

12/21/2018



Where energy meets innovation.

EQT PRODUCTION

Doddridge County, WV
OXF43
#516234 -MRC - Slot 516234

Main

Design: 516234 As Drilled

Standard Survey Report

04 October, 2017



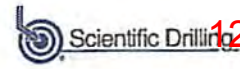
Scientific Drilling

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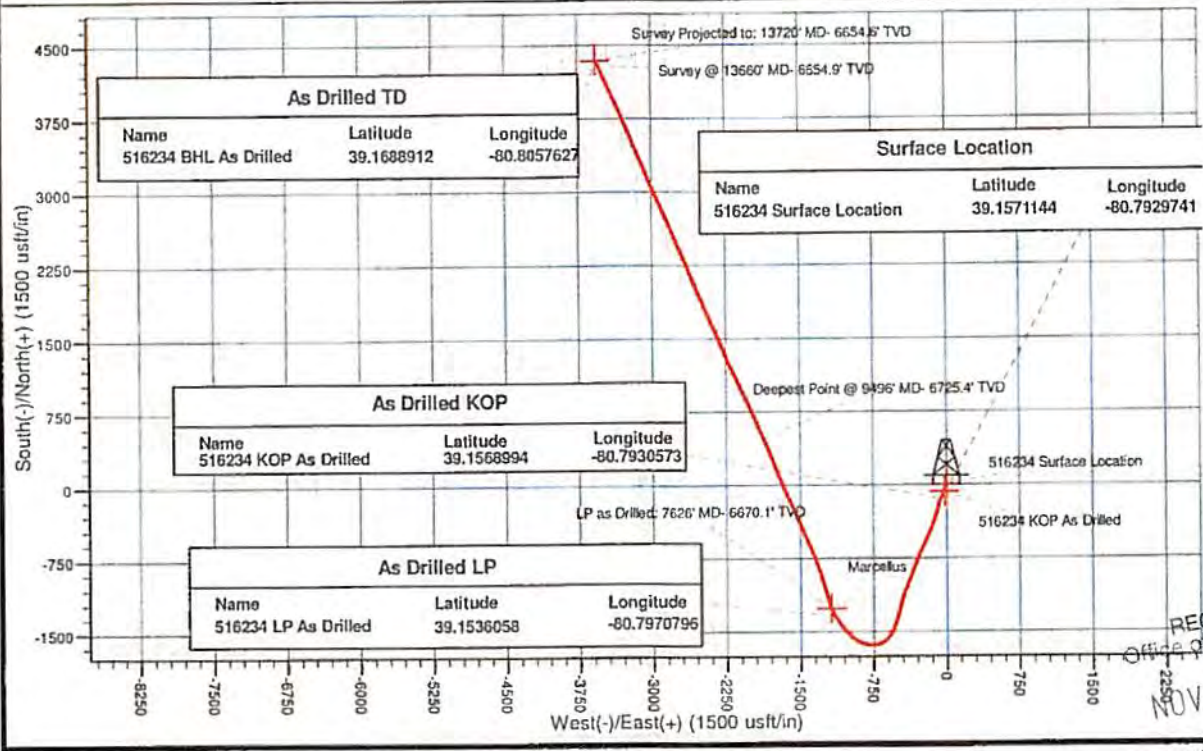
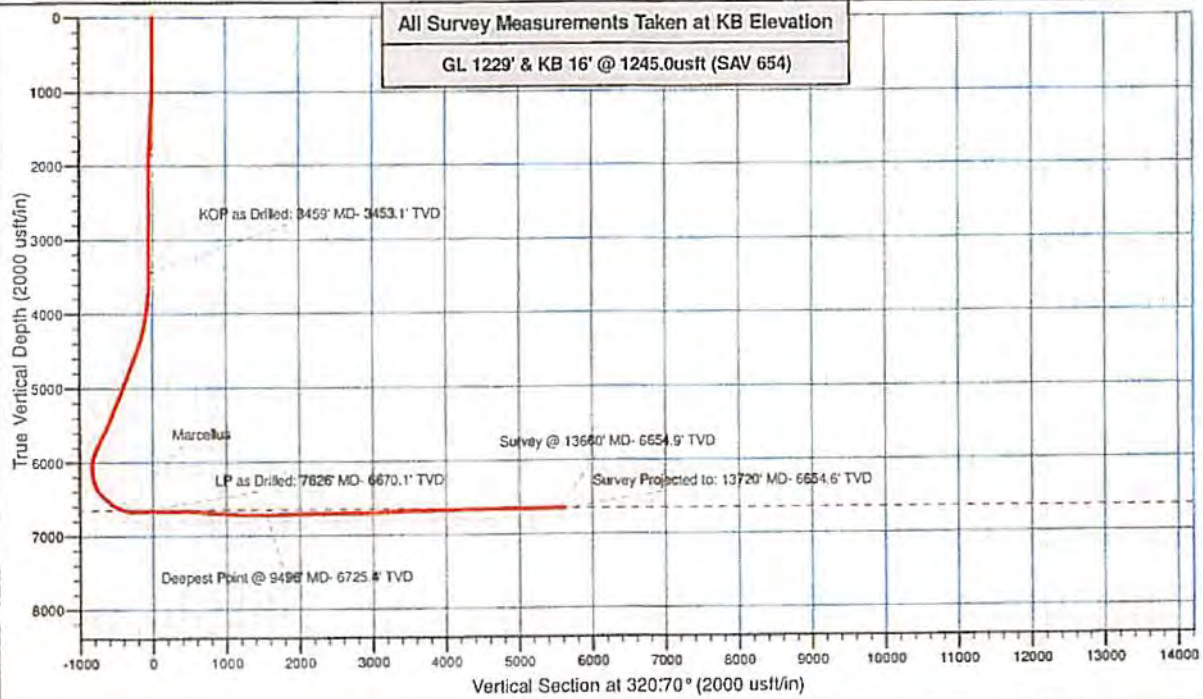
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Project: Boone County, WV
 Site: OXF43
 Well: #516234 -MRC
 Wellbore: Main
 Design: 516234 As Drilled



