

DISTRICT I
1025 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 12, 2005

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

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-36636	Pool Code 96473	Pool Name PIERCE CROSSING Wildcat, Bone Spring, EAST
Property Code 37393	Property Name PLU PIERCE CANYON "33" FEDERAL	Well Number 1H
OGRID No. 147179	Operator Name CHESAPEAKE OPERATING CO.	Elevation 3301'

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	33	24 S	30 E		350	SOUTH	350	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	33	24 S	30 E		351	NORTH	364	EAST	EDDY
Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.						

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

<u>As Drilled Bottom Hole Location</u> <u>BONE SPRINGS ENTRY POINT</u> Lat - N32°10'04.69" Long - W103°52'42.94" N.: 425137.658 SPC- E.: 682046.547 (NAD-83) <u>SURFACE LOCATION</u> Lat - N32°10'04.69" Long - W103°52'42.94" N.: 425137.658 SPC- E.: 682046.547 (NAD-83)	<u>OPERATOR CERTIFICATION</u> 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 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> 07/19/2010 Signature Date Bryan Arrant Printed Name
	<u>SURVEYOR CERTIFICATION</u> 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. JULY 28, 2008 Date Surveyed <i>Gary L. Jones</i> Signature & Seal Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS

REFERENCE SHEET FOR
UNDESIGNATED WELLS

	Fm	Pm	N	Pc
22-26 E	XX	XX	XX	

paragraph

1. Date:	8/30/2010
2. Type of Well:	
Oil:	XX
Gas:	
3. County:	EDDY

4. Operator:	CHESAPEAKE OPERATING INC	API NUMBER:	30 - 015 - 36636
5. Address of Operator	PO BOX 18496 OKLAHOMA CITY, OK 73154-0496		
6. Lease name or Unit Agreement Name	PLU PIERCE CANYON 33 FEDERAL		7. Well Number # - 1H
8. Well Location	Unit Letter: P/A Section 33 feet from the S/N Township 24S line and 350/364 Range 30E feet from the E line		

9. Completion Date:	7/8/2010	11. Perfs	Top	Bottom	TD
			8385	12575	12620
10. Name of Producing Formation(s)	BONE SPRING		12. Open Hole Casing shoe	Bottom	PBTD
					12590

13. C-123 Filed:	Date	15. Name of Pool Requested or temporary Wildcat designation:	Pool ID num
Y	N	PIERCE CROSSING;BONE SPRING, EAST	96473
16. Remarks:			
EXTEND			

TO BE COMPLETED BY DISTRICT GEOLOGIST																								
17. Action taken	18. Pool Name	Pool ID num																						
EXTEND	PIERCE CROSSING;BONE SPRING, EAST	96473																						
<table border="0"> <tr> <td>T 24 S, R 29 E</td> <td>T 24 S, R 30 E</td> <td>T 25 S, R 29 E</td> </tr> <tr> <td>SEC 1: SW/4 & N/2</td> <td>SEC 6: N/2</td> <td>SEC 1: S/2</td> </tr> <tr> <td>SEC 9: SW/4</td> <td>SEC 32: SE/4</td> <td>SEC 12: SE/4 & N/2</td> </tr> <tr> <td>SEC 12: SE/4 & N/2</td> <td>SEC 33: W/2</td> <td></td> </tr> <tr> <td>SEC 13: E/2</td> <td></td> <td>T 25 S, R 30 E</td> </tr> <tr> <td>SEC 16: N/2</td> <td></td> <td>SEC 5: All</td> </tr> <tr> <td>SEC 28: N/2</td> <td></td> <td>SEC 6: NE/4</td> </tr> </table>				T 24 S, R 29 E	T 24 S, R 30 E	T 25 S, R 29 E	SEC 1: SW/4 & N/2	SEC 6: N/2	SEC 1: S/2	SEC 9: SW/4	SEC 32: SE/4	SEC 12: SE/4 & N/2	SEC 12: SE/4 & N/2	SEC 33: W/2		SEC 13: E/2		T 25 S, R 30 E	SEC 16: N/2		SEC 5: All	SEC 28: N/2		SEC 6: NE/4
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SEC 13: E/2		T 25 S, R 30 E																						
SEC 16: N/2		SEC 5: All																						
SEC 28: N/2		SEC 6: NE/4																						

19. Advertised for HEARING:	20. Case Number
21. Name of pool for which was advertised:	Pool ID num
PIERCE CROSSING;BONE SPRING, EAST	96473
22. Placed in Pool	23. By order number
	R-

Chesapeake Operating Inc.

