



EQT Production - Marcellus

Doddridge County, WV Grid

Doddridge County 514141

Well #514141

API 47-1706587

Main Wellbore

Design: 514141 As Drilled Surveys

Standard Survey Report

28 April, 2015

RECEIVED
Office of Oil and Gas

AUG 13 2015

WV Department of
Environmental Protection



Where energy meets innovation.

10/30/2015

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Doddridge County 514141
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1277.0usft
Project:	Doddridge County, WV Grid	MD Reference:	KB@23 @ 1277.0usft
Site:	Doddridge County 514141	North Reference:	Grid
Well:	Well #514141	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	514141 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 514141

Site Position:		Northing:	280,273.30 usft	Latitude:	39.26
From:	Map	Easting:	1,649,362.70 usft	Longitude:	-80.74
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.79 °

Well Well #514141

Well Position	+N/-S	0.0 usft	Northing:	280,273.30 usft	Latitude:	39° 15' 46.370 N
	+E/-W	0.0 usft	Easting:	1,649,362.70 usft	Longitude:	80° 44' 18.209 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	1,254.0 usft

Wellbore Main Wellbore

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/7/2015	-7.82	66.75	52,307

Design 514141 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	182.95

Survey Program Date 4/28/2015

From (')	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	5,349.8	514141 Gyrodata Gyros (Main Wellbore)	GYD_DP_MS	Gyrodata gyro-compassing and drop
0.00	13,863.0	514141 PHX MWD Curve and Lateral (Ma	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	-1,277.0	0.0	0.0	0.0	0.00	0.00	0.00
110.0	0.13	267.90	110.0	-1,167.0	0.0	-0.1	0.0	0.12	0.12	0.00
210.0	0.18	247.53	210.0	-1,067.0	-0.1	-0.4	0.1	0.07	0.05	-20.37
310.0	0.27	276.02	310.0	-967.0	-0.1	-0.8	0.1	0.14	0.09	28.49
410.0	0.26	272.21	410.0	-867.0	-0.1	-1.2	0.1	0.02	-0.01	-3.81
510.0	0.10	307.01	510.0	-767.0	0.0	-1.5	0.1	0.19	-0.16	34.80
610.0	0.08	348.98	610.0	-667.0	0.1	-1.6	0.0	0.07	-0.02	4.97
710.0	0.05	349.94	710.0	-567.0	0.2	-1.6	-0.1	0.03	-0.03	0.96

RECEIVED
Office of Oil and Gas
AUG 13 2015
WV Department of Environmental Protection

