



EQT Production - Marcellus

Doddridge County, WV Grid

Doddridge County 515940

Well #515940

Main Wellbore

Design: 515940 As Drilled Surveys

Standard Survey Report

08 June, 2015



Where energy meets innovation.



PHX
Survey Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Doddridge County 515940
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1193.0usft
Project:	Doddridge County, WV Grid	MD Reference:	KB@23 @ 1193.0usft
Site:	Doddridge County 515940	North Reference:	Grid
Well:	Well #515940	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515940 As Drilled Surveys		

Project: Doddridge County, WV Grid			
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		Using geodetic scale factor

Site: Doddridge County 515940					
Site Position:	From: Map	Northing:	237,750.70 usft	Latitude:	39.15
		Easting:	1,627,299.30 usft	Longitude:	-80.81
Position Uncertainty:	0 0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.84 "

Well: Well #515940						
Well Position	+N-S	0.0 usft	Northing:	237,750.70 usft	Latitude:	39° 8' 43.012 N
	+E-W	0.0 usft	Easting:	1,627,299.30 usft	Longitude:	80° 48' 50.789 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	1 170.0 usft	

Wellbore: Main Wellbore					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/21/2015	-7.72	66.60	52,124

Design: 515940 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	358.86	

Survey Program		Date	6/8/2015		
From (')	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	3,807.0	515940 Gyros (Main Wellbore)	GYD_DP_MS	Gyrodata gyro-compassing and drop	
0.00	11,762.0	515940 PHX MWD (Main Wellbore)	PHX+MWD+HDGM	PHX+OWSG MWD + HDGM	

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	-1,193.0	0.0	0.0	0.0	0.00	0.00	0.00
110.0	0.24	138.80	110.0	-1,083.0	-0.2	0.2	-0.2	0.22	0.22	0.00
210.0	0.21	141.45	210.0	-983.0	-0.5	0.4	-0.5	0.03	-0.03	2.65
310.0	0.22	145.22	310.0	-883.0	-0.8	0.6	-0.8	0.02	0.01	3.77
410.0	0.25	144.52	410.0	-783.0	-1.1	0.9	-1.1	0.04	0.04	-0.70
510.0	0.18	158.73	510.0	-683.0	-1.4	1.1	-1.5	0.10	-0.08	14.21
610.0	0.14	149.86	610.0	-583.0	-1.7	1.2	-1.7	0.05	-0.04	-8.87
710.0	0.15	139.98	710.0	-483.0	-1.9	1.3	-1.9	0.03	0.01	-9.88



