

Well Name: **Great Western 25-52**

Surface Location: Great Western 25-22 Pad Sec.25-T6N-R67W  
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

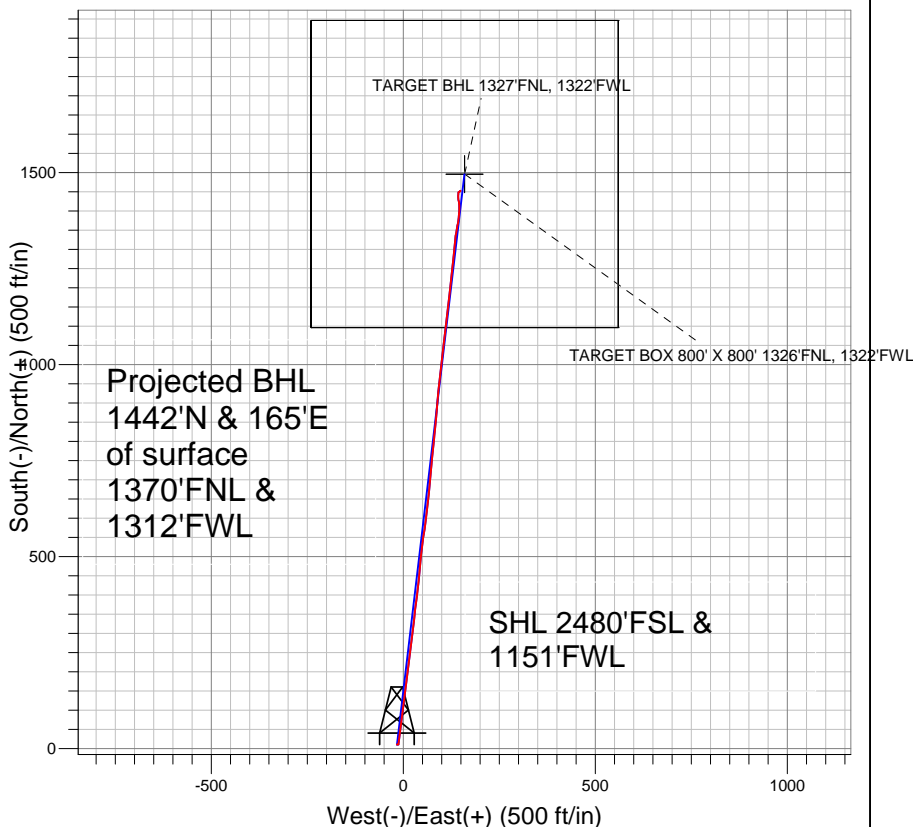
Ground Elevation: 4751.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
10.9	-16.7	1410176.04	3181627.89	40° 27' 27.000 N	104° 50' 50.280 W

Original Well Elev WELL @ 4764.0ft (Original Well Elev)

