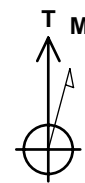
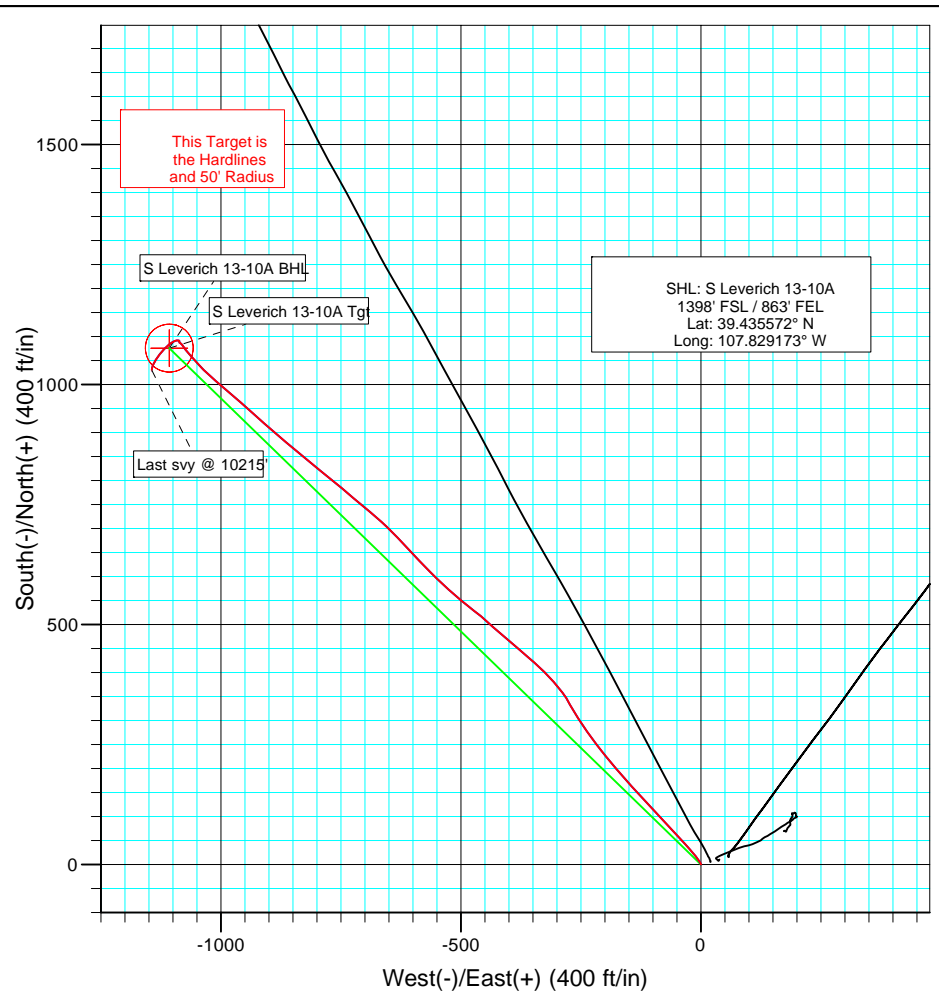
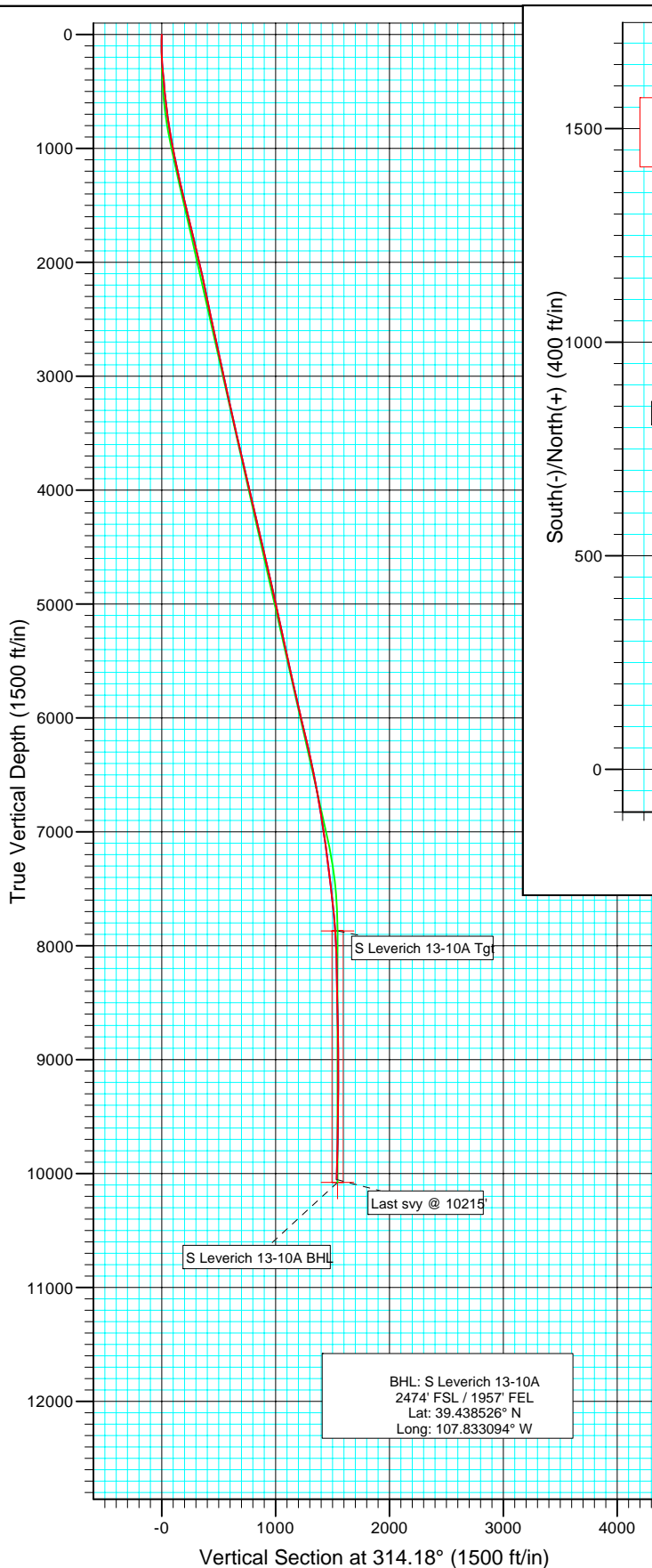




