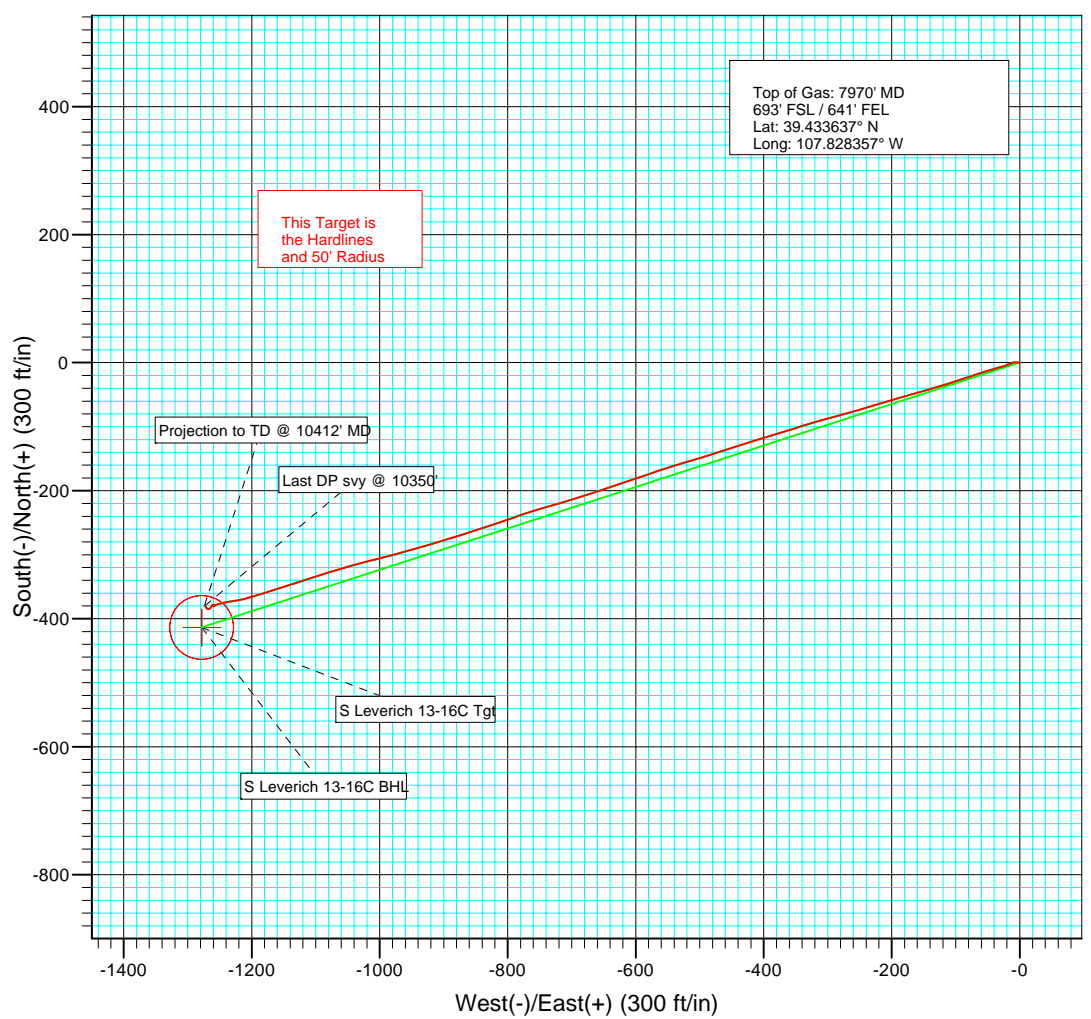
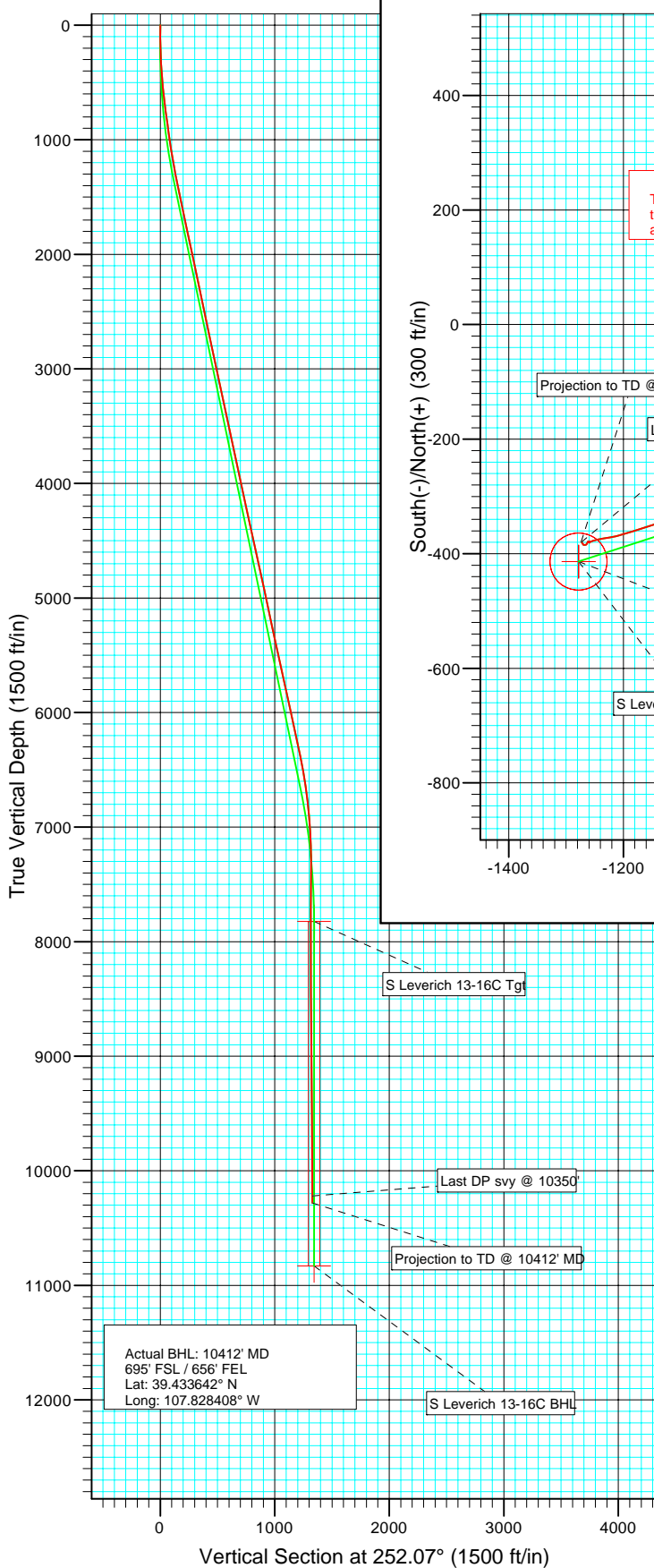