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 Environmental Protection



Company:	EQT PRODUCTION	Local Co-ordinate Reference:	Well #516234 -MRC - Slot 516234
Project:	Doddridge County, WV	TVD Reference:	GL 1229' & KB 16' @ 1245 00ft (SAV 654)
Site:	OXF43	MD Reference:	GL 1229' & KB 16' @ 1245 00ft (SAV 654)
Well:	#516234 -MRC	North Reference:	Grid
Wellbore:	Main	Survey Calculation Method:	Minimum Curvature
Design:	516234 As Drilled	Database:	Northeast District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/1000ft)	Build Rate (°/1000ft)	Turn Rate (°/1000ft)
1,000.00	0.66	203.63	999.96	-5.38	1.01	-4.80	0.20	0.20	2.45
1,100.00	3.69	198.68	1,099.89	-8.96	-0.25	-6.77	3.03	3.03	-4.95
1,200.00	8.33	206.09	1,199.32	-18.51	-4.47	-11.50	4.69	4.64	7.41
1,300.00	10.27	207.10	1,298.00	-32.96	-11.72	-18.08	1.95	1.94	1.01
1,400.00	8.45	208.46	1,396.66	-47.38	-19.29	-24.44	1.80	-1.79	1.35
1,500.00	6.23	208.15	1,495.83	-58.64	-25.37	-29.31	2.25	-2.25	-0.31
1,600.00	6.24	207.44	1,595.24	-68.25	-30.43	-33.54	0.08	0.01	-0.71
1,700.00	5.51	204.06	1,694.71	-77.46	-34.89	-37.84	0.81	-0.73	-3.38
1,800.00	3.04	187.88	1,794.43	-84.47	-37.21	-41.80	2.72	-2.47	-16.18
1,900.00	1.15	129.61	1,894.37	-87.74	-36.80	-44.58	2.62	-1.89	-56.27
2,000.00	1.12	102.18	1,994.35	-88.58	-35.08	-46.33	0.54	-0.03	-27.43
2,100.00	1.18	100.73	2,094.33	-88.98	-33.11	-47.89	0.07	0.06	-1.45
2,200.00	1.12	95.24	2,194.31	-89.26	-31.12	-49.36	0.13	-0.06	-5.49
2,300.00	1.09	89.83	2,294.29	-89.35	-29.20	-50.65	0.11	-0.03	-5.41
2,400.00	0.89	85.01	2,394.28	-89.28	-27.47	-51.69	0.22	-0.20	-4.82
2,500.00	0.78	78.70	2,494.26	-89.08	-26.03	-52.44	0.14	-0.11	-6.31
2,600.00	0.64	67.66	2,594.25	-88.73	-24.85	-52.93	0.19	-0.14	-10.82
2,700.00	0.79	38.74	2,694.24	-87.99	-23.90	-52.95	0.39	0.15	-29.14
2,800.00	0.73	21.04	2,794.23	-86.85	-23.24	-52.49	0.24	-0.06	-17.70
2,900.00	0.81	5.01	2,894.22	-85.56	-22.95	-51.67	0.23	0.08	-16.03
3,000.00	0.77	357.54	2,994.21	-84.18	-22.92	-50.63	0.11	-0.04	-7.47
3,100.00	0.84	359.38	3,094.21	-82.78	-22.95	-49.52	0.07	0.07	1.84
3,200.00	0.90	358.18	3,194.19	-81.26	-22.99	-48.32	0.06	0.06	-1.20
3,300.00	1.08	347.68	3,294.18	-79.55	-23.21	-46.86	0.25	0.18	-10.50
3,359.00	1.32	348.96	3,353.17	-78.34	-23.46	-45.76	0.41	0.41	2.17
3,396.00	0.77	320.44	3,390.16	-77.73	-23.70	-45.14	2.00	-1.49	-77.08
3,459.00	1.70	234.76	3,453.15	-77.94	-24.73	-44.65	2.88	1.48	-135.96
KOP as Drilled: 3459' MD- 3453.1' TVD									
3,522.00	3.57	216.77	3,516.08	-80.05	-26.67	-45.06	3.21	2.97	-28.59
3,586.00	5.57	211.64	3,579.87	-84.30	-29.49	-46.55	3.19	3.13	-8.02
3,649.00	7.64	210.96	3,642.45	-90.49	-33.25	-48.96	3.29	3.29	-1.08
3,712.00	9.32	207.25	3,704.76	-98.62	-37.74	-52.41	2.80	2.67	-5.89
3,775.00	10.99	204.34	3,766.77	-108.62	-42.55	-57.10	2.77	2.65	-4.62
3,839.00	12.70	204.42	3,829.41	-120.59	-47.98	-62.93	2.67	2.67	0.13
3,902.00	14.28	204.13	3,890.67	-133.99	-54.02	-69.47	2.51	2.51	-0.46
3,965.00	15.80	203.48	3,951.51	-148.95	-60.61	-76.87	2.43	2.41	-1.03
4,028.00	16.68	202.07	4,012.00	-165.19	-67.43	-85.13	1.53	1.40	-2.24
4,091.00	17.70	199.91	4,072.16	-182.58	-74.08	-94.36	1.91	1.62	-3.43
4,154.00	18.72	196.94	4,132.03	-201.25	-80.29	-104.88	2.19	1.62	-4.71
4,218.00	21.02	194.75	4,192.21	-222.18	-86.21	-117.33	3.78	3.59	-3.42
4,281.00	23.85	194.78	4,250.44	-245.43	-92.34	-131.44	4.49	4.49	0.05
4,345.00	26.33	195.27	4,308.40	-271.63	-99.38	-147.26	3.89	3.86	0.77
4,408.00	28.85	195.61	4,364.23	-299.76	-107.15	-164.10	4.01	4.00	0.54