Project: Helmer Gulch  
 Site: NESE Sec 13-T7S-R94W  
 Well: South Leverich 13-10A  
 Wellbore: DD  
 Design: Final Survey



Azimuths to True North  
 Magnetic North: 10.52°

Magnetic Field  
 Strength: 52463.6snT  
 Dip Angle: 65.79°  
 Date: 4/28/2009  
 Model: IGRF200510

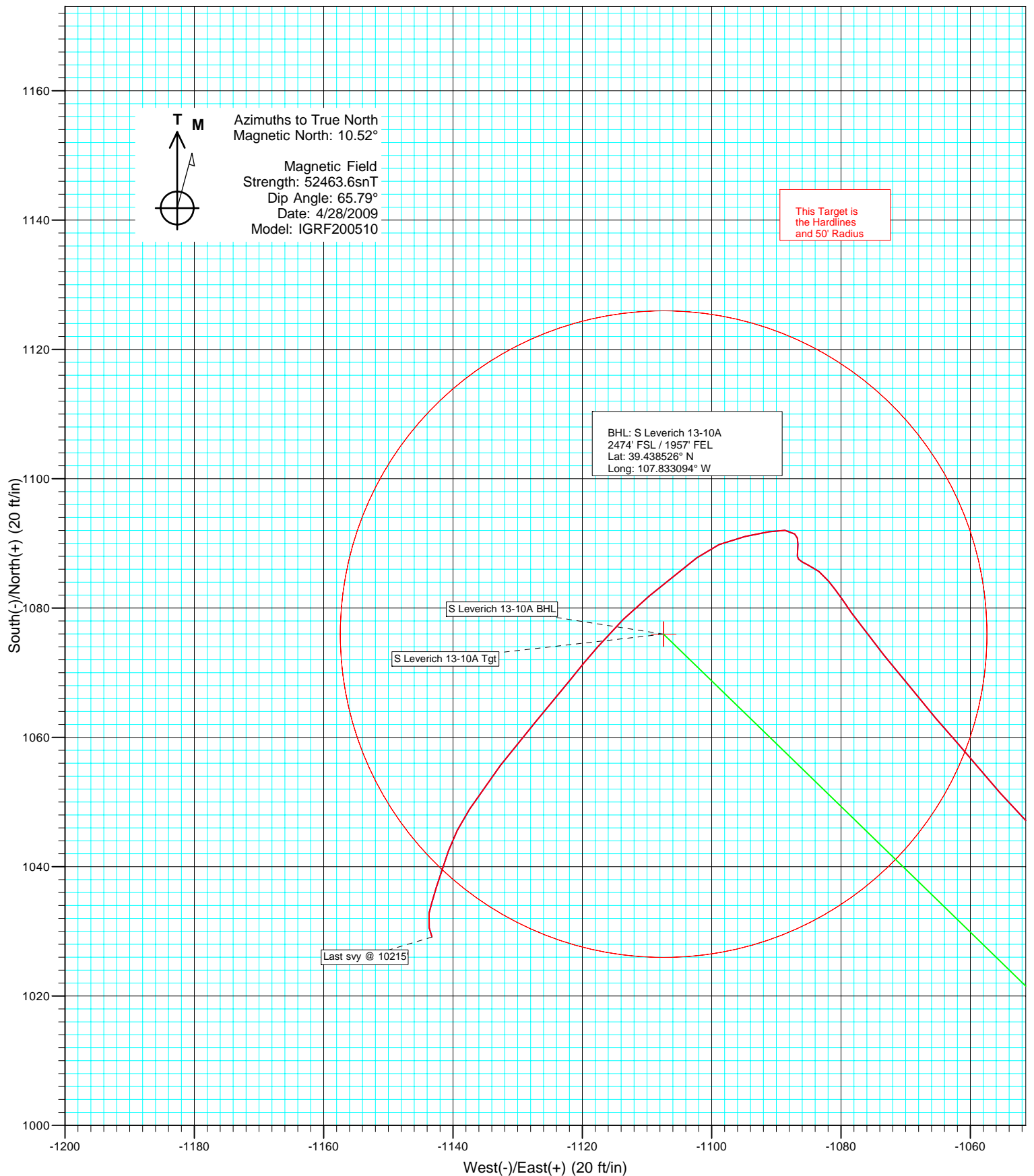
DESIGN DETAILS: DD

95119; LR  
 SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)