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Doddridge County 514141
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ -1277.Dusft
Project:	Doddridge County, WV Grid	MD Reference:	KB@23 @ 1277.Dusft
Site:	Doddridge County 514141	North Reference:	Gnd
Well:	Well #514141	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	514141 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)
810.0	0.09	298.73	810.0	-467.0	0.3	-1.7	-0.2	0.07	0.04	-51.21
910.0	0.19	319.60	910.0	-367.0	0.5	-1.9	-0.4	0.11	0.10	20.87
1,010.0	0.23	346.54	1,010.0	-267.0	0.8	-2.0	-0.7	0.11	0.04	26.94
1,110.0	0.36	31.32	1,110.0	-167.0	1.3	-1.9	-1.2	0.25	0.13	44.78
1,210.0	0.39	51.12	1,210.0	-67.0	1.7	-1.5	-1.7	0.13	0.03	19.80
1,310.0	0.41	66.01	1,310.0	33.0	2.1	-0.9	-2.0	0.11	0.02	14.89
1,410.0	0.48	94.91	1,410.0	133.0	2.2	-0.2	-2.2	0.23	0.07	28.90
1,510.0	0.50	96.70	1,510.0	233.0	2.1	0.7	-2.2	0.03	0.02	1.79
1,610.0	0.48	123.61	1,610.0	333.0	1.8	1.5	-1.9	0.23	-0.02	26.91
1,710.0	0.58	144.84	1,710.0	433.0	1.2	2.1	-1.3	0.22	0.10	21.23
1,810.0	0.63	149.71	1,810.0	533.0	0.3	2.7	-0.4	0.07	0.05	4.87
1,910.0	0.64	157.15	1,910.0	633.0	-0.7	3.2	0.5	0.08	0.01	7.44
2,010.0	0.63	161.33	2,010.0	733.0	-1.7	3.6	1.5	0.05	-0.01	4.18
2,110.0	0.62	165.78	2,110.0	833.0	-2.8	3.9	2.6	0.05	-0.01	4.45
2,210.0	0.55	174.72	2,209.9	932.9	-3.8	4.1	3.6	0.11	-0.07	8.94
2,310.0	0.55	180.74	2,309.9	1,032.9	-4.7	4.1	4.5	0.06	0.00	6.02
2,410.0	0.80	237.13	2,409.9	1,132.9	-5.6	3.5	5.4	0.67	0.25	56.39
2,510.0	4.65	274.54	2,509.8	1,232.8	-5.6	-1.1	5.7	4.04	3.85	37.41
2,610.0	8.66	282.03	2,609.1	1,332.1	-3.8	-12.5	4.4	4.09	4.01	7.49
2,710.0	9.64	282.73	2,707.8	1,430.8	-0.3	-28.1	1.8	0.99	0.98	0.70
2,810.0	6.36	274.91	2,806.9	1,529.9	2.0	-41.7	0.2	3.45	-3.28	-7.82
2,910.0	4.04	265.28	2,906.4	1,629.4	2.2	-50.8	0.5	2.47	-2.32	-9.63
3,010.0	2.22	253.16	3,006.3	1,729.3	1.3	-56.1	1.6	1.93	-1.82	-12.12
3,110.0	0.89	235.67	3,106.3	1,829.3	0.3	-58.6	2.7	1.40	-1.33	-17.49
3,210.0	0.62	218.28	3,206.2	1,929.2	-0.6	-59.6	3.6	0.35	-0.27	-17.39
3,310.0	0.56	215.41	3,306.2	2,029.2	-1.4	-60.2	4.5	0.07	-0.06	-2.87
3,410.0	0.53	218.49	3,406.2	2,129.2	-2.1	-60.8	5.3	0.04	-0.03	3.08
3,510.0	0.54	223.28	3,506.2	2,229.2	-2.8	-61.4	6.0	0.05	0.01	4.79
3,610.0	0.47	236.77	3,606.2	2,329.2	-3.4	-62.1	6.6	0.14	-0.07	13.49
3,710.0	0.44	241.93	3,706.2	2,429.2	-3.8	-62.8	7.0	0.05	-0.03	5.16
3,810.0	0.47	259.41	3,806.2	2,529.2	-4.1	-63.5	7.3	0.14	0.03	17.48
3,910.0	0.64	275.66	3,906.2	2,629.2	-4.1	-64.5	7.4	0.23	0.17	16.25
4,010.0	0.68	285.15	4,006.2	2,729.2	-3.9	-65.6	7.2	0.12	0.04	9.49
4,110.0	0.80	295.93	4,106.2	2,829.2	-3.4	-66.8	6.8	0.18	0.12	10.78
4,210.0	0.98	306.56	4,206.2	2,929.2	-2.6	-68.1	6.1	0.24	0.18	10.63
4,310.0	1.04	308.42	4,306.2	3,029.2	-1.5	-69.5	5.1	0.07	0.06	1.86
4,410.0	1.26	315.40	4,406.2	3,129.2	-0.2	-71.0	3.8	0.26	0.22	6.98
4,510.0	1.47	323.01	4,506.1	3,229.1	1.6	-72.5	2.1	0.28	0.21	7.61
4,610.0	1.89	326.32	4,606.1	3,329.1	4.0	-74.2	-0.2	0.43	0.42	3.31
4,710.0	2.15	327.88	4,706.0	3,429.0	7.0	-76.1	-3.1	0.27	0.26	1.56
4,810.0	2.50	327.70	4,805.9	3,528.9	10.4	-78.3	-6.4	0.35	0.35	-0.18
4,910.0	2.69	327.58	4,905.8	3,628.8	14.2	-80.7	-10.1	0.19	0.19	-0.12

RECEIVED
Office of Oil and Gas
AUG 13 2015
WV Department of
Environmental Protection

