



EQT Production - Marcellus

Doddridge County, WV Grid

Doddridge County 512480

Well #512480

Well #512480

Survey: Directional Surveys

Standard Survey Report

21 July, 2010

RECEIVED
Office of Oil & Gas

MAR 09 2011

WV Department of
Environmental Protection



Nevis Energy Services

Survey Report

Database: EQT on local	Local Co-ordinate Reference: Site Doddridge County 512480	TVD Reference: WELL @ 0.0ft (Original Well Elev)
Company: EQT Production - Marcellus	TVD Reference: WELL @ 0.0ft (Original Well Elev)	MD Reference: WELL @ 0.0ft (Original Well Elev)
Project: Doddridge County, WV Grid	MD Reference: WELL @ 0.0ft (Original Well Elev)	Grid
Site: Doddridge County 512480	North Reference: Grid	Survey Calculation Method: Minimum Curvature
Well: Well #512480	Survey Calculation Method: Minimum Curvature	
Wellbore: Well #512480		
Design: Well #512480		

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 512480			
Site Position:	Northing:	265,343.00 ft	Latitude: 39.22
From: Map	Easting:	1,631,414.00 ft	Longitude: -80.80
Position Uncertainty: 0.0 ft	Slot Radius: "		Grid Convergence: -0.83 °

Well Well #512480				
Well Position	+N/-S	0.0 ft	Northing: 265,343.00 ft	Latitude: 39° 13' 16.303 N
	+E/-W	0.0 ft	Easting: 1,631,414.00 ft	Longitude: 80° 48' 3.639 W
Position Uncertainty		0.0 ft	Wellhead Elevation: ft	Ground Level: 0.0 ft

Wellbore Well #512480					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	-8.21	67.21	52,787

Design Well #512480					
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	155.01	

Survey Program Date 7/21/2010					
From	To	Survey (Wellbore)	Tool Name	Description	
()	(ft)				
0.00	5,000.0	Gyro (Well #512480)	WLST		
0.00	6,382.0	Survey #1 (Well #512480)	WLST		
0.00	9,390.0	Directional Surveys (Well #512480)	WLST		

Survey											
Measured Depth	Inclination	Azimuth	Vertical Depth	Subsea Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	
Tie-in from As-Drilled Curve											
6,407.0	24.70	75.20	6,352.1	6,352.1	265.6	-85.5	-276.9	0.00	0.00	0.00	
6,439.0	28.10	83.10	6,380.8	6,380.8	268.2	-71.6	-273.3	15.26	10.63	24.69	
6,471.0	29.60	93.10	6,408.8	6,408.8	268.7	-56.2	-267.3	15.77	4.69	31.25	
6,502.0	32.00	102.40	6,435.5	6,435.5	266.5	-40.5	-258.7	17.18	7.74	30.00	
6,534.0	34.80	109.80	6,462.2	6,462.2	261.6	-23.6	-247.1	15.43	8.75	23.13	
6,565.0	36.10	119.80	6,487.5	6,487.5	254.1	-7.4	-233.4	19.16	4.19	32.26	



Nevis Energy Services

Survey Report

Database:	EQT on local	Local Co-ordinate Reference:	Site Doddridge County 512480
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 512480	North Reference:	Grid
Well:	Well #512480	Survey Calculation Method:	Minimum Curvature
Wellbore:	Well #512480		
Design:	Well #512480		

