PHOENIX
TECHNOLOGY SERVICES

EQT Production - Marcellus

Doddridge County, WV Grid
Doddridge County 514316
Well #514316

Main Wellbore

Design: As Drilled Surveys

Standard Survey Report

23 December, 2013

EQT
Where energy meets innovation.

10/31/2014

Database:		**Local Co-ordinate Reference:**	
Company:		**TVD Reference:**	
Project:		**MD Reference:**	
Site:		**North Reference:**	
Well:		**Survey Calculation Method:**	
Wellbore:			
Design:			

Project

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

Site Position:		**Northing:**	324,414.90 usft	**Latitude:**	39.38
From:	Map	**Easting:**	1,654,147.60 usft	**Longitude:**	-80.72
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.78 °

Well

Well Position	**+N/-S**	0.0 usft	**Northing:**	324,414.90 usft	**Latitude:**	39° 23' 3.278 N
	+E/-W	0.0 usft	**Easting:**	1,654,147.60 usft	**Longitude:**	80° 43' 25.022 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	1,111.0 usft

Wellbore

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	10/8/2013	-8.51	66.94	52,420

Design

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	166.53

Survey Program **Date** 12/23/2013

From ()	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	5,465.0	514316 Gyrodata Gyros (Main Wellbore)	GYD_DP_MS	Gyrodata gyro-compassing and drop
0.00	13,601.0	514316 MWD (Main Wellbore)	MWD	MWD - Standard

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	-1,134.0	0.0	0.0	0.0	0.00	0.00	0.00
113.0	0.31	282.67	113.0	-1,021.0	0.1	-0.3	-0.1	0.27	0.27	0.00
213.0	0.35	281.52	213.0	-921.0	0.2	-0.9	-0.4	0.04	0.04	-1.15
313.0	0.35	285.75	313.0	-821.0	0.3	-1.5	-0.7	0.03	0.00	4.23
413.0	0.32	284.08	413.0	-721.0	0.5	-2.0	-0.9	0.03	-0.03	-1.67
513.0	0.30	283.37	513.0	-621.0	0.6	-2.5	-1.2	0.02	-0.02	-0.71
613.0	0.30	276.18	613.0	-521.0	0.7	-3.1	-1.4	0.04	0.00	-7.19
713.0	0.20	260.66	713.0	-421.0	0.7	-3.5	-1.5	0.12	-0.10	-15.52