Eddy County, NM (Nad 83)

PLU Pierce Canyon "33" Federal #1H

PLU Pierce Canyon "33" Federal #1H

Lateral #1

Survey: MWD Survey #1

Standard Survey Report

28 May, 2010

Black Viper Survey Report

Company:	Chesapeake Operating Inc.	Local Co-ordinate Reference:	Site PLU Pierce Canyon "33" Federal #1H
Project:	Eddy County, NM (Nad 83)	TVD Reference:	KB @ 3321.00ft
Site:	PLU Pierce Canyon "33" Federal #1H	MD Reference:	KB @ 3321.00ft
Well:	PLU Pierce Canyon "33" Federal #1H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Black Viper

Project:	Eddy County, NM (Nad 83)	System Datum:	Mean Sea Level
Map System:	US State Plane 1983		
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	PLU Pierce Canyon "33" Federal #1H				
Site Position:		Northings:	425,137.66 ft	Latitude:	32° 10' 4.663 N
From:	Map	Easting:	682,046.54 ft	Longitude:	103° 52' 42.929 W
Position Uncertainty:	0.00 ft	Slot Radius:	0.000 in	Grid Convergence:	0.24 °

Well	PLU Pierce Canyon "33" Federal #1H					
Well Position	+N/-S	0.00 ft	Northings:	425,137.66 ft	Latitude:	32° 10' 4.663 N
	+E/-W	0.00 ft	Easting:	682,046.54 ft	Longitude:	103° 52' 42.929 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,321.00 ft	Ground Level:	3,301.00 ft

Wellbore:	Lateral #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	5/4/2010	(°) 7.84	(°) 60.13	(nT) 48,693

Design:	Lateral #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	7,875.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	178.48	

Survey Program	Date:	5/28/2010			
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
100.00	7,875.00	Gyro Survey #1 (OH)	GM	Gyro MultiShot	
7,707.00	12,620.00	MWD Survey #1 (Lateral #1)	MWD	Standard MWD	

Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)
7,675.00	0.91	201.81	7,673.73	-26.59	2.31	26.64	0.00	0.00	0.00
7,707.00	0.70	236.20	7,705.73	-26.93	2.05	26.97	1.61	-0.66	107.47
First MWD Survey									
7,738.00	1.50	341.00	7,736.73	-26.65	1.76	26.69	5.84	2.58	338.06
7,769.00	5.70	348.80	7,767.66	-24.76	1.33	24.78	13.61	13.55	25.16
7,800.00	10.20	349.80	7,798.35	-20.54	0.55	20.55	14.52	14.52	3.23
7,832.00	14.60	348.50	7,829.60	-13.80	-0.76	13.77	13.78	13.75	-4.06
7,863.00	17.20	350.80	7,859.41	-5.44	-2.27	5.38	8.63	8.39	7.42
7,894.00	19.70	353.90	7,888.82	4.28	-3.56	-4.37	8.66	8.06	10.00
7,925.00	23.10	356.00	7,917.68	15.54	-4.54	-15.66	11.24	10.97	6.77

Black Viper

Survey Report

Company: Chesapeake Operating Inc.
 Project: Eddy County, NM (Nad 83)
 Site: PLU Pierce Canyon "33" Federal #1H
 Well: PLU Pierce Canyon "33" Federal #1H
 Wellbore: Lateral #1
 Design: Lateral #1

Local Co-ordinate Reference: Site PLU Pierce Canyon "33" Federal #1H
 TVD Reference: KB @ 3321.00ft
 MD Reference: KB @ 3321.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Black Viper