PHX
Survey Report



Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Doddridge County 515940
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1153 Bush
Project:	Doddridge County, WV Grid	MD Reference:	KB@23 @ 1193 Bush
Site:	Doddridge County 515940	North Reference:	Grid
Well:	Well #515940	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515940 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	0.11	131.45	810.0	-383.0	-2.1	1.5	-2.1	0.04	-0.04	-8.53
910.0	0.09	139.52	910.0	-283.0	-2.2	1.6	-2.2	0.02	-0.02	8.07
1,010.0	0.05	72.18	1,010.0	-183.0	-2.2	1.7	-2.3	0.08	-0.04	-67.34
1,110.0	0.15	355.15	1,110.0	-83.0	-2.1	1.7	-2.1	0.15	0.10	-77.03
1,210.0	0.22	340.32	1,210.0	17.0	-1.8	1.6	-1.8	0.08	0.07	-14.83
1,310.0	0.15	329.55	1,310.0	117.0	-1.5	1.5	-1.5	0.08	-0.07	-10.77
1,410.0	0.16	321.19	1,410.0	217.0	-1.3	1.4	-1.3	0.02	0.01	-8.36
1,510.0	0.18	326.13	1,510.0	317.0	-1.0	1.2	-1.1	0.02	0.02	4.94
1,610.0	0.18	309.47	1,610.0	417.0	-0.8	1.0	-0.8	0.05	0.00	-16.66
1,710.0	0.65	287.22	1,710.0	517.0	-0.5	0.3	-0.5	0.49	0.47	-22.25
1,810.0	0.94	286.12	1,810.0	617.0	-0.1	-1.0	-0.1	0.29	0.29	-1.10
1,910.0	1.00	287.07	1,910.0	717.0	0.3	-2.6	0.4	0.06	0.06	0.95
2,010.0	1.03	294.57	2,010.0	817.0	1.0	-4.3	1.1	0.14	0.03	7.50
2,110.0	0.95	298.49	2,109.9	916.9	1.7	-5.8	1.9	0.10	-0.08	3.92
2,210.0	0.83	313.07	2,209.9	1,016.9	2.6	-7.1	2.8	0.26	-0.12	14.58
2,310.0	0.81	313.61	2,309.9	1,116.9	3.6	-8.1	3.8	0.02	-0.02	0.54
2,410.0	0.82	313.96	2,409.9	1,216.9	4.6	-9.2	4.8	0.01	0.01	0.35
2,510.0	0.81	319.00	2,509.9	1,316.9	5.6	-10.1	5.8	0.07	-0.01	5.04
2,610.0	0.75	317.44	2,609.9	1,416.9	6.6	-11.0	6.9	0.06	-0.06	-1.56
2,710.0	0.83	315.89	2,709.9	1,516.9	7.7	-12.0	7.9	0.08	0.08	-1.55
2,810.0	0.84	311.50	2,809.9	1,616.9	8.7	-13.0	8.9	0.06	0.01	-4.39
2,910.0	0.88	316.83	2,909.9	1,716.9	9.7	-14.1	10.0	0.09	0.04	5.33
3,010.0	0.95	316.36	3,009.8	1,816.8	10.9	-15.2	11.2	0.07	0.07	-0.47
3,110.0	0.61	330.43	3,109.8	1,916.8	11.9	-16.1	12.2	0.39	-0.34	14.07
3,210.0	0.39	337.89	3,209.8	2,016.8	12.7	-16.4	13.0	0.23	-0.22	7.46
3,310.0	0.36	340.83	3,309.8	2,116.8	13.3	-16.7	13.6	0.04	-0.03	2.94
3,410.0	0.27	334.92	3,409.8	2,216.8	13.8	-16.9	14.2	0.10	-0.09	-5.91
3,510.0	0.16	305.18	3,509.8	2,316.8	14.1	-17.1	14.5	0.15	-0.11	-29.74
3,610.0	0.25	321.90	3,609.8	2,416.8	14.4	-17.3	14.7	0.11	0.09	16.72
3,710.0	0.22	303.79	3,709.8	2,516.8	14.6	-17.6	15.0	0.08	-0.03	-18.11
Gyro Tie In=3807' MD										
3,807.0	0.41	286.58	3,806.8	2,613.8	14.9	-18.1	15.2	0.22	0.20	-17.74
KOP=3877' MD										
3,877.0	0.30	306.60	3,876.8	2,683.8	15.0	-18.5	15.4	0.23	-0.16	28.60
3,940.0	2.60	104.60	3,939.8	2,746.8	14.8	-17.3	15.1	4.57	3.65	250.79
3,972.0	6.70	104.90	3,971.7	2,778.7	14.1	-14.7	14.4	12.81	12.81	0.94
4,004.0	10.60	102.90	4,003.3	2,810.3	13.0	-10.1	13.2	12.22	12.19	-6.25
4,035.0	13.10	103.30	4,033.7	2,840.7	11.5	-3.9	11.6	8.07	8.06	1.29
4,067.0	15.90	106.20	4,064.6	2,871.6	9.5	3.9	9.4	9.04	8.75	9.06
4,099.0	18.70	107.90	4,095.2	2,902.2	6.7	13.0	6.4	8.89	8.75	5.31
4,130.0	21.00	107.80	4,124.3	2,931.3	3.4	23.0	3.0	7.42	7.42	-0.32
4,160.0	23.30	106.20	4,152.1	2,959.1	0.1	33.8	-0.5	7.93	7.67	-5.33
4,192.0	26.80	105.90	4,181.1	2,988.1	-3.6	46.8	-4.5	10.94	10.94	-0.94



