



EQT PRODUCTION

Taylor County, WV

RSM118

Well #515746 - Marcellus - Slot 515746

API# 47-91001319

Main Wellbore

Design: 515746 As Drilled Surveys

Standard Survey Report

22 September, 2015



Where energy meets innovation.



Phoenix Technology Services

Survey Report



Database:	EDM 5000-1 Single User Db	Local Co-ordinate Reference:	Well Well #515746 - Marcellus - Slot 515746
Company:	EQT PRODUCTION	TVD Reference:	KB 23' @ 1488.0usft
Project:	Taylor County, WV	MD Reference:	KB 23' @ 1488.0usft
Site:	RSM118	North Reference:	Grid
Well:	Well #515746 - Marcellus	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515746 As Drilled Surveys		

Project	Taylor County, WV		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	West Virginia North 4701		

Site	RSM118				
Site Position:		Northing:	289,938.90 usft	Latitude:	39.29
From:	Map	Easting:	1,803,864.30 usft	Longitude:	-80.19
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.44 °

Well	Well #515746 - Marcellus - Slot 515746					
Well Position	+N/-S	0.0 usft	Northing:	289,967.50 usft	Latitude:	39° 17' 38.601 N
	+E/-W	0.0 usft	Easting:	1,803,892.20 usft	Longitude:	80° 11' 34.489 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	1,465.0 usft

Wellbore	Main Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/7/2015	-9.48	66.47	52,308

Design	515746 As Drilled Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	182.51	

Survey Program	Date	9/22/2015			
From (')	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	3,762.0	515746 Gyrodata Gyro (Main Wellbore)	GYD_DP_MS	Gyrodata gyro-compassing and drop	
0.00	8,206.0	515746 PHX MWD (Main Wellbore)	PHX+MWD+HDGM	PHX+OWSG MWD + HDGM	

Survey											
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	-1,488.0	0.0	0.0	0.0	0.00	0.00	0.00	
110.0	0.70	338.72	110.0	-1,378.0	0.6	-0.2	-0.6	0.64	0.64	0.00	
210.0	0.74	338.30	210.0	-1,278.0	1.8	-0.7	-1.8	0.04	0.04	0.00	
310.0	0.46	0.24	310.0	-1,178.0	2.8	-0.9	-2.8	0.36	-0.28	21.94	
410.0	0.26	351.57	410.0	-1,078.0	3.4	-1.0	-3.4	0.21	-0.20	-8.67	
510.0	0.25	337.15	510.0	-978.0	3.8	-1.1	-3.8	0.06	-0.01		
610.0	0.25	334.25	610.0	-878.0	4.2	-1.3	-4.2	0.01	0.00		
710.0	0.20	26.75	710.0	-778.0	4.6	-1.3	-4.5	0.20	-0.05	52.50	

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WV Department of Environmental Protection
04/01/2016



Phoenix Technology Services
Survey Report



Database:	EDM 5000.1 Single User DB	Local Co-ordinate Reference:	Well: Well #515746 - Marcellus - Slot 515746
Company:	EQT PRODUCTION	TVD Reference:	KB 23 @ 1488.0usft
Project:	Taylor County, WV	MD Reference:	KB 23 @ 1488.0usft
Site:	RSM111#	North Reference:	Grid
Well:	Well #515746 - Marcellus	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515746 As Drilled Surveys		

Survey											
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
810.0	0.17	335.35	810.0	-678.0	4.9	-1.3	-4.8	0.16	-0.03	-51.40	
910.0	0.18	329.05	910.0	-578.0	5.2	-1.4	-5.1	0.02	0.01	-6.30	
1,010.0	0.30	23.26	1,010.0	-478.0	5.5	-1.4	-5.5	0.24	0.12	54.21	
1,110.0	0.44	3.68	1,110.0	-378.0	6.2	-1.3	-6.1	0.19	0.14	-19.58	
1,210.0	1.04	0.08	1,210.0	-278.0	7.4	-1.2	-7.4	0.60	0.60	-3.60	
1,310.0	1.04	356.91	1,310.0	-178.0	9.3	-1.3	-9.2	0.06	0.00	-3.17	
1,410.0	1.04	10.61	1,409.9	-78.1	11.1	-1.2	-11.0	0.25	0.00	13.70	
1,510.0	0.95	14.98	1,509.9	21.9	12.8	-0.8	-12.7	0.12	-0.09	4.37	
1,610.0	0.89	14.95	1,609.9	121.9	14.3	-0.4	-14.3	0.06	-0.06	-0.03	
1,710.0	0.85	13.12	1,709.9	221.9	15.8	0.0	-15.8	0.05	-0.04	-1.83	
1,810.0	0.88	7.22	1,809.9	321.9	17.3	0.3	-17.3	0.09	0.03	-5.90	
1,910.0	0.82	3.04	1,909.9	421.9	18.7	0.4	-18.7	0.09	-0.06	-4.18	
2,010.0	0.80	0.52	2,009.9	521.9	20.1	0.4	-20.1	0.04	-0.02	-2.52	
2,110.0	0.75	358.85	2,109.9	621.9	21.5	0.4	-21.5	0.05	-0.05	-1.67	
2,210.0	0.70	3.56	2,209.8	721.8	22.8	0.5	-22.8	0.08	-0.05	4.71	
2,310.0	0.58	352.59	2,309.8	821.8	23.9	0.4	-23.9	0.17	-0.12	-10.97	
2,410.0	0.41	353.16	2,409.8	921.8	24.7	0.3	-24.7	0.17	-0.17	0.57	
2,510.0	0.37	353.53	2,509.8	1,021.8	25.4	0.2	-25.4	0.04	-0.04	0.37	
2,610.0	0.37	353.13	2,609.8	1,121.8	26.1	0.2	-26.0	0.00	0.00	-0.40	
2,710.0	0.34	341.45	2,709.8	1,221.8	26.7	0.0	-26.6	0.08	-0.03	-11.68	
2,810.0	0.40	343.59	2,809.8	1,321.8	27.3	-0.2	-27.2	0.06	0.06	2.14	
2,910.0	0.50	332.87	2,909.8	1,421.8	28.0	-0.5	-27.9	0.13	0.10	-10.72	
3,010.0	0.43	322.72	3,009.8	1,521.8	28.7	-0.9	-28.6	0.11	-0.07	-10.15	
3,110.0	0.41	314.43	3,109.8	1,621.8	29.2	-1.4	-29.1	0.06	-0.02	-8.29	
3,210.0	0.43	311.80	3,209.8	1,721.8	29.7	-1.9	-29.6	0.03	0.02	-2.63	
3,310.0	0.46	306.72	3,309.8	1,821.8	30.2	-2.5	-30.1	0.05	0.03	-5.08	
3,410.0	0.42	304.69	3,409.8	1,921.8	30.7	-3.1	-30.5	0.04	-0.04	-2.03	
3,510.0	0.39	303.61	3,509.8	2,021.8	31.1	-3.7	-30.9	0.03	-0.03	-1.08	
3,610.0	0.39	319.85	3,609.8	2,121.8	31.5	-4.2	-31.3	0.11	0.00	16.24	
3,710.0	0.57	325.04	3,709.8	2,221.8	32.2	-4.7	-31.9	0.18	0.18	5.19	
Gyro Tie On=3782' MD											
3,762.0	0.65	339.18	3,761.8	2,273.8	32.7	-5.0	-32.4	0.33	0.15	27.19	
3,800.0	2.60	306.20	3,799.8	2,311.8	33.4	-5.7	-33.1	5.49	5.13	-86.79	
3,831.0	7.50	310.60	3,830.7	2,342.7	35.1	-7.8	-34.7	15.84	15.81	14.19	
3,863.0	12.80	309.20	3,862.1	2,374.1	38.7	-12.2	-38.1	16.58	16.56	-4.38	
3,894.0	15.70	306.40	3,892.2	2,404.2	43.4	-18.2	-42.5	9.61	9.35	-9.03	
3,926.0	16.90	299.30	3,922.9	2,434.9	48.2	-25.8	-47.0	7.26	3.75	-22.19	
3,957.0	18.30	294.60	3,952.4	2,464.4	52.5	-34.1	-50.9	6.43	4.52	-15.16	
3,989.0	19.50	290.30	3,982.7	2,494.7	56.4	-43.7	-54.4	5.74	3.75	-13.44	
4,020.0	20.70	285.10	4,011.8	2,523.8	59.6	-53.8	-57.2	6.94	3.87	-16.77	
4,051.0	23.00	281.30	4,040.6	2,552.6	62.2	-65.1	-59.3	8.71	7.42	-12.26	
4,083.0	24.40	278.80	4,069.9	2,581.9	64.5	-77.7	-61.0	5.38	4.38	-7.81	
4,114.0	25.50	278.10	4,098.0	2,610.0	66.4	-90.7	-62.4	3.67	3.55	-2.26	



