



SM Energy

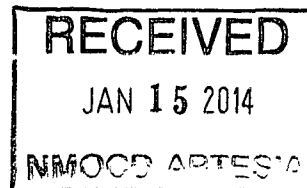
Eddy County, NM (NAD 83)
Sec 35, T19S, R29E
Parkway 35 Fed Com #6H

Original Wellbore

Survey: MWD Survey

Standard Survey Report

03 November, 2013



30-015-41646



Company:	SM Energy	Local Co-ordinate Reference:	Well Parkway 35 Fed Com #6H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	WELL @ 3349.0usft (Original Well Elev)
Site:	Sec 35, T19S, R29E	MD Reference:	WELL @ 3349.0usft (Original Well Elev)
Well:	Parkway 35 Fed Com #6H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Project	Eddy County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site						Sec 35, T19S, R29E											
Site Position:			Northing:			0.00 usft			Latitude:			30° 59' 18.404 N					
From:			Map			Easting:			0.00 usft			Longitude:			106° 3' 38.987 W		
Position Uncertainty:			0.0 usft			Slot Radius:			13-3/16 "			Grid Convergence:			-0.89 °		

Well	Parkway 35 Fed Com #6H					
Well Position	+N/-S	0.0 usft	Northing:	587,426.78 usft	Latitude:	32° 36' 52.477 N
	+E/-W	0.0 usft	Easting:	627,314.20 usft	Longitude:	104° 3' 14.761 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,349.0 usft	Ground Level:	3,331.0 usft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/31/2013	7.58	60.41	48,586

Design	Original Wellbore				
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	90.55	

Survey Program	Date	11/3/2013			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
155.0	1,590.0	Teledrift Survey (Original Wellbore)	MWD	MWD - Standard	
1,715.0	7,614.0	MWD Surveys OH (Original Wellbore)	MWD	MWD - Standard	

Survey										
	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	1,590.0	1.00	58.70	1,589.6	20.5	20.9	20.7	0.00	0.00	0.00
	1,715.0	0.70	64.40	1,714.6	21.4	22.5	22.3	0.25	-0.24	4.56
First MWD Survey										
	1,811.0	1.00	66.30	1,810.6	22.0	23.8	23.6	0.31	0.31	1.98
	1,906.0	1.00	57.50	1,905.6	22.8	25.3	25.0	0.16	0.00	-9.26
	2,002.0	0.80	71.00	2,001.6	23.4	26.6	26.4	0.30	-0.21	14.06
	2,097.0	0.70	83.80	2,096.6	23.7	27.8	27.6	0.20	-0.11	13.47
	2,193.0	0.50	110.90	2,192.6	23.6	28.8	28.6	0.36	-0.21	28.23
	2,288.0	0.60	201.60	2,287.6	23.0	29.0	28.8	0.83	0.11	95.47
	2,384.0	1.00	192.10	2,383.5	21.7	28.6	28.4	0.44	0.42	-9.90