PHX
Survey Report



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Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1193.0usf
Project:	Doddridge County, WV Gnd	MD Reference:	KB@23 @ 1193.0usf
Site:	Doddridge County 515940	North Reference:	Grid
Well:	Well #315940	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515940 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)
4,223.0	30.10	105.90	4,208.4	3,015.4	-7.6	61.0	-8.9	10.65	10.65	0.00
4,255.0	32.50	105.90	4,235.7	3,042.7	-12.2	77.0	-13.7	7.50	7.50	0.00
4,286.0	35.40	105.00	4,261.4	3,068.4	-16.8	93.7	-18.7	9.49	9.35	-2.90
4,349.0	39.10	105.20	4,311.6	3,118.6	-26.7	130.5	-29.3	5.88	5.87	0.32
4,444.0	40.40	103.30	4,384.6	3,191.6	-41.7	189.4	-45.5	1.87	1.37	-2.00
4,538.0	39.00	101.40	4,456.9	3,263.9	-54.5	248.0	-59.5	1.97	-1.49	-2.02
4,632.0	39.30	106.20	4,529.8	3,336.8	-68.7	305.6	-74.8	3.24	0.32	5.11
4,727.0	40.40	104.30	4,602.8	3,409.8	-84.7	364.3	-92.0	1.73	1.16	-2.00
4,822.0	40.40	107.50	4,675.1	3,482.1	-101.6	423.5	-110.0	2.18	0.00	3.37
4,916.0	40.50	108.20	4,746.7	3,553.7	-120.2	481.6	-129.8	0.49	0.11	0.74
5,011.0	42.30	105.70	4,817.9	3,624.9	-138.5	541.7	-149.3	2.57	1.89	-2.63
5,106.0	40.60	104.70	4,889.1	3,696.1	-155.0	602.4	-167.0	1.92	-1.79	-1.05
5,201.0	41.60	107.10	4,960.7	3,767.7	-172.1	662.4	-185.3	1.97	1.05	2.53
5,296.0	40.30	105.50	5,032.5	3,839.5	-189.6	722.2	-204.0	1.76	-1.37	-1.68
5,391.0	42.30	107.10	5,103.8	3,910.8	-207.2	782.3	-222.8	2.38	2.11	1.68
5,486.0	41.90	105.00	5,174.3	3,981.3	-224.9	843.5	-241.7	1.54	-0.42	-2.21
5,581.0	41.70	104.30	5,245.1	4,052.1	-240.9	904.8	-258.9	0.53	-0.21	-0.74
5,676.0	41.10	102.90	5,316.4	4,123.4	-255.6	965.8	-274.9	1.16	-0.63	-1.47
5,771.0	40.60	104.80	5,388.3	4,195.3	-270.5	1,026.2	-291.0	1.41	-0.53	2.00
5,866.0	39.60	102.80	5,460.9	4,267.9	-285.1	1,085.6	-306.8	1.72	-1.05	-2.11
5,961.0	41.80	106.20	5,533.0	4,340.0	-300.7	1,145.5	-323.5	3.29	2.32	3.58
6,056.0	41.00	104.50	5,604.2	4,411.2	-317.3	1,206.1	-341.3	1.45	-0.84	-1.79
6,151.0	40.20	103.10	5,676.4	4,483.4	-332.1	1,266.1	-357.3	1.28	-0.84	-1.47
6,246.0	39.70	105.50	5,749.2	4,556.2	-347.1	1,325.2	-373.5	1.71	-0.53	2.53
6,340.0	41.00	106.80	5,820.8	4,627.8	-364.0	1,383.7	-391.6	1.65	1.38	1.38
6,435.0	40.30	105.30	5,892.9	4,699.9	-381.2	1,443.2	-409.9	1.27	-0.74	-1.58
6,498.0	40.00	100.00	5,941.1	4,748.1	-390.1	1,482.8	-419.6	5.44	-0.48	-8.41
6,529.0	39.70	94.60	5,964.9	4,771.9	-392.6	1,502.5	-422.5	11.20	-0.97	-17.42
6,561.0	39.60	88.20	5,989.5	4,796.5	-393.1	1,522.8	-423.4	12.76	-0.31	-20.00
6,593.0	38.70	82.50	6,014.4	4,821.4	-391.5	1,543.0	-422.2	11.59	-2.81	-17.81
6,624.0	37.20	77.40	6,038.8	4,845.8	-388.1	1,561.7	-419.3	11.21	-4.84	-16.45
6,655.0	36.30	72.30	6,063.6	4,870.6	-383.3	1,579.6	-414.8	10.26	-2.90	-16.45
6,686.0	35.80	67.20	6,088.7	4,895.7	-377.0	1,596.7	-408.8	9.81	-1.61	-16.45
6,718.0	35.60	62.30	6,114.7	4,921.7	-369.0	1,613.6	-401.2	8.96	-0.63	-15.31
6,749.0	35.40	56.80	6,140.0	4,947.0	-359.9	1,629.1	-392.4	10.32	-0.65	-17.74
6,781.0	35.30	50.40	6,166.1	4,973.1	-349.0	1,644.0	-381.7	11.57	-0.31	-20.00
6,813.0	34.50	44.80	6,192.3	4,999.3	-336.6	1,657.5	-369.7	10.32	-2.50	-17.50
6,845.0	34.70	40.70	6,218.7	5,025.7	-323.3	1,669.8	-356.6	7.30	0.63	-12.81
6,877.0	35.20	36.20	6,244.9	5,051.9	-308.9	1,681.2	-342.5	8.20	1.56	-14.06
6,908.0	35.80	32.10	6,270.1	5,077.1	-294.1	1,691.3	-327.8	7.92	1.94	-13.23
6,940.0	37.00	27.80	6,295.9	5,102.9	-277.6	1,700.8	-311.5	8.81	3.75	-13.44
6,972.0	38.40	24.10	6,321.2	5,128.2	-260.0	1,709.3	-294.1	8.31	4.38	-11.56