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Survey

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813.0	0.15	247.13	813.0	-321.0	0.6	-3.8	-1.5	0.06	-0.05	-13.53
913.0	0.10	201.32	913.0	-221.0	0.5	-3.9	-1.4	0.11	-0.05	-45.81
1,013.0	0.07	201.67	1,013.0	-121.0	0.3	-4.0	-1.3	0.03	-0.03	0.35
1,113.0	0.34	215.22	1,113.0	-21.0	0.1	-4.2	-1.0	0.27	0.27	13.55
1,213.0	0.47	215.52	1,213.0	79.0	-0.5	-4.6	-0.6	0.13	0.13	0.30
1,313.0	0.54	238.03	1,313.0	179.0	-1.1	-5.2	-0.1	0.21	0.07	22.51
1,413.0	0.56	237.80	1,413.0	279.0	-1.6	-6.0	0.2	0.02	0.02	-0.23
1,513.0	0.78	238.87	1,513.0	379.0	-2.2	-7.0	0.5	0.22	0.22	1.07
1,613.0	1.21	244.35	1,613.0	479.0	-3.0	-8.6	1.0	0.44	0.43	5.48
1,713.0	1.37	240.66	1,712.9	578.9	-4.1	-10.6	1.5	0.18	0.16	-3.69
1,813.0	1.75	235.98	1,812.9	678.9	-5.5	-12.9	2.4	0.40	0.38	-4.68
1,913.0	2.78	226.45	1,912.8	778.8	-8.0	-15.9	4.1	1.09	1.03	-9.53
2,013.0	3.37	223.17	2,012.7	878.7	-11.9	-19.7	7.0	0.62	0.59	-3.28
2,113.0	4.09	221.38	2,112.5	978.5	-16.7	-24.0	10.6	0.73	0.72	-1.79
2,213.0	4.99	220.60	2,212.1	1,078.1	-22.7	-29.2	15.2	0.90	0.90	-0.78
2,313.0	5.59	222.31	2,311.7	1,177.7	-29.6	-35.3	20.5	0.62	0.60	1.71
2,413.0	5.64	225.33	2,411.2	1,277.2	-36.6	-42.1	25.8	0.30	0.05	3.02
2,513.0	5.70	229.89	2,510.7	1,376.7	-43.3	-49.4	30.6	0.45	0.06	4.56
2,613.0	5.98	230.31	2,610.2	1,476.2	-49.8	-57.2	35.1	0.28	0.28	0.42
2,713.0	6.31	230.59	2,709.7	1,575.7	-56.6	-65.5	39.8	0.33	0.33	0.28
2,813.0	6.59	229.59	2,809.0	1,675.0	-63.8	-74.1	44.8	0.30	0.28	-1.00
2,913.0	7.03	227.84	2,908.3	1,774.3	-71.7	-83.0	50.3	0.49	0.44	-1.75
3,013.0	7.30	226.89	3,007.5	1,873.5	-80.1	-92.2	56.4	0.29	0.27	-0.95
3,113.0	7.95	226.04	3,106.6	1,972.6	-89.2	-101.8	63.1	0.66	0.65	-0.85
3,213.0	8.40	225.29	3,205.6	2,071.6	-99.2	-111.9	70.4	0.46	0.45	-0.75
3,313.0	8.65	225.35	3,304.5	2,170.5	-109.6	-122.5	78.1	0.25	0.25	0.06
3,413.0	8.68	224.10	3,403.4	2,269.4	-120.3	-133.1	86.0	0.19	0.03	-1.25
3,513.0	8.68	223.10	3,502.2	2,368.2	-131.2	-143.5	94.2	0.15	0.00	-1.00
3,613.0	8.89	223.13	3,601.1	2,467.1	-142.4	-153.9	102.6	0.21	0.21	0.03
3,713.0	8.76	223.68	3,699.9	2,565.9	-153.5	-164.5	111.0	0.15	-0.13	0.55
3,813.0	8.96	223.99	3,798.7	2,664.7	-164.6	-175.1	119.3	0.21	0.20	0.31
3,913.0	8.99	224.36	3,897.5	2,763.5	-175.8	-186.0	127.7	0.07	0.03	0.37
4,013.0	9.14	224.20	3,996.2	2,862.2	-187.1	-197.0	136.1	0.15	0.15	-0.16
4,113.0	8.69	222.53	4,095.0	2,961.0	-198.4	-207.7	144.5	0.52	-0.45	-1.67
4,213.0	8.53	219.28	4,193.9	3,059.9	-209.7	-217.5	153.2	0.51	-0.16	-3.25
4,313.0	8.71	214.33	4,292.8	3,158.8	-221.7	-226.4	162.8	0.76	0.18	-4.95
4,413.0	8.94	211.41	4,391.6	3,257.6	-234.6	-234.7	173.4	0.50	0.23	-2.92
4,513.0	9.26	207.31	4,490.3	3,356.3	-248.3	-242.5	185.0	0.72	0.32	-4.10
4,613.0	9.66	204.84	4,589.0	3,455.0	-263.1	-249.7	197.7	0.57	0.40	-2.47
4,713.0	10.14	201.31	4,687.5	3,553.5	-278.9	-256.4	211.5	0.77	0.48	-3.53
4,813.0	10.76	200.57	4,785.8	3,651.8	-295.9	-262.9	226.5	0.63	0.62	-0.74
4,913.0	11.24	198.85	4,884.0	3,750.0	-313.8	-269.3	242.4	0.58	0.48	-1.72

