

30-015-40650

RKI Exploration & Production

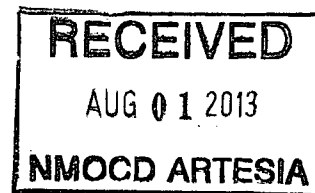
Eddy County (NM83E)

Sec 1-T23S-R28E

Longview Deep Fed 6-22

Wellbore #1

Survey: MWD Surveys



Standard Survey Report

08 November, 2012

Wolverine Directional, LLC

Survey Report

Company:	RKI Exploration & Production	Local Co-ordinate Reference:	Well Longview Deep Fed 6-22
Project:	Eddy County (NM83E)	TVD Reference:	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 1-T23S-R28E	MD Reference:	WELL @ 0.0ft (Original Well Elev)
Well:	Longview Deep Fed 6-22	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 2003.21 Single User Db

Design	Wellbore #1			
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	79.09

Survey Program	Date 2012/11/08			
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
286.0	13,212.0	MWD Surveys (Wellbore #1)	MWD	MWD - Standard

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
200.0	0.89	156.95	200.0	-1.6	0.6	0.3	0.00	0.00	0.00	
286.0	2.00	173.30	286.0	-3.7	1.1	0.4	1.36	1.29	19.01	
First MWD Survey										
315.0	2.10	157.40	314.9	-4.7	1.3	0.4	1.98	0.34	-54.83	
344.0	2.00	147.80	343.9	-5.6	1.8	0.7	1.23	-0.34	-33.10	
377.0	1.80	149.70	376.9	-6.5	2.4	1.1	0.64	-0.61	5.76	
407.0	2.30	144.40	406.9	-7.4	3.0	1.5	1.78	1.67	-17.67	
438.0	2.40	135.60	437.9	-8.4	3.8	2.1	1.21	0.32	-28.39	
469.0	2.10	123.50	468.8	-9.2	4.7	2.9	1.81	-0.97	-39.03	
499.0	2.60	115.60	498.8	-9.8	5.8	3.8	1.98	1.67	-26.33	
530.0	2.80	116.00	529.8	-10.4	7.1	5.0	0.65	0.65	1.29	
560.0	3.10	109.10	559.7	-11.0	8.5	6.3	1.55	1.00	-23.00	
591.0	3.70	105.90	590.7	-11.5	10.3	7.9	2.03	1.94	-10.32	
622.0	3.90	101.70	621.6	-12.0	12.3	9.8	1.11	0.65	-13.55	
653.0	4.30	104.50	652.5	-12.5	14.4	11.8	1.44	1.29	9.03	
684.0	4.80	105.60	683.4	-13.2	16.8	14.0	1.64	1.61	3.55	
714.0	5.50	102.20	713.3	-13.8	19.4	16.5	2.54	2.33	-11.33	
745.0	6.30	97.50	744.2	-14.3	22.6	19.4	3.01	2.58	-15.16	
776.0	7.30	94.00	774.9	-14.7	26.2	23.0	3.49	3.23	-11.29	
807.0	8.40	89.90	805.6	-14.8	30.4	27.1	3.98	3.55	-13.23	
837.0	9.60	88.00	835.3	-14.7	35.1	31.7	4.12	4.00	-6.33	
868.0	11.20	86.60	865.8	-14.5	40.7	37.2	5.22	5.16	-4.52	
899.0	12.80	86.10	896.1	-14.1	47.2	43.6	5.17	5.16	-1.61	
929.0	14.80	84.80	925.2	-13.5	54.3	50.8	6.75	6.67	-4.33	
960.0	16.90	84.30	955.0	-12.7	62.7	59.2	6.79	6.77	-1.61	
991.0	18.00	83.80	984.6	-11.7	72.0	68.4	3.58	3.55	-1.61	
1,022.0	18.40	84.00	1,014.1	-10.7	81.6	78.1	1.31	1.29	0.65	
1,052.0	18.90	82.60	1,042.5	-9.6	91.1	87.7	2.24	1.67	-4.67	
1,083.0	19.20	81.00	1,071.8	-8.1	101.1	97.8	1.94	0.97	-5.16	
1,114.0	19.60	80.40	1,101.0	-6.5	111.3	108.1	1.44	1.29	-1.94	
1,146.0	20.00	79.70	1,131.1	-4.6	122.0	118.9	1.45	1.25	-2.19	
1,238.0	20.10	78.30	1,217.6	1.4	152.9	150.4	0.53	0.11	-1.52	
1,299.0	20.00	75.00	1,274.9	6.3	173.3	171.3	1.86	-0.16	-5.41	
1,362.0	18.20	73.60	1,334.4	11.8	193.1	191.9	2.95	-2.86	-2.22	
1,423.0	17.20	72.70	1,392.5	17.2	210.9	210.3	1.70	-1.64	-1.48	
1,484.0	17.50	71.10	1,450.7	22.9	228.1	228.4	0.92	0.49	-2.62	
1,547.0	18.00	71.10	1,510.7	29.1	246.3	247.4	0.79	0.79	0.00	
1,610.0	18.50	71.30	1,570.6	35.4	265.0	266.9	0.80	0.79	0.32	
1,674.0	18.90	73.10	1,631.2	41.7	284.5	287.3	1.10	0.63	2.81	