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Site:	Doddridge County 515940	North Reference:	Grid
Well:	Well #515940	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515940 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)
7,004.0	40.20	20.90	6,346.0	5,153.0	-241.3	1,717.1	-275.5	8.47	5.63	-10.00
7,035.0	42.70	17.70	6,369.2	5,176.2	-221.9	1,723.8	-256.3	10.57	8.06	-10.32
7,066.0	45.00	15.10	6,391.6	5,198.6	-201.3	1,729.9	-235.8	9.42	7.42	-8.39
7,098.0	46.80	12.60	6,413.8	5,220.8	-179.0	1,735.4	-213.7	7.94	5.63	-7.81
7,129.0	49.20	9.60	6,434.6	5,241.6	-156.4	1,739.8	-191.1	10.57	7.74	-9.68
7,161.0	51.70	6.70	6,455.0	5,262.0	-132.0	1,743.3	-166.8	10.48	7.81	-9.06
7,192.0	53.80	3.50	6,473.7	5,280.7	-107.4	1,745.5	-142.3	10.65	6.77	-10.32
7,224.0	56.00	0.80	6,492.1	5,299.1	-81.3	1,746.4	-116.1	9.74	6.88	-8.44
7,256.0	58.40	358.70	6,509.5	5,316.5	-54.4	1,746.3	-89.3	9.31	7.50	-6.56
7,288.0	60.10	355.80	6,525.8	5,332.8	-26.9	1,745.0	-61.8	9.43	5.31	-9.06
7,319.0	62.90	354.20	6,540.6	5,347.6	0.2	1,742.6	-34.6	10.11	9.03	-5.16
7,351.0	65.40	351.80	6,554.6	5,361.6	28.8	1,739.1	-5.9	10.32	7.81	-7.50
7,382.0	69.30	350.20	6,566.5	5,373.5	57.1	1,734.6	22.4	13.45	12.58	-5.16
7,414.0	72.50	348.50	6,577.0	5,384.0	86.8	1,729.0	52.2	11.19	10.00	-5.31
7,445.0	75.10	346.50	6,585.6	5,392.6	115.8	1,722.6	81.4	10.43	8.39	-6.45
7,476.0	77.00	344.50	6,593.1	5,400.1	145.0	1,715.1	110.7	8.76	6.13	-6.45
7,508.0	79.10	342.10	6,599.7	5,406.7	174.9	1,706.1	140.8	9.84	6.56	-7.50
7,540.0	81.30	340.70	6,605.2	5,412.2	204.8	1,696.0	170.9	8.11	6.88	-4.38
7,571.0	83.00	340.20	6,609.4	5,416.4	233.8	1,685.7	200.0	5.71	5.48	-1.61
7,603.0	85.40	339.30	6,612.6	5,419.6	263.6	1,674.7	230.1	8.00	7.50	-2.81
515940 LP										
7,621.6	86.37	338.03	6,614.0	5,421.0	280.9	1,668.0	247.5	8.60	5.23	-6.84
7,666.0	88.70	335.00	6,615.9	5,422.9	321.6	1,650.3	288.5	8.60	5.24	-6.82
LP=7760' MDI 8618' TVD										
7,760.0	89.30	333.60	6,617.5	5,424.5	406.3	1,609.5	374.0	1.62	0.64	-1.49
Deepest Point of Well=7865' MDI 8618' TVD										
7,855.0	89.60	331.90	6,618.4	5,425.4	490.7	1,566.0	459.3	1.82	0.32	-1.79
7,949.0	91.20	334.80	6,617.8	5,424.8	574.7	1,523.9	544.1	3.52	1.70	3.09
8,044.0	90.00	335.50	6,616.8	5,423.8	660.9	1,484.0	631.1	1.46	-1.26	0.74
8,139.0	90.30	333.50	6,616.5	5,423.5	746.6	1,443.1	717.7	2.13	0.32	-2.11
8,233.0	91.00	334.40	6,615.5	5,422.5	831.1	1,401.8	802.9	1.21	0.74	0.96
8,328.0	91.30	334.00	6,613.6	5,420.6	916.6	1,360.4	889.2	0.53	0.32	-0.42
8,423.0	92.30	337.50	6,610.6	5,417.6	1,003.2	1,321.4	976.6	3.83	1.05	3.68
8,517.0	92.50	336.70	6,606.6	5,413.6	1,089.7	1,284.9	1,063.8	0.88	0.21	-0.85
8,612.0	92.70	335.50	6,602.3	5,409.3	1,176.4	1,246.5	1,151.3	1.28	0.21	-1.26
8,706.0	90.70	337.10	6,599.5	5,406.5	1,262.5	1,208.7	1,238.1	2.72	-2.13	1.70
8,801.0	90.20	336.60	6,598.8	5,405.8	1,349.8	1,171.3	1,326.1	0.74	-0.53	-0.53
8,895.0	89.80	336.60	6,598.8	5,405.8	1,436.1	1,134.0	1,413.1	0.43	-0.43	0.00
8,990.0	91.60	336.20	6,597.6	5,404.6	1,523.1	1,096.0	1,500.9	1.94	1.89	-0.42
9,084.0	91.60	335.50	6,595.0	5,402.0	1,608.9	1,057.5	1,587.4	0.74	0.00	-0.74
9,178.0	91.70	335.80	6,592.3	5,399.3	1,694.5	1,018.8	1,673.8	0.34	0.11	0.32
9,273.0	91.70	335.80	6,589.5	5,396.5	1,781.1	979.9	1,761.2	0.00	0.00	0.00
9,367.0	91.10	334.60	6,587.2	5,394.2	1,866.4	940.5	1,847.2	1.43	-0.64	-1.28