Phoenix Technology Services

Survey Report



Database: EDM 5000.1 Single User Db Company: EQT PRODUCTION Project: Taylor County, WV Site: RSM118 Well: Well #515746 - Marcellus Wellbore: Main Wellbore Design: 515746 As Drilled Surveys	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Well Well #515746 - Marcellus - Slot 515746 KB 23 @ 1488 Offset KB 23 @ 1488 Offset Gnd Minimum Curvature
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Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,146.0	27.60	276.90	4,126.6	2,638.6	68.3	-104.8	-63.6	6.77	6.56	-3.75
4,177.0	30.60	277.40	4,153.7	2,665.7	70.1	-119.8	-64.8	9.71	9.68	1.61
4,208.0	33.50	279.60	4,180.0	2,692.0	72.6	-136.1	-66.6	10.08	9.35	7.10
4,240.0	35.40	279.30	4,206.4	2,718.4	75.5	-153.9	-68.7	5.96	5.94	-0.94
4,271.0	37.30	277.60	4,231.4	2,743.4	78.2	-172.1	-70.6	6.94	6.13	-5.48
4,334.0	37.40	275.40	4,281.4	2,793.4	82.6	-210.1	-73.3	2.12	0.16	-3.49
4,426.0	38.40	276.10	4,354.0	2,866.0	88.2	-266.3	-76.5	1.18	1.09	0.76
4,521.0	36.60	275.00	4,429.4	2,941.4	93.8	-323.8	-79.6	2.02	-1.89	-1.16
4,615.0	37.30	276.10	4,504.5	3,016.5	99.3	-380.1	-82.6	1.02	0.74	1.17
4,709.0	38.50	278.40	4,578.7	3,090.7	106.6	-437.4	-87.4	1.97	1.28	2.45
4,803.0	40.60	279.00	4,651.2	3,163.2	115.7	-496.5	-93.8	2.27	2.23	0.64
4,897.0	39.50	277.40	4,723.1	3,235.1	124.3	-556.4	-99.8	1.60	-1.17	-1.70
4,991.0	40.40	279.90	4,795.2	3,307.2	133.4	-616.0	-106.3	1.96	0.96	2.66
5,086.0	39.90	278.40	4,867.8	3,379.8	143.1	-676.5	-113.4	1.15	-0.53	-1.58
5,180.0	39.10	276.90	4,940.3	3,452.3	151.1	-735.8	-118.8	1.32	-0.85	-1.60
5,275.0	39.40	277.20	5,013.9	3,525.9	158.5	-795.4	-123.5	0.37	0.32	0.32
5,369.0	41.30	278.10	5,085.5	3,597.5	166.6	-855.7	-129.0	2.11	2.02	0.96
5,463.0	40.40	277.40	5,156.6	3,668.6	174.9	-916.6	-134.6	1.07	-0.96	-0.74
5,557.0	40.70	276.00	5,228.1	3,740.1	182.0	-977.3	-139.1	1.02	0.32	-1.49
5,651.0	39.30	274.50	5,300.1	3,812.1	187.5	-1,037.5	-142.0	1.81	-1.49	-1.60
5,745.0	39.50	277.30	5,372.7	3,884.7	193.7	-1,096.8	-145.5	1.90	0.21	2.98
5,840.0	38.50	276.40	5,446.6	3,958.6	200.8	-1,156.2	-150.1	1.21	-1.05	-0.95
5,934.0	38.70	275.70	5,520.0	4,032.0	207.0	-1,214.5	-153.7	0.51	0.21	-0.74
6,028.0	39.70	277.40	5,592.9	4,104.9	213.8	-1,273.5	-157.9	1.56	1.06	1.81
6,123.0	40.20	277.30	5,665.7	4,177.7	221.6	-1,334.0	-163.0	0.53	0.53	-0.11
6,217.0	39.60	277.50	5,737.8	4,249.8	229.4	-1,393.8	-168.2	0.65	-0.64	0.21
6,312.0	38.20	276.70	5,811.7	4,323.7	236.7	-1,453.0	-173.0	1.57	-1.47	-0.84
6,406.0	39.70	278.90	5,884.8	4,396.8	244.8	-1,511.5	-178.4	2.17	1.60	2.34
6,500.0	40.50	279.30	5,956.7	4,468.7	254.3	-1,571.3	-185.4	0.89	0.85	0.43
6,595.0	40.70	279.00	6,028.9	4,540.9	264.2	-1,632.4	-192.5	0.29	0.21	-0.32
6,689.0	39.30	278.10	6,100.9	4,612.9	273.2	-1,692.1	-198.9	1.61	-1.49	-0.96
6,783.0	40.20	277.00	6,173.2	4,685.2	281.1	-1,751.7	-204.2	1.22	0.96	-1.17
6,878.0	39.40	277.30	6,246.1	4,758.1	288.6	-1,812.0	-209.1	0.87	-0.84	0.32
6,972.0	41.80	278.60	6,317.5	4,829.5	297.1	-1,872.6	-214.9	2.71	2.55	1.38
7,066.0	41.60	275.00	6,387.7	4,899.7	304.5	-1,934.7	-219.6	2.56	-0.21	-3.83
7,161.0	40.70	275.30	6,459.2	4,971.2	310.1	-1,996.9	-222.5	0.97	-0.95	0.32
7,255.0	39.90	274.70	6,530.9	5,042.9	315.4	-2,057.5	-225.1	0.95	-0.85	-0.64
7,349.0	38.60	274.30	6,603.7	5,115.7	320.1	-2,116.8	-227.2	1.41	-1.38	-0.43
7,444.0	37.10	277.10	6,678.7	5,190.7	325.9	-2,174.8	-230.4	2.40	-1.58	2.95
7,538.0	37.40	277.10	6,753.6	5,265.6	332.9	-2,231.2	-235.0	0.32	0.32	0.00
7,569.0	36.90	276.80	6,778.3	5,290.3	335.2	-2,249.8	-236.4	1.72	-1.61	-0.97
7,601.0	36.20	274.60	6,804.0	5,316.0	337.0	-2,268.8	-237.5	4.64	-2.19	-6.88

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Survey Report



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Company:	EQT PRODUCTION	TVD Reference:	KB 23' @ 1488.0usft
Project:	Taylor County, WV	MD Reference:	KB 23' @ 1488.0usft
Site:	RSM118	North Reference:	Grid
Well:	Well #515746 - Marcellus	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515746 As Drilled Surveys		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,632.0	36.90	268.50	6,828.9	5,340.9	337.5	-2,287.2	-237.2	11.93	2.26	-19.68
7,663.0	38.30	264.30	6,853.5	5,365.5	336.3	-2,306.1	-235.2	9.42	4.52	-13.55
7,695.0	39.30	260.30	6,878.4	5,390.4	333.6	-2,326.0	-231.6	8.43	3.13	-12.50
7,726.0	39.80	257.10	6,902.3	5,414.3	329.8	-2,345.3	-226.9	6.77	1.61	-10.32
7,758.0	39.90	252.40	6,926.9	5,438.9	324.4	-2,365.1	-220.6	9.42	0.31	-14.69
7,789.0	40.20	249.10	6,950.6	5,462.6	317.8	-2,383.9	-213.2	6.92	0.97	-10.65
7,821.0	40.80	244.40	6,974.9	5,486.9	309.6	-2,403.0	-204.2	9.72	1.88	-14.69
7,852.0	40.80	240.70	6,998.4	5,510.4	300.3	-2,421.0	-194.1	7.80	0.00	-11.94
7,884.0	40.80	238.40	7,022.6	5,534.6	289.7	-2,439.0	-182.7	4.70	0.00	-7.19
7,915.0	40.90	234.80	7,046.1	5,558.1	278.5	-2,455.9	-170.8	7.60	0.32	-11.61
7,947.0	40.60	230.00	7,070.3	5,582.3	265.8	-2,472.4	-157.4	9.83	-0.94	-15.00
7,978.0	40.40	225.50	7,093.9	5,605.9	252.3	-2,487.3	-143.2	9.45	-0.65	-14.52
8,009.0	40.50	221.80	7,117.5	5,629.5	237.7	-2,501.2	-128.1	7.75	0.32	-11.94
8,041.0	40.70	218.60	7,141.8	5,653.8	221.8	-2,514.6	-111.6	6.54	0.63	-10.00
8,072.0	41.30	214.90	7,165.2	5,677.2	205.5	-2,526.8	-94.8	8.07	1.94	-11.94
8,104.0	40.10	211.70	7,189.5	5,701.5	188.1	-2,538.3	-76.9	7.52	-3.75	-10.00
Final Survey=8135' MD/7213' TVD										
8,135.0	40.40	210.60	7,213.1	5,725.1	170.9	-2,548.6	-59.3	2.49	0.97	-3.55
PROJ to Bit=8206' MD/7268' TVD - 515746 LP 608' VS p5 - 515746 Plat TD 2 - 515746 LP 608' VS p4 - 515746 Plat TD 2 p3 - 515746 Plat LP										
8,206.0	39.30	208.70	7,267.6	5,779.6	131.4	-2,571.1	-18.8	2.31	-1.55	-2.68