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Company: EQT PRODUCTION	Local Co-ordinate Reference: Well #518234 -MRC - Slot 516234
Project: Doddridge County, WV	TVD Reference: GL 1229' & KB 16' @ 1245.00ft (SAV 654)
Site: OXF43	MD Reference: GL 1229' & KB 16' @ 1245.00ft (SAV 654)
Well: #518234 -MRC	North Reference: Grid
Wellbore: Main	Survey Calculation Method: Minimum Curvature
Design: 518234 As Drilled	Database: Northeast District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/1000ft)	Build Rate (°/1000ft)	Turn Rate (°/1000ft)
4,471.00	31.23	197.06	4,418.76	-330.01	-116.03	-181.69	3.95	3.78	2.30
4,534.00	33.84	199.36	4,471.87	-362.18	-126.64	-200.06	4.58	4.14	3.65
4,597.00	36.31	200.26	4,523.43	-396.24	-138.91	-218.64	4.00	3.92	1.41
4,660.00	38.25	200.88	4,573.55	-431.96	-152.32	-237.79	3.14	3.08	1.00
4,723.00	40.00	202.98	4,622.43	-468.83	-167.18	-256.91	3.48	2.78	3.33
4,787.00	42.35	204.84	4,670.60	-507.33	-184.27	-275.89	4.14	3.67	2.91
4,849.00	42.66	205.06	4,716.31	-545.32	-201.94	-294.08	0.55	0.50	0.35
4,913.00	41.74	205.04	4,763.72	-584.26	-220.14	-312.69	1.44	-1.44	-0.03
4,976.00	41.18	204.79	4,810.93	-622.09	-237.71	-330.84	0.93	-0.89	-0.40
5,039.00	40.90	205.71	4,858.45	-659.50	-255.35	-348.81	1.05	-0.44	1.46
5,102.00	41.55	205.61	4,905.83	-698.93	-273.33	-366.19	1.04	1.03	-0.18
5,165.00	38.71	202.70	4,954.00	-733.95	-289.97	-384.30	5.40	-4.51	-4.62
5,228.00	37.94	202.30	5,003.43	-770.04	-304.92	-402.76	1.28	-1.22	-0.63
5,292.00	38.58	199.82	5,053.68	-807.02	-319.16	-422.36	2.60	1.00	-3.88
5,355.00	38.59	200.31	5,102.93	-843.93	-332.64	-442.38	0.49	0.02	0.78
5,418.00	40.48	200.40	5,151.51	-881.53	-346.58	-462.64	3.00	3.00	0.14
5,481.00	40.52	201.61	5,199.42	-919.72	-361.25	-482.91	1.25	0.06	1.92
5,544.00	40.21	201.80	5,247.42	-957.66	-376.27	-502.75	0.49	-0.49	-0.02
5,603.00	40.22	202.29	5,292.48	-992.99	-390.51	-521.07	0.78	0.02	1.17
5,634.00	39.95	203.73	5,316.19	-1,011.36	-398.31	-530.35	3.12	-0.87	4.65
5,696.00	41.18	203.93	5,363.29	-1,048.24	-414.60	-548.57	1.99	1.98	0.32
5,760.00	40.69	202.09	5,411.64	-1,086.84	-430.99	-568.05	2.03	-0.77	-2.88
5,823.00	41.44	196.41	5,459.16	-1,125.88	-444.61	-589.64	6.04	1.19	-9.02
5,886.00	41.06	195.84	5,506.53	-1,165.78	-456.15	-613.21	0.85	-0.60	-0.90
5,949.00	40.37	194.30	5,554.28	-1,205.46	-466.84	-637.15	1.93	-1.10	-2.44
6,012.00	42.01	193.55	5,601.69	-1,245.73	-476.82	-651.99	2.72	2.60	-1.19
6,075.00	41.72	193.01	5,648.60	-1,286.65	-486.48	-667.54	0.73	-0.46	-0.86
6,139.00	40.00	198.07	5,697.02	-1,328.97	-497.65	-711.66	5.83	-2.69	7.91
6,202.00	42.01	198.46	5,744.56	-1,366.22	-510.61	-733.82	3.22	3.19	0.62
6,265.00	41.94	197.99	5,791.40	-1,406.24	-523.79	-756.45	0.51	-0.11	-0.75
6,328.00	41.66	201.67	5,838.37	-1,445.73	-538.02	-777.99	3.92	-0.44	5.84
6,380.00	40.32	202.98	5,882.52	-1,485.14	-545.99	-787.96	4.97	-4.19	4.09
6,391.00	39.85	203.54	5,886.24	-1,483.48	-553.88	-797.16	1.91	-1.52	1.81
6,423.00	38.28	207.69	5,911.09	-1,501.66	-562.58	-805.72	9.53	-4.91	12.97
6,455.00	37.14	211.51	5,936.41	-1,518.68	-572.24	-812.77	8.12	-3.56	11.94
6,486.00	37.14	214.55	5,961.12	-1,534.36	-582.44	-818.45	5.92	0.00	9.81
6,518.00	38.06	217.40	5,986.48	-1,550.15	-593.92	-823.39	6.30	2.88	9.19
6,550.00	37.33	220.69	6,011.80	-1,565.33	-606.25	-827.33	6.53	-2.28	10.00
6,582.00	35.71	224.00	6,037.52	-1,579.41	-619.06	-830.11	7.97	-5.06	10.34
6,614.00	32.87	229.02	6,063.96	-1,591.83	-632.11	-831.45	12.52	-8.88	15.69
6,645.00	31.27	232.64	6,090.23	-1,602.23	-644.86	-831.43	8.07	-5.16	11.68
6,677.00	29.71	237.28	6,117.81	-1,611.56	-658.13	-830.24	8.80	-4.88	14.44
6,708.00	27.45	242.25	6,145.91	-1,619.29	-671.34	-827.86	10.27	-7.06	15.59