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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)
5,013.0	11.73	198.24	4,982.0	3,848.0	-332.7	-275.7	259.3	0.50	0.49	-0.61
5,113.0	11.80	197.38	5,079.9	3,945.9	-352.1	-281.9	276.7	0.19	0.07	-0.86
5,213.0	12.22	196.28	5,177.7	4,043.7	-372.0	-287.9	294.7	0.48	0.42	-1.10
5,313.0	12.87	195.96	5,275.3	4,141.3	-392.9	-293.9	313.6	0.65	0.65	-0.32
5,413.0	11.44	196.35	5,373.0	4,239.0	-413.1	-299.8	331.9	1.43	-1.43	0.39
5,465.0	10.37	195.61	5,424.1	4,290.1	-422.6	-302.5	340.5	2.07	-2.05	-1.41
5,487.0	8.40	201.00	5,445.8	4,311.8	-426.0	-303.6	343.5	9.81	-8.97	24.48
5,518.0	4.70	215.70	5,476.6	4,342.6	-429.1	-305.2	346.2	13.01	-11.94	47.42
5,549.0	3.30	269.60	5,507.5	4,373.5	-430.2	-306.8	346.8	12.36	-4.52	173.87
5,581.0	4.80	320.20	5,539.5	4,405.5	-429.1	-308.6	345.4	11.61	4.69	158.13
5,612.0	5.10	349.50	5,570.4	4,436.4	-426.8	-309.7	342.9	8.12	0.97	94.52
5,644.0	7.40	2.20	5,602.2	4,468.2	-423.3	-309.8	339.5	8.34	7.19	39.69
5,675.0	10.70	355.90	5,632.8	4,498.8	-418.5	-310.0	334.7	11.10	10.65	-20.32
5,706.0	13.90	352.90	5,663.1	4,529.1	-411.9	-310.6	328.2	10.52	10.32	-9.68
5,738.0	16.60	354.20	5,693.9	4,559.9	-403.5	-311.6	319.8	8.50	8.44	4.06
5,769.0	19.30	356.80	5,723.4	4,589.4	-394.0	-312.3	310.4	9.08	8.71	8.39
5,800.0	21.80	0.10	5,752.4	4,618.4	-383.1	-312.6	299.8	8.89	8.06	10.65
5,832.0	24.10	2.90	5,781.9	4,647.9	-370.7	-312.2	287.7	7.95	7.19	8.75
5,863.0	26.50	5.40	5,809.9	4,675.9	-357.5	-311.3	275.1	8.47	7.74	8.06
5,895.0	29.40	4.60	5,838.2	4,704.2	-342.5	-310.0	260.9	9.14	9.06	-2.50
5,926.0	32.00	4.30	5,864.9	4,730.9	-326.7	-308.7	245.8	8.40	8.39	-0.97
5,958.0	35.20	3.80	5,891.5	4,757.5	-309.1	-307.5	228.9	10.04	10.00	-1.56
5,989.0	38.50	4.20	5,916.3	4,782.3	-290.5	-306.2	211.2	10.67	10.65	1.29
6,020.0	41.80	4.80	5,940.0	4,806.0	-270.6	-304.6	192.2	10.72	10.65	1.94
6,115.0	47.60	5.20	6,007.5	4,873.5	-204.1	-298.8	128.8	6.11	6.11	0.42
6,209.0	45.10	6.20	6,072.4	4,938.4	-136.4	-292.1	64.6	2.77	-2.66	1.06
6,240.0	44.70	5.80	6,094.3	4,960.3	-114.6	-289.8	44.0	1.58	-1.29	-1.29
6,272.0	42.90	5.60	6,117.4	4,983.4	-92.6	-287.6	23.1	5.64	-5.63	-0.63
6,303.0	40.60	5.40	6,140.6	5,006.6	-72.1	-285.6	3.5	7.43	-7.42	-0.65
6,335.0	37.80	6.50	6,165.4	5,031.4	-51.9	-283.5	-15.5	9.02	-8.75	3.44
6,366.0	35.00	7.90	6,190.3	5,056.3	-33.7	-281.2	-32.7	9.42	-9.03	4.52
6,398.0	32.50	8.00	6,216.9	5,082.9	-16.1	-278.7	-49.3	7.81	-7.81	0.31
6,429.0	29.50	8.80	6,243.5	5,109.5	-0.3	-276.4	-64.1	9.77	-9.68	2.58
6,460.0	27.00	10.50	6,270.8	5,136.8	14.2	-274.0	-77.6	8.47	-8.06	5.48
6,492.0	24.80	14.70	6,299.6	5,165.6	27.8	-270.9	-90.2	8.95	-6.88	13.13
6,523.0	21.40	20.00	6,328.1	5,194.1	39.4	-267.4	-100.6	12.85	-10.97	17.10
6,555.0	18.10	27.90	6,358.2	5,224.2	49.3	-263.0	-109.2	13.24	-10.31	24.69
6,586.0	15.80	38.80	6,387.9	5,253.9	56.8	-258.1	-115.4	12.62	-7.42	35.16
6,617.0	15.10	52.00	6,417.7	5,283.7	62.6	-252.3	-119.7	11.54	-2.26	42.58
6,649.0	14.90	64.20	6,448.7	5,314.7	67.0	-245.3	-122.3	9.87	-0.63	38.13
6,680.0	15.30	76.80	6,478.6	5,344.6	69.6	-237.7	-123.1	10.65	1.29	40.65
6,711.0	16.90	88.30	6,508.4	5,374.4	70.7	-229.2	-122.2	11.48	5.16	37.10