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)
7,957.00	26.70	356.30	7,946.70	28.98	-5.44	-28.12	11.26	11.25	0.94
7,988.00	30.00	356.50	7,973.97	43.67	-6.37	-43.83	10.65	10.65	0.65
8,020.00	33.20	357.30	8,001.23	60.41	-7.27	-60.59	10.09	10.00	2.50
8,051.00	36.70	358.50	8,028.63	78.16	-7.91	-78.34	11.51	11.29	3.87
8,082.00	40.00	358.90	8,050.94	97.38	-8.34	-97.57	10.68	10.65	1.29
8,113.00	43.30	359.30	8,074.10	117.98	-8.66	-118.17	10.68	10.65	1.29
8,145.00	45.50	0.30	8,096.96	140.37	-8.74	-140.55	7.21	6.88	3.13
8,176.00	48.40	0.60	8,118.12	163.02	-8.56	-163.19	9.38	9.35	0.97
8,207.00	52.00	359.50	8,137.96	186.83	-8.54	-186.99	11.93	11.61	-3.55
8,239.00	55.30	359.10	8,156.93	212.60	-8.86	-212.76	10.36	10.31	-1.25
8,270.00	58.50	358.80	8,173.85	238.56	-9.34	-238.72	10.35	10.32	-0.97
8,301.00	62.50	359.10	8,189.12	265.53	-9.83	-265.70	12.93	12.90	0.97
8,333.00	65.80	0.10	8,203.07	294.32	-10.03	-294.49	10.69	10.31	3.13
8,364.00	69.80	0.50	8,214.78	323.02	-9.88	-323.17	12.96	12.90	1.29
8,396.00	73.10	0.50	8,224.98	353.35	-9.81	-353.48	10.31	10.31	0.00
8,427.00	76.60	0.20	8,233.06	383.27	-9.43	-383.38	11.33	11.29	-0.97
8,457.00	81.70	0.10	8,238.70	412.72	-9.35	-412.82	17.00	17.00	-0.33
8,489.00	85.00	359.90	8,242.41	444.50	-9.35	-444.59	10.33	10.31	-0.63
8,520.00	88.20	359.80	8,244.25	475.44	-9.43	-475.53	10.33	10.32	-0.32
8,551.00	88.50	359.80	8,245.14	506.43	-9.54	-506.51	0.97	0.97	0.00
8,583.00	89.70	359.30	8,245.64	538.42	-9.79	-538.49	4.06	3.75	-1.66
8,614.00	91.40	359.80	8,245.34	569.42	-10.04	-569.49	5.72	5.48	1.61
8,708.00	90.70	0.50	8,243.62	683.40	-9.79	-683.43	1.05	-0.74	0.74
8,801.00	89.20	359.70	8,243.70	756.40	-9.63	-756.39	1.83	-1.61	-0.86
8,895.00	88.80	359.20	8,245.34	850.38	-10.53	-850.36	0.68	-0.43	-0.53
8,989.00	87.70	359.90	8,248.21	944.33	-11.27	-944.30	1.39	-1.17	0.74
9,083.00	87.40	1.00	8,252.23	1,038.24	-10.53	-1,038.16	1.21	-0.32	1.17
9,177.00	86.90	359.90	8,256.90	1,132.12	-9.79	-1,131.98	1.28	-0.53	-1.17
9,270.00	86.40	359.30	8,262.34	1,224.96	-10.44	-1,224.80	0.84	-0.54	-0.65
9,364.00	86.10	359.30	8,268.49	1,318.75	-11.59	-1,318.59	0.32	-0.32	0.00
9,458.00	86.20	358.30	8,274.80	1,412.52	-13.55	-1,412.38	1.07	0.11	-1.06
9,552.00	87.40	357.80	8,280.05	1,506.31	-16.75	-1,506.23	1.38	1.28	-0.53
9,646.00	88.00	357.90	8,283.82	1,600.17	-20.27	-1,600.15	0.65	0.64	0.11
9,740.00	88.30	358.40	8,286.85	1,694.07	-23.30	-1,694.09	0.62	0.32	0.53
9,834.00	89.70	358.30	8,288.49	1,788.02	-26.01	-1,788.08	1.49	1.49	-0.11
9,928.00	90.00	358.20	8,288.74	1,881.97	-28.88	-1,882.08	0.34	0.32	-0.11
10,022.00	89.50	359.50	8,289.15	1,975.95	-30.77	-1,976.07	1.48	-0.53	1.38
10,116.00	88.30	359.80	8,290.95	2,069.93	-31.34	-2,070.03	1.32	-1.28	0.32
10,210.00	88.80	358.60	8,293.33	2,163.89	-32.65	-2,163.99	1.38	0.53	-1.28
10,305.00	90.10	358.80	8,294.25	2,258.86	-34.81	-2,258.99	1.38	1.37	0.21
10,399.00	90.90	359.10	8,293.42	2,352.84	-36.53	-2,352.98	0.91	0.85	0.32
10,493.00	92.20	359.80	8,290.88	2,446.80	-37.43	-2,446.93	1.57	1.38	0.74
10,587.00	92.10	0.80	8,287.36	2,540.73	-36.94	-2,540.81	1.07	-0.11	1.06