Database:	EDM 5000 1 Single User Db.	Local Co-ordinate Reference:	Site Doddridge County 514141
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1277.0usft
Project:	Doddridge County, WV Grd	MD Reference:	KB@23 @ 1277.0usft
Site:	Doddridge County 514141	North Reference:	Grid
Well:	Well #514141	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	514141 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)	
5,010.0	2.86	328.84	5,005.7	3,728.7	18.4	-83.3	-14.1	0.18	0.17	1.26	
5,110.0	3.10	329.72	5,105.6	3,828.6	22.8	-85.9	-18.4	0.24	0.24	0.88	
5,210.0	3.73	330.92	5,205.4	3,928.4	28.0	-88.9	-23.4	0.63	0.63	1.20	
5,310.0	4.28	330.78	5,305.2	4,028.2	34.1	-92.3	-29.3	0.55	0.55	-0.14	
Gyro Tie In=5350' MD											
5,349.8	4.41	329.17	5,344.8	4,067.8	36.7	-93.6	-31.8	0.45	0.33	-4.05	
5,412.0	4.30	330.20	5,406.9	4,129.9	40.8	-96.2	-35.8	0.22	-0.18	1.66	
5,444.0	4.00	325.00	5,438.8	4,161.8	42.7	-97.4	-37.7	1.50	-0.94	-16.25	
KOP=E476' MD											
5,476.0	5.90	285.50	5,470.7	4,193.7	44.1	-99.6	-38.9	11.84	5.94	-123.44	
5,507.0	10.00	269.70	5,501.4	4,224.4	44.5	-103.9	-39.1	14.87	13.23	-50.97	
5,539.0	13.80	266.50	5,532.7	4,255.7	44.3	-110.4	-38.5	12.05	11.88	-10.00	
5,570.0	15.50	265.80	5,562.7	4,285.7	43.7	-118.3	-37.6	5.51	5.48	-2.26	
5,602.0	16.60	261.40	5,593.4	4,316.4	42.7	-127.0	-36.2	5.12	3.44	-13.75	
5,634.0	19.50	258.40	5,623.8	4,346.8	41.0	-136.8	-33.9	9.51	9.06	-9.38	
5,665.0	22.90	254.00	5,652.7	4,375.7	38.3	-147.7	-30.6	12.10	10.97	-14.19	
5,697.0	26.90	252.00	5,681.8	4,404.8	34.3	-160.5	-26.0	12.77	12.50	-6.25	
5,729.0	29.70	253.10	5,709.9	4,432.9	29.8	-175.0	-20.7	8.90	8.75	3.44	
5,760.0	32.60	253.00	5,736.5	4,459.5	25.1	-190.4	-15.3	9.36	9.35	-0.32	
5,792.0	35.60	251.20	5,763.0	4,486.0	19.6	-207.4	-8.9	9.89	9.38	-5.63	
5,823.0	39.00	249.40	5,787.6	4,510.6	13.2	-225.1	-1.7	11.52	10.97	-5.81	
5,855.0	42.50	247.30	5,811.9	4,534.9	5.5	-244.5	7.1	11.75	10.94	-6.56	
5,886.0	45.80	246.30	5,834.1	4,557.1	-3.0	-264.3	16.6	10.88	10.65	-3.23	
5,918.0	48.30	247.90	5,855.9	4,578.9	-12.1	-285.9	26.8	8.63	7.81	5.00	
5,950.0	50.90	246.50	5,876.6	4,599.6	-21.5	-308.4	37.4	8.78	8.13	-4.38	
5,982.0	53.60	244.30	5,896.2	4,619.2	-32.1	-331.4	49.1	10.04	8.44	-6.88	
6,013.0	56.70	243.30	5,913.9	4,636.9	-43.3	-354.2	61.5	10.34	10.00	-3.23	
6,045.0	60.70	242.80	5,930.6	4,653.6	-55.7	-378.6	75.1	12.57	12.50	-1.56	
6,076.0	63.80	243.70	5,945.0	4,668.0	-68.1	-403.1	88.7	10.32	10.00	2.90	
6,108.0	66.40	245.00	5,958.5	4,681.5	-80.6	-429.2	102.6	8.92	8.13	4.06	
6,140.0	68.80	246.00	5,970.7	4,693.7	-92.9	-456.1	116.2	8.04	7.50	3.13	
6,171.0	70.20	246.20	5,981.5	4,704.5	-104.6	-482.7	129.3	4.56	4.52	0.65	
6,266.0	73.80	246.70	6,010.9	4,733.9	-140.7	-565.5	169.6	3.82	3.79	0.53	
6,361.0	72.00	245.70	6,038.8	4,761.8	-177.4	-648.6	210.5	2.15	-1.89	-1.05	
6,456.0	71.60	245.60	6,068.5	4,791.5	-214.6	-730.8	251.8	0.43	-0.42	-0.11	
6,551.0	71.30	243.20	6,098.7	4,821.7	-253.5	-812.0	294.9	2.42	-0.32	-2.55	
6,646.0	71.10	245.10	6,129.3	4,852.3	-292.7	-892.9	338.2	1.90	-0.21	2.00	
6,741.0	71.70	244.70	6,159.6	4,882.6	-330.9	-974.5	380.5	0.75	0.63	-0.42	
6,836.0	72.30	244.30	6,189.0	4,912.0	-369.8	-1,056.0	423.6	0.75	0.63	-0.42	
6,931.0	70.50	245.40	6,219.3	4,942.3	-408.1	-1,137.5	466.0	2.19	-1.89	1.16	
7,026.0	71.20	244.90	6,250.4	4,973.4	-445.8	-1,219.0	507.8	0.89	0.74	-0.53	
7,121.0	72.30	244.90	6,280.2	5,003.2	-484.0	-1,300.7	550.2	1.16	1.16	0.95	
7,216.0	70.90	245.80	6,310.2	5,033.2	-521.6	-1,382.6	592.0	1.73	-1.47	0.95	

