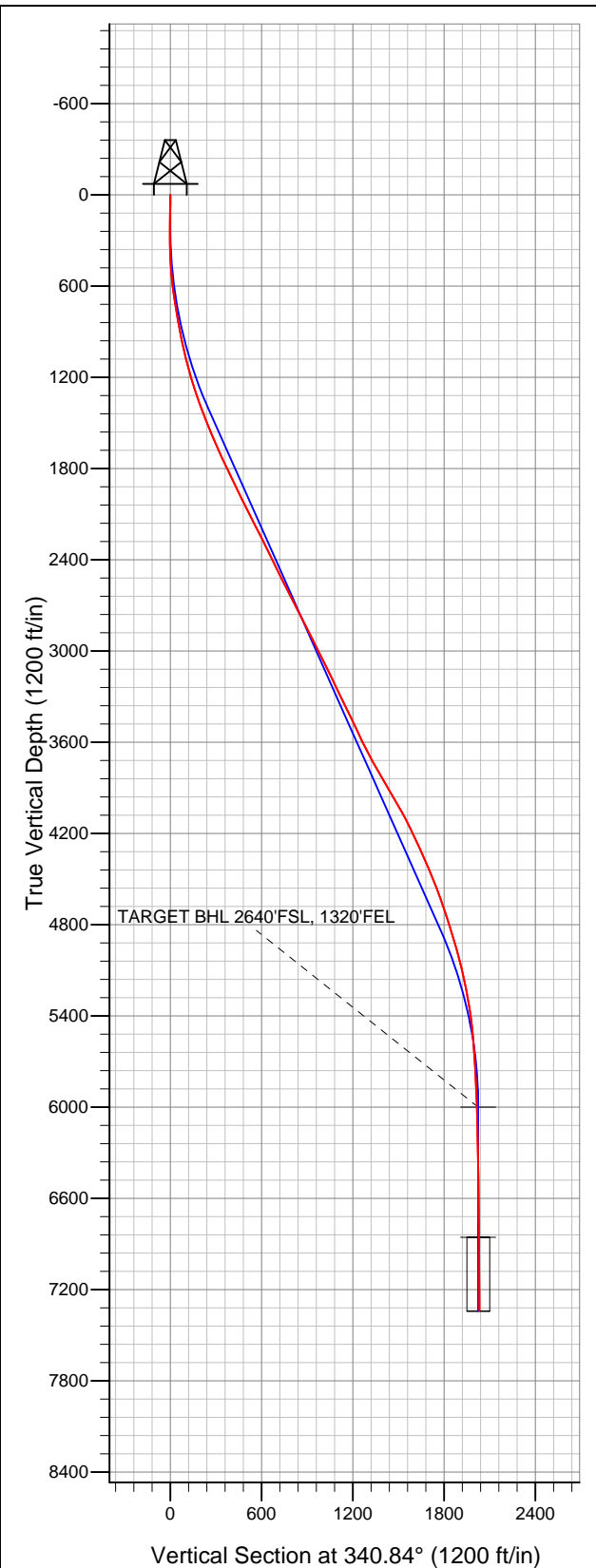


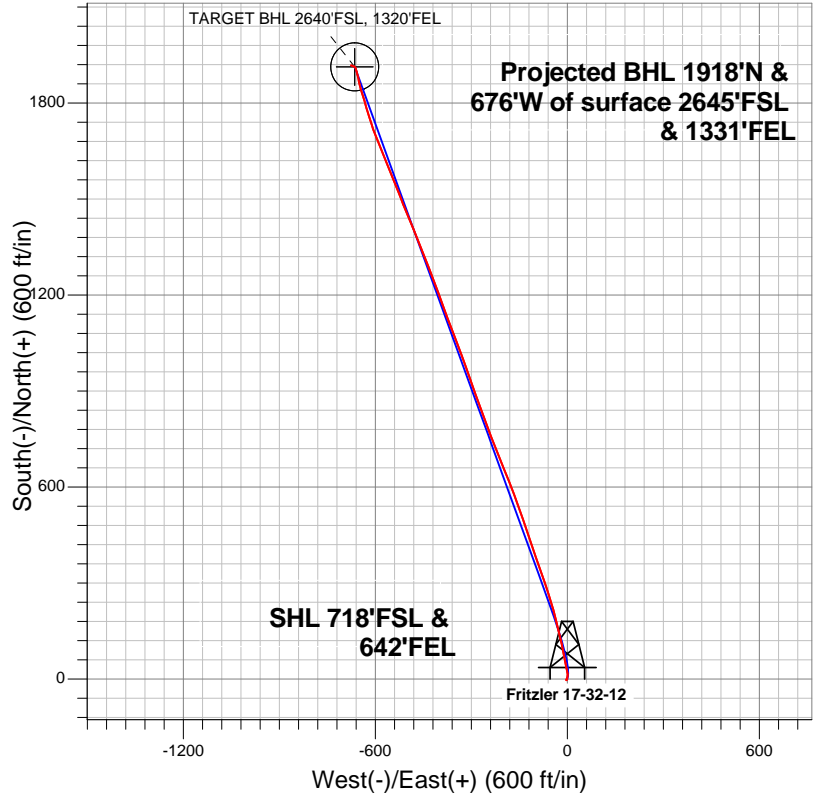
Well Name: Fritzler 17-32-12

Surface Location: Fritzler 17-23-18 Pad Sec.17-T6N-R66W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4771.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1419522.82	3196181.21	40.482850	-104.794736	
Original Well Elev		WELL @ 4785.0ft (Original Well Elev)				



Great Western



LEGEND

- Wellbore #1
- Fritzler 17-32-12, Wellbore #1, Plan #3 (9-10-12)R V0
- Survey #1

Final Survey Plot

Projected Final Survey -
7755'MD & 7336'TVD @ 2033'VS
0.50 deg Inc 289.30 deg AZ

Project: SEC.17-T6N-R66W
Site: Fritzler 17-23-18 Pad Sec.17-T6N-R66W
Well: Fritzler 17-32-12
Plan: Wellbore #1



Great Western

SEC.17-T6N-R66W

Fritzler 17-23-18 Pad Sec.17-T6N-R66W

Fritzler 17-32-12

Wellbore #1

Survey: Survey #1

Standard Survey Report

17 September, 2012

Company:	Great Western	Local Co-ordinate Reference:	Well Fritzler 17-32-12
Project:	SEC.17-T6N-R66W	TVD Reference:	WELL @ 4785.0ft (Original Well Elev)
Site:	Fritzler 17-23-18 Pad Sec.17-T6N-R66W	MD Reference:	WELL @ 4785.0ft (Original Well Elev)
Well:	Fritzler 17-32-12	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.17-T6N-R66W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site Fritzler 17-23-18 Pad Sec.17-T6N-R66W					
Site Position:		Northing:	1,419,520.40ft	Latitude:	40.482844
From:	Lat/Long	Easting:	3,196,151.19ft	Longitude:	-104.794844