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (-1,057.8)	+E/-W (-2,402.7)	Northing (usft)	Easting (usft)	Latitude	Longitude
515746 Plat LP 2	0.00	0.00	7,499.0	-1,057.8	-2,402.7	288,909.70	1,801,489.50	39° 17' 27.962 N	80° 12' 4.945 W
- hit/miss target									
- Shape									
- actual wellpath misses target center by 1223.2usft at 8206.0usft MD (7267.6 TVD, 131.4 N, -2571.1 E)									
- Point									

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
3,762.0	3,761.8	32.7	-5.0	Gyro Tie On=3762' MD
8,135.0	7,213.1	170.9	-2,548.6	Final Survey=8135' MD/7213' TVD
8,206.0	7,267.6	131.4	-2,571.1	PROJ to Bit=8206' MD/7268' TVD

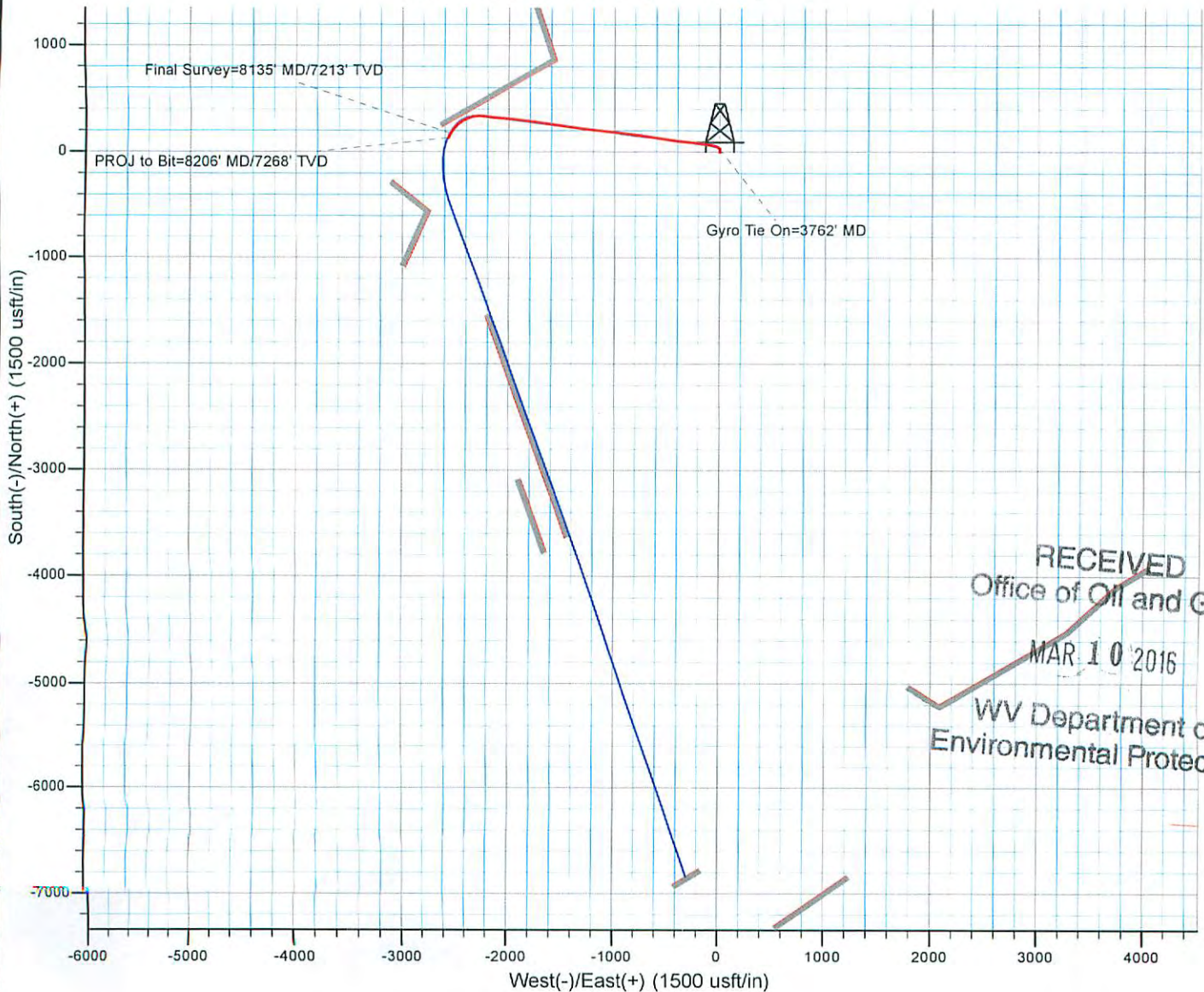
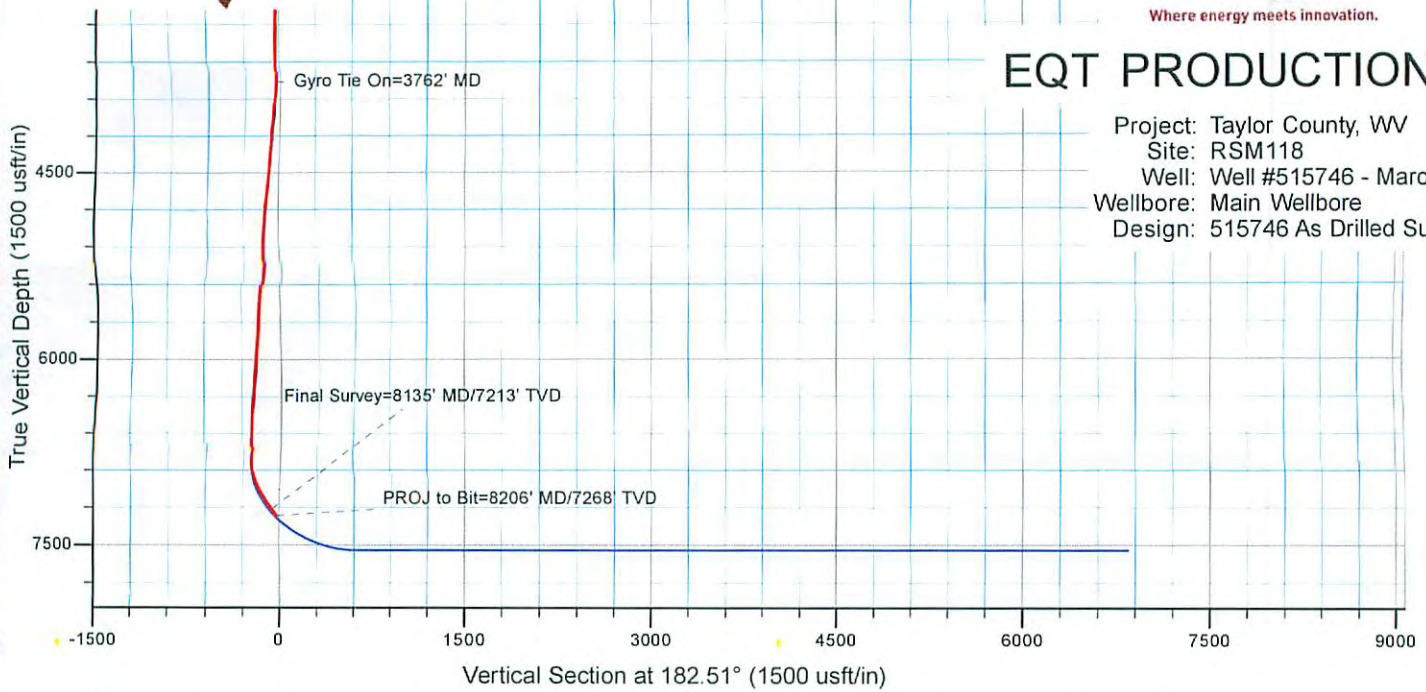
Checked By: _____ Approved By: _____ Date: _____

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EQT PRODUCTION

Project: Taylor County, WV
Site: RSM118
Well: Well #515746 - Marcellus
Wellbore: Main Wellbore
Design: 515746 As Drilled Surveys



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515746 ST01 AWP Proj: 15614'

Page 1 of 11

API# 47-91001319



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

REPORT SETUP INFORMATION

Projection System	NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	Gotfbral
Scale	0.999957	Report Generated	13/Oct/2015 at 14:48
Convergence at slot	0.44° West	Database/Source file	WellArchitectDB/515746_ST01_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	1803892.20	289967.50	39°17'38.602"N	80°11'34.489"W
Facility Reference Pt			1803892.20	289967.50	39°17'38.602"N	80°11'34.489"W
Field Reference Pt			1803892.20	289967.50	39°17'38.602"N	80°11'34.489"W

WELLPATH DATUM

Calculation method	Minimum curvature	Savanna 803 (RKB) to Facility Vertical Datum	1488.00ft
Horizontal Reference Pt	Slot	Savanna 803 (RKB) to Mean Sea Level	1488.00ft
Vertical Reference Pt	Savanna 803 (RKB)	Savanna 803 (RKB) to Mud Line at Slot (Slot 01)	23.00ft
MD Reference Pt	Savanna 803 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	161.12°