PHX
Survey Report



Database:	EDM 5000 1 S 1 U e Do	Local Co-ordinate Reference:	
Company:		TVD Reference:	
Project:		MD Reference:	
Site:		North Reference:	
Well:		Survey Calculation Method:	
Wellbore:			
Design:			

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)
9,462.0	90.30	332.70	6,586.0	5,393.0	1,951.5	898.3	1,933.2	2.17	-0.84	-2.00
9,557.0	91.60	333.80	6,584.5	5,391.5	2,036.3	855.5	2,018.8	1.79	1.37	1.16
9,651.0	91.30	332.90	6,582.1	5,389.1	2,120.3	813.4	2,103.6	1.01	-0.32	-0.96
9,745.0	90.70	334.30	6,580.4	5,387.4	2,204.5	771.6	2,188.6	1.62	-0.64	1.49
9,840.0	90.40	332.60	6,579.5	5,386.5	2,289.5	729.1	2,274.4	1.82	-0.32	-1.79
9,935.0	90.50	334.10	6,578.8	5,385.8	2,374.4	686.5	2,360.2	1.58	0.11	1.58
10,029.0	90.80	334.60	6,577.7	5,384.7	2,459.1	645.9	2,445.7	0.62	0.32	0.53
10,124.0	90.90	333.60	6,576.3	5,383.3	2,544.5	604.4	2,532.0	1.06	0.11	-1.05
10,218.0	91.60	336.30	6,574.3	5,381.3	2,629.7	564.6	2,617.9	2.97	0.74	2.87
10,313.0	91.30	337.50	6,571.9	5,378.9	2,717.0	527.3	2,706.0	1.30	-0.32	1.26
10,407.0	90.90	339.10	6,570.0	5,377.0	2,804.4	492.6	2,793.9	1.75	-0.43	1.70
10,502.0	89.00	337.80	6,570.1	5,377.1	2,892.7	457.7	2,883.0	2.42	-2.00	-1.37
10,597.0	90.00	335.50	6,571.0	5,378.0	2,979.9	420.0	2,970.9	2.64	1.05	-2.42
10,691.0	89.50	335.40	6,571.4	5,378.4	3,065.4	381.0	3,057.2	0.54	-0.53	-0.11
10,786.0	89.70	335.10	6,572.0	5,379.0	3,151.7	341.2	3,144.2	0.38	0.21	-0.32
10,881.0	89.70	334.40	6,572.5	5,379.5	3,237.6	300.7	3,231.0	0.74	0.00	-0.74
10,975.0	90.00	334.30	6,572.8	5,379.8	3,322.3	260.0	3,316.5	0.34	0.32	-0.11
11,070.0	90.60	334.70	6,572.3	5,379.3	3,408.1	219.1	3,403.0	0.76	0.63	0.42
11,165.0	92.20	334.80	6,570.0	5,377.0	3,494.0	178.6	3,489.7	1.69	1.68	0.11
11,259.0	92.80	334.20	6,565.9	5,372.9	3,578.7	138.1	3,575.3	0.90	0.64	-0.64
11,353.0	92.80	332.80	6,561.3	5,368.3	3,662.8	96.3	3,660.1	1.49	0.00	-1.49
11,447.0	91.90	332.90	6,557.4	5,364.4	3,746.3	53.4	3,744.5	0.96	-0.96	0.11
11,541.0	90.70	334.60	6,555.3	5,362.3	3,830.6	11.8	3,829.6	2.21	-1.28	1.81
11,636.0	90.70	334.20	6,554.1	5,361.1	3,916.3	-29.2	3,916.1	0.42	0.00	-0.42

