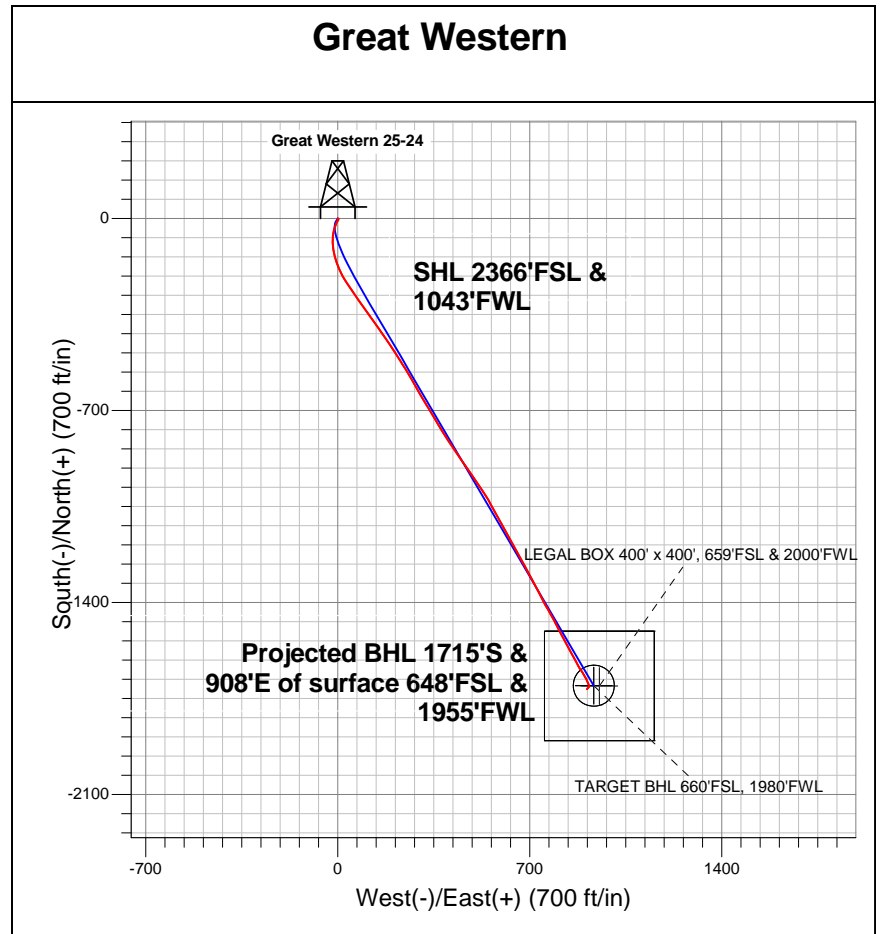
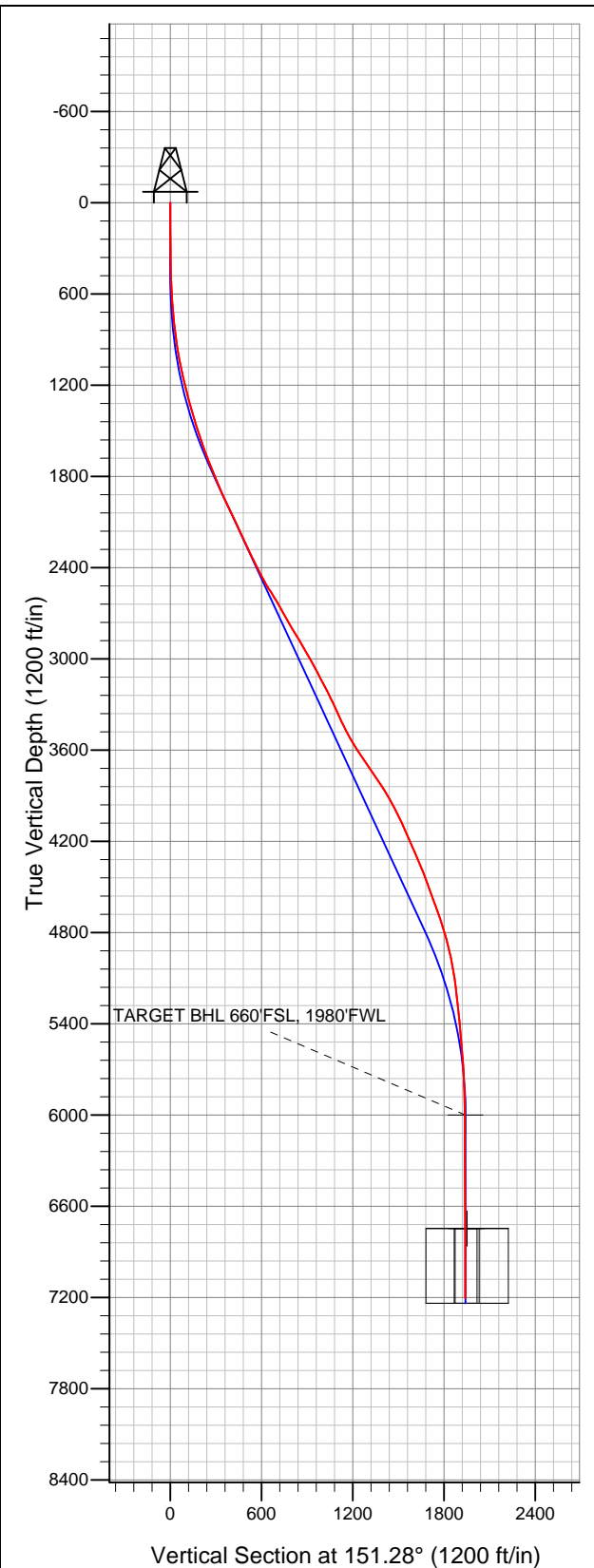