Wolverine Directional, LLC

Survey Report

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Project: Eddy County (NM83E)
Site: Sec 1-T23S-R28E
Well: Longview/Deep Fed 6-22
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Longview Deep Fed 6-22
TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM:2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,736.0	18.40	75.20	1,689.9	47.1	303.6	307.0	1.35	-0.81	3.39
1,801.0	17.80	78.50	1,751.7	51.7	323.3	327.2	1.83	-0.92	5.08
1,864.0	17.90	78.30	1,811.7	55.6	342.2	346.5	0.19	0.16	-0.32
1,928.0	17.80	81.00	1,872.6	59.1	361.5	366.1	1.30	-0.16	4.22
1,991.0	18.00	82.00	1,932.6	62.0	380.6	385.5	0.58	0.32	1.59
2,055.0	18.60	81.50	1,993.3	64.9	400.5	405.5	0.97	0.94	-0.78
2,118.0	18.90	83.60	2,053.0	67.5	420.6	425.8	1.17	0.48	3.33
2,182.0	18.10	82.20	2,113.7	70.0	440.7	446.0	1.43	-1.25	-2.19
2,245.0	18.40	83.40	2,173.5	72.5	460.3	465.7	0.76	0.48	1.90
2,309.0	18.20	82.20	2,234.3	75.0	480.2	485.8	0.67	-0.31	-1.88
2,372.0	18.10	79.40	2,294.1	78.1	499.6	505.4	1.39	-0.16	-4.44
2,436.0	18.30	78.90	2,354.9	81.9	519.2	525.4	0.40	0.31	-0.78
2,499.0	18.50	81.70	2,414.7	85.2	538.8	545.2	1.44	0.32	4.44
2,563.0	18.10	79.70	2,475.5	88.5	558.7	565.3	1.16	-0.63	-3.13
2,626.0	18.10	79.90	2,535.4	92.0	577.9	584.9	0.10	0.00	0.32
2,690.0	18.00	77.80	2,596.2	95.8	597.4	604.7	1.03	-0.16	-3.28
2,753.0	17.70	76.80	2,656.2	100.0	616.2	624.0	0.68	-0.48	-1.59
2,817.0	18.30	76.90	2,717.0	104.5	635.5	643.8	0.94	0.94	0.16
2,881.0	18.00	75.90	2,777.9	109.2	654.9	663.7	0.68	-0.47	-1.56
2,944.0	17.40	79.20	2,837.9	113.4	673.5	682.8	1.86	-0.95	5.24
3,008.0	17.10	79.40	2,899.0	116.9	692.2	701.8	0.48	-0.47	0.31
3,071.0	17.90	78.90	2,959.1	120.4	710.8	720.7	1.29	1.27	-0.79
3,135.0	18.50	79.60	3,019.9	124.2	730.4	740.7	1.00	0.94	1.09
3,198.0	19.00	79.20	3,079.5	127.9	750.3	761.0	0.82	0.79	-0.63
3,230.0	19.00	78.90	3,109.8	129.9	760.6	771.4	0.31	0.00	-0.94
3,262.0	18.80	76.90	3,140.1	132.0	770.7	781.8	2.12	-0.63	-6.25
