17-06459

EQT Production - Marcellus

Doddridge County, WV Grid
Doddridge County 513145
Well #513145

Mian Wellbore

Design: 513145 As Drilled Surveys

Standard Survey Report

22 December, 2014

17-06459

Phoenix Technologies
Survey Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Doddridge County 513145
Company:	EQT Production - Marcellus	**TVD Reference:**	KB@23ft @ 991.0usft
Project:	Doddridge County, WV Grid	**MD Reference:**	KB@23ft @ 991.0usft
Site:	Doddridge County 513145	**North Reference:**	Grid
Well:	Well #513145	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Mian Wellbore		
Design:	513145 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 513145

Site Position:		**Northing:**	270,614.39 usft	**Latitude:**	39.24
From:	Map	**Easting:**	1,641,301.80 usft	**Longitude:**	-80.77
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.81 °

Well Well #513145

Well Position	**+N/-S**	0.0 usft	**Northing:**	270,614.39 usft	**Latitude:**	39° 14' 9.798 N
	+E/-W	0.0 usft	**Easting:**	1,641,301.80 usft	**Longitude:**	80° 45' 58.955 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	968.0 usft

Wellbore Mian Wellbore

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	12/8/2014	-8.49	66.72	52,208

Design 513145 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	155.00

Survey Program **Date** 12/22/2014

From ()	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	4,991.0	513145 Gyrodata Gyros (Mian Wellbore)	GYD_DP_MS	Gyrodata gyro-compassing and drop
0.00	10,301.0	513145 PHX MWD (Mian Wellbore)	MWD+IGRF	MWD+IGRF v3:standard declination

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	-991.0	0.0	0.0	0.0	0.00	0.00	0.00
110.0	0.12	28.07	110.0	-881.0	0.1	0.1	-0.1	0.11	0.11	0.00
210.0	0.10	346.77	210.0	-781.0	0.3	0.1	-0.2	0.03	-0.02	-41.30
310.0	0.11	338.89	310.0	-681.0	0.5	0.0	-0.4	0.02	0.01	-7.88
410.0	0.12	330.97	410.0	-581.0	0.6	-0.1	-0.6	0.02	0.01	-7.92
510.0	0.14	339.86	510.0	-481.0	0.8	-0.1	-0.8	0.03	0.02	8.89
610.0	0.09	324.30	610.0	-381.0	1.0	-0.2	-1.0	0.06	-0.05	-15.56
710.0	0.10	347.18	710.0	-281.0	1.2	-0.3	-1.2	0.04	0.01	22.88