Well Name: Great Western 25-24

Surface Location: Great Western 25-12-15 Pad Sec.25-T6N-R67W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4752.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1410059.79	3181524.39	40.457183	-104.847675	
Original Well Elev		WELL @ 4766.0ft (Original Well Elev)				



LEGEND

- Wellbore #1
- Great Western 25-24, Wellbore #1, Plan #2 (8-03-12) R V0
- Survey #1

Final Survey Plot

Projected Final Survey -
7626'MD & 7203'TVD @ 1941'VS
0.40 deg Inc 240.70 deg AZ

Project: SEC.25-T6N-R67W
Site: Great Western 25-12-15 Pad Sec.25-T6N-R67W
Well: Great Western 25-24
Plan: Wellbore #1



Great Western

SEC.25-T6N-R67W

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

Great Western 25-24

Wellbore #1

Survey: Survey #1

Standard Survey Report

09 August, 2012

Company:	Great Western	Local Co-ordinate Reference:	Well Great Western 25-24
Project:	SEC.25-T6N-R67W	TVD Reference:	WELL @ 4766.0ft (Original Well Elev)
Site:	Great Western 25-12-15 Pad Sec.25-T6N-R67W	MD Reference:	WELL @ 4766.0ft (Original Well Elev)
Well:	Great Western 25-24	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 25-24					
Well Position	+N-S	0.0 ft	Northing:	1,410,059.79 ft	Latitude:	40.457183
	+E-W	0.0 ft	Easting:	3,181,524.39 ft	Longitude:	-104.847675
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,752.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/2/2012	8.76	67.04	53,034

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	151.28	

Survey Program		Date	8/9/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
151.0	7,626.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
151.0	0.40	113.20	151.0	-0.2	0.5	0.4	0.26	0.26	0.00
245.0	0.60	133.60	245.0	-0.7	1.1	1.1	0.28	0.21	21.70
337.0	0.80	117.10	337.0	-1.3	2.1	2.1	0.31	0.22	-17.93
428.0	1.60	201.10	428.0	-2.8	2.2	3.5	1.88	0.88	92.31
512.0	3.90	209.60	511.9	-6.4	0.3	5.7	2.77	2.74	10.12
604.0	6.70	208.10	603.5	-13.8	-3.7	10.3	3.05	3.04	-1.63
694.0	7.70	201.50	692.8	-24.1	-8.4	17.0	1.44	1.11	-7.33
790.0	8.30	198.10	787.8	-36.6	-12.9	25.9	0.80	0.63	-3.54
885.0	9.20	190.40	881.7	-50.6	-16.4	36.5	1.55	0.95	-8.11
980.0	11.10	183.90	975.2	-67.2	-18.4	50.1	2.33	2.00	-6.84
1,075.0	12.80	178.60	1,068.2	-86.9	-18.8	67.1	2.13	1.79	-5.58
1,170.0	14.80	171.10	1,160.4	-109.4	-16.7	87.9	2.82	2.11	-7.89