Project: Helmer Gulch
Site: SWSW Sec 18-T7S-R93W
Well: South Leverich 13-16C
Wellbore: DD
Design: DD



Azimuths to True North
Magnetic North: 10.55°

Magnetic Field
Strength: 52483.9snT
Dip Angle: 65.79°
Date: 2/5/2009
Model: IGRF200510

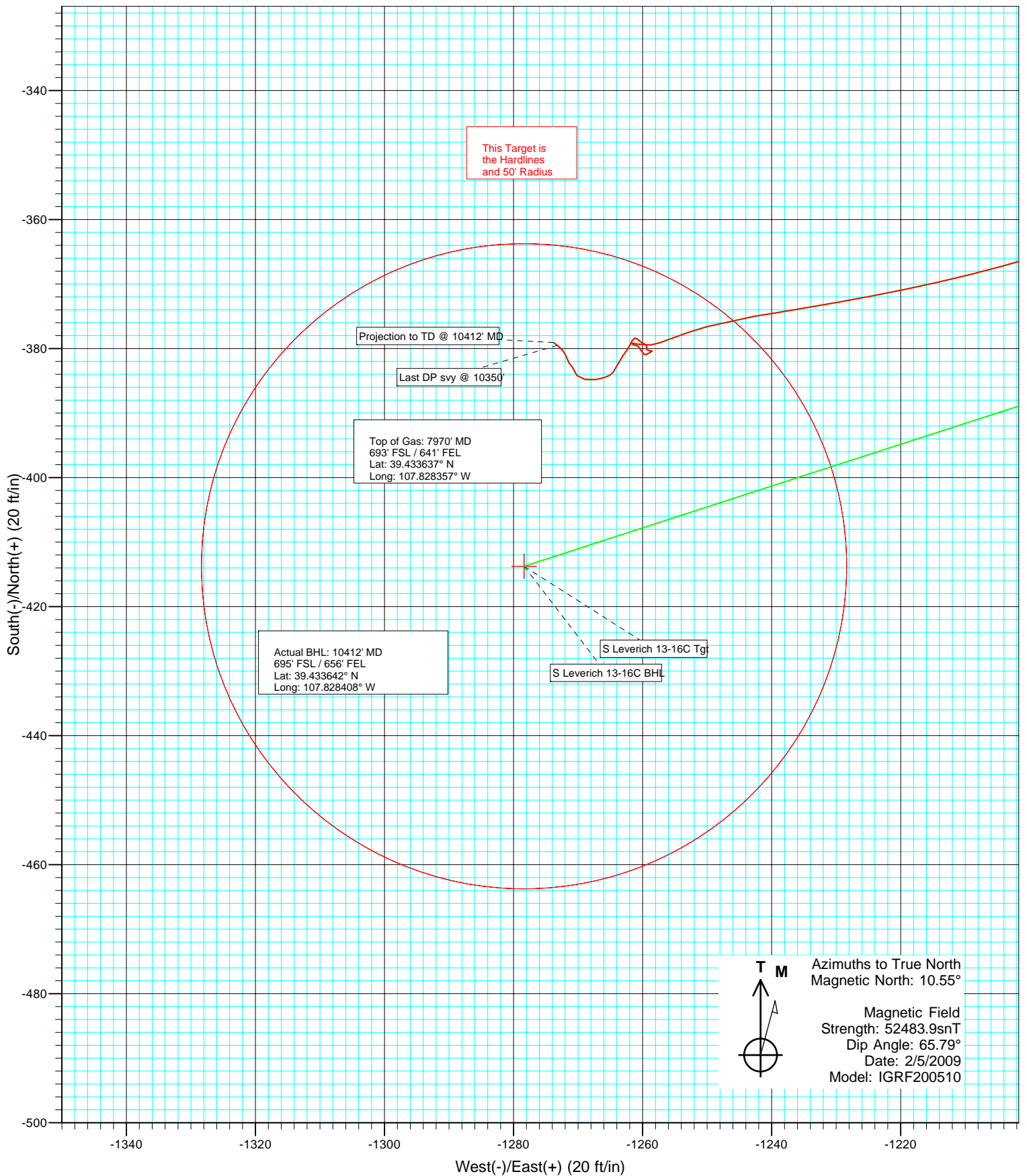
DESIGN DETAILS: DD

95053; JS
SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)

Target	Azimuth	Origin Type	N/S	E/W	TVD
No Target (Freehand)	252.07	Slot	0.0	0.0	0.0