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Company:	EQT PRODUCTION	Local Co-ordinates Reference:	Well #516234 -MRC - Slot 516234
Project:	Doddridge County, WV	TVD Reference:	GL 1229' & KB 16' @ 1245.00R (SAV 654)
Site:	OXF43	MD Reference:	GL 1229' & KB 16' @ 1245.00R (SAV 654)
Well:	#516234 -MRC	North Reference:	Grid
Wellbore:	Main	Survey Calculation Method:	Minimum Curvature
Design:	516234 As Drilled	Database:	Northeast District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/1000ft)	Build Rate (°/1000ft)	Turn Rate (°/1000ft)
6,740.00	26.06	247.87	6,173.60	-1,625.18	-683.97	-824.42	9.31	-4.48	18.13
6,772.00	26.05	254.60	6,202.35	-1,629.69	-697.26	-819.49	9.23	-0.03	21.03
6,803.00	26.48	258.78	6,230.15	-1,632.85	-710.60	-813.48	6.12	1.39	13.48
6,835.00	28.28	262.20	6,258.57	-1,635.28	-725.11	-806.16	7.47	5.63	10.69
6,867.00	29.82	267.42	6,286.55	-1,636.65	-740.57	-797.44	9.28	4.81	16.31
6,898.00	32.02	271.60	6,313.14	-1,636.77	-756.49	-787.45	9.91	7.10	13.48
6,930.00	35.70	271.86	6,339.71	-1,636.23	-774.31	-775.75	11.51	11.50	0.81
6,962.00	38.05	274.51	6,365.31	-1,635.15	-793.48	-762.77	8.67	7.34	8.28
6,994.00	40.72	277.01	6,390.04	-1,633.10	-813.67	-748.39	9.70	8.34	7.81
7,025.00	43.64	282.50	6,413.02	-1,629.55	-834.16	-732.67	15.16	9.42	17.71
7,057.00	47.32	287.86	6,435.46	-1,623.55	-856.15	-714.09	16.57	11.50	16.75
7,089.00	50.28	291.22	6,456.54	-1,615.48	-878.83	-693.48	12.16	9.25	10.50
7,120.00	51.57	295.85	6,476.09	-1,605.87	-900.88	-672.08	12.32	4.16	14.94
7,152.00	51.51	300.43	6,495.00	-1,594.06	-922.97	-648.96	11.21	-0.19	14.31
7,184.00	51.97	304.22	6,515.82	-1,580.82	-944.19	-625.12	9.41	1.44	11.64
7,215.00	53.04	308.72	6,534.69	-1,566.00	-963.99	-601.29	12.02	3.45	14.52
7,247.00	54.13	311.08	6,553.69	-1,549.49	-983.71	-575.99	6.80	3.41	7.31
7,279.00	55.92	314.51	6,572.04	-1,531.68	-1,002.94	-550.03	10.46	5.59	10.78
7,310.00	58.09	317.98	6,588.92	-1,512.90	-1,020.91	-524.11	11.71	7.00	11.19
7,342.00	61.34	319.31	6,605.06	-1,492.15	-1,038.16	-496.50	10.77	10.16	4.18
7,373.00	65.18	321.84	6,619.00	-1,470.77	-1,056.73	-468.83	14.37	12.39	8.18
7,405.00	68.37	322.72	6,631.62	-1,447.51	-1,074.72	-439.44	10.28	9.97	2.75
7,437.00	72.03	323.94	6,642.46	-1,423.36	-1,092.69	-409.37	11.09	11.44	3.81
7,468.00	75.33	325.91	6,651.17	-1,399.02	-1,109.78	-379.70	12.27	10.65	6.35
7,500.00	79.03	328.25	6,658.27	-1,372.83	-1,126.73	-348.70	13.58	11.56	7.31
7,532.00	81.42	330.52	6,663.70	-1,345.69	-1,142.78	-317.53	10.23	7.47	7.09
7,563.00	84.67	332.91	6,667.40	-1,318.59	-1,157.38	-287.33	13.51	11.13	7.71
7,594.00	87.86	336.14	6,669.37	-1,290.67	-1,170.67	-257.29	14.18	9.65	10.42
7,626.00	89.43	340.21	6,670.13	-1,260.98	-1,182.56	-226.79	13.83	4.91	12.72
LP as Drilled: 7628' MD - 8670.1' TVD									
7,658.00	91.38	341.60	6,669.90	-1,230.74	-1,193.02	-196.76	7.48	6.09	4.34
7,721.00	92.64	342.58	6,667.69	-1,170.84	-1,212.39	-138.14	2.51	2.00	1.52
7,784.00	91.85	343.34	6,665.22	-1,110.68	-1,230.85	-79.87	1.76	-1.25	1.24
7,848.00	89.40	342.72	6,664.52	-1,049.45	-1,249.53	-20.68	3.95	-3.83	-0.97
7,911.00	88.82	343.31	6,665.50	-989.21	-1,267.93	37.59	1.31	-0.92	0.94
7,974.00	88.46	342.87	6,667.00	-928.95	-1,286.25	95.63	0.50	-0.57	-0.70
8,037.00	88.99	341.29	6,668.40	-869.02	-1,305.63	154.48	2.64	0.84	-2.51
8,101.00	89.63	338.96	6,669.17	-809.84	-1,327.38	214.82	3.78	1.00	-3.64
8,164.00	90.30	337.44	6,669.21	-750.35	-1,350.78	274.91	2.64	1.06	-2.41
8,227.00	91.61	337.11	6,668.16	-692.25	-1,375.11	335.28	2.14	2.08	-0.52
8,291.00	91.04	335.57	6,668.68	-633.85	-1,400.79	396.89	2.57	-0.89	-2.41
8,354.00	90.34	335.39	6,665.92	-576.33	-1,426.93	457.60	1.15	-1.11	-0.29
8,417.00	85.88	337.18	6,668.00	-518.70	-1,452.25	518.43	7.63	-7.08	2.84
8,481.00	85.93	336.78	6,672.57	-459.95	-1,477.21	579.71	0.63	0.08	-0.63