Black Viper Survey Report

Company: Chesapeake Operating Inc.
Project: Eddy County, NM (Nad 83)
Site: PLU Pierce Canyon "33" Federal #1H
Well: PLU Pierce Canyon "33" Federal #1H
Wellbore: Lateral #1
Design: Lateral #1

Local Co-ordinate Reference: Site PLU Pierce Canyon "33" Federal #1H
TVD Reference: KB @ 3321.00ft
MD Reference: KB @ 3321.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Black Viper

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)
10,681.00	89.30	0.50	8,286.21	2,634.71	-35.87	-2,634.73	3.00	-2.98	-0.32
10,775.00	89.00	0.60	8,287.60	2,728.69	-34.97	-2,728.66	0.34	-0.32	0.11
10,869.00	89.50	2.20	8,288.83	2,822.65	-32.68	-2,822.52	1.78	0.53	1.70
10,963.00	90.40	1.70	8,288.91	2,916.60	-29.48	-2,916.35	1.10	0.96	-0.53
11,057.00	89.50	0.40	8,289.00	3,010.58	-27.75	-3,010.25	1.68	-0.96	-1.38
11,151.00	88.70	358.60	8,290.47	3,104.56	-28.57	-3,104.22	2.10	-0.85	-1.91
11,245.00	88.80	358.50	8,292.52	3,198.50	-30.95	-3,198.20	0.15	0.11	-0.11
11,339.00	88.80	358.10	8,294.49	3,292.44	-33.74	-3,292.18	0.43	0.00	-0.43
11,434.00	91.10	0.10	8,294.58	3,387.42	-35.23	-3,387.16	3.21	2.42	2.11
11,528.00	89.40	359.10	8,294.16	3,481.41	-35.89	-3,481.14	2.10	-1.81	-1.06
11,622.00	89.90	359.10	8,294.74	3,575.40	-37.37	-3,575.13	0.53	0.53	0.00
11,716.00	90.00	358.40	8,294.82	3,669.37	-39.42	-3,669.13	0.75	0.11	-0.74
11,810.00	89.60	358.50	8,295.15	3,763.34	-41.96	-3,763.13	0.44	-0.43	0.11
11,904.00	89.10	358.10	8,296.22	3,857.29	-44.75	-3,857.12	0.69	-0.53	-0.43
11,998.00	89.00	357.70	8,297.77	3,951.22	-48.19	-3,951.10	0.44	-0.11	-0.43
12,092.00	88.10	358.30	8,300.15	4,045.13	-51.47	-4,045.07	1.15	-0.96	0.64
12,187.00	88.00	358.70	8,303.39	4,140.04	-53.96	-4,140.01	0.43	-0.11	0.42
12,281.00	90.00	358.80	8,305.03	4,234.00	-56.01	-4,233.99	2.13	2.13	0.11
12,375.00	90.10	358.30	8,304.94	4,327.97	-58.38	-4,327.99	0.54	0.11	-0.53
12,469.00	90.70	358.70	8,304.29	4,421.93	-60.85	-4,421.99	0.77	0.64	0.43
12,563.00	91.30	357.80	8,302.65	4,515.87	-63.72	-4,515.97	1.15	0.64	-0.96
Last MWD Survey									
12,620.00	91.30	357.80	8,301.35	4,572.82	-65.90	-4,572.85	0.00	0.00	0.00
Proj. to Bit - PBHL#1[PLUPC33F#1H] - PBHL#3[PLUPC33F#1H] - PBHL#1a[PLUPC33F#1H]									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
7,707.00	7,705.73	-26.93	2.05	First MWD Survey
12,563.00	8,302.65	4,515.87	-63.72	Last MWD Survey
12,620.00	8,301.35	4,572.82	-65.90	Proj. to Bit

Checked By: _____ Approved By: _____ Date: _____

A Gyrodata Directional Survey

for

CHESAPEAKE OPERATING

Location: LATSHAW #6, EDDY COUNTY, NEW MEXICO

Lease: PLU PIERCE CANYON 33 FED Well: #1H, 4-1/2" DRILLPIPE

Job Number: MD0510GBM223

Run Date: 5/17/2010 9:25:41 PM

Surveyor: Anthony Eaton

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.167640 deg. N Longitude: 103.877700 deg. W