Project: Helmer Gulch
Site: SWSW Sec 18-T7S-R93W
Well: South Leverich 13-16C
Wellbore: DD
Design: DD



Survey Report

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 2003.21 US Multi User DB

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

Site		SWSW Sec 18-T7S-R93W			
Site Position:		Northing:	1,591,622.70 ft	Latitude:	39.434725
From:	Lat/Long	Easting:	2,343,708.26 ft	Longitude:	-107.823853
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-1.47 °

Well	South Leverich 13-16C					
Well Position	+N/-S	0.0 ft	Northing:	1,591,607.72 ft	Latitude:	39.434683
	+E/-W	0.0 ft	Easting:	2,343,695.16 ft	Longitude:	-107.823898
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,235.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2/5/2009	10.55	65.79	52,484

Design	DD				
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	252.07	

Survey Program	Date	2/21/2009			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
126.0	10,412.0	Survey #1 (DD)	Geolink MWD	Geolink MWD	

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	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
126.0	0.20	256.30	126.0	-0.1	-0.2	0.2	0.16	0.16		
188.0	1.90	277.70	188.0	0.1	-1.3	1.3	2.77	2.74		
249.0	2.60	273.90	248.9	0.3	-3.7	3.5	1.17	1.15		
311.0	3.30	270.10	310.9	0.4	-6.9	6.5	1.17	1.13		
373.0	3.50	259.10	372.7	0.0	-10.6	10.0	1.10	0.32		
435.0	4.10	244.30	434.6	-1.3	-14.4	14.1	1.85	0.97		
496.0	4.70	245.80	495.4	-3.3	-18.7	18.7	1.00	0.98		
558.0	5.70	256.60	557.2	-5.0	-24.0	24.3	2.25	1.61		
620.0	6.50	252.50	618.8	-6.8	-30.3	30.9	1.47	1.29		
681.0	7.10	255.00	679.4	-8.8	-37.2	38.1	1.10	0.98		
743.0	7.70	252.20	740.9	-11.1	-44.9	46.1	1.13	0.97		
805.0	7.90	252.50	802.3	-13.6	-52.9	54.5	0.33	0.32		

Survey Report

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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
867.0	8.20	251.50	863.7	-16.3	-61.2	63.2	0.53	0.48	
930.0	8.20	251.10	926.1	-19.2	-69.7	72.2	0.09	0.00	
994.0	8.50	253.00	989.4	-22.0	-78.5	81.5	0.64	0.47	
1,057.0	8.50	251.50	1,051.7	-24.9	-87.4	90.8	0.35	0.00	
1,120.0	8.90	251.90	1,114.0	-27.9	-96.4	100.3	0.64	0.63	
1,184.0	9.10	252.20	1,177.2	-30.9	-106.0	110.3	0.32	0.31	
1,279.0	10.60	254.30	1,270.8	-35.6	-121.5	126.6	1.62	1.58	
1,374.0	11.50	252.30	1,364.0	-40.9	-139.0	144.8	1.03	0.95	
1,469.0	11.90	253.90	1,457.0	-46.4	-157.4	164.0	0.54	0.42	
1,540.0	11.90	254.90	1,526.5	-50.4	-171.5	178.7	0.29	0.00	
1,622.0	11.90	253.70	1,606.7	-55.0	-187.8	195.6	0.30	0.00	
1,686.0	12.30	254.20	1,669.3	-58.7	-200.7	209.0	0.65	0.62	
1,781.0	12.00	253.20	1,762.2	-64.3	-219.9	229.0	0.39	-0.32	
1,876.0	12.10	253.10	1,855.1	-70.0	-238.8	248.8	0.11	0.11	
1,971.0	12.10	253.80	1,948.0	-75.7	-257.9	268.7	0.15	0.00	
2,067.0	12.00	255.10	2,041.9	-81.1	-277.2	288.7	0.30	-0.10	
2,162.0	12.00	255.20	2,134.8	-86.1	-296.3	308.4	0.02	0.00	
2,257.0	11.70	252.90	2,227.8	-91.5	-315.1	327.9	0.59	-0.32	
2,353.0	11.90	253.00	2,321.7	-97.2	-333.8	347.6	0.21	0.21	
2,448.0	11.80	252.90	2,414.7	-103.0	-352.5	367.1	0.11	-0.11	
2,543.0	12.30	252.90	2,507.6	-108.8	-371.5	386.9	0.53	0.53	
2,639.0	12.40	253.10	2,601.4	-114.8	-391.1	407.4	0.11	0.10	
2,734.0	11.70	252.80	2,694.3	-120.6	-410.1	427.3	0.74	-0.74	
2,829.0	11.50	252.90	2,787.4	-126.2	-428.3	446.4	0.21	-0.21	
2,925.0	12.00	252.20	2,881.4	-132.1	-447.0	465.9	0.54	0.52	
3,020.0	12.00	251.90	2,974.3	-138.2	-465.7	485.7	0.07	0.00	
3,115.0	12.20	253.00	3,067.2	-144.2	-484.7	505.6	0.32	0.21	
3,211.0	11.80	252.80	3,161.1	-150.1	-503.8	525.5	0.42	-0.42	
3,306.0	12.10	252.70	3,254.0	-155.9	-522.6	545.2	0.32	0.32	
3,401.0	12.00	253.70	3,346.9	-161.6	-541.6	565.0	0.24	-0.11	
3,496.0	12.00	251.00	3,439.8	-167.6	-560.4	584.8	0.59	0.00	
3,592.0	12.30	250.90	3,533.7	-174.2	-579.5	605.0	0.31	0.31	
3,687.0	12.10	251.90	3,626.6	-180.6	-598.5	625.1	0.31	-0.21	
3,782.0	12.00	251.60	3,719.5	-186.8	-617.4	644.9	0.12	-0.11	
3,877.0	12.70	251.00	3,812.3	-193.4	-636.6	665.2	0.75	0.74	
3,972.0	12.00	251.20	3,905.1	-199.9	-655.8	685.5	0.74	-0.74	
4,068.0	12.20	253.20	3,998.9	-206.1	-675.0	705.6	0.48	0.21	
4,162.0	12.00	253.00	4,090.8	-211.8	-693.8	725.3	0.22	-0.21	
4,257.0	12.30	252.90	4,183.7	-217.7	-712.9	745.3	0.32	0.32	
4,352.0	12.40	253.50	4,276.5	-223.5	-732.4	765.6	0.17	0.11	
4,447.0	12.50	253.70	4,369.3	-229.3	-752.0	786.1	0.11	0.11	
4,542.0	12.00	252.20	4,462.1	-235.2	-771.3	806.3	0.62	-0.53	
4,637.0	12.80	249.10	4,554.9	-242.0	-790.6	826.7	1.10	0.84	
4,732.0	12.20	253.60	4,647.7	-248.6	-810.0	847.2	1.20	-0.63	
4,827.0	12.00	250.30	4,740.5	-254.8	-828.9	867.1	0.76	-0.21	
4,923.0	12.50	252.00	4,834.4	-261.3	-848.2	887.5	0.64	0.52	
5,018.0	12.20	251.30	4,927.2	-267.7	-867.5	907.8	0.35	-0.32	
5,113.0	12.10	254.00	5,020.0	-273.7	-886.6	927.8	0.61	-0.11	
5,208.0	11.80	253.30	5,113.0	-279.2	-905.5	947.4	0.35	-0.32	
5,303.0	12.30	253.50	5,205.9	-284.9	-924.5	967.3	0.53	0.53	
5,396.0	12.40	253.40	5,296.7	-290.6	-943.5	987.2	0.11	0.11	
5,491.0	12.30	255.10	5,389.5	-296.1	-963.1	1,007.5	0.40	-0.11	
5,587.0	12.60	254.90	5,483.3	-301.4	-983.1	1,028.1	0.32	0.31	