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Well:	Well #513145	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Mian Wellbore		
Design:	513145 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	0.05	126.18	810.0	-181.0	1.2	-0.3	-1.2	0.14	-0.05	139.00
910.0	0.14	254.24	910.0	-81.0	1.2	-0.4	-1.2	0.18	0.09	128.06
1,010.0	0.57	260.52	1,010.0	19.0	1.1	-1.0	-1.4	0.43	0.43	6.28
1,110.0	0.82	255.06	1,110.0	119.0	0.8	-2.2	-1.6	0.26	0.25	-5.46
1,210.0	0.85	251.45	1,210.0	219.0	0.4	-3.6	-1.8	0.06	0.03	-3.61
1,310.0	0.95	252.47	1,310.0	319.0	-0.1	-5.0	-2.0	0.10	0.10	1.02
1,410.0	0.96	257.42	1,410.0	419.0	-0.6	-6.7	-2.3	0.08	0.01	4.95
1,510.0	0.97	257.58	1,509.9	518.9	-0.9	-8.3	-2.7	0.01	0.01	0.16
1,610.0	0.90	258.19	1,609.9	618.9	-1.3	-9.9	-3.0	0.07	-0.07	0.61
1,710.0	0.91	258.48	1,709.9	718.9	-1.6	-11.4	-3.4	0.01	0.01	0.29
1,810.0	0.74	248.02	1,809.9	818.9	-2.0	-12.8	-3.6	0.23	-0.17	-10.46
1,910.0	0.74	244.50	1,909.9	918.9	-2.5	-14.0	-3.7	0.05	0.00	-3.52
2,010.0	0.71	242.90	2,009.9	1,018.9	-3.1	-15.1	-3.6	0.04	-0.03	-1.60
2,110.0	0.65	241.55	2,109.9	1,118.9	-3.6	-16.2	-3.6	0.06	-0.06	-1.35
2,210.0	0.67	240.43	2,209.9	1,218.9	-4.2	-17.2	-3.5	0.02	0.02	-1.12
2,310.0	0.63	238.53	2,309.9	1,318.9	-4.7	-18.2	-3.4	0.05	-0.04	-1.90
2,410.0	0.59	240.00	2,409.9	1,418.9	-5.3	-19.1	-3.3	0.04	-0.04	1.47
2,510.0	0.59	240.69	2,509.9	1,518.9	-5.8	-20.0	-3.2	0.01	0.00	0.69
2,610.0	0.52	232.09	2,609.8	1,618.8	-6.3	-20.8	-3.0	0.11	-0.07	-8.60
2,710.0	0.50	235.97	2,709.8	1,718.8	-6.9	-21.5	-2.9	0.04	-0.02	3.88
2,810.0	0.37	232.23	2,809.8	1,818.8	-7.3	-22.1	-2.7	0.13	-0.13	-3.74
2,910.0	0.31	231.12	2,909.8	1,918.8	-7.7	-22.6	-2.6	0.06	-0.06	-1.11
3,010.0	0.29	229.34	3,009.8	2,018.8	-8.0	-23.0	-2.5	0.02	-0.02	-1.78
3,110.0	0.30	226.03	3,109.8	2,118.8	-8.3	-23.4	-2.3	0.02	0.01	-3.31
3,210.0	0.29	221.71	3,209.8	2,218.8	-8.7	-23.7	-2.1	0.02	-0.01	-4.32
3,310.0	0.33	226.23	3,309.8	2,318.8	-9.1	-24.1	-1.9	0.05	0.04	4.52
3,410.0	0.33	228.47	3,409.8	2,418.8	-9.5	-24.5	-1.8	0.01	0.00	2.24
3,510.0	0.32	234.78	3,509.8	2,518.8	-9.8	-25.0	-1.6	0.04	-0.01	6.31
3,610.0	0.35	250.89	3,609.8	2,618.8	-10.1	-25.5	-1.6	0.10	0.03	16.11
3,710.0	0.53	265.59	3,709.8	2,718.8	-10.2	-26.2	-1.8	0.21	0.18	14.70
3,810.0	0.64	278.76	3,809.8	2,818.8	-10.2	-27.3	-2.3	0.17	0.11	13.17
3,910.0	0.87	281.35	3,909.8	2,918.8	-10.0	-28.5	-3.0	0.23	0.23	2.59
4,010.0	1.15	282.93	4,009.8	3,018.8	-9.6	-30.3	-4.1	0.28	0.28	1.58
4,110.0	1.45	287.52	4,109.8	3,118.8	-9.0	-32.5	-5.6	0.32	0.30	4.59
4,210.0	1.67	288.93	4,209.7	3,218.7	-8.1	-35.0	-7.4	0.22	0.22	1.41
4,310.0	1.90	292.82	4,309.7	3,318.7	-7.0	-37.9	-9.7	0.26	0.23	3.89
4,410.0	2.04	297.14	4,409.6	3,418.6	-5.6	-41.1	-12.3	0.20	0.14	4.32
4,510.0	2.25	301.27	4,509.6	3,518.6	-3.7	-44.3	-15.4	0.26	0.21	4.13
4,610.0	2.35	302.77	4,609.5	3,618.5	-1.6	-47.7	-18.7	0.12	0.10	1.50
4,710.0	2.44	309.00	4,709.4	3,718.4	0.9	-51.1	-22.4	0.28	0.09	6.23
4,810.0	2.72	310.48	4,809.3	3,818.3	3.7	-54.6	-26.4	0.29	0.28	1.48
4,910.0	3.10	309.19	4,909.2	3,918.2	7.0	-58.5	-31.0	0.39	0.38	-1.29