Target	Azimuth	Origin Type	N/S	E/W	TVD
No Target (Freehand)	314.18	Slot	0.0	0.0	0.0



Project: Helmer Gulch  
Site: NESE Sec 13-T7S-R94W  
Well: South Leverich 13-10A  
Wellbore: DD  
Design: DD



# Directional Plus

## Survey Report

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi User Db

<b>Project</b>	Helmer Gulch		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

Site		NESE Sec 13-T7S-R94W			
Site Position:		Northing:	1,591,983.75 ft	Latitude:	39.435615
From:	Lat/Long	Easting:	2,342,272.33 ft	Longitude:	-107.828968
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-1.47 °

Well	South Leverich 13-10A					
Well Position	+N/-S	0.0 ft	Northing:	1,591,969.56 ft	Latitude:	39.435572
	+E/-W	0.0 ft	Easting:	2,342,214.04 ft	Longitude:	-107.829173
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,007.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	4/28/2009	10.52	65.79	52,464

<b>Design</b>	DD				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	314.18	

<b>Survey Program</b>	<b>Date</b>	6/3/2009			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
96.0	10,215.0	Survey #1 (DD)	Geolink MWD	Geolink MWD	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
96.0	0.50	62.10	96.0	0.2	0.4	-0.1	0.52	0.52		
188.0	1.10	322.60	188.0	1.1	0.2	0.6	1.39	0.65		
280.0	5.00	332.40	279.8	5.3	-2.2	5.3	4.26	4.24		
340.0	5.70	324.00	339.6	10.1	-5.2	10.7	1.75	1.17		
400.0	5.70	320.40	399.3	14.8	-8.8	16.6	0.60	0.00		
461.0	5.00	320.30	460.0	19.2	-12.4	22.3	1.15	-1.15		
552.0	6.30	322.60	550.6	26.2	-18.0	31.2	1.45	1.43		
643.0	7.40	316.70	640.9	34.4	-25.1	42.0	1.43	1.21		
733.0	7.60	318.30	730.2	43.1	-33.0	53.7	0.32	0.22		
824.0	8.70	317.50	820.2	52.6	-41.7	66.6	1.22	1.21		
918.0	10.10	318.30	913.0	64.0	-51.9	81.9	1.50	1.49		
1,012.0	11.30	314.40	1,005.3	76.6	-64.0	99.3	1.49	1.28		