Survey Report

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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
5,682.0	12.30	255.90	5,576.0	-306.6	-1,002.9	1,048.6	0.39	-0.32	
5,777.0	12.40	255.90	5,668.8	-311.5	-1,022.6	1,068.8	0.11	0.11	
5,872.0	12.70	253.30	5,761.6	-317.0	-1,042.5	1,089.5	0.67	0.32	
5,967.0	12.10	254.70	5,854.4	-322.7	-1,062.1	1,109.9	0.71	-0.63	
6,063.0	12.30	253.70	5,948.2	-328.2	-1,081.6	1,130.1	0.30	0.21	
6,158.0	11.80	252.30	6,041.1	-334.0	-1,100.6	1,150.0	0.61	-0.53	
6,253.0	12.30	250.60	6,134.0	-340.3	-1,119.4	1,169.8	0.65	0.53	
6,348.0	11.90	253.00	6,226.9	-346.5	-1,138.3	1,189.7	0.68	-0.42	
6,443.0	11.60	251.50	6,319.9	-352.4	-1,156.7	1,209.0	0.45	-0.32	
6,539.0	11.20	252.30	6,414.0	-358.3	-1,174.8	1,228.0	0.45	-0.42	
6,634.0	10.60	253.00	6,507.3	-363.7	-1,191.9	1,246.0	0.65	-0.63	
6,729.0	9.60	255.70	6,600.8	-368.2	-1,207.9	1,262.6	1.16	-1.05	
6,824.0	7.90	259.10	6,694.7	-371.4	-1,222.0	1,277.0	1.87	-1.79	
6,919.0	6.20	260.30	6,789.0	-373.5	-1,233.5	1,288.6	1.80	-1.79	
7,015.0	4.90	260.80	6,884.5	-375.0	-1,242.7	1,297.7	1.36	-1.35	
7,110.0	4.10	254.30	6,979.2	-376.6	-1,249.9	1,305.1	1.00	-0.84	
7,205.0	2.90	247.80	7,074.1	-378.4	-1,255.4	1,310.9	1.33	-1.26	
7,300.0	1.40	263.40	7,169.0	-379.4	-1,258.8	1,314.5	1.68	-1.58	
7,395.0	1.10	286.40	7,264.0	-379.3	-1,260.8	1,316.4	0.61	-0.32	
7,491.0	0.20	186.10	7,360.0	-379.2	-1,261.7	1,317.2	1.20	-0.94	
7,586.0	0.50	96.80	7,455.0	-379.4	-1,261.3	1,316.9	0.56	0.32	
7,681.0	0.30	122.60	7,550.0	-379.6	-1,260.7	1,316.3	0.28	-0.21	
7,776.0	0.60	154.30	7,645.0	-380.2	-1,260.3	1,316.1	0.40	0.32	
7,875.0	0.40	125.20	7,744.0	-380.9	-1,259.8	1,315.8	0.32	-0.20	
7,970.0	0.20	35.10	7,839.0	-380.9	-1,259.4	1,315.5	0.47	-0.21	
8,065.0	0.60	67.20	7,934.0	-380.6	-1,258.9	1,314.9	0.47	0.42	
8,160.0	0.10	280.60	8,028.9	-380.4	-1,258.5	1,314.5	0.72	-0.53	
8,255.0	0.50	277.10	8,123.9	-380.3	-1,259.0	1,314.9	0.42	0.42	
8,350.0	0.20	344.60	8,218.9	-380.1	-1,259.4	1,315.3	0.49	-0.32	
8,445.0	0.30	33.30	8,313.9	-379.7	-1,259.3	1,315.1	0.24	0.11	
8,541.0	0.40	292.30	8,409.9	-379.4	-1,259.5	1,315.1	0.57	0.10	
8,635.0	0.50	301.90	8,503.9	-379.1	-1,260.2	1,315.7	0.13	0.11	
8,731.0	0.60	316.10	8,599.9	-378.5	-1,260.9	1,316.1	0.18	0.10	
8,826.0	0.90	210.30	8,694.9	-378.8	-1,261.6	1,316.9	1.27	0.32	
8,921.0	0.80	208.10	8,789.9	-380.0	-1,262.3	1,318.0	0.11	-0.11	
9,016.0	1.00	218.90	8,884.9	-381.2	-1,263.1	1,319.1	0.28	0.21	
9,112.0	1.00	203.70	8,980.9	-382.6	-1,264.0	1,320.4	0.28	0.00	
9,207.0	0.50	222.20	9,075.9	-383.7	-1,264.6	1,321.3	0.58	-0.53	
9,302.0	0.30	243.40	9,170.9	-384.1	-1,265.1	1,321.9	0.26	-0.21	
9,398.0	0.70	249.40	9,266.9	-384.4	-1,265.9	1,322.7	0.42	0.42	
9,493.0	1.00	259.90	9,361.9	-384.8	-1,267.2	1,324.1	0.35	0.32	
9,588.0	1.10	280.60	9,456.9	-384.8	-1,268.9	1,325.8	0.41	0.11	
9,683.0	0.70	322.20	9,551.8	-384.1	-1,270.2	1,326.8	0.78	-0.42	
9,778.0	0.60	341.40	9,646.8	-383.2	-1,270.7	1,327.0	0.25	-0.11	
9,810.0	0.70	319.80	9,678.8	-382.9	-1,270.9	1,327.0	0.82	0.31	
9,905.0	0.40	327.80	9,773.8	-382.2	-1,271.4	1,327.3	0.33	-0.32	
9,969.0	0.30	351.20	9,837.8	-381.8	-1,271.6	1,327.4	0.27	-0.16	
10,064.0	0.10	280.60	9,932.8	-381.6	-1,271.7	1,327.4	0.30	-0.21	
10,159.0	0.50	347.00	10,027.8	-381.1	-1,271.9	1,327.4	0.49	0.42	
10,254.0	0.70	318.70	10,122.8	-380.3	-1,272.3	1,327.6	0.37	0.21	
10,350.0	0.70	307.20	10,218.8	-379.5	-1,273.2	1,328.2	0.15	0.00	Last DP svy @ 10350'
10,412.0	0.70	307.20	10,280.8	-379.1	-1,273.8	1,328.6	0.00	0.00	