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Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
2,479.0	0.90	194.40	2,478.5	20.2	28.3	28.1	0.11	-0.11	2.42	
2,575.0	0.50	193.60	2,574.5	19.1	28.0	27.8	0.42	-0.42	-0.83	
2,670.0	0.40	124.20	2,669.5	18.5	28.2	28.0	0.55	-0.11	-73.05	
2,766.0	0.40	85.30	2,765.5	18.3	28.8	28.6	0.28	0.00	-40.52	
2,861.0	0.40	73.20	2,860.5	18.4	29.4	29.2	0.09	0.00	-12.74	
2,957.0	0.40	95.60	2,956.5	18.5	30.1	29.9	0.16	0.00	23.33	
3,052.0	0.30	89.80	3,051.5	18.5	30.7	30.5	0.11	-0.11	-6.11	
3,148.0	0.20	93.50	3,147.5	18.5	31.1	30.9	0.11	-0.10	3.85	
3,243.0	0.50	56.30	3,242.5	18.7	31.6	31.4	0.38	0.32	-39.16	
3,365.0	0.40	28.40	3,364.5	19.3	32.2	32.0	0.19	-0.08	-22.87	
3,460.0	0.40	52.20	3,459.5	19.8	32.6	32.5	0.17	0.00	25.05	
3,556.0	0.20	60.70	3,555.5	20.1	33.1	32.9	0.21	-0.21	8.85	
3,651.0	0.40	48.30	3,650.5	20.4	33.4	33.3	0.22	0.21	-13.05	
3,747.0	0.40	70.30	3,746.5	20.8	34.0	33.8	0.16	0.00	22.92	
3,842.0	0.50	76.20	3,841.5	21.0	34.7	34.5	0.12	0.11	6.21	
3,938.0	0.50	78.40	3,937.5	21.2	35.5	35.3	0.02	0.00	2.29	
4,033.0	0.50	98.60	4,032.5	21.2	36.4	36.2	0.18	0.00	21.26	
4,129.0	0.80	83.30	4,128.5	21.2	37.4	37.2	0.36	0.31	-15.94	
4,224.0	0.70	65.20	4,223.5	21.5	38.6	38.4	0.27	-0.11	-19.05	
4,320.0	1.10	53.30	4,319.5	22.3	39.9	39.7	0.46	0.42	-12.40	
4,416.0	0.70	125.40	4,415.5	22.5	41.1	40.9	1.15	-0.42	75.10	
4,511.0	0.60	136.40	4,510.4	21.8	41.9	41.7	0.17	-0.11	11.58	
4,606.0	0.60	104.50	4,605.4	21.3	42.8	42.6	0.35	0.00	-33.58	
4,702.0	0.30	321.80	4,701.4	21.4	43.1	42.9	0.89	-0.31	-148.65	
4,797.0	0.40	321.70	4,796.4	21.9	42.7	42.5	0.11	0.11	-0.11	
4,892.0	0.50	340.50	4,891.4	22.5	42.4	42.2	0.19	0.11	19.79	
4,988.0	0.60	280.80	4,987.4	23.0	41.8	41.5	0.58	0.10	-62.19	
5,083.0	0.70	277.20	5,082.4	23.2	40.7	40.5	0.11	0.11	-3.79	
5,179.0	0.80	276.80	5,178.4	23.3	39.4	39.2	0.10	0.10	-0.42	
5,274.0	1.00	281.20	5,273.4	23.6	38.0	37.7	0.22	0.21	4.63	
5,370.0	1.20	276.40	5,369.4	23.8	36.1	35.9	0.23	0.21	-5.00	
5,465.0	1.10	288.70	5,464.4	24.2	34.3	34.1	0.28	-0.11	12.95	
5,561.0	1.10	291.70	5,560.4	24.9	32.6	32.3	0.06	0.00	3.13	
5,656.0	1.00	247.20	5,655.3	24.9	31.0	30.7	0.84	-0.11	-46.84	
5,752.0	1.20	248.00	5,751.3	24.2	29.3	29.0	0.21	0.21	0.83	
5,847.0	1.20	253.70	5,846.3	23.5	27.4	27.1	0.13	0.00	6.00	
5,943.0	1.10	256.00	5,942.3	23.0	25.5	25.3	0.11	-0.10	2.40	
6,038.0	1.10	267.00	6,037.3	22.8	23.7	23.5	0.22	0.00	11.58	
6,134.0	1.30	281.70	6,133.2	22.9	21.7	21.5	0.38	0.21	15.31	
6,229.0	1.30	282.10	6,228.2	23.4	19.6	19.4	0.01	0.00	0.42	
6,325.0	1.70	309.00	6,324.2	24.5	17.5	17.2	0.83	0.42	28.02	
6,421.0	1.80	337.30	6,420.1	26.8	15.8	15.5	0.90	0.10	29.48	
6,482.0	2.40	89.60	6,481.1	27.7	16.7	16.4	5.74	0.98	184.10	