RECEIVED
Office of Oil and Gas
AUG 13 2015
WV Department of
Environmental Protection

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Doddridge County 514141
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1277.0usft
Project:	Doddridge County, WV Grid	MD Reference:	KB@23 @ 1277.0usft
Site:	Doddridge County 514141	North Reference:	Grid
Well:	Well #514141	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	514141 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)
7,311.0	71.90	245.80	6,340.5	5,063.5	-558.5	-1,464.7	633.1	1.05	1.05	0.00
7,406.0	70.80	244.40	6,370.9	5,093.9	-596.4	-1,546.3	675.1	1.81	-1.16	-1.47
7,500.0	71.70	244.30	6,401.1	5,124.1	-635.0	-1,626.6	717.7	0.96	0.96	-0.11
7,595.0	72.30	244.90	6,430.4	5,153.4	-673.7	-1,706.2	760.6	0.87	0.63	0.63
7,690.0	70.70	244.70	6,460.6	5,183.6	-712.1	-1,789.7	803.1	1.70	-1.68	-0.21
7,785.0	71.20	245.00	6,491.6	5,214.6	-750.2	-1,871.0	845.4	0.61	0.53	0.32
7,880.0	72.00	245.10	6,521.6	5,244.6	-788.3	-1,952.7	887.6	0.85	0.84	0.11
7,975.0	70.80	244.60	6,551.9	5,274.9	-826.5	-2,034.2	930.0	1.36	-1.26	-0.53
8,039.0	70.90	245.00	6,572.9	5,295.9	-852.3	-2,086.9	958.5	0.61	0.16	0.63
8,070.0	71.30	245.00	6,582.9	5,305.9	-864.7	-2,115.5	972.2	1.29	1.29	0.00
8,102.0	71.70	242.00	6,593.1	5,316.1	-878.2	-2,142.7	987.2	8.98	1.25	-9.38
8,134.0	71.30	237.10	6,603.2	5,326.2	-893.6	-2,168.8	1,003.9	14.57	-1.25	-15.31
8,165.0	71.80	233.20	6,613.0	5,336.0	-910.4	-2,193.0	1,021.9	12.04	1.61	-12.58
8,197.0	72.30	230.40	6,622.9	5,345.9	-929.2	-2,216.9	1,041.9	8.47	1.56	-8.75
8,229.0	72.50	227.30	6,632.6	5,355.6	-949.3	-2,239.8	1,063.1	9.26	0.63	-9.69
8,260.0	73.60	224.30	6,641.6	5,364.6	-969.9	-2,261.1	1,084.9	9.91	3.55	-9.68
8,292.0	74.90	221.00	6,650.3	5,373.3	-992.6	-2,281.9	1,108.6	10.72	4.06	-10.31
8,323.0	75.90	218.10	6,658.1	5,381.1	-1,015.7	-2,301.0	1,132.6	9.61	3.23	-9.35
8,355.0	75.70	215.30	6,666.0	5,389.0	-1,040.6	-2,319.6	1,158.4	8.51	-0.63	-8.75
8,387.0	76.50	211.90	6,673.7	5,396.7	-1,066.5	-2,336.8	1,185.1	10.61	2.50	-10.63
8,418.0	77.40	209.20	6,680.7	5,403.7	-1,092.5	-2,352.1	1,211.9	8.97	2.90	-8.71
8,450.0	77.60	207.30	6,687.6	5,410.6	-1,120.0	-2,366.9	1,240.1	5.83	0.63	-5.94
8,482.0	78.20	204.60	6,694.3	5,417.3	-1,148.1	-2,380.6	1,268.9	8.46	1.88	-8.44
8,513.0	78.90	200.90	6,700.4	5,423.4	-1,176.1	-2,392.3	1,297.5	11.91	2.26	-11.94
8,545.0	79.40	197.50	6,706.5	5,429.5	-1,205.8	-2,402.7	1,327.7	10.55	1.56	-10.63
8,577.0	79.90	194.10	6,712.2	5,435.2	-1,236.1	-2,411.2	1,358.4	10.57	1.56	-10.63
8,608.0	80.70	190.70	6,717.4	5,440.4	-1,265.9	-2,417.8	1,388.5	11.11	2.58	-10.97
8,640.0	80.20	187.80	6,722.8	5,445.8	-1,297.1	-2,422.9	1,419.9	9.07	-1.56	-9.06
8,671.0	79.80	184.50	6,728.1	5,451.1	-1,327.4	-2,426.1	1,450.3	10.56	-1.29	-10.65
8,703.0	79.00	181.30	6,734.0	5,457.0	-1,358.8	-2,427.7	1,481.8	10.14	-2.50	-10.00
8,735.0	78.90	178.40	6,740.2	5,463.2	-1,390.2	-2,427.7	1,513.2	8.90	-0.31	-9.06
8,766.0	80.30	175.80	6,745.8	5,468.8	-1,420.7	-2,426.1	1,543.5	9.40	4.52	-8.39
8,797.0	80.10	172.20	6,751.0	5,474.0	-1,451.1	-2,422.9	1,573.7	11.46	-0.65	-11.61
8,829.0	81.00	169.50	6,756.3	5,479.3	-1,482.2	-2,417.9	1,604.5	8.79	2.81	-8.44
8,861.0	82.80	166.80	6,760.8	5,483.8	-1,513.2	-2,411.4	1,635.1	10.07	5.63	-8.44
8,892.0	85.20	163.90	6,764.0	5,487.0	-1,543.0	-2,403.6	1,664.5	12.10	7.74	-9.35
8,924.0	87.50	160.60	6,766.1	5,489.1	-1,573.5	-2,393.9	1,694.4	12.55	7.19	-10.31
8,955.0	89.30	157.70	6,766.9	5,489.9	-1,602.4	-2,382.8	1,722.7	11.01	5.81	-10.25
LP=9019' MD/ 5768' TVD										
9,019.0	89.40	156.20	6,767.7	5,490.7	-1,661.3	-2,357.8	1,780.3	2.35	0.16	-2.54
9,113.0	89.90	156.30	6,768.2	5,491.2	-1,747.3	-2,319.9	1,864.2	0.54	0.53	0.11
9,208.0	90.70	156.40	6,767.8	5,490.8	-1,834.3	-2,281.8	1,949.2	0.85	0.84	0.11
9,303.0	89.60	155.30	6,767.5	5,490.5	-1,921.0	-2,242.9	2,033.8	1.64	-1.16	-1.16