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Company:	EQT PRODUCTION	Local Co-ordinate Reference:	Well #516234 -MRC - Slot 516234
Project:	Doddridge County, WV	TVD Reference:	GL 1229' & KB 16' @ 1245.00ft (SAV 654)
Site:	OXF43	MD Reference:	GL 1229' & KB 16' @ 1245.00ft (SAV 654)
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Wellbore:	Main	Survey Calculation Method:	Minimum Curvature
Design:	516234 As Drilled	Database:	Northeast District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/1000ft)	Build Rate (°/1000ft)	Turn Rate (°/1000ft)
8,544.00	84.63	337.26	6,677.75	-402.15	-1,501.73	639.97	2.20	-2.06	0.76
8,607.00	85.00	336.28	6,683.45	-344.49	-1,526.47	700.26	1.66	0.59	-1.56
8,671.00	84.89	335.00	6,689.08	-266.42	-1,552.77	761.85	2.00	-0.17	-2.00
8,734.00	85.57	334.08	6,694.32	-229.73	-1,579.76	822.81	1.81	1.08	-1.46
8,798.00	86.64	335.92	6,698.67	-171.87	-1,608.74	884.68	3.32	1.67	2.88
8,861.00	85.73	336.95	6,702.88	-114.25	-1,631.85	945.18	2.19	-1.44	1.65
8,925.00	85.23	335.97	6,707.91	-55.75	-1,657.34	1,005.58	1.73	-0.78	-1.55
8,988.00	85.63	335.62	6,712.93	1.57	-1,682.99	1,067.19	0.68	0.63	-0.24
9,052.00	86.58	330.05	6,717.27	60.52	-1,707.49	1,128.33	5.25	1.48	5.05
9,115.00	87.98	339.18	6,720.26	119.32	-1,729.92	1,188.03	2.23	2.22	0.21
9,178.00	88.88	339.31	6,722.00	178.21	-1,752.24	1,247.74	1.41	1.40	0.21
9,242.00	89.53	339.41	6,722.80	238.09	-1,774.79	1,308.37	1.06	1.05	0.16
9,305.00	90.27	338.85	6,723.01	296.96	-1,797.24	1,368.13	1.47	1.17	-0.89
9,369.00	88.78	337.37	6,723.55	356.34	-1,821.10	1,429.20	3.30	-2.36	-2.31
9,432.00	88.93	336.93	6,724.82	414.38	-1,845.55	1,489.61	0.75	0.27	-0.70
9,495.00	89.97	336.65	6,725.44	473.20	-1,870.78	1,551.10	1.68	1.62	-0.44
Deepest Point @ 9496' MD- 6725.4' TVD									
9,559.00	91.31	336.66	6,724.73	531.04	-1,895.74	1,611.68	2.13	2.13	0.02
9,622.00	91.82	335.67	6,723.01	588.64	-1,921.19	1,672.36	1.77	0.81	-1.57
9,685.00	92.69	335.97	6,720.42	646.07	-1,946.97	1,733.12	1.78	1.70	0.48
9,749.00	90.44	336.49	6,718.58	704.61	-1,972.75	1,794.76	3.91	-3.83	0.81
9,812.00	90.84	336.05	6,717.86	762.28	-1,998.10	1,855.44	0.94	0.63	-0.70
9,875.00	91.51	336.05	6,716.57	819.84	-2,023.67	1,916.18	1.06	1.06	0.00
9,939.00	92.45	336.11	6,714.36	878.31	-2,049.61	1,977.85	1.47	1.47	0.09
10,002.00	90.57	335.29	6,712.70	935.70	-2,075.52	2,038.88	3.26	-2.98	-1.30
10,065.00	90.20	333.66	6,712.27	992.65	-2,102.67	2,099.87	2.65	-0.59	-2.59
10,129.00	91.11	334.10	6,711.54	1,050.01	-2,130.84	2,162.17	1.58	1.42	0.69
10,192.00	90.44	335.07	6,710.69	1,106.91	-2,157.88	2,223.33	1.87	-1.06	1.54
10,255.00	91.21	335.14	6,709.78	1,164.05	-2,184.39	2,284.34	1.23	1.22	0.11
10,319.00	91.08	335.87	6,708.50	1,222.27	-2,210.92	2,345.20	1.16	-0.20	1.14
10,382.00	91.47	336.87	6,707.10	1,279.88	-2,236.17	2,406.84	1.70	0.62	1.59
10,444.00	90.47	337.08	6,706.05	1,337.03	-2,260.42	2,466.35	1.65	-1.61	0.34
10,507.00	90.70	338.05	6,705.41	1,395.26	-2,284.46	2,526.64	1.58	0.37	1.54
10,571.00	91.04	337.58	6,704.44	1,454.51	-2,308.62	2,587.80	0.91	0.53	-0.73
10,634.00	91.40	336.89	6,703.05	1,512.59	-2,332.99	2,648.18	1.30	0.70	-1.10
10,697.00	89.26	335.53	6,702.65	1,570.23	-2,358.40	2,708.67	4.13	-3.52	-2.16
10,761.00	89.53	334.42	6,703.32	1,628.22	-2,385.47	2,770.89	1.78	0.42	-1.73
10,823.00	90.47	336.00	6,703.32	1,684.50	-2,411.47	2,830.91	2.97	1.52	2.55
10,887.00	90.34	337.18	6,702.87	1,743.23	-2,436.90	2,892.47	1.85	-0.20	1.84
10,951.00	91.24	337.85	6,701.99	1,802.36	-2,461.36	2,953.72	1.78	1.41	1.08
11,013.00	91.51	337.23	6,700.50	1,859.64	-2,485.04	3,013.04	1.11	0.44	-1.02
11,077.00	92.05	335.84	6,698.51	1,918.28	-2,510.61	3,074.01	2.62	0.84	-2.48
11,140.00	92.62	335.48	6,695.94	1,975.58	-2,536.66	3,135.46	0.94	0.90	-0.25