3,293.0	17.60	78.20	3,169.5	134.1	780.2	791.4	4.09	-3.87	4.19
3,325.0	16.90	79.00	3,200.1	136.0	789.5	800.9	2.31	-2.19	2.50
3,357.0	16.50	79.40	3,230.7	137.7	798.5	810.1	1.30	-1.25	1.25
3,388.0	15.40	80.60	3,260.5	139.2	806.9	818.6	3.70	-3.55	3.87
3,420.0	14.50	80.60	3,291.4	140.6	815.0	826.9	2.81	-2.81	0.00
3,452.0	13.70	82.00	3,322.5	141.7	822.7	834.7	2.72	-2.50	4.38
3,484.0	12.40	83.10	3,353.7	142.7	829.9	841.9	4.14	-4.06	3.44
3,515.0	11.40	83.30	3,384.0	143.4	836.2	848.3	3.23	-3.23	0.65
3,547.0	11.10	81.20	3,415.4	144.3	842.4	854.5	1.59	-0.94	-6.56
3,579.0	10.40	81.70	3,446.8	145.2	848.3	860.5	2.21	-2.19	1.56
3,611.0	9.30	80.80	3,478.3	146.0	853.7	865.9	3.47	-3.44	-2.81
3,642.0	8.90	78.00	3,508.9	146.9	858.6	870.8	1.92	-1.29	-9.03
3,674.0	8.40	78.90	3,540.6	147.9	863.3	875.7	1.62	-1.56	2.81
3,706.0	8.00	81.70	3,572.3	148.6	867.8	880.2	1.77	-1.25	8.75
3,738.0	7.30	78.90	3,604.0	149.4	872.0	884.5	2.48	-2.19	-8.75
3,769.0	6.80	82.20	3,634.7	150.0	875.7	888.3	2.08	-1.61	10.65
3,801.0	6.70	79.40	3,666.5	150.6	879.4	892.0	1.07	-0.31	-8.75
3,833.0	6.80	82.00	3,698.3	151.2	883.1	895.8	1.00	0.31	8.13
3,865.0	6.60	79.90	3,730.1	151.8	886.8	899.5	0.99	-0.63	-6.56
3,896.0	6.80	82.60	3,760.9	152.3	890.4	903.1	1.20	0.65	8.71
3,928.0	7.10	82.40	3,792.6	152.8	894.2	907.0	0.94	0.94	-0.63
3,960.0	7.00	82.90	3,824.4	153.3	898.1	910.9	0.37	-0.31	1.56
3,992.0	6.20	82.60	3,856.2	153.8	901.8	914.6	2.50	-2.50	-0.94
4,024.0	5.30	84.50	3,888.0	154.2	905.0	917.8	2.87	-2.81	5.94
4,055.0	4.80	82.70	3,918.9	154.5	907.7	920.5	1.69	-1.61	-5.81
4,087.0	4.10	82.60	3,950.8	154.8	910.1	923.0	2.19	-2.19	-0.31
4,119.0	2.70	77.80	3,982.7	155.1	912.0	924.9	4.46	-4.38	-15.00
4,136.2	2.54	77.18	4,000.0	155.3	912.8	925.7	0.96	-0.95	-3.61

Wolverine Directional, LLC

Survey Report

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Project: Eddy County (NM83E)
Site: Sec 1-T23S-R28E
Well: Longview Deep Fed 6-22
Wellbore: Wellbore #1
Design: Wellbore #1