Azimuth Correction:

Gyro: -0.24000 deg to Grid North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Local Horizontal Reference

A Gyrodata Directional Survey

CHESAPEAKE OPERATING

Location: LATSHAW #6, EDDY COUNTY, NEW MEXICO

Lease: PLU PIERCE CANYON 33 FED Well: #1H, 4-1/2" DRILLPIPE

Job Number: MD0510GBM223

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	0.00	0.00	0.0 0.0	0.00 N 0.00 E
0 TO 7675 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO LATSHAW #6 R.K.B. (+ 25 FT.)						
100.00	0.36	38.37	0.36	100.00	0.3 38.4	0.25 N 0.20 E
200.00	0.47	20.97	0.17	200.00	1.0 31.5	0.88 N 0.54 E
300.00	0.50	314.38	0.54	299.99	1.6 13.5	1.58 N 0.38 E
400.00	1.04	263.76	0.82	399.99	2.0 334.8	1.78 N 0.84 W
500.00	1.43	243.26	0.58	499.96	3.1 291.5	1.12 N 2.85 W
600.00	1.72	226.99	0.53	599.92	5.1 264.8	0.46 S 5.07 W
700.00	1.81	229.81	0.13	699.88	7.8 251.2	2.51 S 7.37 W
764.80	0.39	74.61	3.35	764.67	8.5 248.6	3.11 S 7.95 W
859.90	0.45	80.42	0.08	859.77	7.8 247.8	2.97 S 7.27 W
955.00	0.51	69.17	0.12	954.86	7.1 247.1	2.75 S 6.50 W
1050.10	0.85	67.18	0.36	1049.96	5.9 246.9	2.33 S 5.46 W
1145.20	1.03	70.84	0.20	1145.04	4.4 246.1	1.77 S 4.00 W
1240.30	1.12	76.93	0.15	1240.13	2.6 240.7	1.28 S 2.28 W
1335.40	1.20	85.05	0.19	1335.21	1.1 201.4	0.99 S 0.39 W
1430.50	1.26	85.50	0.07	1430.28	1.8 116.4	0.82 S 1.65 E
1525.60	1.32	88.11	0.09	1525.36	3.9 100.5	0.70 S 3.79 E
1620.70	1.46	94.67	0.22	1620.43	6.1 97.1	0.76 S 6.09 E
1715.80	1.27	110.15	0.43	1715.51	8.4 98.4	1.23 S 8.29 E
1810.90	1.35	120.44	0.26	1810.58	10.5 101.9	2.16 S 10.25 E

A Gyrodata Directional Survey

CHESAPEAKE OPERATING

Location: LATSHAW #6, EDDY COUNTY, NEW MEXICO

Lease: PLU PIERCE CANYON 33 FED Well: #1H, 4-1/2" DRILLPIPE

Job Number: MD0510GBM223

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
1906.00	1.20	126.77	0.22	1905.66	12.5 105.5	3.32 S 12.02 E
2001.10	1.53	119.91	0.39	2000.73	14.6 108.1	4.55 S 13.91 E
2096.20	1.85	142.78	0.78	2095.79	17.2 111.9	6.40 S 15.94 E
2191.30	1.49	162.32	0.70	2190.85	19.4 117.0	8.80 S 17.25 E
2286.40	0.62	162.84	0.92	2285.93	20.6 120.5	10.47 S 17.77 E
2381.50	0.45	142.05	0.27	2381.03	21.4 121.8	11.25 S 18.15 E
2476.60	0.45	86.29	0.44	2476.13	22.0 121.6	11.52 S 18.75 E
2571.70	0.59	83.81	0.15	2571.22	22.7 120.3	11.45 S 19.61 E
2666.80	0.63	68.13	0.18	2666.32	23.4 118.6	11.20 S 20.58 E
2761.90	0.63	48.80	0.22	2761.41	24.0 116.4	10.66 S 21.46 E
2857.00	0.79	40.87	0.19	2856.50	24.3 113.8	9.82 S 22.28 E
2952.10	0.85	46.53	0.11	2951.59	24.8 110.9	8.84 S 23.22 E
3047.20	1.01	88.34	0.72	3046.68	25.9 108.7	8.33 S 24.57 E
3142.30	1.36	111.56	0.62	3141.76	27.9 108.2	8.72 S 26.46 E
3237.40	1.70	141.68	0.91	3236.83	30.2 109.9	10.25 S 28.38 E
3332.50	1.78	151.89	0.33	3331.89	32.5 112.9	12.66 S 29.95 E
3427.60	1.11	149.50	0.71	3426.96	34.4 115.4	14.75 S 31.11 E
3522.70	0.98	149.32	0.13	3522.04	35.9 116.9	16.24 S 32.00 E
3617.80	0.89	151.42	0.10	3617.13	37.2 118.2	17.60 S 32.77 E
3712.90	0.70	150.85	0.21	3712.22	38.3 119.3	18.75 S 33.40 E
3808.00	0.57	153.18	0.14	3807.31	39.2 120.1	19.68 S 33.90 E
3903.10	0.73	146.41	0.19	3902.41	40.1 120.9	20.60 S 34.44 E
3998.20	0.67	122.96	0.30	3997.50	41.2 121.3	21.41 S 35.25 E