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Site:	Doddridge County 513145	**North Reference:**	Grid
Well:	Well #513145	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Mian Wellbore		
Design:	513145 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)
Gyro Tie In=4991' MD										
4,991.0	3.41	311.83	4,990.0	3,999.0	10.0	-62.0	-35.2	0.43	0.38	3.26
5,000.0	3.41	311.83	4,999.0	4,008.0	10.3	-62.4	-35.7	0.00	0.00	0.00
5,042.0	3.80	308.70	5,040.9	4,049.9	12.0	-64.4	-38.1	1.04	0.93	-7.45
5,073.0	3.80	316.00	5,071.9	4,080.9	13.4	-65.9	-40.0	1.56	0.00	23.55
5,105.0	5.60	322.80	5,103.8	4,112.8	15.4	-67.6	-42.5	5.88	5.63	21.25
5,136.0	8.80	330.40	5,134.5	4,143.5	18.7	-69.6	-46.4	10.75	10.32	24.52
5,168.0	11.60	333.10	5,166.0	4,175.0	23.7	-72.3	-52.0	8.87	8.75	8.44
5,199.0	14.60	333.70	5,196.2	4,205.2	30.0	-75.5	-59.1	9.69	9.68	1.94
5,231.0	18.00	336.70	5,226.9	4,235.9	38.1	-79.2	-68.0	10.94	10.63	9.38
5,262.0	21.30	340.40	5,256.1	4,265.1	47.8	-83.0	-78.4	11.37	10.65	11.94
5,294.0	24.80	344.90	5,285.5	4,294.5	59.8	-86.7	-90.8	12.24	10.94	14.06
5,325.0	27.50	350.00	5,313.4	4,322.4	73.1	-89.6	-104.2	11.33	8.71	16.45
5,357.0	28.50	353.80	5,341.6	4,350.6	88.0	-91.7	-118.5	6.39	3.13	11.88
5,388.0	30.50	354.20	5,368.6	4,377.6	103.2	-93.3	-132.9	6.48	6.45	1.29
5,420.0	33.60	351.70	5,395.7	4,404.7	120.0	-95.4	-149.1	10.54	9.69	-7.81
5,451.0	35.00	350.40	5,421.3	4,430.3	137.3	-98.1	-165.9	5.10	4.52	-4.19
5,482.0	32.90	351.30	5,447.0	4,456.0	154.4	-100.9	-182.5	6.97	-6.77	2.90
5,514.0	29.00	354.50	5,474.5	4,483.5	170.7	-103.0	-198.2	13.22	-12.19	10.00
5,545.0	25.70	358.10	5,502.0	4,511.0	184.9	-103.9	-211.5	11.90	-10.65	11.61
5,577.0	21.80	1.40	5,531.3	4,540.3	197.8	-104.0	-223.2	12.87	-12.19	10.31
5,609.0	17.10	0.90	5,561.5	4,570.5	208.4	-103.8	-232.7	14.70	-14.69	-1.56
5,640.0	13.50	356.50	5,591.4	4,600.4	216.6	-103.9	-240.2	12.19	-11.61	-14.19
5,671.0	10.10	352.30	5,621.7	4,630.7	222.9	-104.5	-246.2	11.31	-10.97	-13.55
5,703.0	6.90	355.10	5,653.3	4,662.3	227.6	-105.0	-250.7	10.08	-10.00	8.75
5,734.0	4.50	359.70	5,684.2	4,693.2	230.7	-105.2	-253.5	7.87	-7.74	14.84
5,766.0	1.80	345.40	5,716.1	4,725.1	232.4	-105.3	-255.2	8.72	-8.44	-44.69
5,797.0	0.90	233.20	5,747.1	4,756.1	232.7	-105.7	-255.6	7.41	-2.90	-361.94
5,829.0	1.30	227.90	5,779.1	4,788.1	232.3	-106.1	-255.4	1.29	1.25	-16.56
5,860.0	2.50	171.50	5,810.1	4,819.1	231.4	-106.3	-254.7	6.72	3.87	-181.94
5,891.0	5.00	153.00	5,841.0	4,850.0	229.6	-105.6	-252.7	8.86	8.06	-59.68
5,923.0	7.90	144.60	5,872.8	4,881.8	226.5	-103.7	-249.1	9.51	9.06	-26.25
5,954.0	11.60	146.50	5,903.4	4,912.4	222.2	-100.7	-243.9	11.98	11.94	6.13
5,986.0	14.40	151.80	5,934.6	4,943.6	216.0	-97.1	-236.8	9.50	8.75	16.56
6,017.0	17.60	155.30	5,964.4	4,973.4	208.3	-93.3	-228.2	10.78	10.32	11.29
6,049.0	20.50	154.30	5,994.6	5,003.6	198.9	-88.8	-217.8	9.12	9.06	-3.13
6,080.0	23.20	153.00	6,023.4	5,032.4	188.6	-83.7	-206.3	8.85	8.71	-4.19
6,111.0	26.20	153.20	6,051.5	5,060.5	177.0	-77.8	-193.3	9.68	9.68	0.65
6,143.0	29.00	156.80	6,079.9	5,088.9	163.6	-71.6	-178.5	10.18	8.75	11.25
6,174.0	32.00	158.50	6,106.6	5,115.6	149.0	-65.6	-162.8	10.07	9.68	5.48
6,206.0	33.50	158.10	6,133.5	5,142.5	132.9	-59.2	-145.5	4.74	4.69	-1.25
6,237.0	36.70	157.20	6,158.9	5,167.9	116.5	-52.4	-127.7	10.46	10.32	-2.90
6,269.0	39.70	155.40	6,184.0	5,193.0	98.3	-44.5	-107.9	10.00	9.38	-5.63

