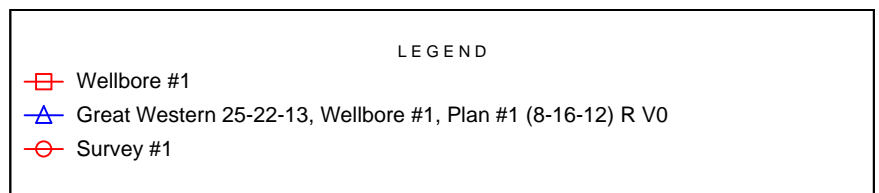
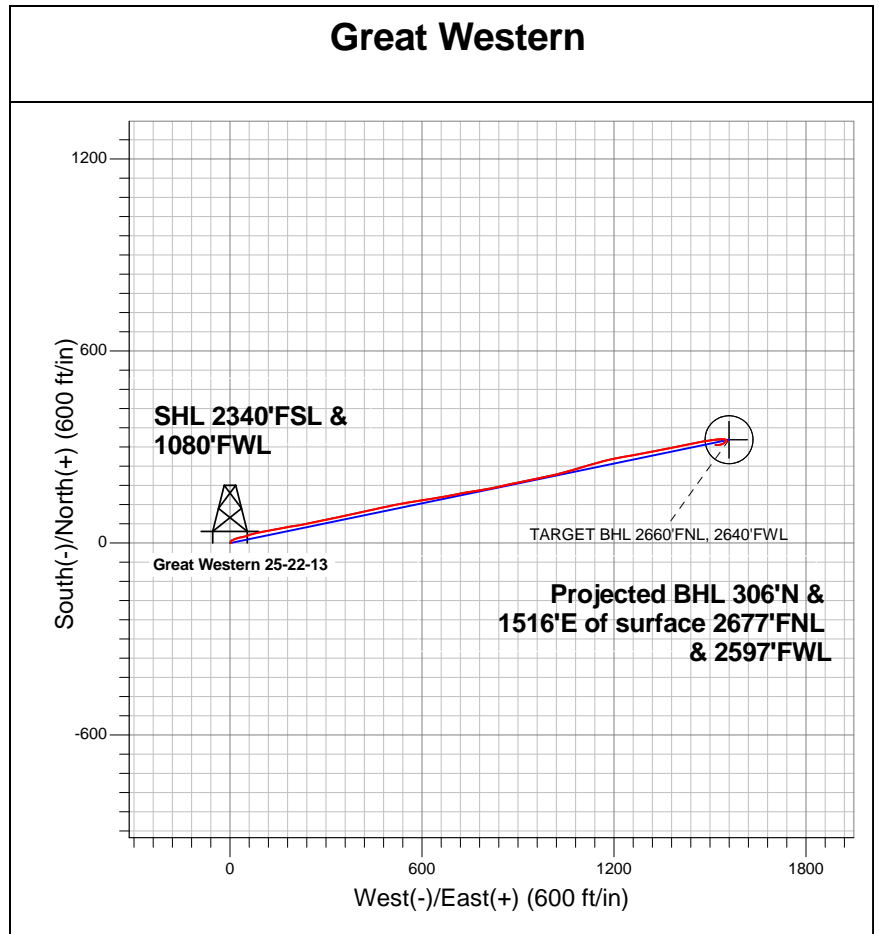
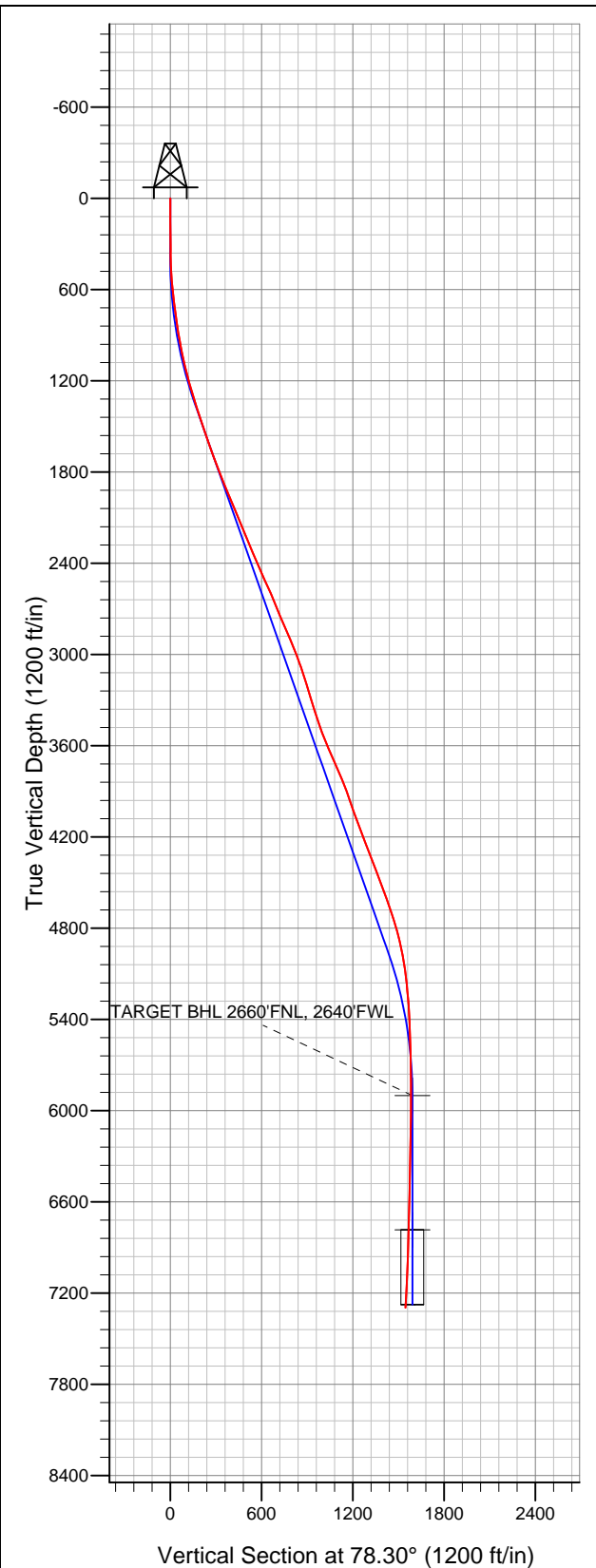