A Gyrodata Directional Survey

CHESAPEAKE OPERATING

Location: LATSHAW #6, EDDY COUNTY, NEW MEXICO

Lease: PLU PIERCE CANYON 33 FED Well: #1H, 4-1/2" DRILLPIPE

Job Number: MD0510GBM223

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4093.30	0.65	97.20	0.31	4092.59	42.3 121.0	21.78 S 36.25 E
4188.40	0.80	88.00	0.20	4187.69	43.3 120.2	21.82 S 37.45 E
4283.50	0.80	74.93	0.19	4282.78	44.4 119.2	21.63 S 38.75 E
4378.60	0.87	67.44	0.13	4377.87	45.3 117.9	21.18 S 40.06 E
4473.70	0.59	79.68	0.34	4472.96	46.2 116.8	20.81 S 41.20 E
4568.80	0.28	72.64	0.33	4568.06	46.7 116.2	20.66 S 41.90 E
4663.90	0.15	40.97	0.18	4663.16	46.9 115.9	20.50 S 42.20 E
4759.00	0.26	30.62	0.13	4758.25	47.0 115.5	20.22 S 42.39 E
4854.10	0.46	355.14	0.30	4853.35	46.8 114.8	19.65 S 42.47 E
4949.20	0.50	324.35	0.27	4948.45	46.2 114.2	18.94 S 42.19 E
5044.30	0.60	289.00	0.36	5043.55	45.4 114.0	18.44 S 41.48 E
5139.40	0.78	278.97	0.23	5138.64	44.3 114.2	18.18 S 40.37 E
5234.50	1.03	277.76	0.26	5233.73	42.8 114.8	17.96 S 38.88 E
5329.60	1.00	278.38	0.04	5328.81	41.2 115.5	17.72 S 37.22 E
5424.70	1.03	278.72	0.04	5423.90	39.6 116.2	17.47 S 35.55 E
5519.80	1.00	281.12	0.06	5518.98	38.0 116.9	17.18 S 33.90 E
5614.90	0.99	302.02	0.38	5614.07	36.4 117.1	16.59 S 32.39 E
5710.00	0.77	303.05	0.24	5709.16	34.9 116.9	15.80 S 31.15 E
5805.10	0.68	298.59	0.11	5804.25	33.7 116.8	15.19 S 30.12 E
5900.20	0.92	271.15	0.47	5899.34	32.5 117.3	14.90 S 28.87 E
5995.30	1.40	271.45	0.50	5994.42	30.8 118.9	14.86 S 26.94 E
6090.40	2.08	276.96	0.74	6089.48	28.2 121.3	14.62 S 24.08 E
6185.50	2.11	278.12	0.06	6184.51	25.0 124.5	14.16 S 20.63 E