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)
6,597.0	36.40	128.70	6,513.3	6,513.3	243.4	8.2	-217.2	16.46	0.94	27.81
6,628.0	36.20	139.20	6,538.3	6,538.3	230.7	21.4	-200.1	20.04	-0.65	33.87
6,660.0	38.80	146.60	6,563.7	6,563.7	215.2	33.1	-181.1	16.24	8.13	23.13
6,692.0	43.40	151.00	6,587.8	6,587.8	197.2	44.0	-160.2	16.97	14.38	13.75
6,724.0	47.40	154.40	6,610.3	6,610.3	177.0	54.4	-137.4	14.61	12.50	10.63
6,755.0	52.60	156.90	6,630.2	6,630.2	155.3	64.2	-113.7	17.87	16.77	8.06
6,786.0	57.50	158.80	6,648.0	6,648.0	131.8	73.7	-88.3	16.58	15.81	6.13
6,818.0	63.20	158.50	6,663.8	6,663.8	105.9	83.9	-60.6	17.83	17.81	-0.94
6,850.0	68.20	157.00	6,677.0	6,677.0	78.9	94.9	-31.4	16.20	15.63	-4.69
6,883.0	75.00	157.80	6,687.4	6,687.4	50.0	106.9	-0.2	20.73	20.61	2.42
6,914.0	80.40	159.00	6,694.0	6,694.0	21.9	118.1	30.1	17.82	17.42	3.87
6,942.0	86.40	161.20	6,697.2	6,697.2	-4.3	127.5	57.7	22.80	21.43	7.86
7,006.0	86.90	161.10	6,700.9	6,700.9	-64.7	148.2	121.3	0.80	0.78	-0.16
7,069.0	87.30	161.30	6,704.1	6,704.1	-124.3	168.4	183.8	0.71	0.63	0.32
7,132.0	87.60	161.20	6,706.9	6,706.9	-183.9	188.7	246.4	0.50	0.48	-0.16
7,196.0	87.80	160.90	6,709.5	6,709.5	-244.4	209.4	310.0	0.56	0.31	-0.47
7,259.0	89.10	160.90	6,711.2	6,711.2	-303.9	230.0	372.6	2.06	2.06	0.00
7,322.0	89.50	160.50	6,712.0	6,712.0	-363.3	250.9	435.3	0.90	0.63	-0.63
7,385.0	92.60	161.40	6,710.8	6,710.8	-422.9	271.4	497.9	5.12	4.92	1.43
7,448.0	92.20	159.70	6,708.2	6,708.2	-482.2	292.4	560.6	2.77	-0.63	-2.70
7,512.0	92.50	158.30	6,705.5	6,705.5	-541.9	315.3	624.4	2.24	0.47	-2.19
7,574.0	93.10	157.80	6,702.5	6,702.5	-599.4	338.4	686.2	1.26	0.97	-0.81
7,638.0	91.80	157.40	6,699.8	6,699.8	-658.5	362.8	750.1	2.13	-2.03	-0.63
7,702.0	91.10	155.70	6,698.2	6,698.2	-717.2	388.3	814.1	2.87	-1.09	-2.66
7,767.0	92.00	157.70	6,696.4	6,696.4	-776.8	414.0	879.0	3.37	1.38	3.08
7,830.0	91.20	154.40	6,694.6	6,694.6	-834.4	439.5	942.0	5.39	-1.27	-5.24
7,894.0	91.50	152.10	6,693.1	6,693.1	-891.5	468.3	1,005.9	3.62	0.47	-3.59
7,956.0	92.60	152.50	6,690.9	6,690.9	-946.4	497.1	1,067.8	1.89	1.77	0.65
8,019.0	92.60	151.00	6,688.1	6,688.1	-1,001.8	526.9	1,130.6	2.38	0.00	-2.38
8,083.0	93.50	151.30	6,684.6	6,684.6	-1,057.8	557.8	1,194.4	1.48	1.41	0.47
8,147.0	93.50	151.50	6,680.7	6,680.7	-1,113.9	588.3	1,258.1	0.31	0.00	0.31
8,210.0	93.20	152.00	6,677.1	6,677.1	-1,169.3	618.1	1,320.9	0.92	-0.48	0.79
8,272.0	92.40	152.50	6,674.0	6,674.0	-1,224.1	646.9	1,382.8	1.52	-1.29	0.81
8,335.0	92.70	153.90	6,671.2	6,671.2	-1,280.2	675.3	1,445.7	2.27	0.48	2.22
8,398.0	91.40	154.70	6,669.0	6,669.0	-1,337.0	702.6	1,508.6	2.42	-2.06	1.27
8,461.0	90.70	157.00	6,667.8	6,667.8	-1,394.4	728.4	1,571.6	3.82	-1.11	3.65
8,524.0	90.00	158.90	6,667.4	6,667.4	-1,452.8	752.0	1,634.5	3.21	-1.11	3.02
8,588.0	89.50	158.70	6,667.7	6,667.7	-1,512.5	775.2	1,698.4	0.84	-0.78	-0.31
8,651.0	90.60	162.30	6,667.7	6,667.7	-1,571.9	796.2	1,761.1	5.98	1.75	5.71
8,715.0	90.80	163.20	6,666.9	6,666.9	-1,633.0	815.2	1,824.5	1.44	0.31	1.41
8,778.0	90.80	162.30	6,666.0	6,666.0	-1,693.2	833.9	1,886.9	1.43	0.00	-1.43
8,841.0	90.50	161.50	6,665.3	6,665.3	-1,753.0	853.4	1,949.5	1.36	-0.48	-1.27
8,904.0	90.50	159.60	6,664.7	6,664.7	-1,812.4	874.4	2,012.2	3.02	0.00	-3.02



Nevis Energy Services

Survey Report

Database:	EQT on local	Local Co-ordinate Reference:	Site Doddridge County 512480
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 512480	North Reference:	Grid
Well:	Well #512480	Survey Calculation Method:	Minimum Curvature
Wellbore:	Well #512480		
Design:	Well #512480		

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)
8,967.0	90.10	158.20	6,664.4	6,664.4	-1,871.2	897.1	2,075.0	2.31	-0.63	-2.22
9,030.0	90.30	158.20	6,664.2	6,664.2	-1,929.7	920.5	2,137.9	0.32	0.32	0.00
9,093.0	90.70	158.20	6,663.6	6,663.6	-1,988.2	943.9	2,200.8	0.63	0.63	0.00
9,156.0	90.60	157.50	6,662.9	6,662.9	-2,046.5	967.6	2,263.7	1.12	-0.16	-1.11
9,219.0	90.40	156.80	6,662.4	6,662.4	-2,104.6	992.1	2,326.7	1.16	-0.32	-1.11
9,282.0	90.60	157.00	6,661.8	6,661.8	-2,162.5	1,016.8	2,389.6	0.45	0.32	0.32
9,344.0	90.40	156.20	6,661.3	6,661.3	-2,219.4	1,041.4	2,451.6	1.33	-0.32	-1.29
Ext. to TD = 9390ft										
9,390.0	90.40	156.20	6,661.0	6,661.0	-2,261.5	1,060.0	2,497.6	0.00	0.00	0.00

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
6,407.0	6,352.1	265.6	-85.5	Tie-In from As-Drilled Curve
9,390.0	6,661.0	-776.8	414.0	Ext. to TD = 9390ft

Checked By: _____ Approved By: _____ Date: _____