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6,743.0	18.20	99.00	6,538.9	5,404.9	70.1	-219.7	-119.3	10.85	4.06	33.44
6,774.0	19.60	109.00	6,568.2	5,434.2	67.6	-210.0	-114.7	11.37	4.52	32.26
6,806.0	21.40	118.70	6,598.2	5,464.2	63.1	-199.8	-107.9	12.00	5.63	30.31
6,837.0	22.30	127.40	6,627.0	5,493.0	56.8	-190.1	-99.5	10.83	2.90	28.06
6,869.0	23.60	134.10	6,656.5	5,522.5	48.6	-180.7	-89.4	9.11	4.06	20.94
6,900.0	25.50	141.80	6,684.7	5,550.7	39.1	-172.1	-78.1	11.99	6.13	24.84
6,932.0	27.40	146.80	6,713.3	5,579.3	27.5	-163.8	-64.9	9.14	5.94	15.63
6,963.0	29.90	147.90	6,740.5	5,606.5	15.0	-155.8	-50.9	8.24	8.06	3.55
7,057.0	38.90	148.70	6,818.0	5,684.0	-30.2	-128.0	-0.5	9.59	9.57	0.85
7,151.0	50.30	150.70	6,884.8	5,750.8	-87.1	-94.8	62.6	12.22	12.13	2.13
7,182.0	54.70	152.20	6,903.7	5,769.7	-108.7	-83.1	86.4	14.70	14.19	4.84
7,213.0	58.80	154.00	6,920.7	5,786.7	-131.9	-71.4	111.6	14.09	13.23	5.81
7,245.0	63.00	154.60	6,936.3	5,802.3	-157.0	-59.2	138.9	13.23	13.13	1.88
7,276.0	65.90	155.00	6,949.6	5,815.6	-182.3	-47.3	166.3	9.43	9.35	1.29
7,308.0	68.80	157.00	6,962.0	5,828.0	-209.3	-35.3	195.3	10.74	9.06	6.25
7,339.0	71.60	159.10	6,972.5	5,838.5	-236.4	-24.4	224.2	11.05	9.03	6.77
7,371.0	72.00	161.20	6,982.5	5,848.5	-265.0	-14.1	254.4	6.36	1.25	6.56
7,402.0	73.80	161.60	6,991.6	5,857.6	-293.0	-4.7	283.9	5.94	5.81	1.29
7,433.0	76.80	162.10	6,999.4	5,865.4	-321.5	4.7	313.8	9.80	9.68	1.61
7,465.0	81.30	163.70	7,005.5	5,871.5	-351.6	13.9	345.1	14.89	14.06	5.00
7,496.0	84.80	164.30	7,009.3	5,875.3	-381.1	22.4	375.9	11.45	11.29	1.94
7,527.0	87.50	165.40	7,011.3	5,877.3	-411.0	30.5	406.8	9.40	8.71	3.55
7,623.0	88.90	166.50	7,014.4	5,880.4	-504.1	53.8	502.7	1.85	1.46	1.15
7,717.0	87.50	163.70	7,017.3	5,883.3	-594.8	77.9	596.6	3.33	-1.49	-2.98
7,811.0	90.70	167.00	7,018.8	5,884.8	-685.8	101.7	690.6	4.89	3.40	3.51
7,905.0	91.20	167.40	7,017.2	5,883.2	-777.4	122.5	784.6	0.68	0.53	0.43
7,999.0	90.90	166.50	7,015.5	5,881.5	-869.0	143.7	878.5	1.01	-0.32	-0.96
8,093.0	89.60	162.80	7,015.1	5,881.1	-959.6	168.6	972.5	4.17	-1.38	-3.94
8,187.0	91.70	165.50	7,014.0	5,880.0	-1,050.0	194.3	1,066.4	3.64	2.23	2.87
8,281.0	91.70	164.20	7,011.2	5,877.2	-1,140.7	218.8	1,160.3	1.38	0.00	-1.38
8,375.0	90.60	163.30	7,009.4	5,875.4	-1,230.9	245.1	1,254.1	1.51	-1.17	-0.96
8,469.0	90.30	165.10	7,008.6	5,874.6	-1,321.4	270.7	1,348.1	1.94	-0.32	1.91
8,564.0	89.90	167.60	7,008.5	5,874.5	-1,413.7	293.1	1,443.1	2.67	-0.42	2.63
8,658.0	90.00	167.90	7,008.5	5,874.5	-1,505.5	313.1	1,537.0	0.34	0.11	0.32
8,753.0	90.40	168.30	7,008.2	5,874.2	-1,598.5	332.7	1,632.0	0.60	0.42	0.42
8,847.0	90.70	166.90	7,007.3	5,873.3	-1,690.3	352.8	1,726.0	1.52	0.32	-1.49
8,941.0	89.40	167.00	7,007.2	5,873.2	-1,781.9	374.1	1,820.0	1.39	-1.38	0.11
9,035.0	89.10	165.20	7,008.4	5,874.4	-1,873.1	396.7	1,914.0	1.94	-0.32	-1.91
9,129.0	90.20	167.40	7,009.0	5,875.0	-1,964.4	418.9	2,007.9	2.62	1.17	2.34
9,223.0	90.20	167.70	7,008.7	5,874.7	-2,056.2	439.2	2,101.9	0.32	0.00	0.32
9,317.0	89.80	166.10	7,008.7	5,874.7	-2,147.7	460.5	2,195.9	1.75	-0.43	-1.70
9,411.0	89.90	165.90	7,008.9	5,874.9	-2,239.0	483.2	2,289.9	0.24	0.11	-0.21
9,505.0	89.80	165.90	7,009.2	5,875.2	-2,330.1	506.1	2,383.9	0.11	-0.11	0.00

