:	Plat				
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Audit Notes:					
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	359.94

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
7,586.52	0.00	0.00	7,586.52	0.00	0.00	0.00	0.00	0.00	0.00	
8,329.86	89 20	359 94	8,063.94	470.80	-0.46	12 00	12 00	0 00	359 94	
12,989.52	89 20	359 94	8,129.00	5,130.01	-5.00	0 00	0 00	0.00	0.00	PC 16-24-30 1H- BI

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Pierce Canyon 16-24-30 ST	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn 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	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	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
1,400.00	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	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
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	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
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Chesapeake Operating

Planning Report

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Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Pierce Canyon.16-24-30 ST	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,586.52	0.00	0.00	7,586.52	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	1.62	359.94	7,600.00	0.19	0.00	0.19	12.00	12.00	0.00
7,700.00	13.62	359.94	7,698.93	13.42	-0.01	13.42	12.00	12.00	0.00
7,800.00	25.62	359.94	7,792.96	46.93	-0.05	46.93	12.00	12.00	0.00
7,900.00	37.62	359.94	7,877.96	99.26	-0.10	99.26	12.00	12.00	0.00
8,000.00	49.62	359.94	7,950.22	168.12	-0.16	168.12	12.00	12.00	0.00
8,100.00	61.62	359.94	8,006.59	250.50	-0.24	250.50	12.00	12.00	0.00
8,200.00	73.62	359.94	8,044.60	342.80	-0.33	342.80	12.00	12.00	0.00
8,300.00	85.62	359.94	8,062.59	440.98	-0.43	440.98	12.00	12.00	0.00
8,329.86	89.20	359.94	8,063.94	470.80	-0.46	470.80	12.00	12.00	0.00
8,400.00	89.20	359.94	8,064.92	540.94	-0.53	540.94	0.00	0.00	0.00
8,500.00	89.20	359.94	8,066.32	640.93	-0.62	640.93	0.00	0.00	0.00
8,600.00	89.20	359.94	8,067.71	740.92	-0.72	740.92	0.00	0.00	0.00
8,700.00	89.20	359.94	8,069.11	840.91	-0.82	840.91	0.00	0.00	0.00
8,800.00	89.20	359.94	8,070.51	940.90	-0.92	940.90	0.00	0.00	0.00
8,900.00	89.20	359.94	8,071.90	1,040.89	-1.01	1,040.89	0.00	0.00	0.00
9,000.00	89.20	359.94	8,073.30	1,140.88	-1.11	1,140.88	0.00	0.00	0.00
9,100.00	89.20	359.94	8,074.69	1,240.87	-1.21	1,240.87	0.00	0.00	0.00
9,200.00	89.20	359.94	8,076.09	1,340.86	-1.31	1,340.86	0.00	0.00	0.00
9,300.00	89.20	359.94	8,077.49	1,440.85	-1.40	1,440.85	0.00	0.00	0.00
9,400.00	89.20	359.94	8,078.88	1,540.84	-1.50	1,540.84	0.00	0.00	0.00
9,500.00	89.20	359.94	8,080.28	1,640.83	-1.60	1,640.83	0.00	0.00	0.00
9,600.00	89.20	359.94	8,081.68	1,740.82	-1.70	1,740.82	0.00	0.00	0.00
9,700.00	89.20	359.94	8,083.07	1,840.81	-1.79	1,840.81	0.00	0.00	0.00
