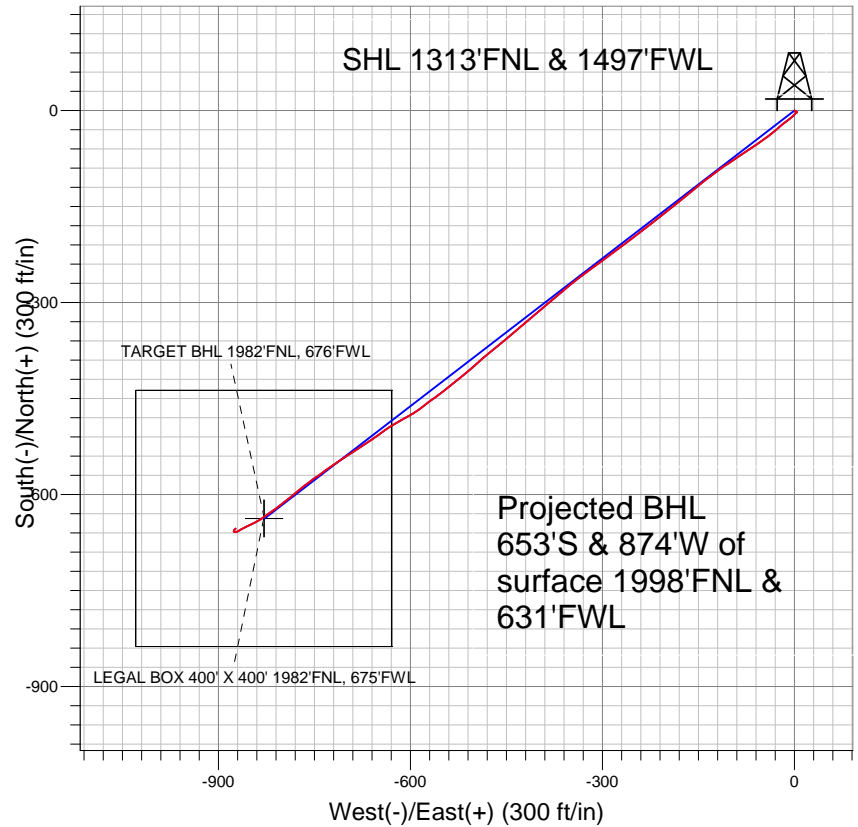


## Great Western

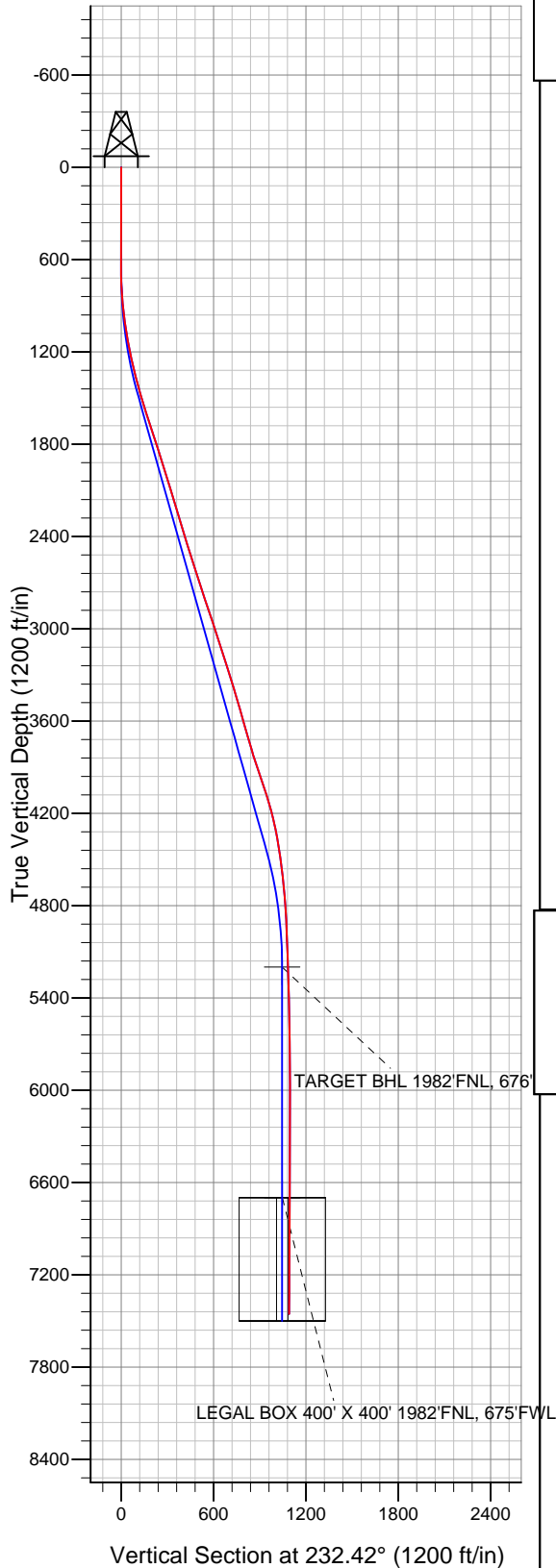


### LEGEND

- △ Gustafson 31-12, Wellbore #1, Plan #1 (12-10-10) V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
7607'MD & 7456'TVD @ 1091'VS  
0.3 deg Inc 71.0 deg AZ