A Gyrodata Directional Survey

CHESAPEAKE OPERATING

Location: LATSHAW #6, EDDY COUNTY, NEW MEXICO

Lease: PLU PIERCE CANYON 33 FED Well: #1H, 4-1/2" DRILLPIPE

Job Number: MD0510GBM223

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
6280.60	1.75	272.19	0.44	6279.56	22.3 128.5	13.86 S 17.45 E
6375.70	1.37	271.31	0.40	6374.62	20.3 132.8	13.78 S 14.87 E
6470.80	1.37	264.06	0.18	6469.70	18.7 137.7	13.87 S 12.60 E
6565.90	1.36	262.10	0.05	6564.77	17.5 143.8	14.14 S 10.36 E
6661.00	0.90	261.53	0.48	6659.85	16.7 149.4	14.41 S 8.51 E
6756.10	0.75	248.01	0.26	6754.94	16.4 154.0	14.75 S 7.19 E
6851.20	0.64	245.61	0.12	6850.03	16.4 158.0	15.20 S 6.13 E
6946.30	0.70	230.58	0.19	6945.13	16.6 161.8	15.79 S 5.20 E
7041.40	0.56	208.02	0.30	7040.22	17.2 164.7	16.57 S 4.53 E
7136.50	0.72	185.39	0.31	7135.32	18.1 166.4	17.57 S 4.26 E
7231.60	0.86	179.05	0.18	7230.41	19.4 167.4	18.89 S 4.21 E
7326.70	1.03	187.51	0.23	7325.49	20.9 168.6	20.45 S 4.11 E
7421.80	1.13	192.94	0.15	7420.58	22.5 170.3	22.22 S 3.79 E
7516.90	1.22	198.38	0.15	7515.66	24.3 172.3	24.09 S 3.26 E
7612.00	0.84	201.60	0.41	7610.74	25.8 174.0	25.70 S 2.69 E
7675.00	0.91	201.81	0.12	7673.73	26.7 175.0	26.59 S 2.33 E

Final Station Closure: Distance: 26.69 ft Az: 174.99 deg.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

OCT 29 2010

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMLC068430

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.7. If Unit or CA/Agreement, Name and/or No.
NMNM71016X

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
PLU PIERCE CANYON 33 FEDERAL 1H2. Name of Operator
CHESAPEAKE OPERATING, INC.Contact: LINDA GOOD
E-Mail: linda.good@chk.com9. API Well No.
30-015-36636-00-S1

3a. Address

OKLAHOMA CITY, OK 73154-0496

3b. Phone No. (include area code)
Ph: 405-935-427510. Field and Pool, or Exploratory
WILDCAT

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 33 T24S R30E SESE 350FSL 350FEL
32.16799 N Lat, 103.87858 W Lon11. County or Parish, and State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☒ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

PERF & FRAC TREATMENT

6/20 - 6/28/2010 Perforated from 8385' - 12,575' w/600 holes total. frac w/67,620 gal acid, 117,041 bbl water, 4,397,510# sand.

CBL Log too large to attach, emailing a copy to Wesley Ingram sending original UPS overnight to BLM.

(CHK PN 623048)

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #91008 verified by the BLM Well Information System
For CHESAPEAKE OPERATING, INC., sent to the Carlsbad
Committed to AFMSS for processing by KURT SIMMONS on 08/06/2010 (10KMS1940SE)**

Name (Printed/Typed) LINDA GOOD

Title SR. REGULATORY COMPLIANCE SPEC

Signature (Electronic Submission)

Date 08/06/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTED

CHRISTOPHER WALLS
Title PETROLEUM ENGINEER

Date 08/25/2010

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Form 3160-3
(August 2007)

RECEIVED
AUG 30 2010
NMOCD ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS **OCD Artesia**

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMLC068430

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM71016X

8. Well Name and No.
PLU PIERCE CANYON 33 FEDERAL 1

9. API Well No.
30-015-36636-00-S1

10. Field and Pool, or Exploratory
WILDCAT

11. County or Parish, and State
EDDY COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **CHESAPEAKE OPERATING, INC.** Contact: **LINDA GOOD**
E-Mail: linda.good@chk.com

3a. Address

OKLAHOMA CITY, OK 73154-0496

3b. Phone No. (include area code)
Ph: 405-935-4275

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 33 T24S R30E SESE 350FSL 350FEL
32.16799 N Lat, 103.87858 W Lon

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☒ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

PERF & FRAC TREATMENT

6/20 - 6/28/2010 Perforated from 8385' - 12,575' w/600 holes total. frac w/67,620 gal acid, 117,041 bbl water, 4,397,510# sand.

CBL Log too large to attach, emailing a copy to Wesley Ingram sending original UPS overnight to BLM.