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TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
LDF 6-22 TGT #1									
4,236.0	1.60	71.10	4,099.7	156.2	916.3	929.3	0.96	-0.94	-6.09
4,331.0	1.90	76.20	4,194.6	157.0	919.0	932.1	0.36	0.32	5.37
4,426.0	1.70	80.30	4,289.6	157.6	922.0	935.1	0.25	-0.21	4.32
4,522.0	1.80	82.70	4,385.5	158.0	924.9	938.1	0.13	0.10	2.50
4,617.0	1.50	87.10	4,480.5	158.3	927.6	940.8	0.34	-0.32	4.63
4,680.0	1.80	84.30	4,543.5	158.4	929.4	942.6	0.49	0.48	-4.44
4,776.0	2.00	89.90	4,639.4	158.6	932.6	945.7	0.28	0.21	5.83
4,870.0	1.80	96.30	4,733.3	158.4	935.7	948.7	0.31	-0.21	6.81
4,966.0	1.80	95.00	4,829.3	158.1	938.7	951.6	0.04	0.00	-1.35
5,061.0	1.40	91.20	4,924.3	158.0	941.3	954.2	0.44	-0.42	-4.00
5,156.0	1.10	112.40	5,019.2	157.6	943.3	956.1	0.58	-0.32	22.32
5,251.0	1.00	100.00	5,114.2	157.1	945.0	957.6	0.26	-0.11	-13.05
5,347.0	0.90	115.60	5,210.2	156.6	946.5	959.0	0.29	-0.10	16.25
5,442.0	0.90	108.60	5,305.2	156.1	947.9	960.3	0.12	0.00	-7.37
5,537.0	0.90	126.50	5,400.2	155.4	949.2	961.4	0.29	0.00	18.84
5,632.0	0.80	111.90	5,495.2	154.7	950.4	962.5	0.25	-0.11	-15.37
5,728.0	0.60	152.90	5,591.2	154.0	951.2	963.2	0.55	-0.21	42.71
5,823.0	0.60	123.20	5,686.2	153.3	951.9	963.7	0.32	0.00	-31.26
5,918.0	0.40	129.00	5,781.2	152.8	952.6	964.3	0.22	-0.21	6.11
6,013.0	0.60	132.70	5,876.2	152.3	953.2	964.8	0.21	0.21	3.89
6,109.0	0.70	188.00	5,972.2	151.4	953.5	964.9	0.54	0.10	57.60
6,204.0	0.70	193.80	6,067.1	150.2	953.2	964.4	0.07	0.00	6.11
6,299.0	1.00	187.00	6,162.1	148.8	953.0	963.9	0.33	0.32	-7.16
6,394.0	1.10	177.70	6,257.1	147.1	952.9	963.6	0.21	0.11	-9.79
6,489.0	1.30	195.20	6,352.1	145.1	952.7	962.9	0.44	0.21	18.42
6,585.0	1.40	190.10	6,448.1	142.9	952.2	962.0	0.16	0.10	-5.31