Well Name: Great Western 25-22-13

Surface Location: Great Western 25-12-15 Pad Sec.25-T6N-R67W
 North American Datum 1983 US State Plane 1983Colorado Northern Zone
 Ground Elevation: 4751.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1410034.92	3181561.58	40.457114	-104.847542	
Original Well Elev						
WELL @ 4765.0ft (Original Well Elev)						



Final Survey Plot

Projected Final Survey -
 7567'MD & 7295'TVD @ 1547'VS
 3.00 deg Inc 268.10 deg AZ

Project: SEC.25-T6N-R67W
 Site: Great Western 25-12-15 Pad Sec.25-T6N-R67W
 Well: Great Western 25-22-13
 Plan: Wellbore #1



Great Western

SEC.25-T6N-R67W

Great Western 25-12-15 Pad Sec.25-T6N-R67W

Great Western 25-22-13

Wellbore #1

Survey: Survey #1

Standard Survey Report

22 August, 2012

Company:	Great Western	Local Co-ordinate Reference:	Well Great Western 25-22-13
Project:	SEC.25-T6N-R67W	TVD Reference:	WELL @ 4765.0ft (Original Well Elev)
Site:	Great Western 25-12-15 Pad Sec.25-T6N-R67W	MD Reference:	WELL @ 4765.0ft (Original Well Elev)
Well:	Great Western 25-22-13	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.25-T6N-R67W, 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		Great Western 25-12-15 Pad Sec.25-T6N-R67W			
Site Position:		Northing:		1,410,085.03ft	
From:	Lat/Long	Easting:		Longitude:	
		3,181,487.19ft		-104.847808	
Position Uncertainty:		Slot Radius:		Grid Convergence:	
0.0 ft		"		0.42 °	

Well	Great Western 25-22-13					
Well Position	+N/-S	0.0 ft	Northing:	1,410,034.92 ft	Latitude:	40.457114
	+E/-W	0.0 ft	Easting:	3,181,561.58 ft	Longitude:	-104.847542
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,751.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/16/2012	8.76	67.04	53,030