10/31/2014

Database:		**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)
9,600.0	89.50	165.10	7,009.8	5,875.8	-2,422.1	529.9	2,478.9	0.90	-0.32	-0.84
9,693.0	89.40	165.60	7,010.7	5,876.7	-2,512.1	553.4	2,571.9	0.55	-0.11	0.54
9,787.0	89.40	165.00	7,011.6	5,877.6	-2,603.0	577.3	2,665.8	0.64	0.00	-0.64
9,882.0	89.70	165.90	7,012.4	5,878.4	-2,694.9	601.1	2,760.8	1.00	0.32	0.95
9,976.0	89.80	165.90	7,012.8	5,878.8	-2,786.1	624.0	2,854.8	0.11	0.11	0.00
10,070.0	90.20	166.30	7,012.8	5,878.8	-2,877.3	646.6	2,948.8	0.60	0.43	0.43
10,164.0	90.30	166.10	7,012.4	5,878.4	-2,968.6	669.0	3,042.8	0.24	0.11	-0.21
10,258.0	90.50	166.20	7,011.7	5,877.7	-3,059.9	691.5	3,136.8	0.24	0.21	0.11
10,352.0	90.60	165.50	7,010.8	5,876.8	-3,151.0	714.5	3,230.8	0.75	0.11	-0.74
10,446.0	90.50	165.10	7,009.9	5,875.9	-3,242.0	738.4	3,324.8	0.44	-0.11	-0.43
10,540.0	90.30	164.40	7,009.3	5,875.3	-3,332.6	763.1	3,418.7	0.77	-0.21	-0.74
10,635.0	88.80	164.80	7,010.0	5,876.0	-3,424.2	788.3	3,513.7	1.63	-1.58	0.42
10,729.0	88.00	167.00	7,012.6	5,878.6	-3,515.4	811.2	3,607.6	2.49	-0.85	2.34
10,823.0	88.30	166.90	7,015.7	5,881.7	-3,606.9	832.4	3,701.6	0.34	0.32	-0.11
10,917.0	86.90	165.90	7,019.6	5,885.6	-3,698.2	854.5	3,795.5	1.83	-1.49	-1.06
11,012.0	88.80	165.30	7,023.2	5,889.2	-3,790.1	878.1	3,890.4	2.10	2.00	-0.63
11,106.0	89.60	166.30	7,024.5	5,890.5	-3,881.2	901.2	3,984.4	1.36	0.85	1.06
11,200.0	89.50	167.60	7,025.2	5,891.2	-3,972.8	922.4	4,078.4	1.39	-0.11	1.38
11,294.0	90.90	165.50	7,024.9	5,890.9	-4,064.2	944.3	4,172.4	2.68	1.49	-2.23
11,388.0	91.70	166.90	7,022.8	5,888.8	-4,155.5	966.7	4,266.3	1.72	0.85	1.49
11,483.0	91.20	163.80	7,020.4	5,886.4	-4,247.3	990.7	4,361.3	3.30	-0.53	-3.26