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.46 °

Well	Fritzler 17-32-12					
Well Position	+N/-S	0.0 ft	Northing:	1,419,522.82 ft	Latitude:	40.482850
	+E/-W	0.0 ft	Easting:	3,196,181.21 ft	Longitude:	-104.794736
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,771.0 ft

Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/10/2012	8.72	67.07	53,041

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	340.84	

Survey Program		Date	9/17/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
120.0	7,755.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey	Wellbore Data									
	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)
Main Wellbore	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	120.0	1.80	211.90	120.0	-1.6	-1.0	-1.2	1.50	1.50	0.00
	213.0	1.30	220.00	212.9	-3.6	-2.4	-2.6	0.59	-0.54	8.71
	305.0	1.20	357.50	304.9	-3.5	-3.2	-2.3	2.53	-0.11	149.46
	395.0	3.40	23.80	394.9	-0.1	-2.1	0.6	2.65	2.44	29.22
	486.0	4.30	18.90	485.7	5.6	0.1	5.3	1.05	0.99	-5.38
	577.0	6.80	357.10	576.2	14.2	0.9	13.1	3.55	2.75	-23.96
	667.0	8.30	347.00	665.5	25.9	-0.8	24.7	2.22	1.67	-11.22
	755.0	9.40	347.30	752.4	39.1	-3.8	38.2	1.25	1.25	0.34
	850.0	10.20	349.40	846.0	54.9	-7.1	54.2	0.92	0.84	2.21
	944.0	11.50	349.40	938.3	72.3	-10.3	71.7	1.38	1.38	0.00
	1,039.0	13.30	348.30	1,031.1	92.3	-14.3	91.9	1.91	1.89	-1.16
	1,133.0	15.00	348.00	1,122.3	114.8	-19.0	114.7	1.81	1.81	-0.32