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13/Oct/2015



Actual Wellpath Report

515746 ST01 AWP Proj: 15614'

Page 2 of 11



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REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

WELLPATH DATA (193 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
0.00†	0.000	338.720	0.00	0.00	0.00	0.00	1803892.20	289967.50	39°17'38.602"N	80°11'34.489"W	0.00	0.000	0.00
23.00	0.000	338.720	23.00	0.00	0.00	0.00	1803892.20	289967.50	39°17'38.602"N	80°11'34.489"W	0.00	0.000	0.00
110.00	0.700	338.720	110.00	-0.53	0.50	-0.19	1803892.01	289968.00	39°17'38.606"N	80°11'34.492"W	0.53	338.720	0.80
210.00	0.740	338.300	209.99	-1.79	1.66	-0.65	1803891.55	289969.16	39°17'38.618"N	80°11'34.498"W	1.79	338.568	0.04
310.00	0.460	0.240	309.98	-2.81	2.67	-0.89	1803891.31	289970.17	39°17'38.628"N	80°11'34.501"W	2.81	341.530	0.36
410.00	0.260	351.570	409.98	-3.41	3.29	-0.92	1803891.28	289970.79	39°17'38.634"N	80°11'34.501"W	3.42	344.352	0.21
510.00	0.250	337.150	509.98	-3.85	3.72	-1.04	1803891.16	289971.22	39°17'38.638"N	80°11'34.503"W	3.86	344.370	0.06
610.00	0.250	334.250	609.98	-4.29	4.11	-1.22	1803890.98	289971.61	39°17'38.642"N	80°11'34.505"W	4.29	343.492	0.01
710.00	0.200	26.750	709.98	-4.63	4.47	-1.24	1803890.96	289971.97	39°17'38.646"N	80°11'34.505"W	4.63	344.537	0.20
810.00	0.170	335.350	809.98	-4.90	4.76	-1.22	1803890.98	289972.26	39°17'38.648"N	80°11'34.505"W	4.91	345.629	0.16
910.00	0.180	329.050	909.98	-5.20	5.03	-1.36	1803890.84	289972.53	39°17'38.651"N	80°11'34.507"W	5.21	344.845	0.02
1010.00	0.300	23.260	1009.98	-5.55	5.40	-1.34	1803890.86	289972.90	39°17'38.655"N	80°11'34.507"W	5.57	346.079	0.24
1110.00	0.440	3.680	1109.98	-6.09	6.03	-1.21	1803890.99	289973.53	39°17'38.661"N	80°11'34.505"W	6.15	348.637	0.19
1210.00	1.040	0.080	1209.97	-7.31	7.32	-1.19	1803891.01	289974.82	39°17'38.674"N	80°11'34.505"W	7.41	350.800	0.60
1310.00	1.040	356.910	1309.95	-9.04	9.13	-1.23	1803890.97	289976.63	39°17'38.692"N	80°11'34.506"W	9.21	352.311	0.06
1410.00	1.040	10.610	1409.93	-10.70	10.93	-1.11	1803891.09	289978.43	39°17'38.709"N	80°11'34.504"W	10.99	354.177	0.25
1510.00	0.950	14.980	1509.92	-12.18	12.62	-0.73	1803891.47	289980.12	39°17'38.726"N	80°11'34.500"W	12.64	356.675	0.12
1610.00	0.890	14.950	1609.91	-13.51	14.17	-0.32	1803891.88	289981.67	39°17'38.742"N	80°11'34.494"W	14.18	358.712	0.06
1710.00	0.850	13.120	1709.90	-14.79	15.65	0.05	1803892.25	289983.14	39°17'38.756"N	80°11'34.490"W	15.65	0.184	0.05
1810.00	0.880	7.220	1809.88	-16.11	17.13	0.31	1803892.51	289984.63	39°17'38.771"N	80°11'34.487"W	17.13	1.053	0.09
1910.00	0.820	3.040	1909.87	-17.46	18.61	0.45	1803892.65	289986.11	39°17'38.785"N	80°11'34.485"W	18.61	1.384	0.09
2010.00	0.800	0.520	2009.86	-18.78	20.02	0.49	1803892.69	289987.52	39°17'38.799"N	80°11'34.485"W	20.02	1.413	0.04
2110.00	0.750	358.850	2109.85	-20.06	21.37	0.49	1803892.69	289988.87	39°17'38.813"N	80°11'34.485"W	21.38	1.305	0.05
2210.00	0.700	3.560	2209.85	-21.25	22.64	0.51	1803892.71	289990.13	39°17'38.825"N	80°11'34.485"W	22.64	1.295	0.08
2310.00	0.580	352.590	2309.84	-22.31	23.75	0.48	1803892.68	289991.25	39°17'38.836"N	80°11'34.485"W	23.75	1.169	0.17

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Actual Wellpath Report

515746 ST01 AWP Proj: 15614'

Page 3 of 11



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REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [%/100ft]
2410.00	0.410	353.160	2409.84	-23.16	24.60	0.38	1803892.58	289992.10	39°17'38.845"N	80°11'34.487"W	24.61	0.877	0.17
2510.00	0.370	353.530	2509.83	-23.82	25.28	0.30	1803892.50	289992.78	39°17'38.851"N	80°11'34.488"W	25.28	0.674	0.04
2610.00	0.370	353.130	2609.83	-24.45	25.92	0.22	1803892.42	289993.42	39°17'38.858"N	80°11'34.489"W	25.92	0.492	0.00
2710.00	0.340	341.450	2709.83	-25.07	26.52	0.09	1803892.29	289994.02	39°17'38.864"N	80°11'34.491"W	26.52	0.193	0.08
2810.00	0.400	343.590	2809.83	-25.71	27.14	-0.10	1803892.10	289994.64	39°17'38.870"N	80°11'34.493"W	27.14	359.781	0.06
2910.00	0.500	332.870	2909.82	-26.49	27.86	-0.40	1803891.80	289995.36	39°17'38.877"N	80°11'34.497"W	27.87	359.175	0.13
3010.00	0.430	322.720	3009.82	-27.28	28.55	-0.83	1803891.37	289996.05	39°17'38.884"N	80°11'34.502"W	28.56	358.340	0.11
3110.00	0.410	314.430	3109.82	-27.96	29.10	-1.31	1803890.89	289996.60	39°17'38.889"N	80°11'34.509"W	29.13	357.422	0.06
3210.00	0.430	311.800	3209.82	-28.60	29.60	-1.85	1803890.35	289997.10	39°17'38.894"N	80°11'34.515"W	29.66	356.432	0.03
3310.00	0.460	306.720	3309.81	-29.26	30.09	-2.45	1803889.75	289997.59	39°17'38.899"N	80°11'34.523"W	30.19	355.351	0.05
3410.00	0.420	304.690	3409.81	-29.89	30.54	-3.07	1803889.13	289998.04	39°17'38.903"N	80°11'34.531"W	30.69	354.259	0.04
3510.00	0.390	303.610	3509.81	-30.45	30.93	-3.65	1803888.55	289998.43	39°17'38.907"N	80°11'34.539"W	31.15	353.262	0.03
3610.00	0.390	319.850	3609.80	-31.04	31.38	-4.16	1803888.04	289998.88	39°17'38.911"N	80°11'34.545"W	31.66	352.453	0.11
3710.00	0.570	325.040	3709.80	-31.84	32.05	-4.66	1803887.54	289999.55	39°17'38.918"N	80°11'34.551"W	32.39	351.724	0.18
3762.00	0.650	339.180	3761.80	-32.38	32.54	-4.92	1803887.29	290000.04	39°17'38.923"N	80°11'34.555"W	32.91	351.410	0.33
3800.00	2.600	306.200	3799.78	-33.30	33.25	-5.69	1803886.51	290000.75	39°17'38.930"N	80°11'34.565"W	33.73	350.293	5.49
3831.00	7.500	310.600	3830.65	-35.62	34.98	-7.79	1803884.41	290002.48	39°17'38.947"N	80°11'34.592"W	35.84	347.443	15.84
3863.00	12.800	309.200	3862.14	-40.43	38.58	-12.13	1803880.07	290006.08	39°17'38.982"N	80°11'34.647"W	40.45	342.551	16.58
3894.00	15.700	306.400	3892.18	-46.80	43.24	-18.17	1803874.03	290010.74	39°17'39.028"N	80°11'34.724"W	46.91	337.213	9.61
3926.00	16.900	299.300	3922.90	-53.82	48.09	-25.71	1803866.49	290015.59	39°17'39.075"N	80°11'34.821"W	54.53	331.872	7.26
3957.00	18.300	294.600	3952.45	-60.53	52.32	-34.06	1803858.14	290019.82	39°17'39.116"N	80°11'34.927"W	62.43	326.934	6.43
3989.00	19.500	290.300	3982.72	-67.36	56.27	-43.64	1803848.56	290023.76	39°17'39.154"N	80°11'35.050"W	71.21	322.202	5.74
4020.00	20.700	285.100	4011.84	-73.69	59.49	-53.79	1803838.42	290026.99	39°17'39.185"N	80°11'35.179"W	80.20	317.883	6.94
4051.00	23.000	281.300	4040.61	-79.80	62.10	-65.02	1803827.19	290029.60	39°17'39.210"N	80°11'35.322"W	89.91	313.688	8.71
4083.00	24.400	278.800	4069.91	-86.02	64.34	-77.68	1803814.52	290031.84	39°17'39.232"N	80°11'35.483"W	100.87	309.634	5.38

