

Great Western

Well Name: **Kodak North FD 27-102HN**

Surface Location: Kodak North Pad Sec.26-T6N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4760.1

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1410693.93	3177146.07	40.459011	-104.863392	
RKB - 16.5' WELL @ 4776.6ft (RKB - 16.5')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 2252'FNL & 1940'FWL, Sec.26	1.0	0.0	0.0	Point
BHL 1475'FNL & 470'FWL, Sec.27	6930.6	767.1	-6692.4	Point
Entry Pt. 1425'FNL & 1825'FWL, Sec.26	6930.6	827.1	-115.8	Point



Azimuths to True North
Magnetic North: 8.59°

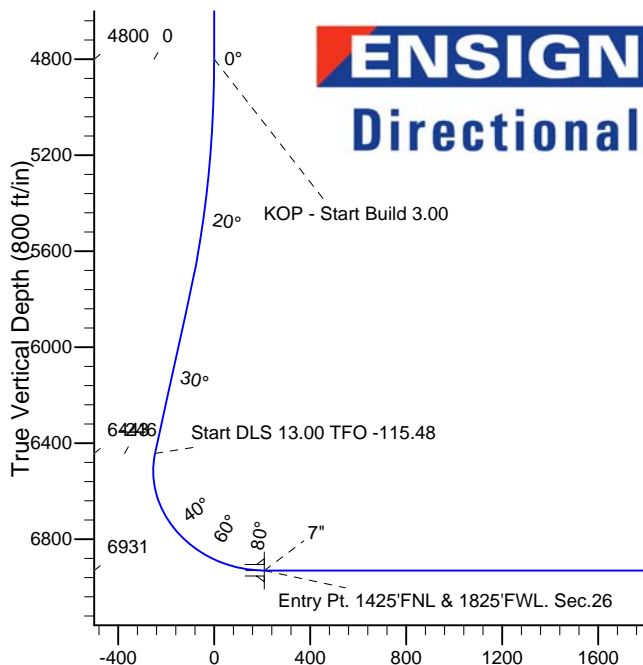
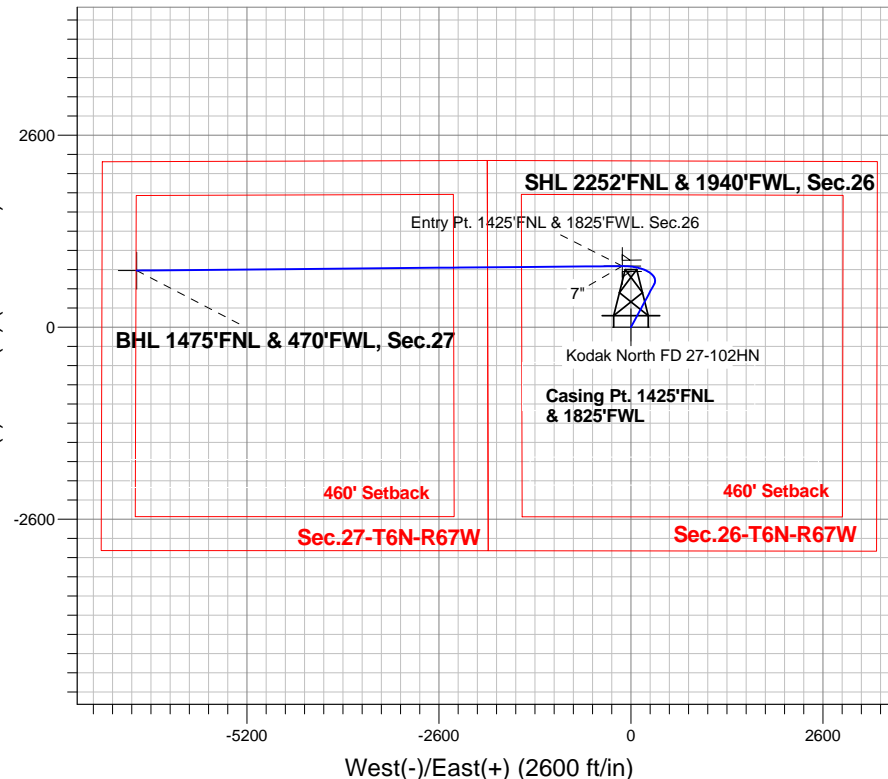
Magnetic Field
Strength: 52895.6srT
Dip Angle: 67.00°
Date: 11/21/2013
Model: IGRF2010