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WV Department of
Environmental Protection



Company:	EQT PRODUCTION	Local Co-ordinates Reference:	Well #516234 -MRC - Slot 516234
Project:	Doddridge County, WV	TVD Reference:	GL 1229' & KB 16' @ 1245.00ft (SAV 854)
Site:	OXF43	MD Reference:	GL 1229' & KB 16' @ 1245.00ft (SAV 854)
Well:	#516234 -MRC	North Reference:	Grid
Wellbore:	Main	Survey Calculation Method:	Minimum Curvature
Design:	516234 As Drilled	Database:	Northeast District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/1000ft)	Bulld Rate (°/1000ft)	Turn Rate (°/1000ft)
11,203.00	92.48	337.79	6,693.14	2,033.36	-2,561.01	3,195.97	3.67	-0.22	3.67
11,266.00	91.58	338.15	6,690.91	2,091.72	-2,585.23	3,256.09	1.54	-1.43	0.57
11,329.00	92.22	338.24	6,688.82	2,150.18	-2,608.62	3,316.14	1.03	1.02	0.14
11,393.00	92.22	336.98	6,686.34	2,209.31	-2,632.98	3,377.33	1.97	0.00	-1.97
11,456.00	92.75	337.13	6,683.61	2,267.27	-2,657.51	3,437.72	0.87	0.84	0.24
11,520.00	92.29	336.62	6,680.80	2,326.07	-2,682.63	3,499.13	1.07	-0.72	-0.80
11,583.00	89.90	336.89	6,679.59	2,383.94	-2,707.48	3,559.66	3.82	-3.79	0.43
11,646.00	90.40	336.89	6,679.43	2,441.89	-2,732.21	3,620.16	0.79	0.79	0.00
11,709.00	90.81	336.40	6,678.76	2,499.72	-2,757.18	3,680.73	1.01	0.65	-0.78
11,773.00	91.07	336.60	6,677.71	2,558.45	-2,782.60	3,742.27	0.75	0.41	0.63
11,836.00	91.31	336.41	6,676.40	2,616.26	-2,807.61	3,802.85	0.73	0.38	-0.62
11,899.00	91.84	335.75	6,674.67	2,673.82	-2,833.14	3,863.57	1.34	0.84	-1.05
11,962.00	92.15	335.66	6,672.48	2,731.21	-2,859.05	3,924.38	0.51	0.49	-0.14
12,025.00	90.70	335.97	6,670.91	2,788.66	-2,884.85	3,985.18	2.35	-2.30	0.49
12,088.00	90.67	335.69	6,670.16	2,846.13	-2,910.64	4,046.00	0.45	-0.05	-0.44
12,151.00	90.77	335.02	6,669.37	2,903.39	-2,936.91	4,106.94	1.08	0.16	-1.05
12,215.00	90.81	334.87	6,668.48	2,961.36	-2,964.01	4,168.97	0.24	0.06	-0.23