Survey Report

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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 13-16C Tgt	0.00	0.00	7,823.0	-413.7	-1,278.4	1,591,226.82	2,342,406.62	39.433547	-107.828424
- survey misses target center by 37.8ft at 7954.0ft MD (7822.9 TVD, -381.0 N, -1259.5 E)									
- Point									
S Leverich 13-16C BHL	0.00	0.00	10,831.0	-413.7	-1,278.4	1,591,226.82	2,342,406.62	39.433547	-107.828424
- survey misses target center by 551.3ft at 10412.0ft MD (10280.8 TVD, -379.1 N, -1273.8 E)									
- Circle (radius 50.0)									

Survey Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
10,350.0	10,218.8	-379.5	-1,273.2	Last DP svy @ 10350'	
10,412.0	10,280.8	-379.1	-1,273.8	Projection to TD @ 10412' MD	

Checked By: _____ Approved By: _____ Date: _____

Survey Report - Geographic

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 2003.21 US Multi User DB

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

Site		SWSW Sec 18-T7S-R93W			
Site Position:		Northing:	1,591,622.70 ft	Latitude:	39.434725
From:	Lat/Long	Easting:	2,343,708.26 ft	Longitude:	-107.823853
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-1.47 °

Well		South Leverich 13-16C				
Well Position	+N/-S	0.0 ft	Northing:	1,591,607.72 ft	Latitude:	39.434683
	+E/-W	0.0 ft	Easting:	2,343,695.16 ft	Longitude:	-107.823898
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,235.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2/5/2009	10.55	65.79	52,484

Design	DD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	252.07	

Survey Program	Date	2/21/2009			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
126.0	10,412.0	Survey #1 (DD)	Geolink MWD	Geolink MWD	