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6,300.0	42.80	153.90	6,207.3	5,216.3	79.9	-35.7	-87.5	10.50	10.00	-4.84
6,332.0	46.00	153.10	6,230.2	5,239.2	59.8	-25.7	-65.1	10.15	10.00	-2.50
6,363.0	49.00	153.50	6,251.1	5,260.1	39.4	-15.5	-42.3	9.72	9.68	1.29
6,395.0	51.80	154.00	6,271.5	5,280.5	17.3	-4.6	-17.6	8.83	8.75	1.56
6,426.0	54.30	156.00	6,290.2	5,299.2	-5.1	5.9	7.1	9.57	8.06	6.45
6,458.0	57.60	157.10	6,308.1	5,317.1	-29.5	16.4	33.6	10.70	10.31	3.44
6,489.0	60.70	157.00	6,324.0	5,333.0	-54.0	26.8	60.2	10.00	10.00	-0.32
6,520.0	63.70	156.40	6,338.4	5,347.4	-79.1	37.7	87.6	9.83	9.68	-1.94
6,552.0	66.90	155.80	6,351.8	5,360.8	-105.7	49.4	116.7	10.14	10.00	-1.88
6,583.0	69.10	156.10	6,363.4	5,372.4	-132.0	61.2	145.4	7.15	7.10	0.97
6,615.0	71.70	156.10	6,374.1	5,383.1	-159.5	73.4	175.6	8.13	8.13	0.00
6,646.0	74.00	155.80	6,383.3	5,392.3	-186.6	85.4	205.2	7.48	7.42	-0.97
6,678.0	76.90	155.80	6,391.3	5,400.3	-214.8	98.1	236.2	9.06	9.06	0.00
6,709.0	80.30	155.00	6,397.4	5,406.4	-242.4	110.8	266.6	11.26	10.97	-2.58
6,741.0	83.30	154.50	6,402.0	5,411.0	-271.1	124.3	298.2	9.50	9.38	-1.56
6,772.0	86.20	153.40	6,404.8	5,413.8	-298.8	137.9	329.1	10.00	9.35	-3.55
6,867.0	91.30	155.70	6,406.9	5,415.9	-384.5	178.7	424.0	5.89	5.37	2.42
6,961.0	89.40	156.30	6,406.3	5,415.3	-470.4	216.9	518.0	2.12	-2.02	0.64
7,055.0	89.90	155.20	6,406.9	5,415.9	-556.1	255.5	612.0	1.29	0.53	-1.17
7,150.0	89.80	153.10	6,407.2	5,416.2	-641.6	296.9	707.0	2.21	-0.11	-2.21
7,244.0	90.70	152.20	6,406.8	5,415.8	-725.1	340.1	800.9	1.35	0.96	-0.96
7,338.0	91.60	154.70	6,404.9	5,413.9	-809.2	382.1	894.8	2.83	0.96	2.66
7,401.0	89.70	155.00	6,404.2	5,413.2	-866.2	408.9	957.8	3.05	-3.02	0.48
7,433.0	89.30	154.60	6,404.4	5,413.4	-895.1	422.5	989.8	1.77	-1.25	-1.25
7,495.0	89.20	156.30	6,405.2	5,414.2	-951.5	448.2	1,051.8	2.75	-0.16	2.74
7,528.0	89.20	157.50	6,405.7	5,414.7	-981.9	461.2	1,084.8	3.64	0.00	3.64
7,591.0	84.00	158.20	6,409.4	5,418.4	-1,040.1	484.9	1,147.6	8.33	-8.25	1.11
7,622.0	84.20	158.60	6,412.6	5,421.6	-1,068.8	496.2	1,178.4	1.44	0.65	1.29
LP= 7716' MD/6418' TVD										
7,716.0	89.10	157.40	6,418.1	5,427.1	-1,155.7	531.4	1,272.0	5.37	5.21	-1.28
7,811.0	90.40	157.40	6,418.5	5,427.5	-1,243.4	567.9	1,367.0	1.37	1.37	0.00
7,905.0	87.70	156.60	6,420.1	5,429.1	-1,330.0	604.6	1,460.9	3.00	-2.87	-0.85
8,000.0	88.80	156.70	6,423.0	5,432.0	-1,417.1	642.3	1,555.8	1.16	1.16	0.11
8,095.0	89.00	155.40	6,424.8	5,433.8	-1,503.9	680.8	1,650.8	1.38	0.21	-1.37
8,189.0	89.10	153.20	6,426.4	5,435.4	-1,588.6	721.6	1,744.7	2.34	0.11	-2.34
8,283.0	88.90	151.80	6,428.0	5,437.0	-1,672.0	765.0	1,838.6	1.50	-0.21	-1.49
8,378.0	88.80	149.70	6,429.9	5,438.9	-1,754.9	811.4	1,933.3	2.21	-0.11	-2.21
8,472.0	89.40	152.50	6,431.4	5,440.4	-1,837.1	856.8	2,027.1	3.05	0.64	2.98
8,567.0	90.40	154.90	6,431.6	5,440.6	-1,922.3	898.9	2,122.1	2.74	1.05	2.53
8,661.0	89.20	156.10	6,431.9	5,440.9	-2,007.8	937.9	2,216.1	1.81	-1.28	1.28
8,755.0	88.20	152.40	6,434.0	5,443.0	-2,092.4	978.7	2,310.0	4.08	-1.06	-3.94
8,849.0	89.10	154.00	6,436.2	5,445.2	-2,176.3	1,021.0	2,403.9	1.95	0.96	1.70
8,943.0	88.80	152.20	6,438.0	5,447.0	-2,260.1	1,063.6	2,497.9	1.94	-0.32	-1.91