6,680.0	1.40	205.10	6,543.0	140.7	951.5	960.9	0.38	0.00	15.79
6,775.0	1.40	228.10	6,638.0	138.9	950.2	959.3	0.59	0.00	24.21
6,870.0	2.30	231.80	6,733.0	137.0	947.8	956.6	0.96	0.95	3.89
6,965.0	2.60	242.70	6,827.9	134.8	944.4	952.8	0.58	0.32	11.47
7,061.0	1.50	232.30	6,923.8	133.0	941.4	949.6	1.20	-1.15	-10.83
7,156.0	1.90	211.20	7,018.8	130.9	939.7	947.4	0.77	0.42	-22.21
7,251.0	2.30	207.90	7,113.7	127.9	937.9	945.2	0.44	0.42	-3.47
7,346.0	1.70	242.50	7,208.7	125.6	935.8	942.6	1.39	-0.63	36.42
7,442.0	2.20	258.20	7,304.6	124.5	932.7	939.4	0.76	0.52	16.35
7,537.0	0.90	285.10	7,399.6	124.3	930.2	936.9	1.53	-1.37	28.32
7,632.0	1.30	273.80	7,494.6	124.6	928.4	935.2	0.48	0.42	-11.89
7,727.0	1.70	267.50	7,589.5	124.6	925.9	932.8	0.45	0.42	-6.63
7,823.0	1.20	274.90	7,685.5	124.6	923.5	930.4	0.56	-0.52	7.71
7,918.0	1.00	286.30	7,780.5	125.0	921.7	928.7	0.31	-0.21	12.00
8,013.0	0.40	268.40	7,875.5	125.2	920.6	927.7	0.66	-0.63	-18.84
8,108.0	0.60	250.60	7,970.5	125.0	919.8	926.8	0.26	0.21	-18.74
8,203.0	0.90	213.70	8,065.5	124.2	918.9	925.8	0.58	0.32	-38.84
8,299.0	1.10	245.00	8,161.4	123.2	917.7	924.4	0.60	0.21	32.60
8,394.0	1.50	277.90	8,256.4	123.0	915.6	922.3	0.87	0.42	34.63
8,489.0	1.00	271.00	8,351.4	123.2	913.6	920.4	0.55	-0.53	-7.26
8,584.0	1.00	229.30	8,446.4	122.7	912.1	918.8	0.75	0.00	-43.89
8,679.0	1.30	211.90	8,541.4	121.2	910.9	917.4	0.48	0.32	-18.32
8,774.0	1.90	212.50	8,636.3	119.0	909.5	915.6	0.63	0.63	0.63
8,870.0	2.10	189.40	8,732.3	115.9	908.3	913.9	0.86	0.21	-24.06
8,965.0	2.30	171.90	8,827.2	112.3	908.3	913.2	0.73	0.21	-18.42
9,060.0	2.00	176.80	8,922.1	108.7	908.7	912.8	0.37	-0.32	5.16
9,155.0	1.90	177.50	9,017.1	105.5	908.8	912.4	0.11	-0.11	0.74