Slot

## Great Western



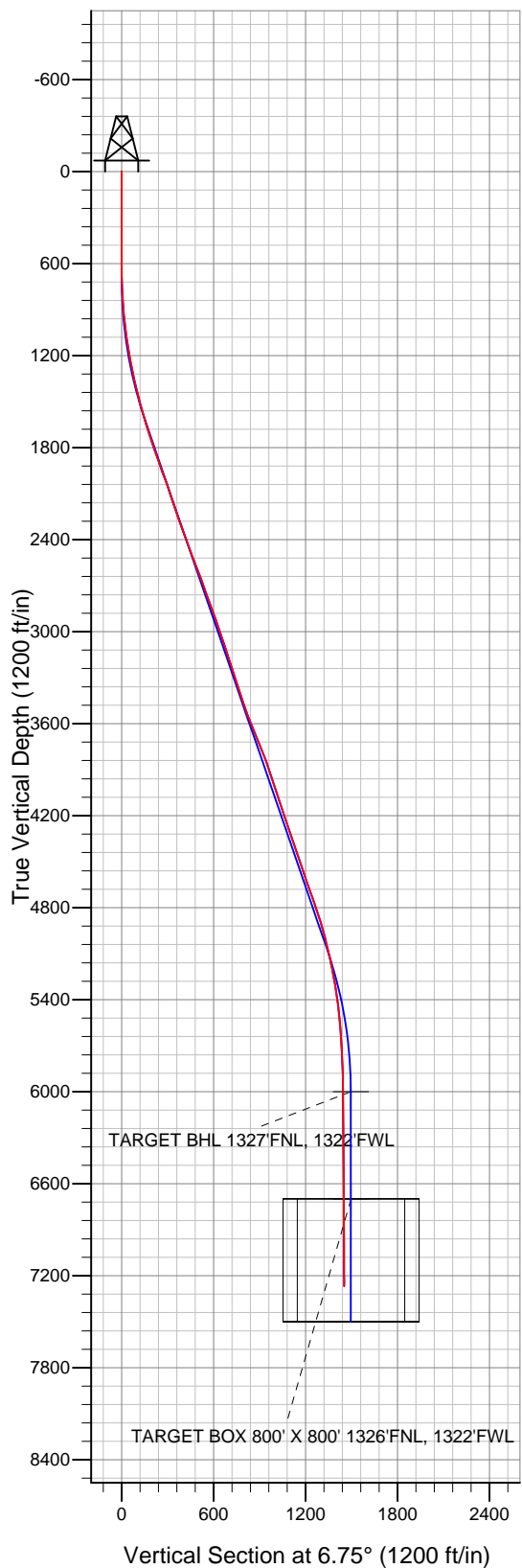
### LEGEND

- Great Western 25-52, Wellbore #1, Plan #1 (4-27-10) V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
7493'MD & 7268'TVD @ 1451'VS  
0.3 deg Inc 44.6 deg AZ

Project: SEC.25-T6N-R67W  
Site: Great Western 25-22 Pad Sec.25-T6N-R67W  
Well: Great Western 25-52  
Plan: Wellbore #1





## **Directional**

### **Great Western**

**SEC.25-T6N-R67W**

**Great Western 25-22 Pad Sec.25-T6N-R67W**

**Great Western 25-52**

**Wellbore #1**

**Survey: Survey #1**

### **Standard Survey Report**

**18 April, 2011**

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 Survey	0.0	0.00	0.00	0.0	10.9	-16.7	0.0	0.00	0.00	0.00
	583.0	0.50	90.70	583.0	10.9	-14.2	0.3	0.09	0.09	0.00
	678.0	0.50	92.00	678.0	10.9	-13.3	0.3	0.01	0.00	1.37
	771.0	2.30	4.30	771.0	12.7	-12.8	2.2	2.51	1.94	-94.30
	865.0	4.40	7.80	864.8	18.2	-12.1	7.7	2.24	2.23	3.72
	957.0	6.20	9.20	956.4	26.6	-10.9	16.2	1.96	1.96	1.52
	1,051.0	7.30	8.50	1,049.7	37.5	-9.2	27.3	1.17	1.17	-0.74
	1,145.0	9.10	8.50	1,142.8	50.7	-7.2	40.7	1.91	1.91	0.00
	1,239.0	10.60	6.50	1,235.4	66.7	-5.1	56.7	1.64	1.60	-2.13
	1,332.0	11.80	5.00	1,326.6	84.7	-3.3	74.8	1.33	1.29	-1.61
	1,426.0	13.40	7.30	1,418.4	105.0	-1.1	95.3	1.78	1.70	2.45
	1,520.0	15.30	6.50	1,509.4	128.2	1.7	118.6	2.03	2.02	-0.85