17-06459

Phoenix Technologies

Survey Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Doddridge County 513145
Company:	EQT Production - Marcellus	**TVD Reference:**	KB@23ft @ 991.0usft
Project:	Doddridge County, WV Grid	**MD Reference:**	KB@23ft @ 991.0usft
Site:	Doddridge County 513145	**North Reference:**	Grid
Well:	Well #513145	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Mian Wellbore		
Design:	513145 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)
9,037.0	89.40	150.00	6,439.4	5,448.4	-2,342.4	1,109.0	2,591.6	2.43	0.64	-2.34
9,131.0	90.50	148.00	6,439.5	5,448.5	-2,423.0	1,157.4	2,685.1	2.43	1.17	-2.13
9,226.0	91.70	152.60	6,437.7	5,446.7	-2,505.5	1,204.4	2,779.7	5.00	1.26	4.84
9,320.0	89.80	156.50	6,436.5	5,445.5	-2,590.3	1,244.8	2,873.7	4.61	-2.02	4.15
9,415.0	87.80	158.80	6,438.5	5,447.5	-2,678.1	1,280.9	2,968.6	3.21	-2.11	2.42
9,509.0	88.60	158.30	6,441.4	5,450.4	-2,765.6	1,315.3	3,062.3	1.00	0.85	-0.53
9,604.0	87.40	157.90	6,444.7	5,453.7	-2,853.7	1,350.7	3,157.1	1.33	-1.26	-0.42
9,698.0	90.40	160.10	6,446.5	5,455.5	-2,941.4	1,384.4	3,250.9	3.96	3.19	2.34
9,792.0	88.00	160.70	6,447.8	5,456.8	-3,029.9	1,415.9	3,344.4	2.63	-2.55	0.64
9,886.0	88.50	159.10	6,450.7	5,459.7	-3,118.2	1,448.2	3,438.1	1.78	0.53	-1.70
9,980.0	88.50	162.60	6,453.2	5,462.2	-3,206.9	1,479.0	3,531.5	3.72	0.00	3.72
10,075.0	88.70	160.10	6,455.5	5,464.5	-3,296.9	1,509.4	3,625.9	2.64	0.21	-2.63
Deepest Point of Well= 10170' MD/6456' TVD										
10,170.0	90.90	160.50	6,455.8	5,464.8	-3,386.3	1,541.4	3,720.5	2.35	2.32	0.42
Final Survey= 10247' MD/6454' TVD										
10,247.0	91.80	159.80	6,454.0	5,463.0	-3,458.7	1,567.5	3,797.2	1.48	1.17	-0.91
Projection to TD= 10301' MD/6452' TVD										
10,301.0	91.80	159.80	6,452.3	5,461.3	-3,509.4	1,586.2	3,850.9	0.00	0.00	0.00