Kodak North Pad Sec.26-T6N-R67W
Kodak North FD 27-102HN
Plan #1 (11-21-13)
12:45, November 22 2013

ANNOTATIONS

TVD	MD	Annotation
4800.0	4800.0	KOP - Start Build 3.00
6442.6	6597.4	Start DLS 13.00 TFO -115.48
6930.6	13975.7	TD at 13975.7

South(-)/North(+) (2600 ft/in)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4800.0	0.00	0.00	4800.0	0.0	0.0	0.00	0.00	0.0	
3	5814.1	30.42	28.41	5767.1	231.3	125.1	3.00	28.41	-97.9	
4	6597.4	30.42	28.41	6442.6	580.2	313.8	0.00	0.00	-245.7	
5	7398.8	90.00	269.48	6930.6	827.1	-115.8	13.00	-115.48	209.2	Entry Pt. 1425'FNL & 1825'FWL, Sec.26
6	7399.1	90.00	269.48	6930.6	827.1	-116.1	1.00	-90.00	209.5	
7	13975.7	90.00	269.48	6930.6	767.1	-6692.4	0.00	0.00	6736.2	BHL 1475'FNL & 470'FWL, Sec.27

BHL 1475'FNL & 470'FWL, Sec.27

TD at 13975.7

Vertical Section at 276.54° (800 ft/in)



Great Western

SEC.26-T6N-R67W

Kodak North Pad Sec.26-T6N-R67W

Kodak North FD 27-102HN

Wellbore #1

Plan: Plan #1 (11-21-13)

Standard Planning Report

22 November, 2013

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,814.1	30.42	28.41	5,767.1	231.3	125.1	3.00	3.00	0.00	28.41	
6,597.4	30.42	28.41	6,442.6	580.2	313.8	0.00	0.00	0.00	0.00	
7,398.8	90.00	269.48	6,930.6	827.1	-115.8	13.00	7.43	-14.84	-115.48	Entry Pt. 1425'FNL
7,399.1	90.00	269.48	6,930.6	827.1	-116.1	1.00	0.00	-1.00	-90.00	
13,975.7	90.00	269.48	6,930.6	767.1	-6,692.4	0.00	0.00	0.00	0.00	BHL 1475'FNL & 475'FNL

Database:	Landmark	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Company:	Great Western	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Project:	SEC.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site:	Kodak North Pad Sec.26-T6N-R67W	North Reference:	True
Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-21-13)		

Planned 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
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 2252'FNL & 1940'FWL, Sec.26									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 3.00									
4,900.0	3.00	28.41	4,900.0	2.3	1.2	-1.0	3.00	3.00	0.00
5,000.0	6.00	28.41	4,999.6	9.2	5.0	-3.9	3.00	3.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
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Project:	SEC.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site:	Kodak North Pad Sec.26-T6N-R67W	North Reference:	True
Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-21-13)		