12,278.00	91.51	336.91	6,667.21	3,018.85	-2,989.74	4,229.75	3.42	1.11	3.24
12,341.00	91.18	336.80	6,665.73	3,076.76	-3,014.49	4,290.25	0.55	-0.52	-0.17
12,404.00	90.64	337.32	6,664.73	3,134.77	-3,039.05	4,350.69	1.19	-0.86	0.83
12,468.00	90.77	338.01	6,663.94	3,193.97	-3,063.37	4,411.90	1.10	0.20	1.08
12,531.00	91.07	337.83	6,662.93	3,252.34	-3,087.04	4,472.07	0.56	0.48	-0.29
12,594.00	91.08	338.71	6,661.75	3,310.43	-3,111.38	4,532.44	1.78	0.02	-1.78
12,657.00	91.41	336.34	6,660.38	3,368.21	-3,136.47	4,593.04	0.79	0.52	-0.59
12,720.00	91.07	337.10	6,659.02	3,426.05	-3,161.36	4,653.57	1.32	-0.54	1.21
12,783.00	90.67	337.88	6,658.05	3,484.26	-3,185.48	4,713.88	1.39	-0.63	1.24
12,847.00	91.21	338.01	6,657.01	3,543.57	-3,209.51	4,775.00	0.87	0.84	0.20
12,909.00	90.61	336.92	6,656.03	3,600.82	-3,233.27	4,834.35	2.01	-0.97	-1.76
12,972.00	89.53	336.76	6,655.95	3,658.74	-3,258.04	4,894.87	1.73	-1.71	-0.25
13,036.00	89.53	336.82	6,656.47	3,717.56	-3,283.27	4,959.35	0.09	0.00	0.09
13,099.00	89.80	336.47	6,656.84	3,775.40	-3,308.24	5,016.93	0.70	0.43	-0.56
13,163.00	89.90	336.07	6,657.01	3,833.99	-3,334.00	5,078.58	0.64	0.16	-0.63
13,226.00	89.97	335.27	6,657.88	3,891.39	-3,359.95	5,139.45	1.27	0.11	-1.27
13,290.00	90.03	335.18	6,657.08	3,949.50	-3,386.77	5,201.40	0.17	0.09	-0.14
13,353.00	90.20	335.78	6,656.95	4,006.82	-3,412.92	5,262.31	0.99	0.27	0.95
13,416.00	90.84	336.89	6,656.49	4,064.52	-3,438.20	5,322.98	1.90	0.70	1.76
13,480.00	90.84	336.24	6,655.67	4,123.24	-3,463.65	5,384.54	1.08	0.31	-1.02
13,543.00	90.20	335.39	6,655.09	4,180.70	-3,489.46	5,445.35	1.69	-1.02	-1.35
13,606.00	89.93	335.03	6,655.02	4,237.90	-3,515.88	5,506.35	0.71	-0.43	-0.57
13,660.00	90.27	335.14	6,654.93	4,286.87	-3,538.63	5,558.65	0.66	0.63	0.20
Survey @ 13660' MD- 6654.9' TVD									
13,720.00	90.27	335.14	6,654.65	4,341.31	-3,563.85	5,616.76	0.00	0.00	0.00
Survey Projected to: 13720' MD- 6654.6' TVD									