Design Annotations

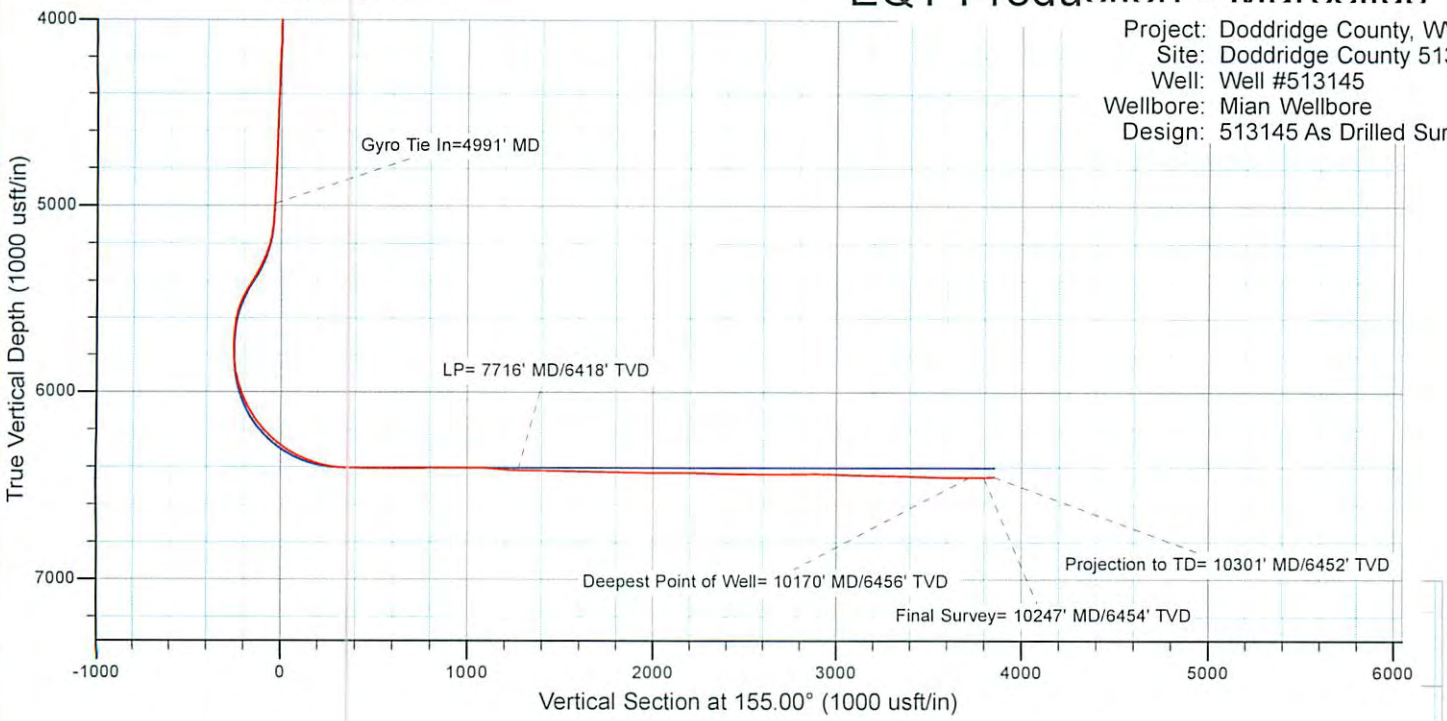
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
4,991.0	4,990.0	10.0	-62.0	Gyro Tie In=4991' MD
7,716.0	6,418.1	-1,155.7	531.4	LP= 7716' MD/6418' TVD
10,170.0	6,455.8	-3,386.3	1,541.4	Deepest Point of Well= 10170' MD/6456' TVD
10,247.0	6,454.0	-3,458.7	1,567.5	Final Survey= 10247' MD/6454' TVD
10,301.0	6,452.3	-3,509.4	1,586.2	Projection to TD= 10301' MD/6452' TVD