RECEIVED
Office of Oil and Gas
Aug 13 2015
WV Department of Environmental Protection

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Doddridge County 514141
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1277.0usft
Project:	Doddridge County, WV Grid	MD Reference:	KB@23 @ 1277.0usft
Site:	Doddridge County 514141	North Reference:	Grid
Well:	Well #514141	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	514141 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)
9,398.0	90.40	156.40	6,767.5	5,490.5	-2,007.7	-2,204.1	2,118.3	1.43	0.84	1.16
9,493.0	91.10	155.80	6,766.3	5,489.3	-2,094.6	-2,165.6	2,203.1	0.97	0.74	-0.63
9,588.0	87.90	153.60	6,767.1	5,490.1	-2,180.4	-2,125.0	2,286.7	4.09	-3.37	-2.32
9,683.0	88.50	153.60	6,770.1	5,493.1	-2,265.5	-2,082.8	2,369.5	0.63	0.63	0.00
9,778.0	89.70	154.30	6,771.6	5,494.6	-2,350.8	-2,041.1	2,452.6	1.46	1.26	0.74
9,873.0	91.40	155.70	6,770.7	5,493.7	-2,436.9	-2,000.9	2,536.5	2.32	1.79	1.47
9,968.0	92.10	155.60	6,767.8	5,490.8	-2,523.4	-1,961.8	2,620.9	0.74	0.74	-0.11
10,063.0	91.20	155.00	6,765.0	5,488.0	-2,609.7	-1,922.1	2,705.0	1.14	-0.95	-0.63
10,158.0	89.80	153.80	6,764.2	5,487.2	-2,695.4	-1,881.1	2,788.5	1.94	-1.47	-1.26
10,253.0	90.30	152.70	6,764.1	5,487.1	-2,780.2	-1,838.3	2,871.0	1.27	0.53	-1.16
10,348.0	91.20	155.10	6,762.9	5,485.9	-2,865.5	-1,796.5	2,954.0	2.70	0.95	2.53
10,443.0	90.10	155.70	6,761.8	5,484.8	-2,951.9	-1,757.0	3,038.2	1.32	-1.16	0.63
10,538.0	88.90	155.80	6,762.6	5,485.6	-3,038.5	-1,717.9	3,122.7	1.27	-1.26	0.11
10,632.0	88.80	155.50	6,764.5	5,487.5	-3,124.1	-1,679.2	3,206.2	0.34	-0.11	-0.32
10,727.0	88.70	153.90	6,766.6	5,489.6	-3,210.0	-1,638.6	3,289.9	1.69	-0.11	-1.68
10,822.0	89.60	154.30	6,768.0	5,491.0	-3,295.4	-1,597.1	3,373.1	1.04	0.95	0.42
10,917.0	90.40	154.50	6,768.0	5,491.0	-3,381.1	-1,556.1	3,456.6	0.87	0.84	0.21
11,012.0	89.10	155.00	6,768.4	5,491.4	-3,467.0	-1,515.5	3,540.3	1.47	-1.37	0.53
11,107.0	89.40	154.60	6,769.6	5,492.6	-3,552.9	-1,475.1	3,624.1	0.53	0.32	-0.42
11,202.0	90.20	155.00	6,770.0	5,493.0	-3,638.9	-1,434.7	3,707.8	0.94	0.84	0.42
11,297.0	88.30	154.20	6,771.2	5,494.2	-3,724.7	-1,393.9	3,791.4	2.17	-2.00	-0.84
11,392.0	89.00	154.60	6,773.5	5,496.5	-3,810.4	-1,352.9	3,874.8	0.85	0.74	0.42
11,486.0	89.90	154.90	6,774.4	5,497.4	-3,895.4	-1,312.8	3,957.7	1.01	0.96	0.32
11,581.0	90.50	155.10	6,774.0	5,497.0	-3,981.5	-1,272.6	4,041.6	0.67	0.63	0.21
11,676.0	91.40	155.20	6,772.4	5,495.4	-4,067.7	-1,232.7	4,125.6	0.95	0.95	0.11