Company:	Great Western	Local Co-ordinate Reference:	Well Fritzler 17-32-12
Project:	SEC.17-T6N-R66W	TVD Reference:	WELL @ 4785.0ft (Original Well Elev)
Site:	Fritzler 17-23-18 Pad Sec.17-T6N-R66W	MD Reference:	WELL @ 4785.0ft (Original Well Elev)
Well:	Fritzler 17-32-12	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)	
1,228.0	16.70	346.60	1,213.6	140.1	-24.7	140.5	1.83	1.79	-1.47	
1,323.0	18.70	346.20	1,304.1	168.2	-31.5	169.2	2.11	2.11	-0.42	
1,417.0	20.50	345.70	1,392.7	198.7	-39.2	200.6	1.92	1.91	-0.53	
1,512.0	21.60	342.90	1,481.4	231.6	-48.5	234.7	1.57	1.16	-2.95	
1,607.0	22.50	342.40	1,569.4	265.6	-59.1	270.3	0.97	0.95	-0.53	
1,701.0	23.70	341.30	1,655.9	300.7	-70.6	307.2	1.36	1.28	-1.17	
1,796.0	25.00	340.30	1,742.4	337.6	-83.5	346.3	1.44	1.37	-1.05	
1,891.0	25.70	341.50	1,828.3	376.1	-96.8	387.0	0.91	0.74	1.26	
1,989.0	26.30	341.50	1,916.3	416.8	-110.4	430.0	0.61	0.61	0.00	
2,085.0	26.40	340.30	2,002.4	457.1	-124.4	472.6	0.56	0.10	-1.25	
2,180.0	26.60	341.10	2,087.4	497.1	-138.4	515.0	0.43	0.21	0.84	
2,274.0	26.80	340.60	2,171.4	537.0	-152.2	557.2	0.32	0.21	-0.53	
2,369.0	26.60	339.70	2,256.2	577.1	-166.7	599.9	0.47	-0.21	-0.95	
2,464.0	26.50	338.00	2,341.2	616.7	-182.0	642.3	0.81	-0.11	-1.79	
2,558.0	26.40	338.10	2,425.4	655.6	-197.7	684.1	0.12	-0.11	0.11	
2,653.0	25.90	337.30	2,510.7	694.3	-213.6	725.9	0.64	-0.53	-0.84	
2,748.0	26.40	338.80	2,595.9	733.1	-229.2	767.8	0.87	0.53	1.58	
2,842.0	27.80	340.40	2,679.6	773.3	-244.1	810.6	1.68	1.49	1.70	
2,937.0	27.90	339.70	2,763.6	815.0	-259.3	854.9	0.36	0.11	-0.74	
3,032.0	26.00	338.80	2,848.3	855.3	-274.5	898.0	2.05	-2.00	-0.95	
3,126.0	26.40	341.00	2,932.6	894.2	-288.8	939.5	1.12	0.43	2.34	
3,221.0	27.30	341.00	3,017.4	934.8	-302.7	982.4	0.95	0.95	0.00	
3,316.0	26.20	339.40	3,102.2	975.0	-317.2	1,025.1	1.38	-1.16	-1.68	
3,408.0	25.90	340.40	3,184.9	1,013.0	-331.1	1,065.5	0.58	-0.33	1.09	
3,503.0	25.60	339.20	3,270.4	1,051.7	-345.3	1,106.8	0.63	-0.32	-1.26	
3,597.0	26.00	339.00	3,355.1	1,089.9	-359.9	1,147.7	0.44	0.43	-0.21	
3,692.0	25.90	339.60	3,440.5	1,128.8	-374.6	1,189.2	0.30	-0.11	0.63	
3,787.0	25.30	339.20	3,526.2	1,167.2	-389.1	1,230.3	0.66	-0.63	-0.42	
3,881.0	26.10	340.10	3,610.9	1,205.4	-403.2	1,271.0	0.95	0.85	0.96	
3,976.0	27.90	339.40	3,695.5	1,245.9	-418.2	1,314.1	1.92	1.89	-0.74	
4,071.0	29.50	338.80	3,778.8	1,288.5	-434.5	1,359.7	1.71	1.68	-0.63	
4,165.0	30.80	338.80	3,860.1	1,332.5	-451.5	1,406.9	1.38	1.38	0.00	
4,260.0	31.20	337.60	3,941.6	1,378.0	-469.7	1,455.8	0.77	0.42	-1.26	
4,355.0	29.30	337.40	4,023.6	1,422.2	-488.0	1,503.6	2.00	-2.00	-0.21	
4,449.0	27.00	337.60	4,106.5	1,463.1	-505.0	1,547.8	2.45	-2.45	0.21	
4,544.0	26.30	339.40	4,191.4	1,502.8	-520.6	1,590.4	1.12	-0.74	1.89	
4,638.0	24.60	338.00	4,276.3	1,540.4	-535.3	1,630.8	1.92	-1.81	-1.49	
4,734.0	23.50	338.10	4,363.9	1,576.7	-549.9	1,669.8	1.15	-1.15	0.10	
4,829.0	23.40	337.40	4,451.1	1,611.7	-564.2	1,707.6	0.31	-0.11	-0.74	
4,924.0	21.20	338.00	4,539.0	1,645.0	-577.9	1,743.6	2.33	-2.32	0.63	
5,018.0	19.60	337.10	4,627.1	1,675.3	-590.4	1,776.3	1.73	-1.70	-0.96	
5,113.0	18.20	339.60	4,717.0	1,703.9	-601.8	1,807.0	1.70	-1.47	2.63	
5,208.0	17.40	342.40	4,807.4	1,731.4	-611.2	1,836.1	1.23	-0.84	2.95	
5,305.0	17.00	342.20	4,900.1	1,758.7	-619.9	1,864.7	0.42	-0.41	-0.21	
5,400.0	15.30	343.80	4,991.3	1,783.9	-627.7	1,891.1	1.85	-1.79	1.68	
5,495.0	13.40	343.60	5,083.4	1,806.5	-634.3	1,914.7	2.00	-2.00	-0.21	
5,589.0	11.90	343.10	5,175.1	1,826.3	-640.2	1,935.2	1.60	-1.60	-0.53	
5,684.0	10.50	343.20	5,268.3	1,843.9	-645.5	1,953.7	1.47	-1.47	0.11	
5,779.0	8.60	345.20	5,361.9	1,859.1	-649.9	1,969.4	2.03	-2.00	2.11	
5,875.0	6.80	351.50	5,457.1	1,871.6	-652.5	1,982.1	2.07	-1.88	6.56	
5,970.0	5.00	347.10	5,551.6	1,881.2	-654.3	1,991.8	1.95	-1.89	-4.63	
6,060.0	3.80	344.80	5,641.3	1,887.9	-655.9	1,998.6	1.35	-1.33	-2.56	
6,159.0	3.20	345.90	5,740.1	1,893.8	-657.5	2,004.7	0.61	-0.61	1.11	
6,254.0	2.60	343.00	5,835.0	1,898.4	-658.8	2,009.5	0.65	-0.63	-3.05	