Project: SEC.31-T7N-R65W  
Site: Gustafson 31-12 Pad Sec.31-T7N-R65W  
Well: Gustafson 31-12  
Plan: Wellbore #1



# **Directional**

## **Great Western**

**SEC.31-T7N-R65W**

**Gustafson 31-12 Pad Sec.31-T7N-R65W**

**Gustafson 31-12**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**15 April, 2011**



<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Site Gustafson 31-12 Pad Sec.31-T7N-R65W
<b>Project:</b>	SEC.31-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4838.0ft (Original Well Elev)
<b>Site:</b>	Gustafson 31-12 Pad Sec.31-T7N-R65W	<b>MD Reference:</b>	WELL @ 4838.0ft (Original Well Elev)
<b>Well:</b>	Gustafson 31-12	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)	
1,767.0	18.40	231.30	1,741.3	-129.1	-164.6	209.2	0.33	0.32	0.21	
1,859.0	17.80	231.20	1,828.8	-147.0	-186.9	237.8	0.65	-0.65	-0.11	
1,951.0	17.20	230.30	1,916.5	-164.5	-208.3	265.4	0.72	-0.65	-0.98	
2,045.0	17.20	232.70	2,006.3	-181.8	-230.0	293.2	0.75	0.00	2.55	
2,138.0	17.00	233.40	2,095.2	-198.3	-251.9	320.5	0.31	-0.22	0.75	
2,232.0	16.30	232.40	2,185.3	-214.5	-273.4	347.5	0.80	-0.74	-1.06	
2,325.0	17.30	234.90	2,274.3	-230.4	-295.0	374.3	1.33	1.08	2.69	
2,419.0	17.30	231.70	2,364.1	-247.1	-317.4	402.3	1.01	0.00	-3.40	
2,512.0	17.10	233.70	2,452.9	-263.8	-339.3	429.8	0.67	-0.22	2.15	
2,606.0	17.20	229.30	2,542.7	-281.0	-361.0	457.5	1.38	0.11	-4.68	
2,699.0	18.20	230.30	2,631.3	-299.3	-382.6	485.7	1.12	1.08	1.08	
2,793.0	17.50	229.30	2,720.8	-317.9	-404.6	514.5	0.81	-0.74	-1.06	
2,887.0	18.20	228.90	2,810.3	-336.7	-426.4	543.3	0.76	0.74	-0.43	
2,980.0	18.90	230.60	2,898.4	-355.8	-448.9	572.8	0.95	0.75	1.83	
3,074.0	19.00	231.30	2,987.3	-375.1	-472.7	603.3	0.26	0.11	0.74	
3,167.0	17.10	227.10	3,075.8	-393.9	-494.5	632.1	2.48	-2.04	-4.52	
3,261.0	18.10	231.30	3,165.4	-412.4	-516.0	660.4	1.72	1.06	4.47	
3,352.0	18.00	230.70	3,251.9	-430.1	-537.9	688.6	0.23	-0.11	-0.66	
3,446.0	17.40	234.50	3,341.4	-447.5	-560.6	717.2	1.38	-0.64	4.04	
3,539.0	16.30	231.30	3,430.4	-463.7	-582.1	744.1	1.55	-1.18	-3.44	
3,633.0	15.70	241.90	3,520.8	-478.0	-603.6	769.9	3.17	-0.64	11.28	
3,727.0	16.70	240.00	3,611.1	-490.7	-626.5	795.8	1.20	1.06	-2.02	
3,820.0	16.20	231.40	3,700.3	-505.5	-648.3	822.0	2.67	-0.54	-9.25	
3,914.0	16.00	238.90	3,790.6	-520.4	-669.6	848.0	2.22	-0.21	7.98	
4,008.0	18.80	236.40	3,880.3	-535.4	-693.3	876.0	3.08	2.98	-2.66	
4,103.0	19.50	234.90	3,970.1	-553.0	-719.0	907.1	0.90	0.74	-1.58	
4,197.0	17.80	234.90	4,059.1	-570.3	-743.6	937.1	1.81	-1.81	0.00	
4,291.0	15.40	232.80	4,149.2	-586.1	-765.3	964.0	2.63	-2.55	-2.23	
4,385.0	13.70	229.00	4,240.2	-601.0	-783.7	987.6	2.07	-1.81	-4.04	
4,479.0	11.10	233.00	4,332.0	-613.7	-799.3	1,007.7	2.91	-2.77	4.26	
4,573.0	8.60	234.20	4,424.6	-623.3	-812.2	1,023.8	2.67	-2.66	1.28	
4,667.0	7.50	234.20	4,517.7	-631.0	-822.9	1,037.0	1.17	-1.17	0.00	
4,760.0	6.50	236.40	4,610.0	-637.5	-832.2	1,048.3	1.11	-1.08	2.37	
4,854.0	5.60	241.50	4,703.4	-642.6	-840.7	1,058.1	1.11	-0.96	5.43	
4,948.0	4.10	245.20	4,797.1	-646.2	-847.8	1,065.9	1.63	-1.60	3.94	
5,041.0	2.80	244.80	4,889.9	-648.5	-852.8	1,071.4	1.40	-1.40	-0.43	
5,135.0	2.40	245.90	4,983.8	-650.3	-856.7	1,075.6	0.43	-0.43	1.17	
5,229.0	2.20	240.40	5,077.8	-652.0	-860.1	1,079.3	0.32	-0.21	-5.85	
5,322.0	2.00	240.40	5,170.7	-653.7	-863.0	1,082.6	0.22	-0.22	0.00	
5,350.0	1.94	240.43	5,198.7	-654.2	-863.9	1,083.6	0.21	-0.21	0.10	
TARGET BHL 1982'FNL, 676'FWL										
5,416.0	1.80	240.50	5,264.6	-655.2	-865.7	1,085.7	0.21	-0.21	0.11	
5,510.0	1.50	241.20	5,358.6	-656.6	-868.1	1,088.4	0.32	-0.32	0.74	
5,603.0	1.40	243.40	5,451.6	-657.7	-870.2	1,090.7	0.12	-0.11	2.37	
5,697.0	1.00	246.10	5,545.6	-658.5	-872.0	1,092.6	0.43	-0.43	2.87	
5,790.0	0.40	238.90	5,638.5	-659.0	-873.0	1,093.7	0.65	-0.65	-7.74	
5,884.0	0.40	243.20	5,732.5	-658.9	-873.4	1,094.0	0.67	0.00	110.96	
5,978.0	0.40	296.90	5,826.5	-658.4	-873.8	1,094.0	0.33	0.00	-49.26	
6,072.0	0.40	272.70	5,920.5	-658.2	-874.4	1,094.4	0.18	0.00	-25.74	
6,165.0	0.30	257.70	6,013.5	-658.3	-874.9	1,094.8	0.14	-0.11	-16.13	
6,259.0	0.20	266.20	6,107.5	-658.3	-875.3	1,095.2	0.11	-0.11	9.04	
6,353.0	0.20	272.80	6,201.5	-658.3	-875.7	1,095.5	0.02	0.00	7.02	
6,446.0	0.10	291.20	6,294.5	-658.3	-875.9	1,095.6	0.12	-0.11	19.78	
6,540.0	0.10	336.80	6,388.5	-658.2	-876.0	1,095.6	0.08	0.00	48.51	

