



EQT Production - Marcellus

Doddridge County, WV Grid
Doddridge County 512474
Well #512474

512474 Revised Sidetrack

Survey: Survey #1

Standard Survey Report

05 August, 2010

RECEIVED
Office of Oil & Gas

MAR 02 2011

WV Department of
Environmental Protection



Nevis Energy Services

Survey Report

Database:	EQT on local	Local Co-ordinate Reference:	Site Doddridge County 512474
Company:	EQT Production - Marcellus	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Project:	Doddridge County, WV Grid	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Doddridge County 512474	North Reference:	Grid
Well:	Well #512474	Survey Calculation Method:	Minimum Curvature
Wellbore:	512474 Revised Sidetrack		
Design:	512474 Revised Sidetrack		

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 512474			
Site Position:		Northing:	266,018.46 ft
From:	Map	Easting:	1,634,177.73 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	39.22
		Longitude:	-80.79
		Grid Convergence:	-0.82 °

Well Well #512474			
Well Position	+N/-S	0.0 ft	Northing: 266,018.46 ft
	+E/-W	0.0 ft	Easting: 1,634,177.73 ft
Position Uncertainty		0.0 ft	Wellhead Elevation: ft
			Latitude: 39° 13' 23.373 N
			Longitude: 80° 47' 28.648 W
			Ground Level: 0.0 ft

Wellbore 512474 Revised Sidetrack					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	-8.22	67.21	52,785

Design 512474 Revised Sidetrack				
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 6,088.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	141.42

Survey Program		Date 6/21/2010	
From (')	To (ft)	Survey (Wellbore)	Tool Name
0.00	5,600.0	Gyro (Well #512474)	WLST
0.00	6,088.0	Survey #1 (Well #512474)	WLST
0.00	11,546.0	Survey #1 (512474 Revised Sidetrack)	WLST

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,088.0	27.80	10.30	6,062.2	6,062.2	113.8	-87.2	-143.4	0.00	0.00	0.00
6,134.0	31.60	14.50	6,102.2	6,102.2	136.0	-82.3	-157.7	9.41	8.26	9.13
6,165.0	35.10	18.20	6,128.1	6,128.1	152.4	-77.5	-167.4	13.05	11.29	11.94
6,196.0	35.80	19.70	6,153.3	6,153.3	169.4	-71.6	-177.1	3.60	2.26	4.84
6,228.0	36.50	23.80	6,179.2	6,179.2	186.9	-64.7	-186.4	7.87	2.19	12.81
6,259.0	36.80	27.60	6,204.0	6,204.0	203.5	-56.6	-194.4	7.38	0.97	12.26
6,291.0	36.50	34.10	6,229.7	6,229.7	219.9	-46.8	-201.1	12.16	-0.94	20.31



Nevis Energy Services

Survey Report

Database:	EQT on local	Local Co-ordinate Reference:	Site Doddridge County 512474
Company:	EQT Production - Marcellus	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Project:	Doddridge County, WV Grid	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Doddridge County 512474	North Reference:	Grid
Well:	Well #512474	Survey Calculation Method:	Minimum Curvature
Wellbore:	512474 Revised Sidelrack		
Design:	512474 Revised Sidelrack		