9,800.00	89.20	359.94	8,084.47	1,940.80	-1.89	1,940.80	0.00	0.00	0.00
9,900.00	89.20	359.94	8,085.86	2,040.79	-1.99	2,040.79	0.00	0.00	0.00
10,000.00	89.20	359.94	8,087.26	2,140.78	-2.09	2,140.78	0.00	0.00	0.00
10,100.00	89.20	359.94	8,088.66	2,240.77	-2.18	2,240.77	0.00	0.00	0.00
10,200.00	89.20	359.94	8,090.05	2,340.76	-2.28	2,340.76	0.00	0.00	0.00
10,300.00	89.20	359.94	8,091.45	2,440.75	-2.38	2,440.75	0.00	0.00	0.00
10,400.00	89.20	359.94	8,092.84	2,540.74	-2.48	2,540.74	0.00	0.00	0.00
10,500.00	89.20	359.94	8,094.24	2,640.73	-2.57	2,640.73	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Pierce Canyon 16-24-30 ST	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,600.00	89.20	359.94	8,095.64	2,740.72	-2.67	2,740.72	0.00	0.00	0.00	
10,700.00	89.20	359.94	8,097.03	2,840.71	-2.77	2,840.71	0.00	0.00	0.00	
10,800.00	89.20	359.94	8,098.43	2,940.70	-2.87	2,940.70	0.00	0.00	0.00	
10,900.00	89.20	359.94	8,099.83	3,040.69	-2.96	3,040.69	0.00	0.00	0.00	
11,000.00	89.20	359.94	8,101.22	3,140.68	-3.06	3,140.68	0.00	0.00	0.00	
11,100.00	89.20	359.94	8,102.62	3,240.67	-3.16	3,240.67	0.00	0.00	0.00	
11,200.00	89.20	359.94	8,104.01	3,340.66	-3.26	3,340.66	0.00	0.00	0.00	
11,300.00	89.20	359.94	8,105.41	3,440.65	-3.35	3,440.65	0.00	0.00	0.00	
11,400.00	89.20	359.94	8,106.81	3,540.64	-3.45	3,540.64	0.00	0.00	0.00	
11,500.00	89.20	359.94	8,108.20	3,640.63	-3.55	3,640.63	0.00	0.00	0.00	
11,600.00	89.20	359.94	8,109.60	3,740.62	-3.65	3,740.62	0.00	0.00	0.00	
11,700.00	89.20	359.94	8,111.00	3,840.61	-3.74	3,840.61	0.00	0.00	0.00	
11,800.00	89.20	359.94	8,112.39	3,940.60	-3.84	3,940.60	0.00	0.00	0.00	
11,900.00	89.20	359.94	8,113.79	4,040.59	-3.94	4,040.59	0.00	0.00	0.00	
12,000.00	89.20	359.94	8,115.18	4,140.58	-4.04	4,140.59	0.00	0.00	0.00	
12,100.00	89.20	359.94	8,116.58	4,240.57	-4.13	4,240.58	0.00	0.00	0.00	
12,200.00	89.20	359.94	8,117.98	4,340.56	-4.23	4,340.57	0.00	0.00	0.00	
12,300.00	89.20	359.94	8,119.37	4,440.55	-4.33	4,440.56	0.00	0.00	0.00	
12,400.00	89.20	359.94	8,120.77	4,540.54	-4.43	4,540.55	0.00	0.00	0.00	
12,500.00	89.20	359.94	8,122.17	4,640.53	-4.52	4,640.54	0.00	0.00	0.00	
12,600.00	89.20	359.94	8,123.56	4,740.52	-4.62	4,740.53	0.00	0.00	0.00	
12,700.00	89.20	359.94	8,124.96	4,840.51	-4.72	4,840.52	0.00	0.00	0.00	
12,800.00	89.20	359.94	8,126.35	4,940.50	-4.82	4,940.51	0.00	0.00	0.00	
12,900.00	89.20	359.94	8,127.75	5,040.50	-4.91	5,040.50	0.00	0.00	0.00	
12,989.52	89.20	359.94	8,129.00	5,130.01	-5.00	5,130.01	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PC 16-24-30 1H- SHL	0.00	0.00	8,057.00	0.00	0.00	440,647.00	680,310.00	32 210617	-103 883990	
- plan misses target center by 192.89ft at 7961.26ft MD (7923 95 TVD, 139.66 N, -0.14 E)										
- Point										
PC 16-24-30 1H- BHL	0.00	0.00	8,129.00	5,130.01	-5.00	445,777.00	680,305.00	32 224719	-103.883937	
- plan hits target center										
- Point										