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515746 ST01 AWP Proj: 15614'

Page 4 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
4114.00	25.500	278.100	4098.02	-92.02	66.26	-90.61	1803801.59	290033.76	39°17'39.250"N	80°11'35.648"W	112.26	306.176	3.67
4146.00	27.600	276.900	4126.64	-98.37	68.12	-104.79	1803787.41	290035.62	39°17'39.267"N	80°11'35.829"W	124.99	303.026	6.77
4177.00	30.600	277.400	4153.73	-104.98	70.00	-119.75	1803772.45	290037.50	39°17'39.284"N	80°11'36.019"W	138.71	300.309	9.71
4208.00	33.500	279.600	4180.00	-112.56	72.44	-136.01	1803756.19	290039.94	39°17'39.307"N	80°11'36.226"W	154.10	298.041	10.08
4240.00	35.400	279.300	4206.39	-121.15	75.42	-153.87	1803738.34	290042.91	39°17'39.335"N	80°11'36.454"W	171.36	296.111	5.96
4271.00	37.300	277.600	4231.35	-129.58	78.11	-172.04	1803720.16	290045.61	39°17'39.360"N	80°11'36.685"W	188.94	294.418	6.94
4334.00	37.400	275.400	4281.44	-145.96	82.43	-210.01	1803682.20	290049.93	39°17'39.400"N	80°11'37.168"W	225.61	291.431	2.12
4426.00	38.400	276.100	4354.03	-169.51	88.10	-266.24	1803625.97	290055.60	39°17'39.452"N	80°11'37.884"W	280.44	288.310	1.18
4521.00	36.600	275.000	4429.40	-193.44	93.70	-323.80	1803568.42	290061.20	39°17'39.503"N	80°11'38.617"W	337.08	286.140	2.02
4615.00	37.300	276.100	4504.52	-216.81	99.17	-380.04	1803512.18	290066.67	39°17'39.553"N	80°11'39.332"W	392.76	284.626	1.02
4709.00	38.500	278.400	4578.70	-242.25	106.47	-437.30	1803454.91	290073.97	39°17'39.621"N	80°11'40.062"W	450.08	283.684	1.97
4803.00	40.600	279.000	4651.17	-269.97	115.53	-496.47	1803395.76	290083.03	39°17'39.706"N	80°11'40.815"W	509.73	283.100	2.27
4897.00	39.500	277.400	4723.13	-297.51	124.17	-556.33	1803335.90	290091.66	39°17'39.786"N	80°11'41.577"W	570.01	282.582	1.60
4991.00	40.400	279.900	4795.19	-325.41	133.26	-615.99	1803276.24	290100.75	39°17'39.872"N	80°11'42.337"W	630.23	282.207	1.96
5086.00	39.900	278.400	4867.81	-354.20	143.00	-676.46	1803215.77	290110.50	39°17'39.963"N	80°11'43.107"W	691.41	281.937	1.15
5180.00	39.100	276.900	4940.34	-380.91	150.97	-735.71	1803156.52	290118.46	39°17'40.037"N	80°11'43.861"W	751.04	281.596	1.32
5275.00	39.400	277.200	5013.91	-407.20	158.35	-795.36	1803096.87	290125.84	39°17'40.106"N	80°11'44.621"W	810.97	281.260	0.37
5369.00	41.300	278.100	5085.55	-434.39	166.46	-855.68	1803036.56	290133.95	39°17'40.181"N	80°11'45.389"W	871.72	281.008	2.11
5463.00	40.400	277.400	5156.65	-461.95	174.75	-916.60	1802975.64	290142.24	39°17'40.259"N	80°11'46.164"W	933.11	280.794	1.07
5557.00	40.700	276.000	5228.08	-488.33	181.88	-977.29	1802914.96	290149.37	39°17'40.324"N	80°11'46.937"W	994.07	280.542	1.02
5651.00	39.300	274.500	5300.08	-513.04	187.42	-1037.45	1802854.80	290154.91	39°17'40.375"N	80°11'47.703"W	1054.24	280.240	1.81
5745.00	39.500	277.300	5372.73	-538.04	193.55	-1096.78	1802795.46	290161.04	39°17'40.431"N	80°11'48.458"W	1113.73	280.008	1.90
5840.00	38.500	276.400	5446.56	-564.00	200.69	-1156.14	1802736.11	290168.18	39°17'40.497"N	80°11'49.214"W	1173.43	279.848	1.21
5934.00	38.700	275.700	5520.02	-588.72	206.87	-1214.46	1802677.80	290174.36	39°17'40.553"N	80°11'49.956"W	1231.95	279.667	0.51
6028.00	39.700	277.400	5592.87	-614.24	213.65	-1273.47	1802618.78	290181.14	39°17'40.616"N	80°11'50.707"W	1291.27	279.524	1.56

04/01/2016

13/Oct/2015



Actual Wellpath Report

515746 ST01 AWP Proj: 15614'

Page 5 of 11



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Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
6123.00	40.200	277.300	5665.69	-641.20	221.46	-1333.97	1802558.29	290188.95	39°17'40.688"N	80°11'51.478"W	1352.23	279.426	0.53
6217.00	39.600	277.500	5737.81	-667.90	229.22	-1393.77	1802498.49	290196.71	39°17'40.760"N	80°11'52.239"W	1412.49	279.339	0.65
6312.00	38.200	276.700	5811.74	-694.03	236.60	-1452.96	1802439.30	290204.09	39°17'40.829"N	80°11'52.993"W	1472.10	279.249	1.57
6406.00	39.700	278.900	5884.84	-720.58	244.64	-1511.50	1802380.77	290212.13	39°17'40.904"N	80°11'53.738"W	1531.17	279.194	2.17
6500.00	40.500	279.300	5956.74	-748.99	254.22	-1571.28	1802320.99	290221.71	39°17'40.994"N	80°11'54.499"W	1591.71	279.190	0.89
6595.00	40.700	279.000	6028.87	-778.04	264.05	-1632.32	1802259.95	290231.54	39°17'41.086"N	80°11'55.276"W	1653.54	279.189	0.29
6689.00	39.300	278.100	6100.88	-805.88	273.04	-1692.06	1802200.21	290240.52	39°17'41.171"N	80°11'56.037"W	1713.95	279.166	1.61
6783.00	40.200	277.000	6173.15	-832.63	280.93	-1751.65	1802140.63	290248.42	39°17'41.244"N	80°11'56.796"W	1774.03	279.111	1.22
6878.00	39.400	277.300	6246.14	-859.31	288.50	-1811.99	1802080.29	290255.98	39°17'41.314"N	80°11'57.564"W	1834.81	279.046	0.87
6972.00	41.800	278.600	6317.51	-886.93	296.97	-1872.56	1802019.72	290264.46	39°17'41.393"N	80°11'58.335"W	1895.96	279.012	2.71
7066.00	41.600	275.000	6387.70	-914.02	304.38	-1934.63	1801957.66	290271.86	39°17'41.462"N	80°11'59.126"W	1958.43	278.941	2.56
7161.00	40.700	275.300	6459.23	-939.48	309.99	-1996.89	1801895.40	290277.47	39°17'41.512"N	80°11'59.918"W	2020.81	278.824	0.97
7255.00	39.900	274.700	6530.93	-964.09	315.29	-2057.46	1801834.83	290282.78	39°17'41.560"N	80°12'00.689"W	2081.47	278.712	0.95
7349.00	38.600	274.300	6603.72	-987.70	319.96	-2116.75	1801775.55	290287.44	39°17'41.602"N	80°12'01.443"W	2140.79	278.596	1.41
7444.00	37.100	277.100	6678.73	-1011.92	325.72	-2174.74	1801717.56	290293.21	39°17'41.654"N	80°12'02.182"W	2198.99	278.518	2.40
7473.00	36.600	278.460	6701.94	-1019.72	328.08	-2191.97	1801700.33	290295.56	39°17'41.676"N	80°12'02.401"W	2216.38	278.512	3.30
7568.00	35.990	278.310	6778.51	-1045.48	336.28	-2247.60	1801644.70	290303.76	39°17'41.753"N	80°12'03.109"W	2272.62	278.509	0.65
7600.00	34.100	277.540	6804.71	-1053.77	338.81	-2265.80	1801626.50	290306.30	39°17'41.776"N	80°12'03.341"W	2290.99	278.505	6.07
7631.00	33.930	275.190	6830.40	-1061.16	340.74	-2283.03	1801609.27	290308.22	39°17'41.794"N	80°12'03.561"W	2308.32	278.489	4.28
7663.00	33.890	270.680	6856.96	-1067.79	341.65	-2300.85	1801591.45	290309.13	39°17'41.802"N	80°12'03.787"W	2326.08	278.446	7.86
7710.00	33.890	259.530	6896.02	-1074.10	339.42	-2326.86	1801565.44	290306.91	39°17'41.778"N	80°12'04.118"W	2351.49	278.299	13.21
7757.00	33.860	248.970	6935.07	-1075.53	332.34	-2351.99	1801540.31	290299.82	39°17'41.706"N	80°12'04.437"W	2375.36	278.043	12.51
7806.00	35.210	238.700	6975.47	-1071.98	320.09	-2376.83	1801515.48	290287.57	39°17'41.583"N	80°12'04.751"W	2398.28	277.670	12.18
7851.00	36.860	234.160	7011.87	-1065.25	305.44	-2398.86	1801493.45	290272.93	39°17'41.436"N	80°12'05.030"W	2418.22	277.256	6.97
7900.00	37.840	229.180	7050.83	-1055.34	287.01	-2422.15	1801470.16	290254.49	39°17'41.252"N	80°12'05.325"W	2439.10	276.758	6.48