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,717.0	88.80	152.20	6,673.9	6,673.9	165.1	1,027.7	511.8	0.81	0.48	0.65
7,780.0	89.10	153.70	6,675.1	6,675.1	109.0	1,056.3	573.5	2.43	0.48	2.38
7,844.0	89.50	155.30	6,675.9	6,675.9	51.3	1,083.9	635.8	2.58	0.63	2.50
7,907.0	89.80	154.60	6,676.3	6,676.3	-5.8	1,110.5	697.1	1.21	0.48	-1.11
7,971.0	89.40	154.60	6,676.7	6,676.7	-63.6	1,138.0	759.4	0.63	-0.63	0.00
8,033.0	89.60	155.60	6,677.2	6,677.2	-119.8	1,164.1	819.6	1.64	0.32	1.61
8,095.0	89.20	155.60	6,677.9	6,677.9	-176.3	1,189.7	879.7	0.65	-0.65	0.00
8,157.0	89.20	155.50	6,678.8	6,678.8	-232.7	1,215.4	939.8	0.16	0.00	-0.16
8,221.0	89.30	154.60	6,679.6	6,679.6	-290.8	1,242.4	1,002.0	1.41	0.16	-1.41
8,283.0	88.50	154.90	6,680.8	6,680.8	-346.8	1,268.8	1,062.3	1.38	-1.29	0.48
8,347.0	88.40	155.70	6,682.5	6,682.5	-404.9	1,295.5	1,124.5	1.26	-0.16	1.25
8,411.0	89.40	156.20	6,683.8	6,683.8	-463.4	1,321.6	1,186.4	1.75	1.56	0.78
8,474.0	89.50	156.30	6,684.4	6,684.4	-521.0	1,347.0	1,247.3	0.22	0.16	0.16
8,536.0	89.90	156.90	6,684.7	6,684.7	-577.9	1,371.6	1,307.1	1.16	0.65	0.97
8,600.0	89.10	156.50	6,685.2	6,685.2	-636.7	1,396.9	1,368.9	1.40	-1.25	-0.63
8,663.0	89.20	156.80	6,686.2	6,686.2	-694.5	1,421.9	1,429.6	0.50	0.16	0.48
8,726.0	89.00	156.80	6,687.2	6,687.2	-752.4	1,446.7	1,490.4	0.32	-0.32	0.00
8,789.0	89.00	156.40	6,688.3	6,688.3	-810.3	1,471.7	1,551.2	0.63	0.00	-0.63
8,851.0	89.70	155.70	6,689.0	6,689.0	-866.9	1,496.9	1,611.2	1.60	1.13	-1.13
8,915.0	89.80	155.30	6,689.2	6,689.2	-925.1	1,523.4	1,673.2	0.64	0.16	-0.63
8,978.0	91.70	156.00	6,688.4	6,688.4	-982.5	1,549.4	1,734.3	3.21	3.02	1.11
9,040.0	91.30	155.40	6,686.8	6,686.8	-1,039.0	1,574.9	1,794.4	1.16	-0.65	-0.97
9,104.0	91.00	154.40	6,685.5	6,685.5	-1,097.0	1,602.0	1,856.6	1.63	-0.47	-1.56
9,167.0	91.20	154.10	6,684.3	6,684.3	-1,153.7	1,629.4	1,918.0	0.57	0.32	-0.48
9,231.0	90.10	153.60	6,683.6	6,683.6	-1,211.1	1,657.6	1,980.5	1.89	-1.72	-0.78
9,295.0	90.40	153.40	6,683.3	6,683.3	-1,268.4	1,686.2	2,043.1	0.56	0.47	-0.31
9,358.0	89.70	154.10	6,683.2	6,683.2	-1,324.9	1,714.0	2,104.6	1.57	-1.11	1.11
9,421.0	89.70	155.90	6,683.6	6,683.6	-1,382.0	1,740.7	2,165.9	2.86	0.00	2.86
9,483.0	90.60	155.70	6,683.4	6,683.4	-1,438.6	1,766.1	2,225.9	1.49	1.45	-0.32
9,546.0	91.10	155.70	6,682.5	6,682.5	-1,496.0	1,792.0	2,287.0	0.79	0.79	0.00
9,610.0	91.30	155.40	6,681.1	6,681.1	-1,554.2	1,818.5	2,349.0	0.56	0.31	-0.47
9,673.0	90.80	153.90	6,680.0	6,680.0	-1,611.1	1,845.4	2,410.3	2.51	-0.79	-2.38
9,735.0	90.10	153.60	6,679.5	6,679.5	-1,666.8	1,872.9	2,470.9	1.23	-1.13	-0.48
9,798.0	90.30	153.70	6,679.3	6,679.3	-1,723.2	1,900.8	2,532.5	0.35	0.32	0.16
9,861.0	90.00	153.10	6,679.1	6,679.1	-1,779.5	1,929.0	2,594.1	1.06	-0.48	-0.95
9,925.0	90.90	153.50	6,678.6	6,678.6	-1,836.7	1,957.8	2,656.7	1.54	1.41	0.63
9,989.0	92.00	155.00	6,677.0	6,677.0	-1,894.3	1,985.6	2,719.1	2.91	1.72	2.34
10,052.0	92.40	154.90	6,674.6	6,674.6	-1,951.4	2,012.2	2,780.3	0.65	0.63	-0.16
10,114.0	91.30	155.00	6,672.6	6,672.6	-2,007.5	2,038.5	2,840.6	1.78	-1.77	0.16
10,177.0	91.10	155.20	6,671.2	6,671.2	-2,064.6	2,065.0	2,901.7	0.45	-0.32	0.32
10,240.0	91.10	154.40	6,670.0	6,670.0	-2,121.6	2,091.8	2,963.0	1.27	0.00	-1.27
10,302.0	90.80	154.40	6,669.0	6,669.0	-2,177.5	2,118.6	3,023.4	0.48	-0.48	0.00