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Site Great Western 25-22 Pad Sec.25-T6N-R67W
<b>Project:</b>	SEC.25-T6N-R67W	<b>TVD Reference:</b>	WELL @ 4764.0ft (Original Well Elev)
<b>Site:</b>	Great Western 25-22 Pad Sec.25-T6N-R67W	<b>MD Reference:</b>	WELL @ 4764.0ft (Original Well Elev)
<b>Well:</b>	Great Western 25-52	<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)
1,614.0	17.00	7.10	1,599.7	154.1	4.8	144.7	1.82	1.81	0.64
1,707.0	18.40	7.80	1,688.3	182.2	8.5	173.0	1.52	1.51	0.75
1,801.0	18.60	7.80	1,777.4	211.7	12.5	202.8	0.21	0.21	0.00
1,895.0	18.50	7.00	1,866.6	241.4	16.4	232.7	0.29	-0.11	-0.85
1,989.0	20.20	7.20	1,955.2	272.3	20.2	263.9	1.81	1.81	0.21
2,082.0	19.70	6.80	2,042.7	303.8	24.1	295.6	0.56	-0.54	-0.43
2,176.0	18.20	6.60	2,131.6	334.1	27.6	326.1	1.60	-1.60	-0.21
2,270.0	18.90	5.80	2,220.7	363.8	30.9	356.0	0.79	0.74	-0.85
2,363.0	19.70	7.80	2,308.5	394.3	34.5	386.8	1.12	0.86	2.15
2,457.0	19.80	6.40	2,396.9	425.9	38.4	418.5	0.51	0.11	-1.49
2,550.0	21.20	4.90	2,484.0	458.3	41.6	451.1	1.61	1.51	-1.61
2,644.0	21.50	6.30	2,571.6	492.3	45.0	485.3	0.63	0.32	1.49
2,738.0	19.20	5.50	2,659.7	524.8	48.4	518.0	2.46	-2.45	-0.85
2,832.0	19.90	10.30	2,748.3	556.0	52.7	549.4	1.86	0.74	5.11
2,925.0	20.30	6.60	2,835.6	587.6	57.4	581.3	1.43	0.43	-3.98
3,019.0	19.20	6.60	2,924.1	619.1	61.0	613.1	1.17	-1.17	0.00
3,112.0	19.50	5.10	3,011.9	649.8	64.2	643.9	0.62	0.32	-1.61
3,206.0	18.70	6.70	3,100.7	680.4	67.3	674.7	1.02	-0.85	1.70
3,300.0	17.80	7.00	3,190.0	709.6	70.8	704.1	0.96	-0.96	0.32
3,394.0	17.20	3.50	3,279.6	737.7	73.4	732.4	1.29	-0.64	-3.72
3,487.0	18.00	4.60	3,368.3	765.8	75.4	760.4	0.93	0.86	1.18
3,581.0	18.70	7.00	3,457.5	795.2	78.4	790.0	1.10	0.74	2.55
3,675.0	21.40	5.70	3,545.8	827.2	82.0	822.2	2.91	2.87	-1.38
3,768.0	22.00	5.30	3,632.2	861.5	85.3	856.6	0.66	0.65	-0.43
3,862.0	22.20	4.90	3,719.3	896.7	88.4	892.0	0.27	0.21	-0.43
3,955.0	21.60	4.70	3,805.6	931.2	91.3	926.6	0.65	-0.65	-0.22
4,049.0	18.80	6.50	3,893.8	963.5	94.4	959.1	3.05	-2.98	1.91
4,143.0	17.60	6.30	3,983.1	992.7	97.7	988.4	1.28	-1.28	-0.21
4,237.0	18.70	6.50	4,072.4	1,021.8	101.0	1,017.7	1.17	1.17	0.21
4,330.0	17.80	8.40	4,160.7	1,050.7	104.7	1,046.8	1.16	-0.97	2.04
4,424.0	19.30	6.20	4,249.8	1,080.4	108.5	1,076.7	1.76	1.60	-2.34
4,516.0	19.50	6.90	4,336.6	1,110.7	112.0	1,107.3	0.33	0.22	0.76
4,610.0	18.10	6.50	4,425.6	1,140.8	115.5	1,137.6	1.50	-1.49	-0.43
4,704.0	18.70	6.70	4,514.8	1,170.3	119.0	1,167.3	0.64	0.64	0.21
4,797.0	18.90	5.10	4,602.8	1,200.1	122.0	1,197.2	0.59	0.22	-1.72
4,891.0	19.90	5.50	4,691.5	1,231.2	124.9	1,228.4	1.07	1.06	0.43
4,985.0	19.70	6.50	4,779.9	1,262.8	128.2	1,260.3	0.42	-0.21	1.06
5,078.0	17.30	7.10	4,868.1	1,292.1	131.7	1,289.8	2.59	-2.58	0.65
5,172.0	15.70	4.60	4,958.2	1,318.7	134.5	1,316.5	1.86	-1.70	-2.66
5,265.0	12.80	9.90	5,048.4	1,341.4	137.3	1,339.3	3.42	-3.12	5.70
5,359.0	13.00	10.00	5,140.0	1,362.1	140.9	1,360.3	0.21	0.21	0.11
5,453.0	10.20	7.90	5,232.1	1,380.7	143.9	1,379.2	3.01	-2.98	-2.23
5,546.0	9.20	3.70	5,323.7	1,396.3	145.5	1,394.8	1.32	-1.08	-4.52
5,640.0	8.20	356.60	5,416.7	1,410.5	145.6	1,408.9	1.56	-1.06	-7.55
5,734.0	6.10	352.90	5,509.9	1,422.1	144.5	1,420.4	2.29	-2.23	-3.94
5,828.0	4.00	351.10	5,603.6	1,430.3	143.4	1,428.4	2.24	-2.23	-1.91
5,922.0	3.20	357.90	5,697.4	1,436.2	142.8	1,434.1	0.96	-0.85	7.23
6,016.0	2.40	6.00	5,791.3	1,440.8	142.9	1,438.7	0.95	-0.85	8.62
6,108.0	1.60	2.90	5,883.2	1,444.0	143.2	1,441.9	0.88	-0.87	-3.37
6,200.0	0.90	353.20	5,975.2	1,446.0	143.2	1,443.9	0.79	-0.76	-10.54
6,225.5	0.84	356.91	6,000.7	1,446.3	143.1	1,444.3	0.32	-0.24	14.53
<b>TARGET BHL 1327'FNL, 1322'FWL</b>									
6,294.0	0.70	9.80	6,069.2	1,447.3	143.2	1,445.2	0.32	-0.20	18.83