# Directional Plus

## Survey Report

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi 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)	Formations / Comments
1,108.0	11.50	318.30	1,099.4	90.4	-77.1	118.3	0.83	0.21	
1,203.0	12.00	316.60	1,192.5	104.6	-90.2	137.6	0.64	0.53	
1,299.0	13.10	316.40	1,286.2	119.7	-104.5	158.4	1.15	1.15	
1,394.0	13.20	316.60	1,378.7	135.4	-119.4	180.0	0.12	0.11	
1,489.0	13.40	318.50	1,471.1	151.5	-134.2	201.8	0.51	0.21	
1,585.0	13.50	319.70	1,564.5	168.4	-148.8	224.1	0.31	0.10	
1,680.0	14.20	317.30	1,656.7	185.4	-163.9	246.7	0.95	0.74	
1,776.0	13.90	319.30	1,749.9	202.8	-179.4	270.0	0.59	-0.31	
1,871.0	13.40	321.00	1,842.2	220.0	-193.7	292.3	0.67	-0.53	
1,966.0	13.40	322.00	1,934.6	237.3	-207.4	314.1	0.24	0.00	
2,061.0	13.30	323.10	2,027.0	254.7	-220.8	335.8	0.29	-0.11	
2,156.0	12.60	325.00	2,119.6	271.9	-233.3	356.8	0.86	-0.74	
2,252.0	12.30	326.00	2,213.3	289.0	-245.0	377.1	0.38	-0.31	
2,346.0	12.20	326.30	2,305.2	305.5	-256.1	396.6	0.13	-0.11	
2,460.0	11.90	330.30	2,416.7	325.8	-268.6	419.7	0.78	-0.26	
2,535.0	11.30	330.90	2,490.2	338.9	-276.0	434.1	0.82	-0.80	
2,630.0	11.60	324.90	2,583.3	354.8	-286.0	452.4	1.29	0.32	
2,725.0	12.10	319.90	2,676.3	370.3	-297.9	471.7	1.20	0.53	
2,821.0	12.70	318.00	2,770.0	385.8	-311.5	492.3	0.76	0.62	
2,916.0	12.80	314.30	2,862.7	400.9	-326.0	513.2	0.87	0.11	
3,012.0	13.10	313.00	2,956.2	415.8	-341.6	534.7	0.44	0.31	
3,107.0	12.70	311.10	3,048.8	430.0	-357.3	555.9	0.61	-0.42	
3,202.0	12.00	310.60	3,141.6	443.3	-372.7	576.2	0.75	-0.74	
3,297.0	11.80	310.00	3,234.6	455.9	-387.6	595.7	0.25	-0.21	
3,393.0	12.60	310.10	3,328.4	469.0	-403.2	616.0	0.83	0.83	
3,488.0	12.10	311.30	3,421.2	482.2	-418.6	636.2	0.59	-0.53	
3,583.0	13.20	312.30	3,513.9	496.1	-434.1	657.0	1.18	1.16	
3,679.0	12.70	311.10	3,607.5	510.4	-450.1	678.5	0.59	-0.52	
3,774.0	13.90	309.20	3,699.9	524.5	-466.8	700.3	1.34	1.26	
3,870.0	13.70	308.10	3,793.1	538.8	-484.7	723.1	0.34	-0.21	
3,965.0	13.20	308.00	3,885.5	552.4	-502.1	745.1	0.53	-0.53	
4,060.0	13.20	312.70	3,978.0	566.5	-518.6	766.7	1.13	0.00	
4,156.0	12.70	313.20	4,071.6	581.1	-534.4	788.2	0.53	-0.52	
4,251.0	12.40	313.90	4,164.3	595.3	-549.3	808.9	0.35	-0.32	
4,346.0	12.80	314.40	4,257.0	609.8	-564.2	829.6	0.44	0.42	
4,441.0	13.40	317.20	4,349.6	625.2	-579.2	851.1	0.92	0.63	
4,537.0	12.70	315.90	4,443.1	640.9	-594.1	872.7	0.79	-0.73	
4,632.0	14.20	316.80	4,535.5	656.9	-609.4	894.8	1.59	1.58	
4,727.0	13.90	317.40	4,627.6	673.8	-625.1	917.9	0.35	-0.32	
4,822.0	12.60	314.00	4,720.1	689.4	-640.2	939.6	1.59	-1.37	
4,917.0	12.20	315.40	4,812.9	703.8	-654.7	960.0	0.53	-0.42	
5,012.0	12.80	309.80	4,905.6	717.7	-669.9	980.5	1.42	0.63	
5,107.0	12.70	312.50	4,998.3	731.5	-685.7	1,001.5	0.64	-0.11	
5,202.0	12.70	309.50	5,091.0	745.2	-701.4	1,022.3	0.69	0.00	
5,298.0	12.10	309.60	5,184.7	758.3	-717.3	1,042.9	0.63	-0.62	
5,393.0	11.50	310.50	5,277.7	770.8	-732.2	1,062.2	0.66	-0.63	
5,488.0	12.30	310.40	5,370.7	783.5	-747.1	1,081.8	0.84	0.84	
5,583.0	12.00	308.80	5,463.6	796.2	-762.5	1,101.7	0.47	-0.32	
5,679.0	12.30	309.10	5,557.4	808.9	-778.2	1,121.8	0.32	0.31	
5,774.0	13.30	309.30	5,650.1	822.2	-794.5	1,142.8	1.05	1.05	
5,869.0	13.30	309.30	5,742.5	836.1	-811.4	1,164.6	0.00	0.00	
5,965.0	12.80	308.10	5,836.0	849.6	-828.3	1,186.2	0.59	-0.52	
6,060.0	13.80	310.10	5,928.5	863.4	-845.3	1,207.9	1.16	1.05	