Nevis Energy Services Survey Report

Database:	EQT on local	Local Co-ordinate Reference:	Site Doddridge County 512474
Company:	EQT Production - Marcellus	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Project:	Doddridge County, WV Grid	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Doddridge County 512474	North Reference:	Grid
Well:	Well #512474	Survey Calculation Method:	Minimum Curvature
Wellbore:	512474 Revised Sidetrack		
Design:	512474 Revised Sidetrack		

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	Subsea Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,385.0	91.20	154.50	6,667.9	6,667.9	-2,234.4	2,145.8	3,084.8	0.65	0.63	0.16
10,429.0	91.70	154.90	6,666.3	6,666.3	-2,292.2	2,173.1	3,147.1	1.00	0.78	0.63
10,493.0	91.70	154.50	6,664.4	6,664.4	-2,350.0	2,200.4	3,209.3	0.62	0.00	-0.63
10,555.0	92.10	154.00	6,662.3	6,662.3	-2,405.9	2,227.4	3,269.8	1.03	0.65	-0.81
10,618.0	91.30	153.10	6,660.5	6,660.5	-2,462.2	2,255.4	3,331.3	1.91	-1.27	-1.43
10,682.0	90.70	153.30	6,659.4	6,659.4	-2,519.4	2,284.3	3,394.0	0.99	-0.94	0.31
10,746.0	89.90	152.40	6,659.0	6,659.0	-2,576.3	2,313.5	3,456.7	1.88	-1.25	-1.41
10,809.0	90.50	153.30	6,658.8	6,658.8	-2,632.4	2,342.2	3,518.4	1.72	0.95	1.43
10,872.0	90.40	152.80	6,658.3	6,658.3	-2,688.5	2,370.8	3,580.1	0.81	-0.16	-0.79
10,934.0	91.20	152.70	6,657.4	6,657.4	-2,743.6	2,399.2	3,640.9	1.30	1.29	-0.16
10,997.0	90.70	153.10	6,656.4	6,656.4	-2,799.7	2,427.9	3,702.7	1.02	-0.79	0.63
11,060.0	90.80	152.10	6,655.6	6,655.6	-2,855.6	2,456.8	3,764.5	1.60	0.16	-1.59
11,123.0	91.70	152.40	6,654.2	6,654.2	-2,911.4	2,486.2	3,826.3	1.51	1.43	0.48
11,186.0	92.40	153.40	6,651.9	6,651.9	-2,967.4	2,514.8	3,888.0	1.94	1.11	1.59
11,249.0	93.00	154.50	6,649.0	6,649.0	-3,023.9	2,542.5	3,949.4	1.99	0.95	1.75
11,313.0	92.30	153.10	6,646.0	6,646.0	-3,081.3	2,570.7	4,011.9	2.44	-1.09	-2.19
11,375.0	91.60	151.80	6,643.9	6,643.9	-3,136.2	2,599.4	4,072.7	2.38	-1.13	-2.10
11,438.0	91.00	150.40	6,642.5	6,642.5	-3,191.4	2,629.8	4,134.8	2.42	-0.95	-2.22
11,500.0	91.60	150.60	6,641.1	6,641.1	-3,245.3	2,660.3	4,196.0	1.02	0.97	0.32
11,546.0	91.60	150.60	6,639.8	6,639.8	-3,285.4	2,682.9	4,241.4	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____