Company:	Great Western	Local Co-ordinate Reference:	Well Great Western 25-24
Project:	SEC.25-T6N-R67W	TVD Reference:	WELL @ 4766.0ft (Original Well Elev)
Site:	Great Western 25-12-15 Pad Sec.25-T6N-R67W	MD Reference:	WELL @ 4766.0ft (Original Well Elev)
Well:	Great Western 25-24	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)	
1,265.0	14.90	166.80	1,252.3	-133.2	-12.0	111.1	1.16	0.11	-4.53	
1,360.0	15.10	162.80	1,344.0	-157.0	-5.5	135.0	1.11	0.21	-4.21	
1,455.0	17.90	155.80	1,435.1	-182.1	4.1	161.7	3.61	2.95	-7.37	
1,549.0	18.10	152.20	1,524.5	-208.2	16.8	190.7	1.20	0.21	-3.83	
1,644.0	19.40	148.70	1,614.5	-234.7	31.9	221.2	1.81	1.37	-3.68	
1,739.0	21.80	145.40	1,703.4	-262.7	50.1	254.5	2.81	2.53	-3.47	
1,834.0	22.50	143.60	1,791.4	-291.9	70.9	290.1	1.03	0.74	-1.89	
1,929.0	23.00	143.30	1,879.0	-321.4	92.8	326.5	0.54	0.53	-0.32	
2,024.0	25.00	145.90	1,965.8	-352.9	115.2	364.8	2.38	2.11	2.74	
2,118.0	25.50	144.70	2,050.8	-385.9	138.0	404.7	0.76	0.53	-1.28	
2,214.0	25.90	145.40	2,137.3	-420.0	161.8	446.1	0.52	0.42	0.73	
2,309.0	26.10	146.00	2,222.7	-454.4	185.3	487.5	0.35	0.21	0.63	
2,404.0	25.50	146.60	2,308.2	-488.8	208.3	528.7	0.69	-0.63	0.63	
2,497.0	25.10	147.00	2,392.3	-522.0	230.0	568.4	0.47	-0.43	0.43	
2,592.0	29.30	149.30	2,476.8	-559.0	252.9	611.7	4.56	4.42	2.42	
2,686.0	32.40	150.50	2,557.5	-600.7	277.0	659.9	3.36	3.30	1.28	
2,777.0	30.90	150.00	2,634.9	-642.1	300.7	707.6	1.67	-1.65	-0.55	
2,872.0	28.10	148.00	2,717.6	-682.2	324.8	754.4	3.12	-2.95	-2.11	
2,967.0	31.40	149.80	2,800.1	-722.6	349.1	801.4	3.60	3.47	1.89	
3,062.0	31.40	148.70	2,881.2	-765.1	374.4	850.9	0.60	0.00	-1.16	
3,157.0	28.90	146.60	2,963.3	-805.5	399.9	898.5	2.86	-2.63	-2.21	
3,249.0	29.40	146.30	3,043.7	-842.8	424.7	943.2	0.57	0.54	-0.33	
3,346.0	27.70	145.20	3,128.9	-881.1	450.7	989.3	1.83	-1.75	-1.13	
3,441.0	27.10	145.90	3,213.2	-917.2	475.5	1,032.8	0.72	-0.63	0.74	
3,535.0	25.30	145.20	3,297.5	-951.4	498.9	1,074.1	1.94	-1.91	-0.74	
3,630.0	24.80	145.00	3,383.6	-984.4	521.9	1,114.1	0.53	-0.53	-0.21	
3,725.0	26.40	149.40	3,469.3	-1,018.9	544.1	1,155.0	2.61	1.68	4.63	
3,819.0	31.60	151.40	3,551.5	-1,058.5	566.6	1,200.6	5.63	5.53	2.13	
3,914.0	33.20	151.20	3,631.7	-1,103.2	591.0	1,251.5	1.69	1.68	-0.21	
4,009.0	34.60	150.50	3,710.5	-1,149.5	616.8	1,304.4	1.53	1.47	-0.74	
4,103.0	34.70	151.50	3,787.9	-1,196.2	642.7	1,357.9	0.61	0.11	1.06	
4,198.0	32.00	151.50	3,867.2	-1,242.1	667.7	1,410.1	2.84	-2.84	0.00	
4,293.0	28.80	151.90	3,949.1	-1,284.4	690.5	1,458.2	3.38	-3.37	0.42	
4,387.0	25.90	151.40	4,032.6	-1,322.4	710.9	1,501.4	3.09	-3.09	-0.53	
4,482.0	23.50	152.40	4,118.9	-1,357.4	729.7	1,541.0	2.56	-2.53	1.05	
4,576.0	23.60	152.40	4,205.1	-1,390.7	747.1	1,578.6	0.11	0.11	0.00	
4,671.0	24.30	150.50	4,291.9	-1,424.6	765.5	1,617.2	1.10	0.74	-2.00	
4,765.0	22.00	150.80	4,378.3	-1,456.8	783.6	1,654.1	2.45	-2.45	0.32	
4,860.0	19.70	152.80	4,467.1	-1,486.6	799.6	1,687.9	2.53	-2.42	2.11	
4,955.0	19.40	153.50	4,556.6	-1,514.9	814.0	1,719.7	0.40	-0.32	0.74	
5,050.0	20.00	150.80	4,646.1	-1,543.2	828.9	1,751.7	1.15	0.63	-2.84	
5,144.0	18.70	151.00	4,734.8	-1,570.4	844.1	1,782.8	1.38	-1.38	0.21	
5,239.0	16.10	152.80	4,825.4	-1,595.5	857.5	1,811.2	2.79	-2.74	1.89	
5,334.0	12.80	150.80	4,917.4	-1,616.4	868.7	1,834.9	3.51	-3.47	-2.11	
5,429.0	10.00	150.50	5,010.5	-1,632.7	877.9	1,853.7	2.95	-2.95	-0.32	
5,524.0	9.00	148.70	5,104.2	-1,646.3	885.8	1,869.4	1.10	-1.05	-1.89	
5,619.0	6.70	143.80	5,198.3	-1,657.1	892.9	1,882.3	2.52	-2.42	-5.16	
5,714.0	6.00	146.60	5,292.7	-1,665.7	898.9	1,892.8	0.81	-0.74	2.95	
5,809.0	5.40	154.40	5,387.3	-1,673.9	903.6	1,902.2	1.03	-0.63	8.21	
5,904.0	4.50	164.40	5,481.9	-1,681.5	906.5	1,910.3	1.31	-0.95	10.53	
5,998.0	5.60	150.70	5,575.5	-1,689.1	909.7	1,918.4	1.73	1.17	-14.57	
6,093.0	3.80	159.10	5,670.2	-1,696.0	913.1	1,926.2	2.02	-1.89	8.84	
6,188.0	2.70	164.40	5,765.1	-1,701.1	914.9	1,931.5	1.20	-1.16	5.58	
6,283.0	2.10	172.50	5,860.0	-1,705.0	915.7	1,935.3	0.72	-0.63	8.53	