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WV Department of
Environmental Protection

Company:	EQT PRODUCTION	Local Co-ordinate Reference:	Well #516234 -MRC - Slot 516234
Project:	Doddridge County, WV	TVD Reference:	GL 1229' & KB 16' @ 1245.00ft (SAV 654)
Site:	OXF43	MD Reference:	GL 1229' & KB 16' @ 1245.00ft (SAV 654)
Well:	#516234 -MRC	North Reference:	Grid
Wellbore:	Main	Survey Calculation Method:	Minimum Curvature
Design:	516234 As Drilled	Database:	Northeast District

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
516234 Surface Location - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	241,973.14	1,633,354.81	39° 9' 25.612 N	80° 47' 34.707 W	
516234 KOP As Drilled - actual wellpath hits target center - Point	0.00	0.00	3,453.15	-77.94	-24.73	241,895.19	1,633,330.07	39° 9' 24.838 N	80° 47' 35.008 W	
516234 BHL As Drilled - actual wellpath hits target center - Point	0.00	0.00	6,654.65	4,341.31	-3,563.85	246,314.44	1,629,790.96	39° 10' 8.008 N	80° 46' 20.746 W	
516234 LP As Drilled - actual wellpath hits target center - Point	0.00	0.00	6,670.13	-1,260.98	-1,182.56	240,712.16	1,632,172.25	39° 9' 12.981 N	80° 47' 49.486 W	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
3,459.00	3,453.15	-77.94	-24.73	KOP as Drilled: 3459' MD- 3453.1' TVD	
7,626.00	6,670.13	-1,260.98	-1,182.56	LP as Drilled: 7626' MD- 6670.1' TVD	
9,496.00	6,725.44	473.20	-1,870.78	Deepest Point @ 9496' MD- 6725.4' TVD	
13,660.00	6,654.93	4,286.67	-3,538.63	Survey @ 13660' MD- 6654.9' TVD	
13,720.00	6,654.65	4,341.31	-3,563.85	Survey Projected to 13720' MD- 6654.6' TVD	

Checked By: _____ Approved By: _____ Date: _____

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