(CHK PN 623048)

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #91008 verified by the BLM Well Information System For CHESAPEAKE OPERATING, INC., sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 08/06/2010 (10KMS1940SE)	
Name (Printed/Typed) LINDA GOOD	Title SR. REGULATORY COMPLIANCE SPEC
Signature (Electronic Submission)	Date 08/06/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED	CHRISTOPHER WALLS Title PETROLEUM ENGINEER	Date 08/25/2010
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****



Regulatory Department

VIA UPS

August 9, 2010

RE: Chesapeake Operating, Inc.
PLU Pierce Canyon 33 Federal # 1H
Sec. 33, T-24-S R-30-E
350' FSL & 350' FEL
Eddy Co., NM
API # 30-015-36636

Confidential
Comp 7/3/10
Out 10/3/10 *KA*

Dears Sirs/Madams:

Chesapeake Operating, Inc. request that the electric logs and completion report submitted be held confidential for the maximum period of time in accordance with NMOCD's Rule 19.15.7.16 (C).

Respectfully yours,

Bryan G. Arrant
Chesapeake Energy Corp.
Senior Regulatory Compliance Specialist

Attachments:

- NMOCD's C-102 "As Drilled" Land Plat
- NMOCD's C-104 Request for Allowable & Authorization to Transport
- BLM's 3160-4 Completion Report
- BLM's 3160-5 Perforation and Frac Sundry
- Final Directional Surveys
- Electric Logs

CONFIDENTIAL UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
Operator Copy

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

AUG 30 2010

5. Lease Serial No.
NMLC068430

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.
NMNM71016X

8. Lease Name and Well No.
PLU PIERCE CANYON 33 FEDERAL 1H

9. API Well No.
30-015-36636-00-S1

10. Field and Pool, or Exploratory
WILDCAT PIERCE CROSSING BS
EAST

11. Sec., T., R., M., or Block and Survey
or Area Sec 33 T24S R30E Mer NMP

12. County or Parish
EDDY

13. State
NM

17. Elevations (DF, KB, RT, GL)*
3301 GL

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other

b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

2. Name of Operator
CHESAPEAKE OPERATING, INC. Contact: LINDA GOOD
E-Mail: linda.good@chk.com

3. Address
OKLAHOMA CITY, OK 73154-0496

3a. Phone No. (include area code)
Ph: 405-935-4275

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface SESE 350FSL 350FEL 32.16799 N Lat, 103.87858 W Lon
At top prod interval reported below
Sec 33 T24S R30E Mer NMP
At total depth NENE 350FNL 350FEL

14. Date Spudded
05/08/2010

15. Date T.D. Reached
05/28/2010

16. Date Completed
☐ D & A ☒ Ready to Prod.
07/03/2010

18. Total Depth: MD 12620 TVD 8301

19. Plug Back T.D.: MD 12590 TVD 8271

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
DSNT SDLT ML ACRT

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
8.750	5.500	20.0		12620		2030		2800	
17.500	13.375 H-40	48.0	0	714		750		0	
12.250	9.625 J-55	40.0	0	3852		1665		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	7714							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	8385	12575	8385 TO 12575		600	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8385 TO 12575	FRAC W/67,620 GAL ACID, 117,041 BBL WTR, 4,397,510# SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/08/2010	07/16/2010	24	→	315.0	249.0	1592.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
37/64	SI		→	315	249	1592		POV	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		→						

ACCEPTED FOR RECORD

AUG 25 2010
/s/ Chris Watts
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #91007 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas (Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				BASE OF SALT	3804
				BELL CANYON	3848
				CHERRY CANYON	4767
				BRUSHY CANYON	6309
				BONE SPRING	7636

32. Additional remarks (include plugging procedure):
CONFIDENTIAL

LOGS SUBMITTED VIA UPD OVERNIGHT TO JERRY FANT.

ATTACHMENTS: WELLBORE SCHEMATIC, DIRECTIONAL SURVEY AND CONFIDENTIAL LETTER.

(CHK PN 623048)

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7. Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #91007 Verified by the BLM Well Information System.
For CHESAPEAKE OPERATING, INC., sent to the Carlsbad
Committed to AFMSS for processing by KURT SIMMONS on 08/06/2010 (10KMS1943SE)

Name (please print) LINDA GOOD

Title SR. REGULATORY COMPLIANCE SPEC

Signature (Electronic Submission)

Date 08/06/2010

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****