Company:	Great Western	Local Co-ordinate Reference:	Well Great Western 25-24
Project:	SEC.25-T6N-R67W	TVD Reference:	WELL @ 4766.0ft (Original Well Elev)
Site:	Great Western 25-12-15 Pad Sec.25-T6N-R67W	MD Reference:	WELL @ 4766.0ft (Original Well Elev)
Well:	Great Western 25-24	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)	
6,377.0	0.50	228.70	5,954.0	-1,707.0	915.6	1,937.0	1.99	-1.70	59.79	
6,422.9	0.50	227.35	5,999.9	-1,707.3	915.3	1,937.1	0.03	0.00	-2.95	
TARGET BHL 660'FSL, 1980'FWL										
6,472.0	0.50	225.90	6,049.0	-1,707.6	915.0	1,937.2	0.03	0.00	-2.95	
6,662.0	0.40	211.70	6,239.0	-1,708.7	914.1	1,937.7	0.08	-0.05	-7.47	
6,851.0	0.60	216.20	6,427.9	-1,710.1	913.1	1,938.5	0.11	0.11	2.38	
7,041.0	0.60	219.90	6,617.9	-1,711.6	911.9	1,939.3	0.02	0.00	1.95	
7,168.7	0.60	213.51	6,745.7	-1,712.7	911.1	1,939.8	0.05	0.00	-5.00	
LEGAL BOX 400' x 400', 659'FSL & 2000'FWL										
7,168.9	0.60	213.50	6,745.8	-1,712.7	911.1	1,939.8	0.05	0.00	-5.01	
TARGET CIRCLE 660'FSL, 1980'FWL										
7,231.0	0.60	210.40	6,807.9	-1,713.3	910.8	1,940.1	0.05	0.00	-4.99	
7,420.0	0.50	240.70	6,996.9	-1,714.5	909.5	1,940.7	0.16	-0.05	16.03	
7,576.0	0.40	240.70	7,152.9	-1,715.1	908.5	1,940.7	0.06	-0.06	0.00	
7,626.0	0.40	240.70	7,202.9	-1,715.3	908.2	1,940.7	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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