# Directional Plus

## Survey Report

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi 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)	Formations / Comments
6,156.0	13.20	310.40	6,021.8	877.9	-862.4	1,230.3	0.63	-0.62	
6,251.0	12.70	311.40	6,114.4	891.8	-878.5	1,251.5	0.58	-0.53	
6,346.0	13.00	310.80	6,207.0	905.7	-894.4	1,272.6	0.35	0.32	
6,442.0	12.10	314.00	6,300.7	919.8	-909.8	1,293.5	1.18	-0.94	
6,537.0	12.30	308.80	6,393.6	933.0	-924.9	1,313.5	1.18	0.21	
6,633.0	11.30	311.50	6,487.6	945.7	-939.9	1,333.1	1.19	-1.04	
6,728.0	11.30	311.90	6,580.7	958.1	-953.8	1,351.7	0.08	0.00	
6,824.0	10.10	310.40	6,675.0	969.8	-967.2	1,369.5	1.28	-1.25	
6,919.0	9.80	314.40	6,768.6	980.8	-979.3	1,385.9	0.79	-0.32	
7,015.0	9.30	307.40	6,863.3	991.3	-991.3	1,401.8	1.32	-0.52	
7,110.0	8.40	309.80	6,957.2	1,000.4	-1,002.7	1,416.3	1.02	-0.95	
7,206.0	7.80	310.80	7,052.2	1,009.1	-1,013.1	1,429.8	0.64	-0.62	
7,301.0	7.20	317.40	7,146.4	1,017.7	-1,022.0	1,442.2	1.10	-0.63	
7,396.0	8.00	309.60	7,240.6	1,026.3	-1,031.1	1,454.7	1.37	0.84	
7,492.0	7.10	319.70	7,335.7	1,035.1	-1,040.1	1,467.3	1.67	-0.94	
7,587.0	6.90	313.80	7,430.0	1,043.5	-1,048.0	1,478.8	0.79	-0.21	
7,682.0	6.30	320.50	7,524.4	1,051.5	-1,055.4	1,489.7	1.03	-0.63	
7,777.0	6.20	318.20	7,618.8	1,059.3	-1,062.2	1,500.0	0.28	-0.11	
7,871.0	4.90	321.70	7,712.4	1,066.3	-1,068.0	1,509.1	1.43	-1.38	
7,966.0	5.20	319.40	7,807.0	1,072.7	-1,073.4	1,517.4	0.38	0.32	
8,061.0	4.70	326.00	7,901.6	1,079.2	-1,078.3	1,525.5	0.80	-0.53	
8,156.0	2.70	320.90	7,996.4	1,084.2	-1,081.9	1,531.5	2.13	-2.11	
8,252.0	2.20	292.80	8,092.4	1,086.7	-1,085.0	1,535.5	1.34	-0.52	
8,347.0	0.80	359.40	8,187.3	1,088.0	-1,086.7	1,537.6	2.13	-1.47	
8,442.0	1.40	4.30	8,282.3	1,089.9	-1,086.7	1,538.8	0.64	0.63	
8,537.0	0.90	309.00	8,377.3	1,091.5	-1,087.1	1,540.3	1.22	-0.53	
8,633.0	1.10	274.30	8,473.3	1,092.0	-1,088.6	1,541.8	0.65	0.21	
8,728.0	1.90	260.10	8,568.2	1,091.8	-1,091.1	1,543.4	0.92	0.84	
8,824.0	2.60	257.70	8,664.2	1,091.1	-1,094.8	1,545.5	0.74	0.73	
8,919.0	2.50	247.40	8,759.1	1,089.8	-1,098.8	1,547.5	0.49	-0.11	
9,014.0	2.40	231.70	8,854.0	1,087.8	-1,102.3	1,548.6	0.71	-0.11	
9,109.0	2.80	230.80	8,948.9	1,085.1	-1,105.7	1,549.1	0.42	0.42	
9,205.0	3.30	231.40	9,044.8	1,081.9	-1,109.6	1,549.8	0.52	0.52	
9,300.0	3.30	224.60	9,139.6	1,078.2	-1,113.7	1,550.1	0.41	0.00	
9,395.0	3.60	221.30	9,234.4	1,074.1	-1,117.6	1,550.0	0.38	0.32	
9,490.0	4.60	218.50	9,329.2	1,068.8	-1,121.9	1,549.5	1.07	1.05	
9,585.0	5.40	220.50	9,423.8	1,062.4	-1,127.2	1,548.8	0.86	0.84	
9,680.0	5.10	217.30	9,518.4	1,055.7	-1,132.7	1,548.0	0.44	-0.32	
9,775.0	4.90	212.80	9,613.1	1,048.9	-1,137.4	1,546.7	0.46	-0.21	
9,870.0	3.90	199.60	9,707.8	1,042.5	-1,140.7	1,544.6	1.49	-1.05	
9,965.0	3.30	196.70	9,802.6	1,036.8	-1,142.6	1,542.0	0.66	-0.63	
10,061.0	1.60	194.50	9,898.5	1,032.9	-1,143.7	1,540.0	1.77	-1.77	
10,156.0	1.30	160.60	9,993.5	1,030.6	-1,143.7	1,538.4	0.94	-0.32	
10,215.0	1.60	164.90	10,052.5	1,029.1	-1,143.2	1,537.1	0.54	0.51	Last svy @ 10215'

# Directional Plus

## Survey Report

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi User Db

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
S Leverich 13-10A Tgt	0.00	0.00	7,870.0	1,076.0	-1,107.4	1,593,073.58	2,341,134.58	39.438526	-107.833094
- survey misses target center by 30.6ft at 8030.8ft MD (7871.5 TVD, 1077.2 N, -1076.9 E)									
- Point									
S Leverich 13-10A BHL	0.00	0.00	10,078.0	1,076.0	-1,107.4	1,593,073.58	2,341,134.58	39.438526	-107.833094
- survey misses target center by 64.3ft at 10215.0ft MD (10052.5 TVD, 1029.1 N, -1143.2 E)									
- Circle (radius 50.0)									

Survey Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
10,215.0	10,052.5	1,029.1	-1,143.2	Last svy @ 10215'	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

# Cathedral Energy Services

## Survey Report - Geographic

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi Users DB

<b>Project</b>	Helmer Gulch		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

Site		NESE Sec 13-T7S-R94W			
Site Position:		Northing:	1,591,983.75 ft	Latitude:	39.435615
From:	Lat/Long	Easting:	2,342,272.33 ft	Longitude:	-107.828968
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-1.47 °

Well	South Leverich 13-10A					
Well Position	+N/-S	0.0 ft	Northing:	1,591,969.56 ft	Latitude:	39.435572
	+E/-W	0.0 ft	Easting:	2,342,214.04 ft	Longitude:	-107.829173
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,007.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	4/28/2009	10.52	65.79	52,464

<b>Design</b>	DD				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	314.18	

<b>Survey Program</b>	<b>Date</b>	5/19/2009			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
96.0	10,061.0	Survey #1 (DD)	Geolink MWD	Geolink MWD	