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Site Gustafson 31-12 Pad Sec.31-T7N-R65W
<b>Project:</b>	SEC.31-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4838.0ft (Original Well Elev)
<b>Site:</b>	Gustafson 31-12 Pad Sec.31-T7N-R65W	<b>MD Reference:</b>	WELL @ 4838.0ft (Original Well Elev)
<b>Well:</b>	Gustafson 31-12	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
6,634.0	0.30	346.10	6,482.5	-657.9	-876.1	1,095.5	0.21	0.21	9.89
6,727.0	0.30	18.60	6,575.5	-657.4	-876.1	1,095.2	0.18	0.00	34.95
6,821.0	0.40	10.70	6,669.5	-656.9	-875.9	1,094.8	0.12	0.11	-8.40
6,851.7	0.40	13.77	6,700.2	-656.6	-875.9	1,094.6	0.07	0.00	9.99
LEGAL BOX 400' X 400' 1982'FNL, 675'FWL									
6,915.0	0.40	20.10	6,763.5	-656.2	-875.8	1,094.3	0.07	0.00	10.01
7,008.0	0.40	32.30	6,856.5	-655.6	-875.5	1,093.7	0.09	0.00	13.12
7,102.0	0.30	43.20	6,950.5	-655.2	-875.1	1,093.1	0.13	-0.11	11.60
7,196.0	0.30	41.60	7,044.5	-654.8	-874.8	1,092.6	0.01	0.00	-1.70
7,289.0	0.30	20.20	7,137.5	-654.4	-874.6	1,092.2	0.12	0.00	-23.01
7,383.0	0.20	44.50	7,231.5	-654.1	-874.4	1,091.8	0.15	-0.11	25.85
7,475.0	0.30	38.90	7,323.5	-653.8	-874.1	1,091.4	0.11	0.11	-6.09
7,555.0	0.30	71.00	7,403.5	-653.5	-873.8	1,091.0	0.21	0.00	40.13
7,607.0	0.30	71.00	7,455.5	-653.4	-873.5	1,090.8	0.00	0.00	0.00

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------