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6,542.0	6.60	100.70	6,540.9	27.1	21.3	21.1	7.12	7.00	18.50	
6,574.0	8.50	89.00	6,572.6	26.8	25.5	25.2	7.61	5.94	-36.56	
6,606.0	11.60	83.00	6,604.2	27.2	31.0	30.8	10.21	9.69	-18.75	
6,638.0	15.30	80.30	6,635.3	28.3	38.4	38.1	11.72	11.56	-8.44	
6,670.0	18.30	85.00	6,665.9	29.5	47.6	47.3	10.28	9.38	14.69	
6,702.0	21.40	89.90	6,696.0	29.9	58.4	58.1	10.99	9.69	15.31	
6,733.0	25.00	94.00	6,724.5	29.5	70.6	70.3	12.72	11.61	13.23	
6,765.0	26.80	96.00	6,753.3	28.2	84.5	84.3	6.25	5.63	6.25	
6,797.0	27.10	95.90	6,781.8	26.7	99.0	98.7	0.95	0.94	-0.31	
6,829.0	29.40	95.40	6,810.0	25.2	114.0	113.8	7.23	7.19	-1.56	
6,860.0	33.10	96.60	6,836.5	23.5	130.0	129.8	12.10	11.94	3.87	
6,892.0	37.10	97.30	6,862.7	21.3	148.3	148.1	12.56	12.50	2.19	
6,924.0	38.10	98.50	6,888.0	18.6	167.6	167.4	3.87	3.13	3.75	
6,956.0	38.70	99.40	6,913.1	15.5	187.3	187.1	2.56	1.88	2.81	
6,988.0	39.70	99.10	6,937.9	12.3	207.2	207.1	3.18	3.13	-0.94	
7,020.0	41.40	98.60	6,962.2	9.1	227.8	227.7	5.41	5.31	-1.56	
7,052.0	44.50	99.20	6,985.6	5.7	249.3	249.2	9.77	9.69	1.88	
7,082.0	46.50	99.10	7,006.6	2.3	270.4	270.4	6.67	6.67	-0.33	
7,114.0	49.90	98.40	7,028.0	-1.3	294.0	294.0	10.75	10.63	-2.19	
7,146.0	53.50	98.30	7,047.8	-5.0	318.9	318.9	11.25	11.25	-0.31	
7,178.0	57.60	97.00	7,065.9	-8.5	345.0	345.1	13.24	12.81	-4.06	
7,210.0	61.50	95.30	7,082.1	-11.4	372.4	372.5	13.02	12.19	-5.31	
7,242.0	64.50	93.50	7,096.6	-13.6	400.8	401.0	10.63	9.38	-5.63	
7,274.0	68.00	91.70	7,109.5	-14.9	430.1	430.2	12.09	10.94	-5.63	
7,306.0	70.00	90.30	7,121.0	-15.4	460.0	460.1	7.47	6.25	-4.38	
7,337.0	71.30	91.20	7,131.3	-15.8	489.2	489.3	5.01	4.19	2.90	
7,369.0	72.20	92.00	7,141.3	-16.7	519.6	519.7	3.68	2.81	2.50	
7,401.0	74.00	91.60	7,150.6	-17.6	550.2	550.3	5.75	5.63	-1.25	
7,433.0	74.80	91.20	7,159.2	-18.4	581.0	581.2	2.77	2.50	-1.25	
7,465.0	76.60	90.00	7,167.1	-18.7	612.0	612.2	6.70	5.63	-3.75	
7,497.0	80.40	89.10	7,173.5	-18.5	643.4	643.5	12.19	11.88	-2.81	
7,529.0	87.40	90.90	7,183.5	-18.5	736.8	736.9	7.69	7.45	1.91	
7,561.0	89.10	90.90	7,186.3	-19.9	830.7	830.9	1.81	1.81	0.00	
7,593.0	88.00	90.30	7,188.7	-20.9	925.7	925.8	1.32	-1.16	-0.63	
7,625.0	88.30	90.10	7,191.8	-21.3	1,019.6	1,019.8	0.38	0.32	-0.21	
7,657.0	89.10	89.90	7,194.0	-21.3	1,115.6	1,115.7	0.86	0.83	-0.21	
7,689.0	89.10	89.40	7,195.4	-20.7	1,210.6	1,210.7	0.53	0.00	-0.53	
7,721.0	87.70	89.00	7,198.1	-19.4	1,305.5	1,305.7	1.53	-1.47	-0.42	
7,753.0	88.50	88.90	7,201.2	-17.6	1,400.5	1,400.6	0.85	0.84	-0.11	
7,785.0	87.10	89.60	7,204.9	-16.4	1,494.4	1,494.5	1.66	-1.49	0.74	
7,817.0	86.50	89.50	7,210.2	-15.6	1,589.2	1,589.3	0.64	-0.63	-0.11	
7,849.0	87.40	89.20	7,215.2	-14.6	1,683.1	1,683.2	1.01	0.96	-0.32	
7,881.0	86.60	89.80	7,220.1	-13.8	1,778.0	1,778.0	1.05	-0.84	0.63	