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,251.0	2.70	197.30	9,113.0	101.7	908.2	911.1	1.16	0.83	20.63
9,346.0	1.80	204.70	9,207.9	98.3	907.0	909.2	0.99	-0.95	7.79
9,441.0	1.60	204.70	9,302.9	95.7	905.8	907.5	0.21	-0.21	0.00
9,539.0	1.60	188.00	9,400.8	93.1	905.0	906.3	0.47	0.00	-17.04
9,634.0	1.70	180.10	9,495.8	90.4	904.8	905.6	0.26	0.11	-8.32
9,729.0	1.70	178.20	9,590.8	87.6	904.9	905.1	0.06	0.00	-2.00
9,810.9	1.53	180.71	9,672.7	85.3	904.9	904.7	0.23	-0.21	3.07
LDF 6-22 TGT #2									
9,825.0	1.50	181.20	9,686.7	84.9	904.9	904.6	0.23	-0.21	3.47
9,920.0	1.50	182.10	9,731.7	82.4	904.8	904.1	0.02	0.00	0.95
10,015.0	1.60	187.70	9,876.7	79.8	904.6	903.4	0.19	0.11	5.89
10,110.0	1.70	187.10	9,971.6	77.1	904.2	902.5	0.11	0.11	-0.63
10,206.0	1.60	204.20	10,067.6	74.5	903.5	901.3	0.52	-0.10	17.81
10,301.0	1.80	204.90	10,162.5	71.9	902.3	899.6	0.21	0.21	0.74
10,396.0	1.30	198.80	10,257.5	69.6	901.4	898.2	0.55	-0.53	-6.42
10,491.0	1.30	176.40	10,352.5	67.5	901.1	897.6	0.53	0.00	-23.58
10,586.0	1.50	175.20	10,447.4	65.1	901.3	897.3	0.21	0.21	-1.26
10,681.0	1.40	175.70	10,542.4	62.7	901.5	897.0	0.11	-0.11	0.53
10,777.0	1.50	180.10	10,638.4	60.3	901.5	896.7	0.16	0.10	4.58
10,872.0	1.30	188.20	10,733.4	58.0	901.4	896.1	0.30	-0.21	8.53
10,967.0	1.40	189.30	10,828.3	55.8	901.0	895.3	0.11	0.11	1.16
11,062.0	1.60	194.00	10,923.3	53.4	900.5	894.4	0.25	0.21	4.95
11,158.0	1.70	196.60	11,019.3	50.7	899.8	893.1	0.13	0.10	2.71
11,253.0	1.80	198.60	11,114.2	47.9	898.9	891.7	0.12	0.11	2.11
11,348.0	1.80	206.80	11,209.2	45.2	897.8	890.1	0.27	0.00	8.63
11,443.0	1.80	208.80	11,304.1	42.6	896.4	883.2	0.07	0.00	2.11
11,539.0	1.80	208.80	11,400.1	39.9	894.9	886.3	0.00	0.00	0.00
11,688.0	2.20	209.60	11,549.0	35.4	892.4	883.0	0.27	0.27	0.54
11,783.0	2.10	219.30	11,643.9	32.4	890.4	880.4	0.40	-0.11	10.21
11,877.0	2.60	246.60	11,737.8	30.3	887.3	877.0	1.29	0.53	29.04
11,972.0	2.80	259.00	11,832.7	29.0	883.1	872.6	0.65	0.21	13.05
12,067.0	2.50	292.30	11,927.6	29.3	878.9	868.5	1.63	-0.32	35.05
12,161.0	2.60	355.50	12,021.6	32.2	876.8	867.1	2.84	0.11	67.23
12,196.0	3.70	11.50	12,056.5	34.1	877.0	867.6	3.99	3.14	45.71
12,291.0	3.10	8.40	12,151.3	39.7	878.0	869.6	0.66	-0.63	-3.26
12,386.0	2.60	8.00	12,246.2	44.3	878.7	871.2	0.53	-0.53	-0.42
12,445.0	2.60	10.10	12,305.2	47.0	879.1	872.1	0.16	0.00	3.56
12,539.0	1.80	21.90	12,399.1	50.4	880.0	873.6	0.97	-0.85	12.55
12,634.0	2.70	21.00	12,494.0	53.9	881.4	875.6	0.95	0.95	-0.95
12,729.0	2.10	33.00	12,538.9	57.5	883.1	878.0	0.82	-0.63	12.63
12,824.0	1.70	24.90	12,633.9	60.2	884.6	880.0	0.51	-0.42	-8.53
12,918.0	1.10	35.80	12,777.9	62.2	885.8	881.5	0.70	-0.64	11.60
13,013.0	0.80	38.60	12,872.8	63.5	886.7	882.7	0.32	-0.32	2.95
13,076.0	0.90	46.50	12,935.8	64.1	887.3	883.4	0.24	0.16	12.54
13,107.0	0.80	44.60	12,966.8	64.5	887.7	883.8	0.34	-0.32	-6.13
Last MWD Survey									
13,212.0	0.80	44.60	13,071.8	65.5	883.7	885.0	0.00	0.00	0.00

Proj to TD - LDF 6-22 PBHL

Wolverine Directional, LLC

Survey Report

Company: RKI Exploration & Production
Project: Eddy County (NM83E)
Site: Sec 1-T23S-R28E
Well: Longview Deep Fed 6-22
Wellbore: Wellbore.#1
Design: Wellbore #1

Local Co-ordinate Reference: Well Longview Deep Fed 6-22
TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.21 Single User Db

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
286.0	286.0	-3.7	1.1	First MWD Survey
13,107.0	12,966.8	64.5	887.7	Last MWD Survey
13,212.0	13,071.8	65.5	888.7	Proj to TD

Checked By: _____ Approved By: _____ Date: _____