Survey Report - Geographic

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 2003.21 US Multi User 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	1,591,607.72	2,343,695.16	39.434683	-107.823898
126.0	0.20	256.30	126.0	-0.1	-0.2	1,591,607.67	2,343,694.94	39.434683	-107.823899
188.0	1.90	277.70	188.0	0.1	-1.3	1,591,607.81	2,343,693.82	39.434683	-107.823903
249.0	2.60	273.90	248.9	0.3	-3.7	1,591,608.10	2,343,691.45	39.434684	-107.823911
311.0	3.30	270.10	310.9	0.4	-6.9	1,591,608.28	2,343,688.26	39.434684	-107.823922
373.0	3.50	259.10	372.7	0.0	-10.6	1,591,608.02	2,343,684.61	39.434683	-107.823935
435.0	4.10	244.30	434.6	-1.3	-14.4	1,591,606.80	2,343,680.72	39.434679	-107.823949
496.0	4.70	245.80	495.4	-3.3	-18.7	1,591,604.94	2,343,676.43	39.434674	-107.823964
558.0	5.70	256.60	557.2	-5.0	-24.0	1,591,603.32	2,343,671.08	39.434669	-107.823983
620.0	6.50	252.50	618.8	-6.8	-30.3	1,591,601.71	2,343,664.69	39.434664	-107.824005
681.0	7.10	255.00	679.4	-8.8	-37.2	1,591,599.88	2,343,657.71	39.434659	-107.824030
743.0	7.70	252.20	740.9	-11.1	-44.9	1,591,597.81	2,343,650.00	39.434653	-107.824057
805.0	7.90	252.50	802.3	-13.6	-52.9	1,591,595.47	2,343,641.91	39.434646	-107.824085
867.0	8.20	251.50	863.7	-16.3	-61.2	1,591,593.00	2,343,633.59	39.434638	-107.824115
930.0	8.20	251.10	926.1	-19.2	-69.7	1,591,590.33	2,343,625.01	39.434630	-107.824145
994.0	8.50	253.00	989.4	-22.0	-78.5	1,591,587.70	2,343,616.10	39.434622	-107.824176
1,057.0	8.50	251.50	1,051.7	-24.9	-87.4	1,591,585.09	2,343,607.16	39.434615	-107.824207
1,120.0	8.90	251.90	1,114.0	-27.9	-96.4	1,591,582.33	2,343,598.04	39.434606	-107.824239
1,184.0	9.10	252.20	1,177.2	-30.9	-106.0	1,591,579.49	2,343,588.44	39.434598	-107.824273
1,279.0	10.60	254.30	1,270.8	-35.6	-121.5	1,591,575.23	2,343,572.76	39.434585	-107.824328
1,374.0	11.50	252.30	1,364.0	-40.9	-139.0	1,591,570.43	2,343,555.20	39.434571	-107.824390
1,469.0	11.90	253.90	1,457.0	-46.4	-157.4	1,591,565.31	2,343,536.63	39.434555	-107.824455
1,540.0	11.90	254.90	1,526.5	-50.4	-171.5	1,591,561.73	2,343,522.43	39.434545	-107.824505
1,622.0	11.90	253.70	1,606.7	-55.0	-187.8	1,591,557.58	2,343,506.04	39.434532	-107.824563
1,686.0	12.30	254.20	1,669.3	-58.7	-200.7	1,591,554.20	2,343,493.06	39.434522	-107.824608
1,781.0	12.00	253.20	1,762.2	-64.3	-219.9	1,591,549.08	2,343,473.73	39.434506	-107.824676
1,876.0	12.10	253.10	1,855.1	-70.0	-238.8	1,591,543.82	2,343,454.61	39.434491	-107.824744
1,971.0	12.10	253.80	1,948.0	-75.7	-257.9	1,591,538.64	2,343,435.38	39.434475	-107.824811
2,067.0	12.00	255.10	2,041.9	-81.1	-277.2	1,591,533.76	2,343,415.94	39.434460	-107.824880
2,162.0	12.00	255.20	2,134.8	-86.1	-296.3	1,591,529.19	2,343,396.73	39.434446	-107.824947
2,257.0	11.70	252.90	2,227.8	-91.5	-315.1	1,591,524.31	2,343,377.84	39.434432	-107.825014
2,353.0	11.90	253.00	2,321.7	-97.2	-333.8	1,591,519.04	2,343,358.93	39.434416	-107.825080
2,448.0	11.80	252.90	2,414.7	-103.0	-352.5	1,591,513.80	2,343,340.14	39.434400	-107.825146
2,543.0	12.30	252.90	2,507.6	-108.8	-371.5	1,591,508.45	2,343,321.04	39.434384	-107.825213
2,639.0	12.40	253.10	2,601.4	-114.8	-391.1	1,591,502.96	2,343,301.26	39.434368	-107.825283
2,734.0	11.70	252.80	2,694.3	-120.6	-410.1	1,591,497.63	2,343,282.16	39.434352	-107.825350
2,829.0	11.50	252.90	2,787.4	-126.2	-428.3	1,591,492.47	2,343,263.77	39.434336	-107.825414
2,925.0	12.00	252.20	2,881.4	-132.1	-447.0	1,591,487.08	2,343,244.97	39.434320	-107.825480
3,020.0	12.00	251.90	2,974.3	-138.2	-465.7	1,591,481.47	2,343,226.03	39.434304	-107.825547
3,115.0	12.20	253.00	3,067.2	-144.2	-484.7	1,591,475.96	2,343,206.90	39.434287	-107.825614
3,211.0	11.80	252.80	3,161.1	-150.1	-503.8	1,591,470.58	2,343,187.68	39.434271	-107.825682
3,306.0	12.10	252.70	3,254.0	-155.9	-522.6	1,591,465.23	2,343,168.75	39.434255	-107.825748
3,401.0	12.00	253.70	3,346.9	-161.6	-541.6	1,591,459.98	2,343,149.62	39.434239	-107.825815
3,496.0	12.00	251.00	3,439.8	-167.6	-560.4	1,591,454.48	2,343,130.66	39.434223	-107.825882
3,592.0	12.30	250.90	3,533.7	-174.2	-579.5	1,591,448.38	2,343,111.40	39.434205	-107.825950
3,687.0	12.10	251.90	3,626.6	-180.6	-598.5	1,591,442.46	2,343,092.22	39.434187	-107.826017
3,782.0	12.00	251.60	3,719.5	-186.8	-617.4	1,591,436.73	2,343,073.23	39.434170	-107.826084
3,877.0	12.70	251.00	3,812.3	-193.4	-636.6	1,591,430.71	2,343,053.82	39.434152	-107.826152
3,972.0	12.00	251.20	3,905.1	-199.9	-655.8	1,591,424.62	2,343,034.44	39.434134	-107.826220
4,068.0	12.20	253.20	3,998.9	-206.1	-675.0	1,591,418.97	2,343,015.13	39.434117	-107.826288
4,162.0	12.00	253.00	4,090.8	-211.8	-693.8	1,591,413.72	2,342,996.13	39.434101	-107.826354
4,257.0	12.30	252.90	4,183.7	-217.7	-712.9	1,591,408.35	2,342,976.88	39.434085	-107.826422
4,352.0	12.40	253.50	4,276.5	-223.5	-732.4	1,591,402.98	2,342,957.28	39.434069	-107.826491
4,447.0	12.50	253.70	4,369.3	-229.3	-752.0	1,591,397.70	2,342,937.49	39.434053	-107.826561
4,542.0	12.00	252.20	4,462.1	-235.2	-771.3	1,591,392.29	2,342,918.08	39.434037	-107.826629