Company:	Great Western	Local Co-ordinate Reference:	Well Fritzler 17-32-12
Project:	SEC.17-T6N-R66W	TVD Reference:	WELL @ 4785.0ft (Original Well Elev)
Site:	Fritzler 17-23-18 Pad Sec.17-T6N-R66W	MD Reference:	WELL @ 4785.0ft (Original Well Elev)
Well:	Fritzler 17-32-12	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)	
6,348.0	2.30	349.90	5,928.9	1,902.3	-659.7	2,013.5	0.45	-0.32	7.34	
6,419.5	2.00	347.11	6,000.3	1,904.9	-660.2	2,016.1	0.45	-0.42	-3.90	
TARGET BHL 2640'FSL, 1320'FEL										
6,443.0	1.90	346.00	6,023.8	1,905.7	-660.4	2,016.9	0.45	-0.42	-4.72	
6,632.0	1.30	323.00	6,212.8	1,910.5	-662.5	2,022.1	0.46	-0.32	-12.17	
6,821.0	0.90	305.00	6,401.7	1,913.0	-665.0	2,025.3	0.28	-0.21	-9.52	
7,010.0	0.80	290.00	6,590.7	1,914.3	-667.4	2,027.4	0.13	-0.05	-7.94	
7,200.0	0.80	290.00	6,780.7	1,915.2	-669.9	2,029.0	0.00	0.00	0.00	
7,274.2	0.80	290.00	6,854.9	1,915.6	-670.9	2,029.7	0.00	0.00	0.00	
TARGET CIRCLE 2640'FSL & 1320'FEL										
7,389.0	0.80	290.00	6,969.7	1,916.2	-672.4	2,030.7	0.00	0.00	0.00	
7,578.0	0.50	300.00	7,158.7	1,917.0	-674.4	2,032.2	0.17	-0.16	5.29	
7,705.0	0.50	289.30	7,285.7	1,917.5	-675.4	2,032.9	0.07	0.00	-8.43	
7,755.0	0.50	289.30	7,335.7	1,917.6	-675.8	2,033.2	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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