Final Survey=11704' MD/ 6553' TVD										
11,704.0	90.50	333.80	6,553.4	5,360.4	3,977.4	-59.0	3,977.8	0.66	-0.29	-0.59
615540 TB										
11,754.0	90.50	333.80	6,553.0	5,360.0	4,022.2	-81.1	4,023.0	0.00	0.00	0.00
Projection to TD=11762' MD/ 6553' TVD										
11,762.0	90.50	333.80	6,552.9	5,359.9	4,029.4	-84.6	4,030.3	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,807.0	3,806.8	14.9	-18.1	Gyro Tie In=3807' MD
3,877.0	3,876.8	15.0	-18.5	KOP=3877' MD
7,760.0	6,617.5	406.3	1,609.5	LP=7760' MD/ 6618' TVD
7,855.0	6,616.4	490.7	1,566.0	Deepest Point of Well=7855' MD/ 6618' TVD
11,704.0	6,553.4	3,977.4	-59.0	Final Survey=11704' MD/ 6553' TVD
11,762.0	6,552.9	4,029.4	-84.6	Projection to TD=11762' MD/ 6553' TVD



PHX
Survey Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site: Doddridge County 515940
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1193.0usft
Project:	Doddridge County, WV GH	MD Reference:	KB@23 @ 1193.0usft
Site:	Doddridge County 515940	North Reference:	Grid
Well:	Well #515940	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	515940 As Drilled Surveys		