Survey Report - Geographic

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 2003.21 US Multi User DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
4,637.0	12.80	249.10	4,554.9	-242.0	-790.6	1,591,386.01	2,342,898.67	39.434018	-107.826697
4,732.0	12.20	253.60	4,647.7	-248.6	-810.0	1,591,379.92	2,342,879.05	39.434000	-107.826766
4,827.0	12.00	250.30	4,740.5	-254.8	-828.9	1,591,374.25	2,342,859.97	39.433983	-107.826833
4,923.0	12.50	252.00	4,834.4	-261.3	-848.2	1,591,368.17	2,342,840.53	39.433965	-107.826901
5,018.0	12.20	251.30	4,927.2	-267.7	-867.5	1,591,362.27	2,342,821.09	39.433948	-107.826969
5,113.0	12.10	254.00	5,020.0	-273.7	-886.6	1,591,356.79	2,342,801.86	39.433931	-107.827037
5,208.0	11.80	253.30	5,113.0	-279.2	-905.5	1,591,351.74	2,342,782.85	39.433916	-107.827104
5,303.0	12.30	253.50	5,205.9	-284.9	-924.5	1,591,346.56	2,342,763.71	39.433901	-107.827171
5,396.0	12.40	253.40	5,296.7	-290.6	-943.5	1,591,341.39	2,342,744.50	39.433885	-107.827239
5,491.0	12.30	255.10	5,389.5	-296.1	-963.1	1,591,336.37	2,342,724.81	39.433870	-107.827308
5,587.0	12.60	254.90	5,483.3	-301.4	-983.1	1,591,331.53	2,342,704.69	39.433855	-107.827379
5,682.0	12.30	255.90	5,576.0	-306.6	-1,002.9	1,591,326.87	2,342,684.75	39.433841	-107.827449
5,777.0	12.40	255.90	5,668.8	-311.5	-1,022.6	1,591,322.43	2,342,664.92	39.433828	-107.827518
5,872.0	12.70	253.30	5,761.6	-317.0	-1,042.5	1,591,317.46	2,342,644.89	39.433812	-107.827589
5,967.0	12.10	254.70	5,854.4	-322.7	-1,062.1	1,591,312.33	2,342,625.15	39.433797	-107.827658
6,063.0	12.30	253.70	5,948.2	-328.2	-1,081.6	1,591,307.31	2,342,605.49	39.433782	-107.827727
6,158.0	11.80	252.30	6,041.1	-334.0	-1,100.6	1,591,302.00	2,342,586.39	39.433766	-107.827795
6,253.0	12.30	250.60	6,134.0	-340.3	-1,119.4	1,591,296.17	2,342,567.43	39.433749	-107.827861
6,348.0	11.90	253.00	6,226.9	-346.5	-1,138.3	1,591,290.43	2,342,548.37	39.433732	-107.827928
6,443.0	11.60	251.50	6,319.9	-352.4	-1,156.7	1,591,285.01	2,342,529.80	39.433715	-107.827993
6,539.0	11.20	252.30	6,414.0	-358.3	-1,174.8	1,591,279.57	2,342,511.62	39.433699	-107.828057
6,634.0	10.60	253.00	6,507.3	-363.7	-1,191.9	1,591,274.65	2,342,494.34	39.433684	-107.828118
6,729.0	9.60	255.70	6,600.8	-368.2	-1,207.9	1,591,270.55	2,342,478.20	39.433672	-107.828175
6,824.0	7.90	259.10	6,694.7	-371.4	-1,222.0	1,591,267.72	2,342,464.04	39.433663	-107.828225
6,919.0	6.20	260.30	6,789.0	-373.5	-1,233.5	1,591,265.92	2,342,452.52	39.433658	-107.828265
7,015.0	4.90	260.80	6,884.5	-375.0	-1,242.7	1,591,264.63	2,342,443.32	39.433653	-107.828298
7,110.0	4.10	254.30	6,979.2	-376.6	-1,249.9	1,591,263.24	2,342,436.01	39.433649	-107.828323
7,205.0	2.90	247.80	7,074.1	-378.4	-1,255.4	1,591,261.56	2,342,430.47	39.433644	-107.828343
7,300.0	1.40	263.40	7,169.0	-379.4	-1,258.8	1,591,260.60	2,342,427.07	39.433641	-107.828355
7,395.0	1.10	286.40	7,264.0	-379.3	-1,260.8	1,591,260.78	2,342,425.04	39.433641	-107.828362
7,491.0	0.20	186.10	7,360.0	-379.2	-1,261.7	1,591,260.90	2,342,424.14	39.433642	-107.828365
7,586.0	0.50	96.80	7,455.0	-379.4	-1,261.3	1,591,260.67	2,342,424.53	39.433641	-107.828364
7,681.0	0.30	122.60	7,550.0	-379.6	-1,260.7	1,591,260.47	2,342,425.15	39.433641	-107.828361
7,776.0	0.60	154.30	7,645.0	-380.2	-1,260.3	1,591,259.88	2,342,425.56	39.433639	-107.828360
7,875.0	0.40	125.20	7,744.0	-380.9	-1,259.8	1,591,259.20	2,342,426.05	39.433637	-107.828358
7,970.0	0.20	35.10	7,839.0	-380.9	-1,259.4	1,591,259.14	2,342,426.41	39.433637	-107.828357
8,065.0	0.60	67.20	7,934.0	-380.6	-1,258.9	1,591,259.45	2,342,426.98	39.433638	-107.828355
8,160.0	0.10	280.60	8,028.9	-380.4	-1,258.5	1,591,259.65	2,342,427.36	39.433639	-107.828354
8,255.0	0.50	277.10	8,123.9	-380.3	-1,259.0	1,591,259.73	2,342,426.87	39.433639	-107.828355
8,350.0	0.20	344.60	8,218.9	-380.1	-1,259.4	1,591,259.95	2,342,426.42	39.433639	-107.828357
8,445.0	0.30	33.30	8,313.9	-379.7	-1,259.3	1,591,260.32	2,342,426.52	39.433640	-107.828357
8,541.0	0.40	292.30	8,409.9	-379.4	-1,259.5	1,591,260.66	2,342,426.36	39.433641	-107.828357
8,635.0	0.50	301.90	8,503.9	-379.1	-1,260.2	1,591,261.02	2,342,425.71	39.433642	-107.828360
8,731.0	0.60	316.10	8,599.9	-378.5	-1,260.9	1,591,261.62	2,342,425.02	39.433644	-107.828362
8,826.0	0.90	210.30	8,694.9	-378.8	-1,261.6	1,591,261.35	2,342,424.30	39.433643	-107.828365
8,921.0	0.80	208.10	8,789.9	-380.0	-1,262.3	1,591,260.14	2,342,423.58	39.433640	-107.828367
9,016.0	1.00	218.90	8,884.9	-381.2	-1,263.1	1,591,258.93	2,342,422.71	39.433636	-107.828370
9,112.0	1.00	203.70	8,980.9	-382.6	-1,264.0	1,591,257.53	2,342,421.81	39.433632	-107.828373
9,207.0	0.50	222.20	9,075.9	-383.7	-1,264.6	1,591,256.48	2,342,421.17	39.433629	-107.828375
9,302.0	0.30	243.40	9,170.9	-384.1	-1,265.1	1,591,256.08	2,342,420.66	39.433628	-107.828377
9,398.0	0.70	249.40	9,266.9	-384.4	-1,265.9	1,591,255.78	2,342,419.88	39.433627	-107.828380
9,493.0	1.00	259.90	9,361.9	-384.8	-1,267.2	1,591,255.46	2,342,418.51	39.433626	-107.828385
9,588.0	1.10	280.60	9,456.9	-384.8	-1,268.9	1,591,255.53	2,342,416.80	39.433626	-107.828391
9,683.0	0.70	322.20	9,551.8	-384.1	-1,270.2	1,591,256.19	2,342,415.57	39.433628	-107.828395
9,778.0	0.60	341.40	9,646.8	-383.2	-1,270.7	1,591,257.13	2,342,415.08	39.433631	-107.828397