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	78.30	

Survey Program		Date	8/21/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
58.0	7,567.0	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)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	58.0	0.70	13.40	58.0	0.3	0.1	0.2	1.21	1.21	0.00
	151.0	1.00	18.50	151.0	1.7	0.5	0.8	0.33	0.32	5.48
	245.0	1.10	20.40	245.0	3.3	1.0	1.7	0.11	0.11	2.02
	337.0	1.00	28.40	337.0	4.8	1.7	2.7	0.19	-0.11	8.70
	428.0	1.60	41.50	427.9	6.5	3.0	4.2	0.73	0.66	14.40
	519.0	4.00	61.00	518.8	9.0	6.6	8.3	2.80	2.64	21.43
	610.0	6.50	70.30	609.4	12.2	14.2	16.4	2.89	2.75	10.22
	792.0	8.00	78.40	790.0	18.3	36.3	39.3	1.00	0.82	4.45
	887.0	9.10	71.20	883.9	22.0	49.9	53.3	1.61	1.16	-7.58
	981.0	11.00	73.80	976.5	26.9	65.5	69.6	2.08	2.02	2.77
	1,076.0	12.60	77.50	1,069.5	31.7	84.4	89.0	1.86	1.68	3.89
	1,171.0	14.70	78.60	1,161.8	36.3	106.3	111.5	2.23	2.21	1.16

Company:	Great Western	Local Co-ordinate Reference:	Well Great Western 25-22-13
Project:	SEC.25-T6N-R67W	TVD Reference:	WELL @ 4765.0ft (Original Well Elev)
Site:	Great Western 25-12-15 Pad Sec.25-T6N-R67W	MD Reference:	WELL @ 4765.0ft (Original Well Elev)
Well:	Great Western 25-22-13	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)	
1,266.0	16.50	80.00	1,253.3	41.0	131.4	137.0	1.94	1.89	1.47	
1,361.0	17.30	80.00	1,344.2	45.8	158.6	164.6	0.84	0.84	0.00	
1,456.0	18.20	80.00	1,434.6	50.9	187.1	193.5	0.95	0.95	0.00	
1,551.0	18.80	80.40	1,524.7	56.0	216.8	223.7	0.65	0.63	0.42	
1,646.0	19.30	78.20	1,614.5	61.7	247.3	254.7	0.92	0.53	-2.32	
1,741.0	20.40	77.90	1,703.9	68.4	278.8	286.9	1.16	1.16	-0.32	
1,836.0	21.40	77.90	1,792.6	75.5	312.0	320.8	1.05	1.05	0.00	
1,931.0	21.70	78.40	1,881.0	82.7	346.1	355.7	0.37	0.32	0.53	
2,024.0	22.80	77.50	1,967.1	90.1	380.6	390.9	1.24	1.18	-0.97	
2,118.0	23.10	78.90	2,053.6	97.5	416.4	427.6	0.66	0.32	1.49	
2,213.0	22.60	75.80	2,141.2	105.6	452.4	464.4	1.37	-0.53	-3.26	
2,308.0	22.50	78.60	2,228.9	113.7	487.9	500.9	1.14	-0.11	2.95	
2,402.0	22.80	79.50	2,315.7	120.6	523.5	537.1	0.49	0.32	0.96	
2,497.0	22.80	79.60	2,403.2	127.2	559.7	573.9	0.04	0.00	0.11	
2,592.0	24.60	81.60	2,490.2	133.4	597.4	612.0	2.07	1.89	2.11	
2,687.0	24.70	81.10	2,576.6	139.4	636.5	651.6	0.24	0.11	-0.53	
2,782.0	21.50	78.90	2,664.0	145.8	673.2	688.8	3.49	-3.37	-2.32	
2,877.0	22.60	78.80	2,752.0	152.7	708.2	724.5	1.16	1.16	-0.11	
2,972.0	24.30	81.20	2,839.2	159.3	745.5	762.3	2.05	1.79	2.53	
3,067.0	22.10	80.90	2,926.5	165.1	782.4	799.6	2.32	-2.32	-0.32	
3,162.0	21.20	78.80	3,014.8	171.2	816.9	834.7	1.25	-0.95	-2.21	
3,257.0	18.20	76.30	3,104.2	178.1	848.2	866.7	3.28	-3.16	-2.63	
3,347.0	17.30	79.10	3,189.9	184.0	875.0	894.1	1.38	-1.00	3.11	
3,441.0	16.90	77.90	3,279.8	189.5	902.1	921.7	0.57	-0.43	-1.28	
3,536.0	17.70	78.60	3,370.5	195.2	929.7	950.0	0.87	0.84	0.74	
3,631.0	18.50	77.70	3,460.8	201.3	958.6	979.5	0.89	0.84	-0.95	
3,725.0	22.60	78.10	3,548.8	208.2	990.9	1,012.5	4.36	4.36	0.43	
3,820.0	23.10	75.40	3,636.3	216.6	1,026.8	1,049.4	1.22	0.53	-2.84	
3,914.0	23.70	74.90	3,722.6	226.2	1,062.9	1,086.6	0.67	0.64	-0.53	
4,009.0	23.20	73.10	3,809.7	236.6	1,099.2	1,124.3	0.92	-0.53	-1.89	
4,104.0	20.10	73.50	3,898.0	246.7	1,132.8	1,159.2	3.27	-3.26	0.42	
4,198.0	19.00	75.80	3,986.6	255.0	1,163.1	1,190.6	1.43	-1.17	2.45	
4,293.0	20.10	77.50	4,076.1	262.4	1,194.0	1,222.4	1.30	1.16	1.79	
4,388.0	20.20	80.20	4,165.3	268.7	1,226.1	1,255.1	0.98	0.11	2.84	
4,482.0	20.90	79.80	4,253.3	274.4	1,258.6	1,288.1	0.76	0.74	-0.43	
4,577.0	21.90	79.10	4,341.8	280.8	1,292.7	1,322.8	1.09	1.05	-0.74	
4,672.0	20.90	78.40	4,430.2	287.5	1,326.7	1,357.4	1.09	-1.05	-0.74	
4,771.0	20.80	79.10	4,522.7	294.4	1,361.2	1,392.7	0.27	-0.10	0.71	
4,866.0	19.10	79.60	4,612.0	300.4	1,393.1	1,425.1	1.80	-1.79	0.53	
4,961.0	18.20	78.80	4,702.0	306.1	1,422.9	1,455.4	0.98	-0.95	-0.84	
5,056.0	16.80	77.50	4,792.6	312.0	1,450.9	1,484.0	1.53	-1.47	-1.37	
5,150.0	12.90	80.20	4,883.5	316.7	1,474.5	1,508.1	4.21	-4.15	2.87	
5,245.0	10.60	81.20	4,976.5	319.8	1,493.6	1,527.4	2.43	-2.42	1.05	
5,340.0	8.10	82.10	5,070.2	322.1	1,508.8	1,542.8	2.64	-2.63	0.95	
5,435.0	6.20	84.40	5,164.5	323.5	1,520.6	1,554.6	2.02	-2.00	2.42	
5,530.0	4.70	85.50	5,259.0	324.3	1,529.6	1,563.6	1.58	-1.58	1.16	
5,625.0	3.70	90.50	5,353.8	324.6	1,536.5	1,570.4	1.12	-1.05	5.26	
5,720.0	2.80	94.40	5,448.6	324.4	1,541.9	1,575.6	0.97	-0.95	4.11	
5,910.0	1.10	126.90	5,638.5	322.9	1,548.0	1,581.3	1.03	-0.89	17.11	
6,099.0	0.60	182.70	5,827.5	320.9	1,549.4	1,582.3	0.48	-0.26	29.52	
6,171.4	0.68	186.21	5,900.0	320.0	1,549.3	1,582.0	0.12	0.10	4.84	
TARGET BHL 2660°FNL, 2640°FWL										
6,287.0	0.80	190.40	6,015.5	318.6	1,549.1	1,581.5	0.12	0.11	3.63	
6,476.0	0.90	221.70	6,204.5	316.2	1,547.9	1,579.8	0.25	0.05	16.56	