Checked By: _____ Approved By: _____ Date: _____

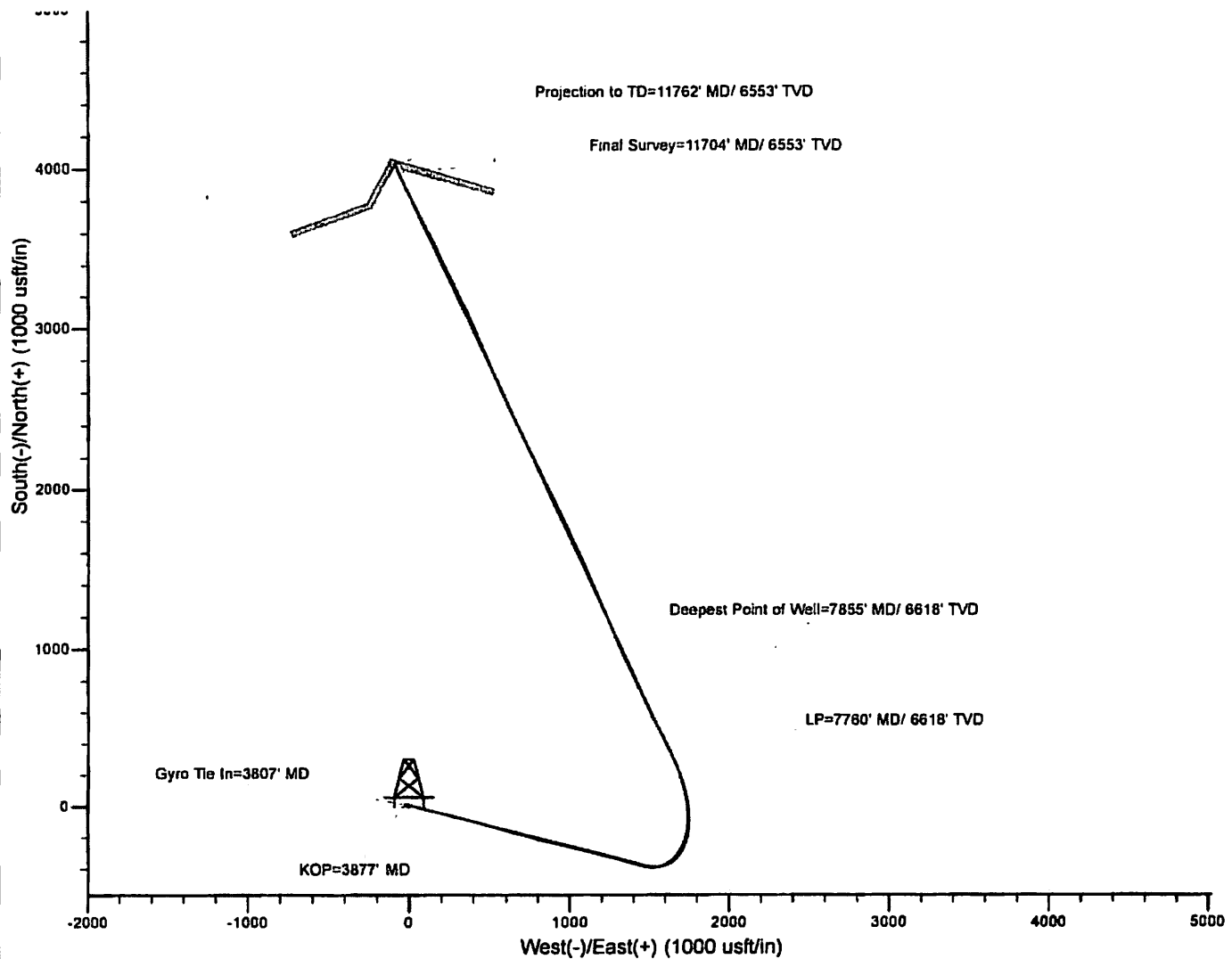
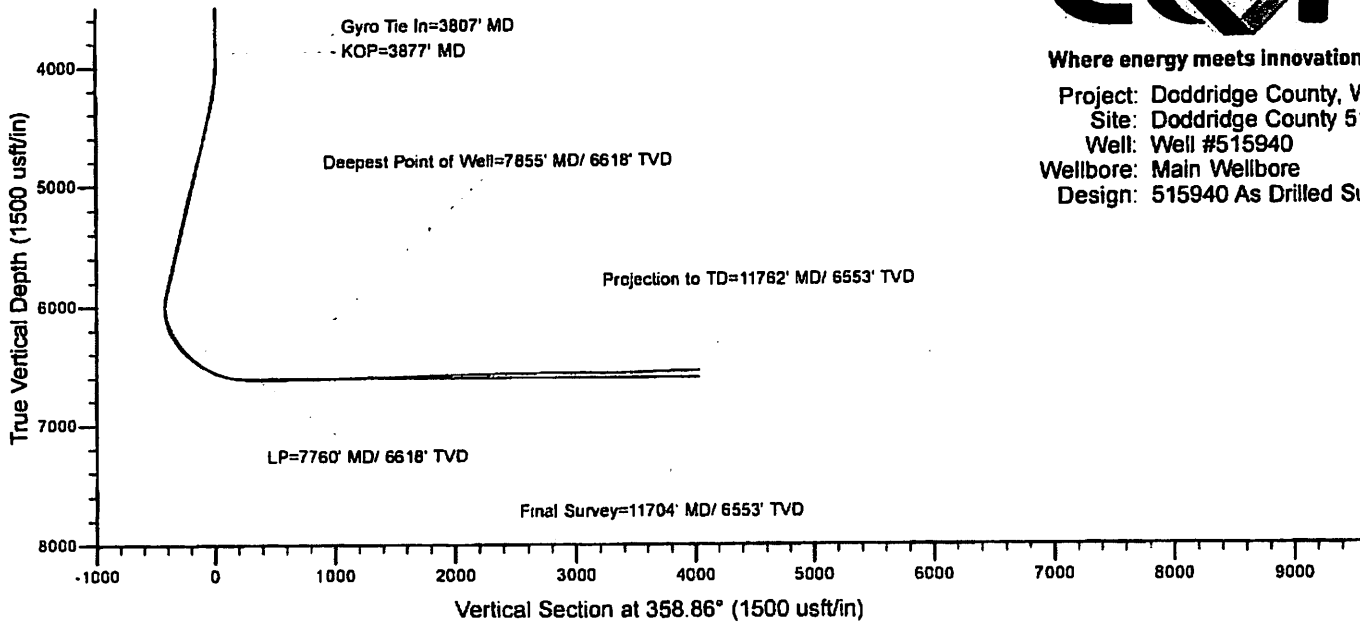
EQT Production - Marcellus

PHOENIX
TECHNOLOGY SERVICES



Where energy meets innovation.

Project: Doddridge County, WV Grid
Site: Doddridge County 515940
Well: Well #515940
Wellbore: Main Wellbore
Design: 515940 As Drilled Surveys



02/05/2016