11,577.0	89.60	161.00	7,019.7	5,885.7	-4,336.9	1,019.1	4,455.0	3.43	-1.70	-2.98
11,671.0	90.70	163.00	7,019.5	5,885.5	-4,426.3	1,048.2	4,548.7	2.43	1.17	2.13
11,766.0	91.10	164.40	7,018.0	5,884.0	-4,517.5	1,074.8	4,643.6	1.53	0.42	1.47
11,860.0	92.90	166.40	7,014.7	5,880.7	-4,608.4	1,098.5	4,737.5	2.86	1.91	2.13
11,954.0	93.20	165.80	7,009.7	5,875.7	-4,699.5	1,121.1	4,831.4	0.71	0.32	-0.64
12,048.0	92.30	167.20	7,005.2	5,871.2	-4,790.8	1,143.0	4,925.2	1.77	-0.96	1.49
12,142.0	90.40	167.10	7,003.0	5,869.0	-4,882.4	1,163.9	5,019.2	2.02	-2.02	-0.11
12,237.0	90.20	166.50	7,002.5	5,868.5	-4,974.9	1,185.6	5,114.2	0.67	-0.21	-0.63
12,331.0	91.10	166.60	7,001.4	5,867.4	-5,066.3	1,207.4	5,208.2	0.96	0.96	0.11
12,425.0	91.00	164.60	6,999.7	5,865.7	-5,157.3	1,230.8	5,302.2	2.13	-0.11	-2.13
12,519.0	90.20	166.50	6,998.7	5,864.7	-5,248.4	1,254.2	5,396.1	2.19	-0.85	2.02
12,613.0	89.40	163.50	6,999.0	5,865.0	-5,339.1	1,278.6	5,490.1	3.30	-0.85	-3.19
12,707.0	88.50	166.60	7,000.7	5,866.7	-5,429.9	1,302.8	5,584.0	3.43	-0.96	3.30
12,801.0	89.80	167.40	7,002.1	5,868.1	-5,521.5	1,324.0	5,678.0	1.62	1.38	0.85
12,895.0	90.60	166.70	7,001.8	5,867.8	-5,613.1	1,345.0	5,772.0	1.13	0.85	-0.74
12,990.0	93.30	166.50	6,998.6	5,864.6	-5,705.5	1,367.0	5,867.0	2.85	2.84	-0.21
13,084.0	91.30	166.80	6,994.8	5,860.8	-5,796.8	1,388.7	5,960.9	2.15	-2.13	0.32
13,178.0	91.30	168.20	6,992.7	5,858.7	-5,888.6	1,409.1	6,054.8	1.49	0.00	1.49
13,273.0	91.60	167.40	6,990.3	5,856.3	-5,981.4	1,429.1	6,149.8	0.90	0.32	-0.84
13,367.0	91.80	168.10	6,987.5	5,853.5	-6,073.2	1,449.1	6,243.7	0.77	0.21	0.74
13,461.0	91.40	166.40	6,984.9	5,850.9	-6,164.9	1,469.8	6,337.7	1.86	-0.43	-1.81