# Cathedral Energy Services

## Survey Report - Geographic

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,591,969.56	2,342,214.04	39.435572	-107.829173
96.0	0.50	62.10	96.0	0.2	0.4	1,591,969.75	2,342,214.42	39.435572	-107.829172
188.0	1.10	322.60	188.0	1.1	0.2	1,591,970.64	2,342,214.26	39.435575	-107.829172
280.0	5.00	332.40	279.8	5.3	-2.2	1,591,974.96	2,342,211.98	39.435587	-107.829181
340.0	5.70	324.00	339.6	10.1	-5.2	1,591,979.76	2,342,209.13	39.435600	-107.829191
400.0	5.70	320.40	399.3	14.8	-8.8	1,591,984.56	2,342,205.61	39.435613	-107.829204
461.0	5.00	320.30	460.0	19.2	-12.4	1,591,989.03	2,342,202.09	39.435625	-107.829217
552.0	6.30	322.60	550.6	26.2	-18.0	1,591,996.19	2,342,196.71	39.435644	-107.829237
643.0	7.40	316.70	640.9	34.4	-25.1	1,592,004.60	2,342,189.87	39.435666	-107.829262
733.0	7.60	318.30	730.2	43.1	-33.0	1,592,013.46	2,342,182.16	39.435690	-107.829290
824.0	8.70	317.50	820.2	52.6	-41.7	1,592,023.25	2,342,173.75	39.435716	-107.829320
918.0	10.10	318.30	913.0	64.0	-51.9	1,592,034.90	2,342,163.76	39.435748	-107.829357
1,012.0	11.30	314.40	1,005.3	76.6	-64.0	1,592,047.81	2,342,152.03	39.435782	-107.829400
1,108.0	11.50	318.30	1,099.4	90.4	-77.1	1,592,061.86	2,342,139.30	39.435820	-107.829446
1,203.0	12.00	316.60	1,192.5	104.6	-90.2	1,592,076.44	2,342,126.58	39.435859	-107.829492
1,299.0	13.10	316.40	1,286.2	119.7	-104.5	1,592,091.93	2,342,112.61	39.435901	-107.829543
1,394.0	13.20	316.60	1,378.7	135.4	-119.4	1,592,107.99	2,342,098.14	39.435944	-107.829596
1,489.0	13.40	318.50	1,471.1	151.5	-134.2	1,592,124.49	2,342,083.81	39.435988	-107.829648
1,585.0	13.50	319.70	1,564.5	168.4	-148.8	1,592,141.73	2,342,069.63	39.436034	-107.829700
1,680.0	14.20	317.30	1,656.7	185.4	-163.9	1,592,159.13	2,342,055.00	39.436081	-107.829753
1,776.0	13.90	319.30	1,749.9	202.8	-179.4	1,592,176.92	2,342,039.95	39.436129	-107.829808
1,871.0	13.40	321.00	1,842.2	220.0	-193.7	1,592,194.49	2,342,026.02	39.436176	-107.829859
1,966.0	13.40	322.00	1,934.6	237.3	-207.4	1,592,212.07	2,342,012.77	39.436223	-107.829907
2,061.0	13.30	323.10	2,027.0	254.7	-220.8	1,592,229.81	2,341,999.88	39.436271	-107.829955
2,156.0	12.60	325.00	2,119.6	271.9	-233.3	1,592,247.36	2,341,987.82	39.436318	-107.829999
2,252.0	12.30	326.00	2,213.3	289.0	-245.0	1,592,264.71	2,341,976.54	39.436365	-107.830040
2,346.0	12.20	326.30	2,305.2	305.5	-256.1	1,592,281.55	2,341,965.85	39.436411	-107.830080
2,460.0	11.90	330.30	2,416.7	325.8	-268.6	1,592,302.09	2,341,953.87	39.436466	-107.830124
2,535.0	11.30	330.90	2,490.2	338.9	-276.0	1,592,315.42	2,341,946.80	39.436502	-107.830150
2,630.0	11.60	324.90	2,583.3	354.8	-286.0	1,592,331.62	2,341,937.20	39.436546	-107.830186
2,725.0	12.10	319.90	2,676.3	370.3	-297.9	1,592,347.35	2,341,925.69	39.436589	-107.830228
2,821.0	12.70	318.00	2,770.0	385.8	-311.5	1,592,363.23	2,341,912.55	39.436631	-107.830276
2,916.0	12.80	314.30	2,862.7	400.9	-326.0	1,592,378.71	2,341,898.42	39.436673	-107.830327
3,012.0	13.10	313.00	2,956.2	415.8	-341.6	1,592,393.95	2,341,883.24	39.436713	-107.830382
3,107.0	12.70	311.10	3,048.8	430.0	-357.3	1,592,408.55	2,341,867.87	39.436752	-107.830438
3,202.0	12.00	310.60	3,141.6	443.3	-372.7	1,592,422.24	2,341,852.85	39.436789	-107.830493
3,297.0	11.80	310.00	3,234.6	455.9	-387.6	1,592,435.28	2,341,838.24	39.436824	-107.830545
3,393.0	12.60	310.10	3,328.4	469.0	-403.2	1,592,448.73	2,341,823.05	39.436860	-107.830600
3,488.0	12.10	311.30	3,421.2	482.2	-418.6	1,592,462.37	2,341,807.99	39.436896	-107.830655
3,583.0	13.20	312.30	3,513.9	496.1	-434.1	1,592,476.63	2,341,792.84	39.436934	-107.830710
3,679.0	12.70	311.10	3,607.5	510.4	-450.1	1,592,491.35	2,341,777.16	39.436973	-107.830767
3,774.0	13.90	309.20	3,699.9	524.5	-466.8	1,592,505.86	2,341,760.81	39.437012	-107.830826
3,870.0	13.70	308.10	3,793.1	538.8	-484.7	1,592,520.61	2,341,743.30	39.437051	-107.830889
3,965.0	13.20	308.00	3,885.5	552.4	-502.1	1,592,534.67	2,341,726.26	39.437089	-107.830951
4,060.0	13.20	312.70	3,978.0	566.5	-518.6	1,592,549.13	2,341,710.10	39.437127	-107.831009
4,156.0	12.70	313.20	4,071.6	581.1	-534.4	1,592,564.18	2,341,694.74	39.437167	-107.831065
4,251.0	12.40	313.90	4,164.3	595.3	-549.3	1,592,578.78	2,341,680.14	39.437206	-107.831118
4,346.0	12.80	314.40	4,257.0	609.8	-564.2	1,592,593.59	2,341,665.65	39.437246	-107.831171
4,441.0	13.40	317.20	4,349.6	625.2	-579.2	1,592,609.41	2,341,651.05	39.437288	-107.831224
4,537.0	12.70	315.90	4,443.1	640.9	-594.1	1,592,625.53	2,341,636.56	39.437332	-107.831277
4,632.0	14.20	316.80	4,535.5	656.9	-609.4	1,592,641.91	2,341,621.73	39.437376	-107.831331
4,727.0	13.90	317.40	4,627.6	673.8	-625.1	1,592,659.20	2,341,606.47	39.437422	-107.831386
4,822.0	12.60	314.00	4,720.1	689.4	-640.2	1,592,675.18	2,341,591.69	39.437465	-107.831440
4,917.0	12.20	315.40	4,812.9	703.8	-654.7	1,592,689.90	2,341,577.56	39.437504	-107.831491
5,012.0	12.80	309.80	4,905.6	717.7	-669.9	1,592,704.16	2,341,562.79	39.437542	-107.831545