11,771.0	90.00	155.50	6,771.3	5,494.3	-4,154.0	-1,193.1	4,209.8	1.51	-1.47	0.32
11,866.0	90.20	154.70	6,771.1	5,494.1	-4,240.2	-1,153.1	4,293.8	0.87	0.21	-0.84
11,961.0	91.60	155.80	6,769.6	5,492.6	-4,326.4	-1,113.3	4,377.9	1.87	1.47	1.16
12,056.0	90.40	156.60	6,768.0	5,491.0	-4,413.3	-1,075.0	4,462.7	1.52	-1.26	0.84
12,151.0	89.00	156.80	6,768.5	5,491.5	-4,500.6	-1,037.4	4,547.9	1.49	-1.47	0.21
12,246.0	88.10	155.90	6,770.9	5,493.9	-4,587.6	-999.3	4,632.9	1.34	-0.95	-0.95
12,341.0	88.60	156.00	6,773.6	5,496.6	-4,674.3	-960.6	4,717.5	0.54	0.53	0.11
12,436.0	89.40	155.80	6,775.3	5,498.3	-4,761.0	-921.8	4,802.1	0.87	0.84	-0.21
12,531.0	88.90	155.70	6,776.7	5,499.7	-4,847.6	-882.8	4,886.6	0.54	-0.53	0.11
12,625.0	89.20	156.00	6,778.2	5,501.2	-4,933.4	-844.4	4,970.2	0.45	0.32	0.32
12,720.0	88.70	154.30	6,780.0	5,503.0	-5,019.5	-804.5	5,054.3	1.86	-0.53	-1.79
12,815.0	89.60	154.80	6,781.4	5,504.4	-5,105.3	-763.6	5,137.8	1.08	0.95	0.53
12,910.0	89.10	154.30	6,782.5	5,505.5	-5,191.1	-722.8	5,221.4	0.74	-0.53	-0.53
13,005.0	90.10	154.90	6,783.1	5,506.1	-5,276.9	-682.1	5,305.0	1.23	1.05	0.63
13,100.0	89.10	155.30	6,783.8	5,506.8	-5,363.1	-642.1	5,389.0	1.13	-1.05	0.42
13,195.0	89.90	155.70	6,784.6	5,507.6	-5,449.5	-602.7	5,473.3	0.94	0.84	0.42
13,290.0	88.90	155.50	6,785.6	5,508.6	-5,536.0	-563.4	5,557.7	1.07	-1.05	-0.21

RECEIVED
Office of Oil and Gas
AUG 13 2015
WV Department of Environmental Protection

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Doddridge County 514141
Company:	EQT Production - Marcellus	TVD Reference:	KB@23 @ 1277.0usft
Project:	Doddridge County, WV Grd	MD Reference:	KB@23 @ 1277.0usft
Site:	Doddridge County 514141	North Reference:	Grid
Well:	Well #514141	Survey Calculation Method:	Minimum Curvature
Wellbore:	Main Wellbore		
Design:	514141 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)
13,384.0	89.80	156.60	6,786.7	5,509.7	-5,621.9	-525.3	5,641.5	1.51	0.96	1.17
13,479.0	90.00	154.80	6,786.8	5,509.8	-5,708.5	-486.2	5,725.9	1.91	0.21	-1.89
13,574.0	90.60	154.70	6,786.3	5,509.3	-5,794.4	-445.7	5,809.7	0.64	0.63	-0.11
13,669.0	89.10	151.50	6,786.6	5,509.6	-5,879.1	-402.7	5,892.1	3.72	-1.58	-3.37
13,764.0	89.80	153.40	6,787.5	5,510.5	-5,963.3	-358.8	5,973.9	2.13	0.74	2.00
Final Survey/Deepest Point of Well=13810' MD/ 6788' TVD										
13,810.0	90.20	154.40	6,787.5	5,510.5	-6,004.7	-338.5	6,014.1	2.34	0.87	2.17
Projection to TD=13863' MD/ 6787' TVD										
13,863.0	90.20	154.40	6,787.3	5,510.3	-6,052.5	-315.6	6,060.7	0.00	0.00	0.00