10/31/2014

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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)
13,546.0	90.60	165.50	6,983.4	5,849.4	-6,247.3	1,490.4	6,422.6	1.42	-0.94	-1.06
13,601.0	90.60	165.50	6,982.8	5,848.8	-6,300.6	1,504.2	6,477.6	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
5,465.0	5,424.1	-422.6	-302.5	Tie In MD=5465' MD
13,546.0	6,983.4	-6,247.3	1,490.4	Last Survey MD=13546'
13,601.0	6,982.8	-6,300.6	1,504.2	Projection to TD MD=13601'

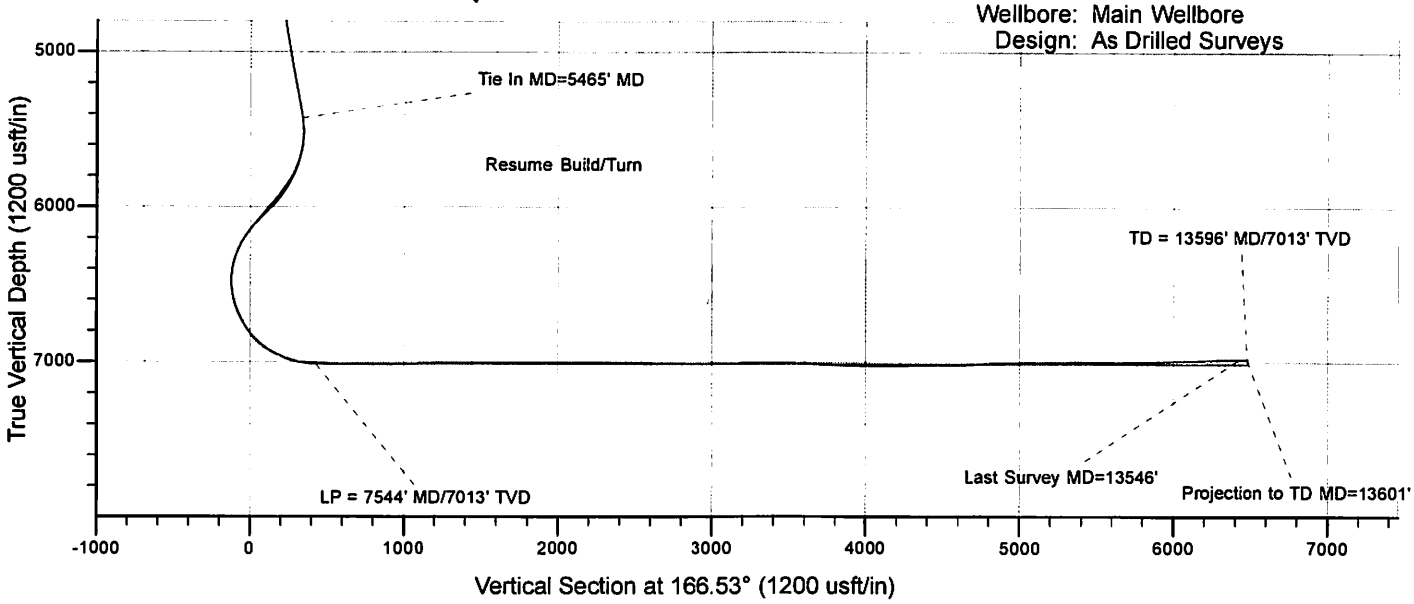
Checked By: _____ Approved By: _____ Date: _____