Company:	Great Western	Local Co-ordinate Reference:	Well Great Western 25-22-13
Project:	SEC.25-T6N-R67W	TVD Reference:	WELL @ 4765.0ft (Original Well Elev)
Site:	Great Western 25-12-15 Pad Sec.25-T6N-R67W	MD Reference:	WELL @ 4765.0ft (Original Well Elev)
Well:	Great Western 25-22-13	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)	
6,659.0	1.20	234.00	6,387.4	314.0	1,545.4	1,576.9	0.20	0.16	6.72	
6,855.0	1.30	237.90	6,583.4	311.6	1,541.8	1,573.0	0.07	0.05	1.99	
7,045.0	1.60	247.30	6,773.3	309.4	1,537.6	1,568.4	0.20	0.16	4.95	
7,053.9	1.61	247.70	6,782.3	309.3	1,537.3	1,568.1	0.16	0.10	4.46	
TARGET CIRCLE 2660'FNL & 2640'FWL										
7,235.0	1.80	254.90	6,963.3	307.6	1,532.2	1,562.8	0.16	0.11	3.98	
7,424.0	3.20	266.90	7,152.1	306.6	1,524.1	1,554.6	0.79	0.74	6.35	
7,517.0	3.00	268.10	7,244.9	306.3	1,519.1	1,549.6	0.23	-0.22	1.29	
7,567.0	3.00	268.10	7,294.9	306.2	1,516.5	1,547.0	0.00	0.00	0.00	

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