04/01/2016

13/Oct/2015



Actual Wellpath Report

515746 ST01 AWP Proj: 15614'

Page 6 of 11



Where energy meets innovation.

REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
7945.00	38.500	223.060	7086.22	-1043.59	267.74	-2442.17	1801450.14	290235.23	39°17'41.060"N	80°12'05.577"W	2456.80	276.257	8.53
7994.00	39.600	216.650	7124.29	-1027.57	244.06	-2461.91	1801430.40	290211.55	39°17'40.825"N	80°12'05.826"W	2473.98	275.661	8.54
8040.00	40.370	212.060	7159.54	-1009.88	219.67	-2478.57	1801413.74	290187.16	39°17'40.582"N	80°12'06.036"W	2488.29	275.065	6.63
8087.00	42.070	207.840	7194.90	-989.49	192.84	-2494.01	1801398.30	290160.33	39°17'40.316"N	80°12'06.229"W	2501.46	274.421	6.93
8134.00	44.280	205.130	7229.18	-966.89	164.05	-2508.34	1801383.98	290131.54	39°17'40.031"N	80°12'06.409"W	2513.69	273.742	6.14
8183.00	47.970	204.350	7263.13	-941.32	131.97	-2523.11	1801369.20	290099.47	39°17'39.712"N	80°12'06.593"W	2526.56	272.994	7.62
8229.00	51.480	202.560	7292.87	-915.37	99.78	-2537.06	1801355.25	290067.28	39°17'39.393"N	80°12'06.768"W	2539.02	272.252	8.19
8275.00	53.850	197.890	7320.77	-886.99	65.47	-2549.68	1801342.64	290032.97	39°17'39.053"N	80°12'06.925"W	2550.52	271.471	9.57
8323.00	55.400	191.240	7348.58	-854.35	27.62	-2559.49	1801332.83	289995.12	39°17'38.678"N	80°12'07.046"W	2559.64	270.618	11.75
8370.00	56.020	183.930	7375.08	-819.63	-10.83	-2564.60	1801327.72	289956.67	39°17'38.298"N	80°12'07.107"W	2564.62	269.758	12.91
8416.00	57.960	179.790	7400.15	-783.56	-49.37	-2565.84	1801326.48	289918.14	39°17'37.917"N	80°12'07.119"W	2566.31	268.898	8.64
8464.00	62.740	179.270	7423.89	-743.99	-91.07	-2565.49	1801326.83	289876.44	39°17'37.505"N	80°12'07.110"W	2567.10	267.967	10.00
8511.00	66.680	179.090	7443.96	-703.60	-133.55	-2564.88	1801327.43	289833.96	39°17'37.085"N	80°12'07.098"W	2568.35	267.019	8.39
8558.00	70.130	178.220	7461.26	-661.93	-177.23	-2563.85	1801328.46	289790.28	39°17'36.653"N	80°12'07.081"W	2569.97	266.046	7.54
8605.00	73.830	177.120	7475.80	-619.10	-221.88	-2562.03	1801330.29	289745.63	39°17'36.212"N	80°12'07.053"W	2571.62	265.050	8.18
8653.00	77.130	175.160	7487.83	-574.22	-268.23	-2558.90	1801333.42	289699.28	39°17'35.754"N	80°12'07.009"W	2572.92	264.016	7.93
8699.00	79.850	171.990	7497.01	-530.22	-313.01	-2553.85	1801338.47	289654.50	39°17'35.312"N	80°12'06.940"W	2572.96	263.012	8.98
8749.00	81.320	169.130	7505.19	-481.57	-361.67	-2545.75	1801346.56	289605.85	39°17'34.832"N	80°12'06.832"W	2571.32	261.914	6.36
8794.00	82.190	165.430	7511.65	-437.30	-405.10	-2535.95	1801356.36	289562.42	39°17'34.403"N	80°12'06.703"W	2568.10	260.924	8.36
8844.00	83.220	161.590	7518.00	-387.75	-452.64	-2521.87	1801370.44	289514.88	39°17'33.934"N	80°12'06.520"W	2562.17	259.824	7.89
8888.00	87.050	159.570	7521.73	-343.93	-493.98	-2507.30	1801385.01	289473.54	39°17'33.527"N	80°12'06.330"W	2555.50	258.854	9.83
8983.00	89.880	158.100	7524.27	-249.05	-582.53	-2473.01	1801419.30	289385.00	39°17'32.654"N	80°12'05.885"W	2540.70	256.745	3.36
9077.00	89.940	158.700	7524.42	-155.15	-669.93	-2438.41	1801453.90	289297.60	39°17'31.793"N	80°12'05.436"W	2528.76	254.638	0.64
9171.00	89.910	158.790	7524.54	-61.23	-757.53	-2404.33	1801487.97	289210.00	39°17'30.930"N	80°12'04.994"W	2520.85	252.512	0.10
9266.00	90.060	158.080	7524.57	33.66	-845.88	-2369.41	1801522.89	289121.66	39°17'30.060"N	80°12'04.541"W	2515.88	250.353	0.76

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Actual Wellpath Report

515746 ST01 AWP Proj: 15614'

Page 7 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
9359.00	89.940	156.840	7524.57	126.47	-931.78	-2333.77	1801558.54	289035.77	39°17'29.213"N	80°12'04.080"W	2512.90	248.235	1.34
9454.00	89.850	157.090	7524.74	221.22	-1019.20	-2296.59	1801595.71	288948.34	39°17'28.352"N	80°12'03.598"W	2512.59	246.069	0.28
9548.00	89.320	158.540	7525.42	315.06	-1106.24	-2261.10	1801631.20	288861.31	39°17'27.495"N	80°12'03.138"W	2517.21	243.930	1.64
9642.00	88.860	158.290	7526.92	408.94	-1193.63	-2226.52	1801665.77	288773.92	39°17'26.634"N	80°12'02.690"W	2526.30	241.804	0.56
9737.00	88.980	158.530	7528.71	503.82	-1281.95	-2191.57	1801700.72	288685.60	39°17'25.763"N	80°12'02.236"W	2538.98	239.675	0.28
9830.00	88.460	161.050	7530.78	596.76	-1369.20	-2159.46	1801732.84	288598.36	39°17'24.904"N	80°12'01.819"W	2556.94	237.623	2.77
9925.00	88.460	164.500	7533.34	691.67	-1459.89	-2131.34	1801760.96	288507.67	39°17'24.009"N	80°12'01.453"W	2583.39	235.590	3.63
10019.00	87.970	165.270	7536.27	785.42	-1550.59	-2106.84	1801785.45	288416.97	39°17'23.115"N	80°12'01.132"W	2615.94	233.648	0.97
10114.00	88.180	165.340	7539.46	880.12	-1642.43	-2082.76	1801809.54	288325.14	39°17'22.209"N	80°12'00.817"W	2652.44	231.741	0.23
10208.00	88.890	164.610	7541.86	973.87	-1733.19	-2058.39	1801833.90	288234.39	39°17'21.314"N	80°12'00.498"W	2690.90	229.902	1.08
10303.00	88.000	158.400	7544.44	1068.79	-1823.21	-2028.29	1801864.00	288144.38	39°17'20.427"N	80°12'00.106"W	2727.27	228.048	6.60
10397.00	87.540	154.380	7548.10	1162.38	-1909.25	-1990.67	1801901.61	288058.33	39°17'19.579"N	80°11'59.619"W	2758.27	226.196	4.30
10491.00	87.260	153.540	7552.36	1255.55	-1993.62	-1949.45	1801942.83	287973.96	39°17'18.748"N	80°11'59.086"W	2788.35	224.358	0.94
10586.00	87.020	160.060	7557.11	1350.11	-2080.79	-1912.09	1801980.19	287886.81	39°17'17.890"N	80°11'58.603"W	2825.91	222.581	6.86
10680.00	87.110	161.590	7561.92	1443.98	-2169.45	-1881.26	1802011.02	287798.14	39°17'17.016"N	80°11'58.202"W	2871.53	220.931	1.63
10775.00	86.430	161.520	7567.28	1538.83	-2259.43	-1851.25	1802041.03	287708.17	39°17'16.129"N	80°11'57.811"W	2920.98	219.329	0.72
10869.00	86.090	162.000	7573.41	1632.62	-2348.51	-1821.89	1802070.39	287619.09	39°17'15.251"N	80°11'57.429"W	2972.34	217.803	0.62
10963.00	86.610	162.940	7579.39	1726.40	-2437.97	-1793.64	1802098.64	287529.64	39°17'14.369"N	80°11'57.061"W	3026.68	216.342	1.14
11057.00	87.510	163.130	7584.21	1820.22	-2527.76	-1766.25	1802126.03	287439.86	39°17'13.483"N	80°11'56.704"W	3083.69	214.944	0.98
11152.00	88.610	161.760	7587.43	1915.14	-2618.28	-1737.61	1802154.67	287349.34	39°17'12.591"N	80°11'56.330"W	3142.40	213.570	1.85
11246.00	88.590	161.260	7589.73	2009.11	-2707.40	-1707.81	1802184.47	287260.22	39°17'11.712"N	80°11'55.943"W	3201.03	212.243	0.53
11340.00	88.680	159.100	7591.96	2103.07	-2795.80	-1675.95	1802216.33	287171.83	39°17'10.841"N	80°11'55.529"W	3259.64	210.941	2.30
11434.00	88.650	158.650	7594.16	2196.97	-2883.46	-1642.08	1802250.20	287084.17	39°17'09.977"N	80°11'55.089"W	3318.24	209.661	0.48
11528.00	88.680	164.330	7596.35	2290.90	-2972.53	-1612.25	1802280.02	286995.10	39°17'09.099"N	80°11'54.701"W	3381.61	208.475	6.04
11623.00	87.970	164.280	7599.12	2385.71	-3063.95	-1586.57	1802305.70	286903.69	39°17'08.198"N	80°11'54.365"W	3450.36	207.376	0.75