# Cathedral Energy Services

## Survey Report - Geographic

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
5,107.0	12.70	312.50	4,998.3	731.5	-685.7	1,592,718.35	2,341,547.37	39.437580	-107.831601
5,202.0	12.70	309.50	5,091.0	745.2	-701.4	1,592,732.45	2,341,531.96	39.437618	-107.831656
5,298.0	12.10	309.60	5,184.7	758.3	-717.3	1,592,745.98	2,341,516.41	39.437654	-107.831713
5,393.0	11.50	310.50	5,277.7	770.8	-732.2	1,592,758.86	2,341,501.86	39.437688	-107.831765
5,488.0	12.30	310.40	5,370.7	783.5	-747.1	1,592,771.94	2,341,487.29	39.437723	-107.831818
5,583.0	12.00	308.80	5,463.6	796.2	-762.5	1,592,785.08	2,341,472.22	39.437758	-107.831873
5,679.0	12.30	309.10	5,557.4	808.9	-778.2	1,592,798.18	2,341,456.83	39.437793	-107.831928
5,774.0	13.30	309.30	5,650.1	822.2	-794.5	1,592,811.90	2,341,440.87	39.437829	-107.831986
5,869.0	13.30	309.30	5,742.5	836.1	-811.4	1,592,826.17	2,341,424.32	39.437867	-107.832046
5,965.0	12.80	308.10	5,836.0	849.6	-828.3	1,592,840.15	2,341,407.76	39.437905	-107.832106
6,060.0	13.80	310.10	5,928.5	863.4	-845.3	1,592,854.38	2,341,391.17	39.437942	-107.832166
6,156.0	13.20	310.40	6,021.8	877.9	-862.4	1,592,869.29	2,341,374.44	39.437982	-107.832226
6,251.0	12.70	311.40	6,114.4	891.8	-878.5	1,592,883.63	2,341,358.71	39.438020	-107.832283
6,346.0	13.00	310.80	6,207.0	905.7	-894.4	1,592,897.92	2,341,343.15	39.438059	-107.832340
6,442.0	12.10	314.00	6,300.7	919.8	-909.8	1,592,912.36	2,341,328.10	39.438097	-107.832394
6,537.0	12.30	308.80	6,393.6	933.0	-924.9	1,592,926.00	2,341,313.40	39.438134	-107.832448
6,633.0	11.30	311.50	6,487.6	945.7	-939.9	1,592,939.02	2,341,298.71	39.438168	-107.832501
6,728.0	11.30	311.90	6,580.7	958.1	-953.8	1,592,951.75	2,341,285.14	39.438202	-107.832550
6,824.0	10.10	310.40	6,675.0	969.8	-967.2	1,592,963.83	2,341,272.03	39.438234	-107.832598
6,919.0	9.80	314.40	6,768.6	980.8	-979.3	1,592,975.19	2,341,260.20	39.438265	-107.832640
7,015.0	9.30	307.40	6,863.3	991.3	-991.3	1,592,985.93	2,341,248.47	39.438293	-107.832683
7,110.0	8.40	309.80	6,957.2	1,000.4	-1,002.7	1,592,995.32	2,341,237.28	39.438318	-107.832723
7,206.0	7.80	310.80	7,052.2	1,009.1	-1,013.1	1,593,004.33	2,341,227.19	39.438342	-107.832760
7,301.0	7.20	317.40	7,146.4	1,017.7	-1,022.0	1,593,013.15	2,341,218.50	39.438366	-107.832791
7,396.0	8.00	309.60	7,240.6	1,026.3	-1,031.1	1,593,021.98	2,341,209.60	39.438390	-107.832824
7,492.0	7.10	319.70	7,335.7	1,035.1	-1,040.1	1,593,030.99	2,341,200.84	39.438414	-107.832856
7,587.0	6.90	313.80	7,430.0	1,043.5	-1,048.0	1,593,039.61	2,341,193.14	39.438437	-107.832884
7,682.0	6.30	320.50	7,524.4	1,051.5	-1,055.4	1,593,047.77	2,341,185.92	39.438459	-107.832910
7,777.0	6.20	318.20	7,618.8	1,059.3	-1,062.2	1,593,055.79	2,341,179.38	39.438480	-107.832934
7,871.0	4.90	321.70	7,712.4	1,066.3	-1,068.0	1,593,062.87	2,341,173.69	39.438499	-107.832955
7,966.0	5.20	319.40	7,807.0	1,072.7	-1,073.4	1,593,069.46	2,341,168.54	39.438517	-107.832973
8,061.0	4.70	326.00	7,901.6	1,079.2	-1,078.3	1,593,076.08	2,341,163.73	39.438535	-107.832991
8,156.0	2.70	320.90	7,996.4	1,084.2	-1,081.9	1,593,081.13	2,341,160.27	39.438549	-107.833004