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,349.8	5,344.8	36.7	-93.8	Gyro Tie In=5350' MD
5,476.0	5,470.7	44.1	-99.6	KOP=5476' MD
9,019.0	6,767.7	-1,661.3	-2,357.8	LP=9019' MD/ 6768' TVD
13,810.0	6,787.5	-6,004.7	-338.5	Final Survey/Deepest Point of Well=13810' MD/ 6788' TVD
13,863.0	6,787.3	-6,052.5	-315.6	Projection to TD=13863' MD/ 6787' TVD

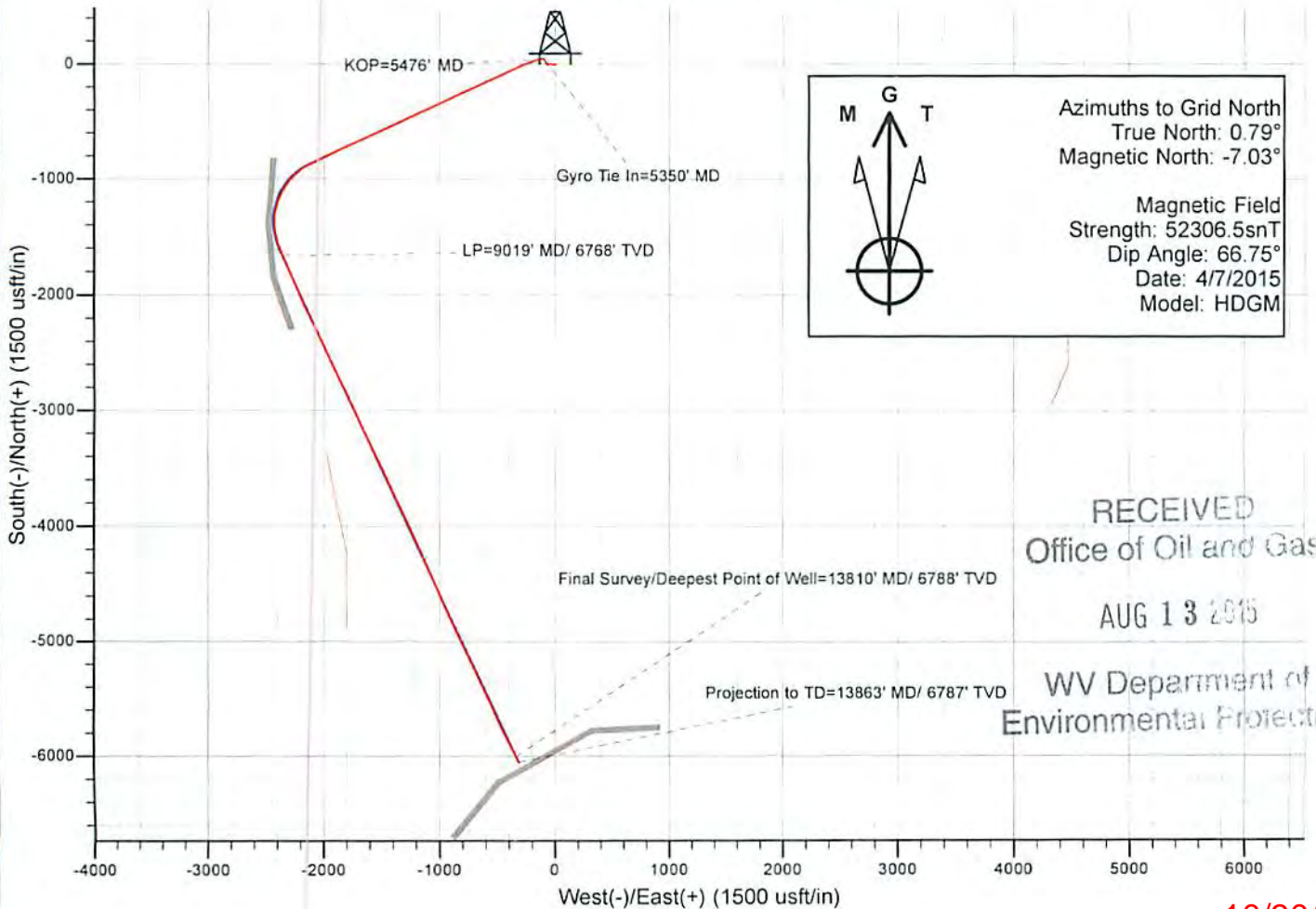
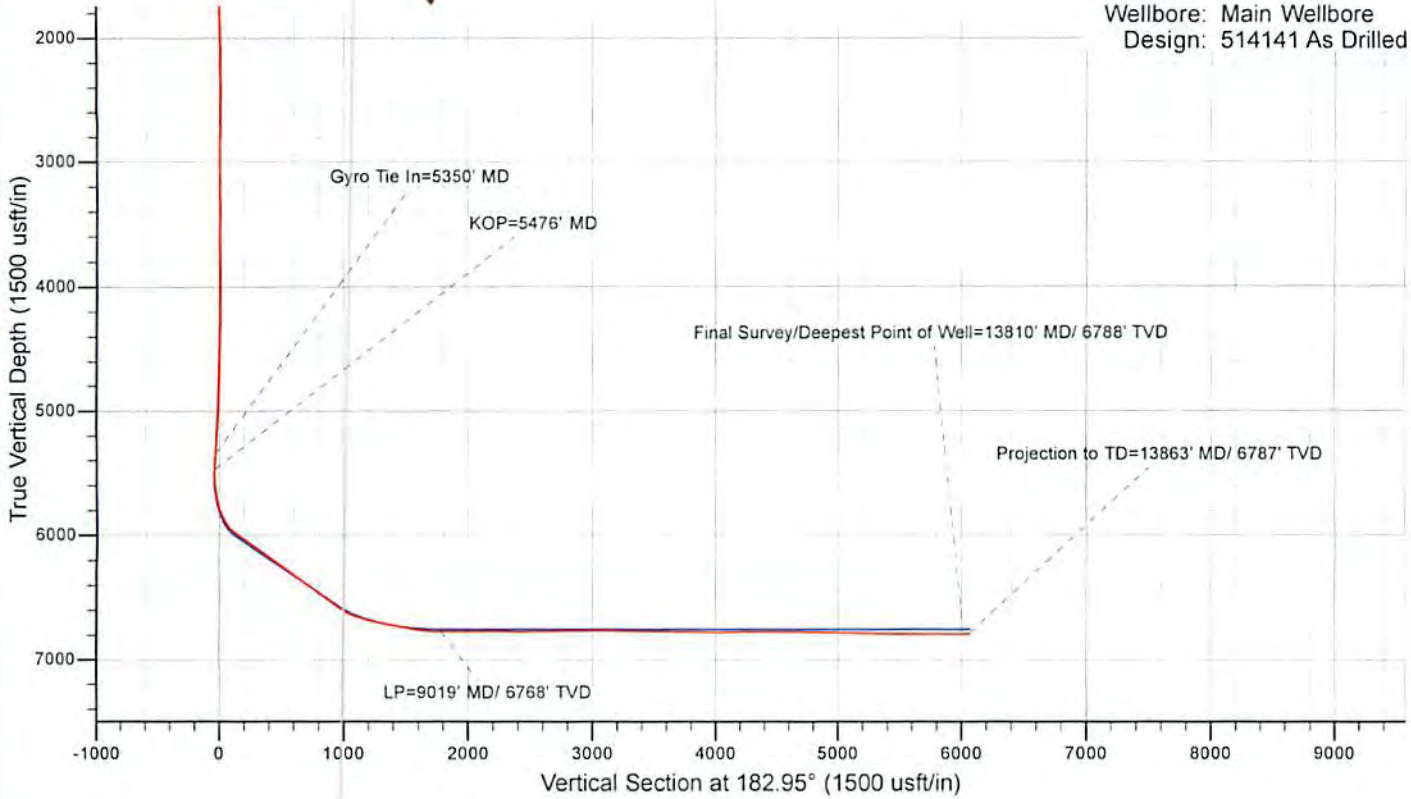
Checked By: _____ Approved By: _____ Date: _____

RECEIVED
Office of Oil and Gas
AUG 13 2015
WV Department of
Environmental Protection



EQT Production - Marcellus

Project: Doddridge County, WV Grid
 Site: Doddridge County 514141
 Well: Well #514141
 Wellbore: Main Wellbore
 Design: 514141 As Drilled Surveys



	Azimuths to Grid North
	True North: 0.79° Magnetic North: -7.03°
Magnetic Field	
Strength: 52306.5snT	
Dip Angle: 66.75°	
Date: 4/7/2015	
Model: HDGM	

RECEIVED
Office of Oil and Gas

AUG 13 2015

WV Department of
Environmental Protection