04/01/2016

13/Oct/2015



Actual Wellpath Report

515746 ST01 AWP Proj: 15614'

Page 8 of 11



Where energy meets innovation.

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Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWP
Facility	RSM118	Sidetrack from	515746 AWP at 7444.00 MD

WELLPATH DATA (193 stations)

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11718.00	89.170	159.560	7601.50	2480.65	-3154.21	-1557.10	1802335.17	286813.44	39°17'07.308"N	80°11'53.982"W	3517.61	206.274	5.12
11812.00	88.550	160.550	7603.37	2574.61	-3242.55	-1525.04	1802367.23	286725.10	39°17'06.437"N	80°11'53.565"W	3583.28	205.189	1.24
11906.00	88.580	161.830	7605.72	2668.58	-3331.50	-1494.74	1802397.52	286636.15	39°17'05.561"N	80°11'53.171"W	3651.46	204.164	1.36
12001.00	88.460	161.870	7608.17	2763.54	-3421.74	-1465.16	1802427.10	286545.91	39°17'04.671"N	80°11'52.786"W	3722.23	203.180	0.13
12095.00	88.710	159.120	7610.50	2857.50	-3510.31	-1433.79	1802458.48	286457.35	39°17'03.798"N	80°11'52.378"W	3791.84	202.218	2.94
12190.00	88.650	155.590	7612.68	2952.25	-3597.95	-1397.23	1802495.04	286369.71	39°17'02.935"N	80°11'51.905"W	3859.73	201.223	3.72
12284.00	87.880	156.680	7615.53	3045.85	-3683.87	-1359.21	1802533.05	286283.79	39°17'02.088"N	80°11'51.413"W	3926.62	200.252	1.42
12378.00	87.690	161.120	7619.17	3139.68	-3771.48	-1325.41	1802566.85	286196.19	39°17'01.225"N	80°11'50.974"W	3997.60	199.363	4.72
12472.00	87.660	165.210	7622.98	3233.53	-3861.36	-1298.21	1802594.05	286106.31	39°17'00.339"N	80°11'50.620"W	4073.75	198.583	4.35
12566.00	87.630	163.800	7626.84	3327.28	-3951.86	-1273.12	1802619.14	286015.81	39°16'59.446"N	80°11'50.292"W	4151.88	197.857	1.50
12661.00	87.720	158.680	7630.70	3422.17	-4041.71	-1242.60	1802649.65	285925.97	39°16'58.561"N	80°11'49.895"W	4228.42	197.090	5.39
12755.00	88.890	156.200	7633.48	3515.93	-4128.47	-1206.56	1802685.69	285839.21	39°16'57.706"N	80°11'49.428"W	4301.17	196.291	2.92
12849.00	88.890	157.760	7635.30	3609.66	-4214.97	-1169.81	1802722.44	285752.72	39°16'56.854"N	80°11'48.952"W	4374.29	195.511	1.66
12944.00	88.860	158.940	7637.17	3704.53	-4303.25	-1134.77	1802757.48	285664.44	39°16'55.984"N	80°11'48.498"W	4450.35	194.773	1.24
13038.00	89.750	160.810	7638.31	3798.50	-4391.50	-1102.43	1802789.82	285576.20	39°16'55.114"N	80°11'48.078"W	4527.76	194.092	2.20
13132.00	88.710	162.520	7639.57	3892.48	-4480.71	-1072.86	1802819.38	285486.99	39°16'54.235"N	80°11'47.693"W	4607.37	193.465	2.13
13227.00	88.740	162.950	7641.68	3987.42	-4571.41	-1044.68	1802847.57	285396.29	39°16'53.341"N	80°11'47.325"W	4689.26	192.872	0.45
13321.00	88.710	163.200	7643.78	4081.34	-4661.32	-1017.32	1802874.93	285306.39	39°16'52.454"N	80°11'46.969"W	4771.04	192.312	0.27
13415.00	89.380	160.720	7645.34	4175.31	-4750.68	-988.21	1802904.03	285217.04	39°16'51.573"N	80°11'46.590"W	4852.37	191.751	2.73
13510.00	89.480	159.950	7646.29	4270.29	-4840.13	-956.25	1802936.00	285127.59	39°16'50.691"N	80°11'46.174"W	4933.69	191.176	0.82
13604.00	88.620	158.070	7647.85	4364.21	-4927.88	-922.58	1802969.66	285039.84	39°16'49.827"N	80°11'45.738"W	5013.49	190.604	2.20
13698.00	88.150	159.490	7650.50	4458.09	-5015.47	-888.57	1803003.67	284952.26	39°16'48.964"N	80°11'45.297"W	5093.57	190.047	1.59
13783.00	87.540	160.720	7653.69	4543.02	-5095.33	-859.67	1803032.57	284872.39	39°16'48.177"N	80°11'44.921"W	5167.35	189.577	1.61
13877.00	87.600	161.940	7657.68	4636.93	-5184.31	-829.60	1803062.63	284783.43	39°16'47.299"N	80°11'44.530"W	5250.26	189.092	1.30
13972.00	87.600	166.470	7661.66	4731.69	-5275.61	-803.77	1803088.46	284692.12	39°16'46.399"N	80°11'44.193"W	5336.49	188.663	4.76