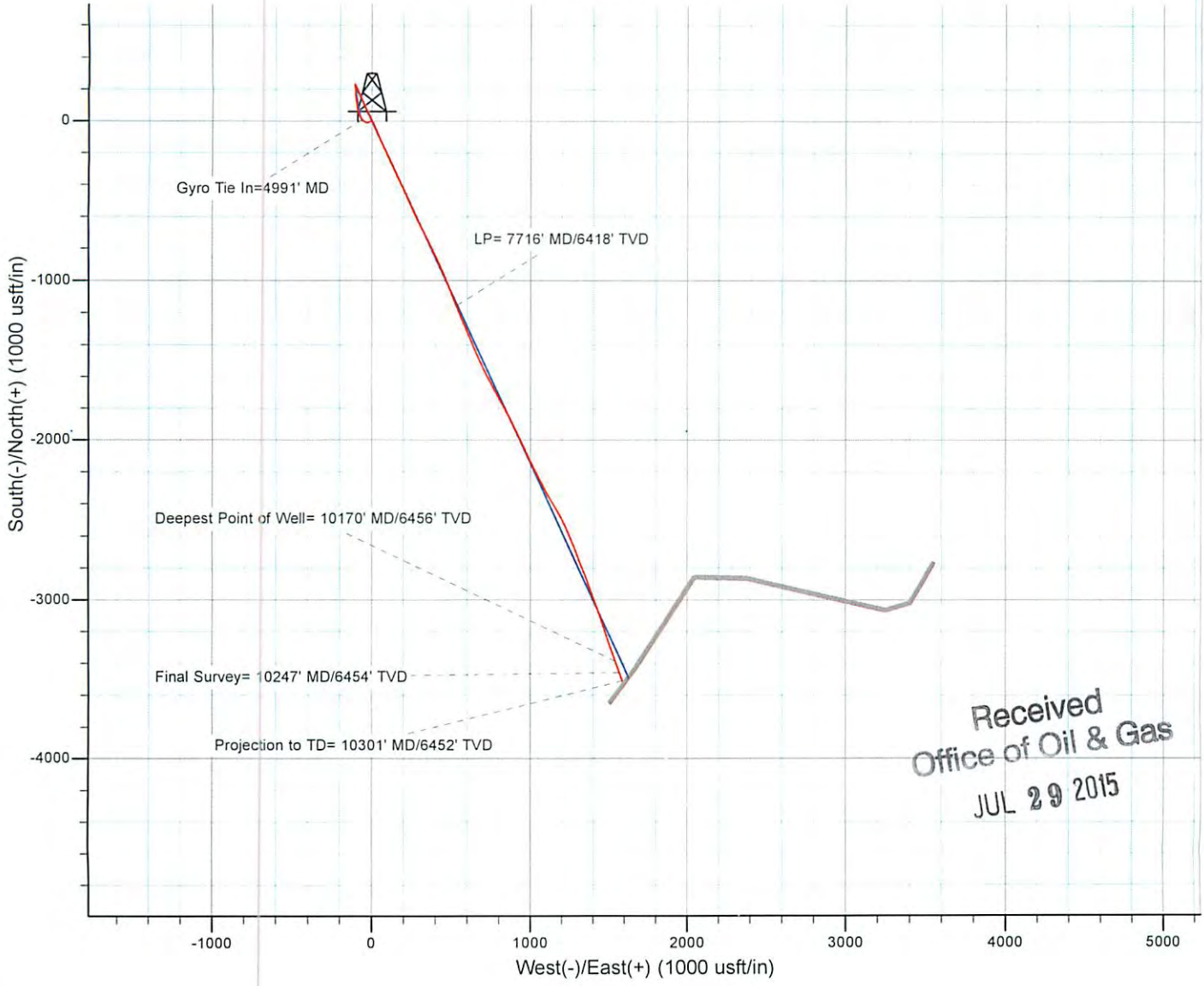
Checked By: _____ Approved By: _____ Date: _____

17-06459

EQT Production - Marcellus

Project: Doddridge County, WV Grid
Site: Doddridge County 513145
Well: Well #513145
Wellbore: Mian Wellbore
Design: 513145 As Drilled Surveys





10/16/2015