8,252.0	2.20	292.80	8,092.4	1,086.7	-1,085.0	1,593,083.68	2,341,157.21	39.438555	-107.833015
8,347.0	0.80	359.40	8,187.3	1,088.0	-1,086.7	1,593,085.10	2,341,155.56	39.438559	-107.833021
8,442.0	1.40	4.30	8,282.3	1,089.9	-1,086.7	1,593,086.91	2,341,155.69	39.438564	-107.833020
8,537.0	0.90	309.00	8,377.3	1,091.5	-1,087.1	1,593,088.55	2,341,155.24	39.438569	-107.833022
8,633.0	1.10	274.30	8,473.3	1,092.0	-1,088.6	1,593,089.13	2,341,153.75	39.438570	-107.833028
8,728.0	1.90	260.10	8,568.2	1,091.8	-1,091.1	1,593,088.99	2,341,151.28	39.438569	-107.833036
8,824.0	2.60	257.70	8,664.2	1,091.1	-1,094.8	1,593,088.35	2,341,147.57	39.438567	-107.833049
8,919.0	2.50	247.40	8,759.1	1,089.8	-1,098.8	1,593,087.20	2,341,143.52	39.438564	-107.833064
9,014.0	2.40	231.70	8,854.0	1,087.8	-1,102.3	1,593,085.26	2,341,140.00	39.438558	-107.833076
9,109.0	2.80	230.80	8,948.9	1,085.1	-1,105.7	1,593,082.65	2,341,136.57	39.438551	-107.833088
9,205.0	3.30	231.40	9,044.8	1,081.9	-1,109.6	1,593,079.55	2,341,132.51	39.438542	-107.833102
9,300.0	3.30	224.60	9,139.6	1,078.2	-1,113.7	1,593,076.00	2,341,128.36	39.438532	-107.833116
9,395.0	3.60	221.30	9,234.4	1,074.1	-1,117.6	1,593,071.91	2,341,124.37	39.438521	-107.833130
9,490.0	4.60	218.50	9,329.2	1,068.8	-1,121.9	1,593,066.80	2,341,119.90	39.438506	-107.833145
9,585.0	5.40	220.50	9,423.8	1,062.4	-1,127.2	1,593,060.56	2,341,114.46	39.438489	-107.833164
9,680.0	5.10	217.30	9,518.4	1,055.7	-1,132.7	1,593,053.94	2,341,108.82	39.438470	-107.833183
9,775.0	4.90	212.80	9,613.1	1,048.9	-1,137.4	1,593,047.30	2,341,103.90	39.438452	-107.833200
9,870.0	3.90	199.60	9,707.8	1,042.5	-1,140.7	1,593,040.93	2,341,100.45	39.438434	-107.833212
9,965.0	3.30	196.70	9,802.6	1,036.8	-1,142.6	1,593,035.32	2,341,098.44	39.438418	-107.833218
10,061.0	1.60	194.50	9,898.5	1,032.9	-1,143.7	1,593,031.40	2,341,097.21	39.438408	-107.833222

# Cathedral Energy Services

## Survey Report - Geographic

<b>Company:</b>	Laramie Energy II, LLC.	<b>Local Co-ordinate Reference:</b>	Well South Leverich 13-10A
<b>Project:</b>	Helmer Gulch	<b>TVD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Site:</b>	NESE Sec 13-T7S-R94W	<b>MD Reference:</b>	SL 13-10A KBE @ 8028.0ft (Grey Wolf 706)
<b>Well:</b>	South Leverich 13-10A	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 2003.21 US Multi Users DB

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
S Leverich 13-10A Tgt	0.00	0.00	7,870.0	1,076.0	-1,107.4	1,593,073.58	2,341,134.58	39.438526	-107.833094
- survey misses target center by 30.6ft at 8030.8ft MD (7871.5 TVD, 1077.2 N, -1076.9 E)									
- Point									
S Leverich 13-10A BHL	0.00	0.00	10,078.0	1,076.0	-1,107.4	1,593,073.58	2,341,134.58	39.438526	-107.833094
- survey misses target center by 188.1ft at 10061.0ft MD (9898.5 TVD, 1032.9 N, -1143.7 E)									
- Circle (radius 50.0)									

Survey Annotations					
	Measured Depth	Vertical Depth	Local Coordinates		
	(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	Comment
	10,061.0	9,898.5	1,032.9	-1,143.7	Last DP svy @ 10061'

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_