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Actual Wellpath Report

515746 ST01 AWP Proj: 15614'

Page 9 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

WELLPATH DATA (193 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
14066.00	88.090	165.040	7665.19	4825.31	-5366.66	-780.66	1803111.57	284601.08	39°16'45.501"N	80°11'43.890"W	5423.14	188.276	1.61
14160.00	88.120	162.390	7668.30	4919.15	-5456.83	-754.32	1803137.91	284510.91	39°16'44.612"N	80°11'43.546"W	5508.72	187.870	2.82
14254.00	88.590	161.040	7671.00	5013.11	-5546.04	-724.84	1803167.39	284421.70	39°16'43.732"N	80°11'43.162"W	5593.21	187.446	1.52
14349.00	88.620	160.920	7673.31	5108.08	-5635.83	-693.89	1803198.34	284331.92	39°16'42.847"N	80°11'42.760"W	5678.39	187.019	0.13
14443.00	88.580	161.500	7675.61	5202.05	-5724.79	-663.62	1803228.61	284242.96	39°16'41.970"N	80°11'42.366"W	5763.13	186.612	0.62
14537.00	88.860	161.130	7677.71	5296.03	-5813.82	-633.51	1803258.71	284153.94	39°16'41.093"N	80°11'41.975"W	5848.23	186.219	0.49
14631.00	88.890	162.660	7679.56	5390.00	-5903.14	-604.31	1803287.92	284064.62	39°16'40.212"N	80°11'41.594"W	5933.99	185.845	1.63
14726.00	88.550	163.160	7681.68	5484.93	-5993.92	-576.40	1803315.83	283973.84	39°16'39.317"N	80°11'41.231"W	6021.57	185.493	0.64
14820.00	88.680	161.640	7683.95	5578.87	-6083.50	-547.98	1803344.24	283884.28	39°16'38.434"N	80°11'40.860"W	6108.13	185.147	1.62
14914.00	88.980	161.610	7685.87	5672.85	-6172.68	-518.36	1803373.86	283795.09	39°16'37.555"N	80°11'40.475"W	6194.41	184.800	0.32
15009.00	88.000	161.220	7688.37	5767.81	-6262.70	-488.09	1803404.13	283705.08	39°16'36.667"N	80°11'40.081"W	6281.69	184.456	1.11
15103.00	89.380	159.880	7690.52	5861.78	-6351.31	-456.80	1803435.42	283616.48	39°16'35.794"N	80°11'39.675"W	6367.71	184.114	2.05
15208.00	91.480	161.500	7689.73	5966.76	-6450.39	-422.08	1803470.14	283517.40	39°16'34.817"N	80°11'39.223"W	6464.18	183.744	2.53
15302.00	91.570	161.830	7687.23	6060.73	-6539.58	-392.52	1803499.69	283428.21	39°16'33.938"N	80°11'38.839"W	6551.35	183.435	0.36
15396.00	89.140	160.850	7686.65	6154.72	-6628.63	-362.45	1803529.76	283339.16	39°16'33.060"N	80°11'38.448"W	6638.53	183.130	2.79
15490.00	88.280	160.730	7688.77	6248.69	-6717.38	-331.53	1803560.68	283250.42	39°16'32.186"N	80°11'38.046"W	6725.55	182.825	0.92
15585.00	88.180	162.850	7691.70	6343.63	-6807.57	-301.86	1803590.35	283160.23	39°16'31.296"N	80°11'37.660"W	6814.26	182.539	2.23
15614.00	88.180	162.850	7692.62	6372.61	-6835.27	-293.31	1803598.90	283132.54	39°16'31.023"N	80°11'37.548"W	6841.56	182.457	0.00

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515746 ST01 AWP Proj: 15614'

Page 10 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT	Slot	Slot 01
Area	Taylor County, WV	Well	515746 ST01
Field	Taylor	Wellbore	515746 ST01 AWB
Facility	RSM118	Sidetrack from	515746 AWB at 7444.00 MD

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
515746 ST01 BHL Rev-1		7540.00	-6837.20	-299.31	1803592.90	283130.60	39°16'31.004"N	80°11'37.624"W	point
515746 ST01 LP Rev-1		7540.00	-494.04	-2500.11	1801392.20	289473.48	39°17'33.527"N	80°12'06.239"W	point
515746 ST01 Turn Rev-1		7540.00	-1938.70	-1974.60	1801917.69	288028.89	39°17'19.289"N	80°11'59.412"W	point
Point-19		7540.00	-6760.65	-170.29	1803721.92	283207.15	39°16'31.770"N	80°11'35.991"W	point
Point-20		7540.00	-6914.53	-427.83	1803464.39	283053.28	39°16'30.230"N	80°11'39.251"W	point
Point-21		7540.00	-3644.68	-1461.28	1802430.99	286322.98	39°17'02.468"N	80°11'52.715"W	point
Point-22		7540.00	-1550.35	-2223.56	1801668.74	288417.22	39°17'23.108"N	80°12'02.616"W	point

WELLPATH COMPOSITION - Ref Wellbore: 515746 ST01 AWB Ref Wellpath: 515746 ST01 AWP Proj: 15614'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
23.00	3762.00	Gyrodata standard - Continuous gyro	01 Gyro Surveys (110'-3762')	515746 AWB
3762.00	7444.00	ISCWSA MWD, Rev. 2 (Standard)	02_Phoenix MWD (3762')(3800'-8206')	515746 AWB
7444.00	15585.00	NaviTrak (AT Curve Short Spaced)	03_BHI AT Curve <8-1/2"> (7444')(7473'-15585')	515746 ST01 AWB
15585.00	15614.00	Blind Drilling (std)	Projection to bit	515746 ST01 AWB

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EQT

Location: Taylor County, WV
Field: Taylor
Facility: RSM118

Slot: Slot 01
Well: 515746 ST01
Wellbore: 515746 ST01 PWB



Plot reference wellpath is 515746 ST01 PWB Rev A.1	
True vertical depths are referenced to Savanna 803 (RKB)	Grid System: NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
Measured depths are referenced to Savanna 803 (RKB)	North Reference: Grid north
Savanna 803 (RKB) to Mean Sea Level: 1483 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot 01): -1455 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gpt/bra on 14/01/2015

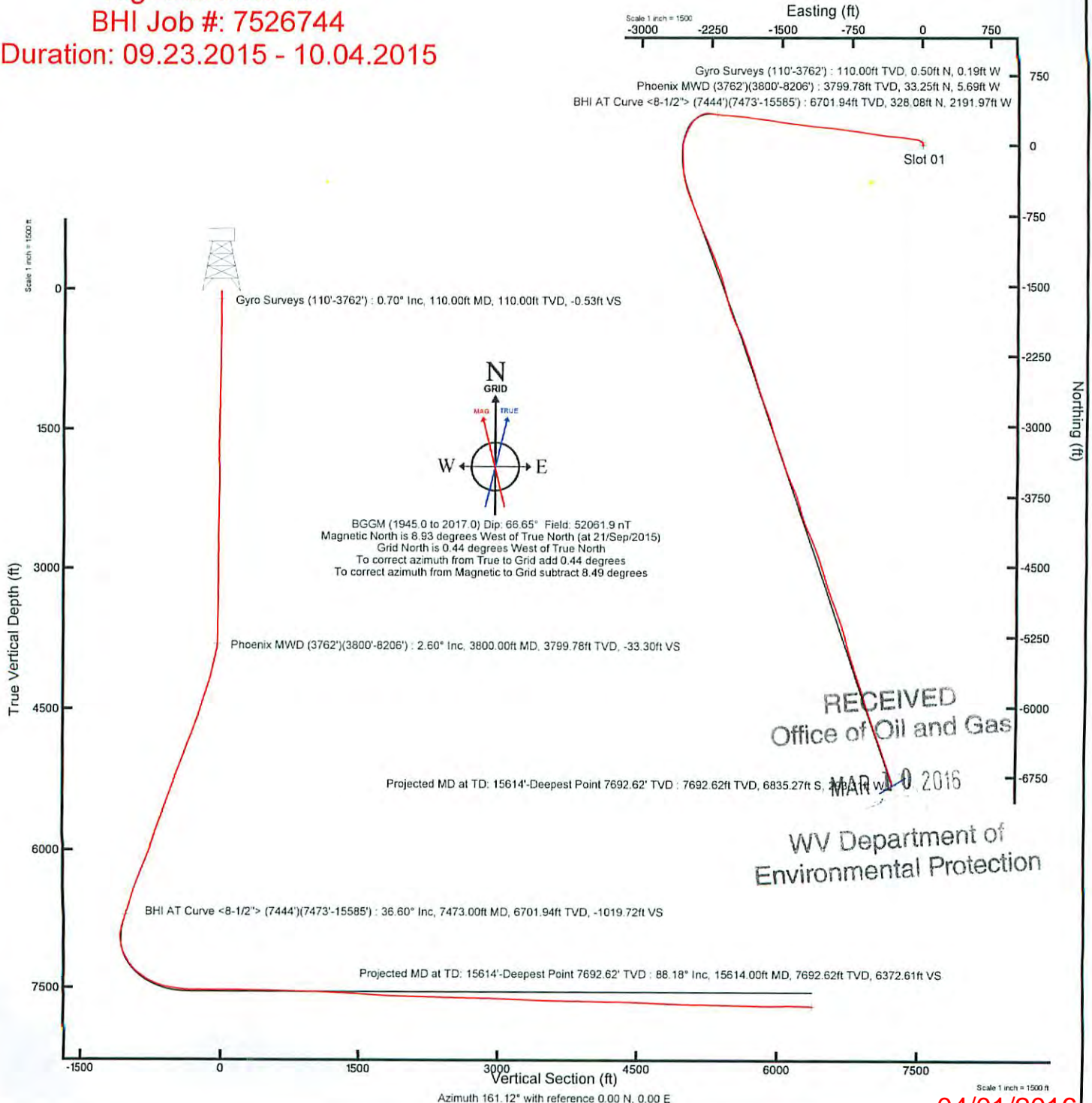
Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
RSM118	1803892.200	289997.500	39°17'38.602"N	80°11'34.489"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
Slot 01	0.00	0.00	1803892.200	289997.500	39°17'38.602"N 80°11'34.489"W
Savanna 803 (RKB) to Mud line (At Slot: Slot 01)					23ft
Mean Sea Level to Mud line (At Slot: Slot 01)					-1455ft
Savanna 803 (RKB) to Mean Sea Level					1488ft

API: 47-091-01319-0100

Rig: Savanna 803

BHI Job #: 7526744

Duration: 09.23.2015 - 10.04.2015



04/01/2016