Survey Report - Geographic

Company:	Laramie Energy II, LLC.	Local Co-ordinate Reference:	Well South Leverich 13-16C
Project:	Helmer Gulch	TVD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Site:	SWSW Sec 18-T7S-R93W	MD Reference:	SL 13-16C KBE @ 8256.0ft (Grey Wolf 706)
Well:	South Leverich 13-16C	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 2003.21 US Multi User DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
9,810.0	0.70	319.80	9,678.8	-382.9	-1,270.9	1,591,257.44	2,342,414.90	39.433632	-107.828397
9,905.0	0.40	327.80	9,773.8	-382.2	-1,271.4	1,591,258.18	2,342,414.37	39.433634	-107.828399
9,969.0	0.30	351.20	9,837.8	-381.8	-1,271.6	1,591,258.54	2,342,414.24	39.433635	-107.828400
10,064.0	0.10	280.60	9,932.8	-381.6	-1,271.7	1,591,258.80	2,342,414.12	39.433635	-107.828400
10,159.0	0.50	347.00	10,027.8	-381.1	-1,271.9	1,591,259.23	2,342,413.96	39.433636	-107.828401
10,254.0	0.70	318.70	10,122.8	-380.3	-1,272.3	1,591,260.08	2,342,413.51	39.433639	-107.828403
10,350.0	0.70	307.20	10,218.8	-379.5	-1,273.2	1,591,260.90	2,342,412.67	39.433641	-107.828406
Last DP svy @ 10350'									
10,412.0	0.70	307.20	10,280.8	-379.1	-1,273.8	1,591,261.37	2,342,412.08	39.433642	-107.828408

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
S Leverich 13-16C Tgt - survey misses target center by 37.8ft at 7954.0ft MD (7822.9 TVD, -381.0 N, -1259.5 E) - Point	0.00	0.00	7,823.0	-413.7	-1,278.4	1,591,226.82	2,342,406.62	39.433547	-107.828424
S Leverich 13-16C BHL - survey misses target center by 551.3ft at 10412.0ft MD (10280.8 TVD, -379.1 N, -1273.8 E) - Circle (radius 50.0)	0.00	0.00	10,831.0	-413.7	-1,278.4	1,591,226.82	2,342,406.62	39.433547	-107.828424

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
10,350.0	10,218.8	-379.5	-1,273.2	Last DP svy @ 10350'	
10,412.0	10,280.8	-379.1	-1,273.8	Projection to TD @ 10412' MD	

Checked By: _____ Approved By: _____ Date: _____