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6,388.0	0.50	8.50	6,163.2	1,448.2	143.3	1,446.2	0.21	-0.21	-1.38
6,481.0	0.40	35.60	6,256.2	1,448.9	143.6	1,446.8	0.25	-0.11	29.14
6,575.0	0.20	35.10	6,350.2	1,449.3	143.9	1,447.3	0.21	-0.21	-0.53
6,669.0	0.20	48.60	6,444.2	1,449.5	144.1	1,447.5	0.05	0.00	14.36
6,762.0	0.20	61.90	6,537.2	1,449.7	144.4	1,447.8	0.05	0.00	14.30
6,856.0	0.50	78.00	6,631.2	1,449.9	144.9	1,448.0	0.33	0.32	17.13
6,925.2	0.64	65.73	6,700.3	1,450.1	145.6	1,448.3	0.27	0.21	-17.75
TARGET BOX 800' X 800' 1326'FNL, 1322'FWL									
6,950.0	0.70	62.60	6,725.1	1,450.2	145.8	1,448.4	0.27	0.23	-12.59
7,043.0	0.50	35.50	6,818.1	1,450.8	146.6	1,449.1	0.37	-0.22	-29.14
7,137.0	0.40	34.60	6,912.1	1,451.4	147.0	1,449.8	0.11	-0.11	-0.96
7,231.0	0.40	51.30	7,006.1	1,451.9	147.4	1,450.3	0.12	0.00	17.77
7,325.0	0.40	49.00	7,100.1	1,452.3	147.9	1,450.8	0.02	0.00	-2.45
7,418.0	0.20	34.00	7,193.1	1,452.7	148.3	1,451.2	0.23	-0.22	-16.13
7,450.0	0.30	44.60	7,225.1	1,452.8	148.4	1,451.3	0.34	0.31	33.13
7,493.0	0.30	44.60	7,268.1	1,452.9	148.5	1,451.4	0.00	0.00	0.00

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