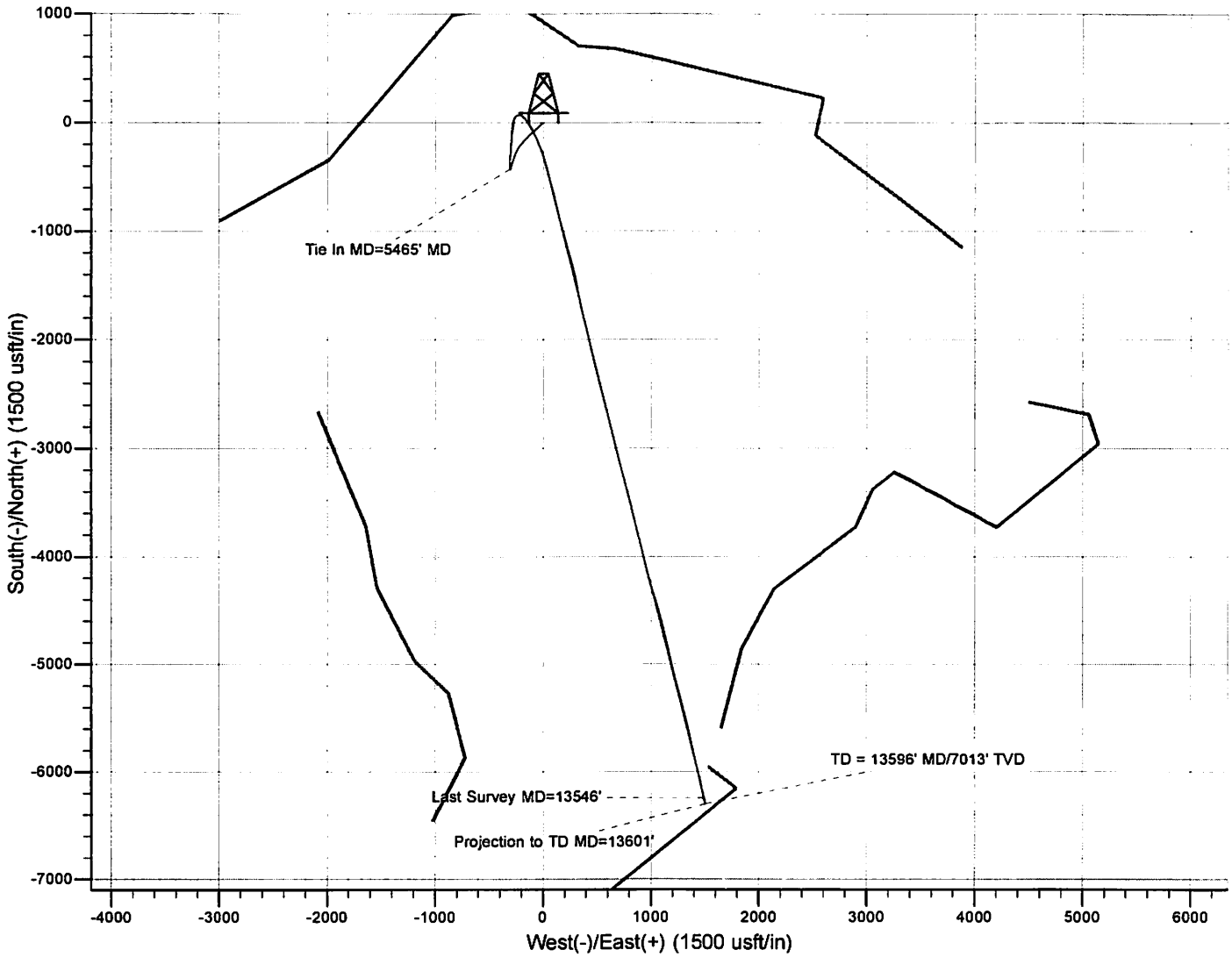
10/31/2014

PHOENIX
TECHNOLOGY SERVICES

EQT Production - Marcellus

Project: Doddridge County, WV Grid
Site: Doddridge County 514316
Well: Well #514316
Wellbore: Main Wellbore
Design: As Drilled Surveys





10/31/2014