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8,727.0	87.10	89.40	7,225.3	-13.1	1,871.8	1,871.8	0.68	0.53	-0.43	
8,822.0	86.90	90.60	7,230.3	-13.1	1,966.7	1,966.7	1.28	-0.21	1.26	
8,917.0	88.30	90.70	7,234.2	-14.2	2,061.6	2,061.6	1.48	1.47	0.11	
9,011.0	87.00	91.20	7,238.1	-15.7	2,155.5	2,155.5	1.48	-1.38	0.53	
9,106.0	85.90	91.20	7,244.0	-17.7	2,250.3	2,250.4	1.16	-1.16	0.00	
9,201.0	86.80	91.20	7,250.0	-19.7	2,345.1	2,345.2	0.95	0.95	0.00	
9,296.0	86.30	91.30	7,255.7	-21.8	2,439.9	2,440.0	0.54	-0.53	0.11	
9,390.0	87.60	90.70	7,260.7	-23.4	2,533.7	2,533.8	1.52	1.38	-0.64	
9,485.0	84.80	89.80	7,267.0	-23.8	2,628.5	2,628.6	3.10	-2.95	-0.95	
9,579.0	85.20	88.60	7,275.2	-22.5	2,722.1	2,722.2	1.34	0.43	-1.28	
9,674.0	86.60	88.00	7,282.0	-19.7	2,816.9	2,816.9	1.60	1.47	-0.63	
9,769.0	88.00	89.20	7,286.5	-17.4	2,911.7	2,911.7	1.94	1.47	1.26	
9,863.0	87.80	90.50	7,290.0	-17.1	3,005.6	3,005.7	1.40	-0.21	1.38	
9,958.0	89.40	90.30	7,292.3	-17.8	3,100.6	3,100.6	1.70	1.68	-0.21	
10,053.0	86.90	91.90	7,295.3	-19.6	3,195.5	3,195.6	3.12	-2.63	1.68	
10,147.0	84.90	91.90	7,302.1	-22.7	3,289.2	3,289.3	2.13	-2.13	0.00	
10,242.0	85.10	92.00	7,310.3	-26.0	3,383.8	3,383.9	0.24	0.21	0.11	
10,337.0	84.80	91.60	7,318.7	-28.9	3,478.4	3,478.5	0.53	-0.32	-0.42	
10,432.0	83.80	91.20	7,328.1	-31.2	3,572.9	3,573.0	1.13	-1.05	-0.42	
10,526.0	82.30	91.40	7,339.5	-33.4	3,666.2	3,666.3	1.61	-1.60	0.21	
10,621.0	82.30	91.80	7,352.2	-36.0	3,760.3	3,760.5	0.42	0.00	0.42	
10,716.0	82.70	91.30	7,364.6	-38.5	3,854.4	3,854.6	0.67	0.42	-0.53	
10,810.0	84.10	90.50	7,375.4	-40.0	3,947.8	3,948.0	1.71	1.49	-0.85	
10,905.0	85.40	90.40	7,384.1	-40.7	4,042.4	4,042.6	1.37	1.37	-0.11	
11,000.0	83.80	90.50	7,393.1	-41.5	4,137.0	4,137.2	1.69	-1.68	0.11	
11,095.0	83.50	90.80	7,403.6	-42.6	4,231.4	4,231.6	0.45	-0.32	0.32	
11,189.0	84.70	90.20	7,413.2	-43.4	4,324.9	4,325.1	1.43	1.28	-0.64	
11,284.0	87.60	90.30	7,419.6	-43.8	4,419.7	4,419.9	3.05	3.05	0.11	
11,379.0	86.30	90.20	7,424.7	-44.2	4,514.5	4,514.7	1.37	-1.37	-0.11	
11,474.0	84.70	90.20	7,432.1	-44.5	4,609.2	4,609.4	1.68	-1.68	0.00	
11,568.0	85.70	90.30	7,440.0	-44.9	4,702.9	4,703.1	1.07	1.06	0.11	
11,662.0	87.40	90.90	7,445.7	-45.9	4,796.7	4,796.9	1.92	1.81	0.64	
11,711.0	87.90	91.20	7,447.7	-46.8	4,845.7	4,845.9	1.19	1.02	0.61	
Last MWD Survey										
11,759.0	87.90	91.20	7,449.4	-47.8	4,893.6	4,893.9	0.00	0.00	0.00	
PTB - TD										

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,715.0	1,714.6	21.4	22.5	First MWD Survey	
11,711.0	7,447.7	-46.8	4,845.7	Last MWD Survey	
11,759.0	7,449.4	-47.8	4,893.6	PTB - TD	

Company:	SM Energy	Local Co-ordinate Reference:	Well Parkway 35 Fed Com #6H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	WELL @ 3349.0usft (Original Well Elev)
Site:	Sec 35, T19S, R29E	MD Reference:	WELL @ 3349.0usft (Original Well Elev)
Well:	Parkway 35 Fed Com #6H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Checked By: _____	Approved By: _____	Date: _____
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