Planned 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)
5,100.0	9.00	28.41	5,098.8	20.7	11.2	-8.8	3.00	3.00	0.00
5,200.0	12.00	28.41	5,197.1	36.7	19.9	-15.5	3.00	3.00	0.00
5,300.0	15.00	28.41	5,294.3	57.2	31.0	-24.2	3.00	3.00	0.00
5,400.0	18.00	28.41	5,390.2	82.2	44.5	-34.8	3.00	3.00	0.00
5,500.0	21.00	28.41	5,484.4	111.6	60.3	-47.3	3.00	3.00	0.00
5,600.0	24.00	28.41	5,576.8	145.2	78.6	-61.5	3.00	3.00	0.00
5,700.0	27.00	28.41	5,667.1	183.1	99.0	-77.5	3.00	3.00	0.00
5,800.0	30.00	28.41	5,754.9	225.1	121.7	-95.3	3.00	3.00	0.00
5,814.1	30.42	28.41	5,767.1	231.3	125.1	-97.9	3.00	3.00	0.00
5,900.0	30.42	28.41	5,841.2	269.6	145.8	-114.2	0.00	0.00	0.00
6,000.0	30.42	28.41	5,927.4	314.1	169.9	-133.0	0.00	0.00	0.00
6,100.0	30.42	28.41	6,013.7	358.6	194.0	-151.9	0.00	0.00	0.00
6,200.0	30.42	28.41	6,099.9	403.2	218.1	-170.7	0.00	0.00	0.00
6,300.0	30.42	28.41	6,186.1	447.7	242.2	-189.6	0.00	0.00	0.00
6,400.0	30.42	28.41	6,272.3	492.3	266.3	-208.5	0.00	0.00	0.00
6,500.0	30.42	28.41	6,358.6	536.8	290.3	-227.3	0.00	0.00	0.00
6,597.4	30.42	28.41	6,442.6	580.2	313.8	-245.7	0.00	0.00	0.00
Start DLS 13.00 TFO -115.48									
6,600.0	30.28	27.81	6,444.8	581.3	314.4	-246.2	12.90	-5.50	-23.09
6,700.0	27.21	1.32	6,532.8	626.7	326.8	-253.3	13.00	-3.07	-26.49
6,800.0	29.60	334.25	6,621.2	672.0	316.5	-237.9	13.00	2.39	-27.08
6,900.0	36.39	313.70	6,705.2	714.9	284.2	-200.9	13.00	6.78	-20.54
7,000.0	45.62	299.67	6,780.8	753.3	231.5	-144.2	13.00	9.24	-14.03
7,100.0	56.09	289.69	6,843.9	785.1	161.1	-70.6	13.00	10.47	-9.98
7,200.0	67.19	281.96	6,891.4	808.7	76.5	16.1	13.00	11.09	-7.72
7,300.0	78.60	275.43	6,920.8	822.9	-17.8	111.3	13.00	11.41	-6.53
7,398.8	90.00	269.48	6,930.6	827.1	-115.8	209.2	13.00	11.54	-6.02
7" - Entry Pt. 1425'FNL & 1825'FWL. Sec.26									
7,399.1	90.00	269.48	6,930.6	827.1	-116.1	209.5	1.23	0.35	-1.18
7,400.0	90.00	269.48	6,930.6	827.1	-117.0	210.4	0.00	0.00	0.00
7,500.0	90.00	269.48	6,930.6	826.2	-217.0	309.6	0.00	0.00	0.00
7,600.0	90.00	269.48	6,930.6	825.3	-317.0	408.9	0.00	0.00	0.00
7,700.0	90.00	269.48	6,930.6	824.4	-417.0	508.1	0.00	0.00	0.00
7,800.0	90.00	269.48	6,930.6	823.4	-517.0	607.4	0.00	0.00	0.00
7,900.0	90.00	269.48	6,930.6	822.5	-616.9	706.6	0.00	0.00	0.00
8,000.0	90.00	269.48	6,930.6	821.6	-716.9	805.8	0.00	0.00	0.00
8,100.0	90.00	269.48	6,930.6	820.7	-816.9	905.1	0.00	0.00	0.00
8,200.0	90.00	269.48	6,930.6	819.8	-916.9	1,004.3	0.00	0.00	0.00
8,300.0	90.00	269.48	6,930.6	818.9	-1,016.9	1,103.6	0.00	0.00	0.00
8,400.0	90.00	269.48	6,930.6	818.0	-1,116.9	1,202.8	0.00	0.00	0.00
8,500.0	90.00	269.48	6,930.6	817.0	-1,216.9	1,302.0	0.00	0.00	0.00
8,600.0	90.00	269.48	6,930.6	816.1	-1,316.9	1,401.3	0.00	0.00	0.00
8,700.0	90.00	269.48	6,930.6	815.2	-1,416.9	1,500.5	0.00	0.00	0.00
8,800.0	90.00	269.48	6,930.6	814.3	-1,516.9	1,599.8	0.00	0.00	0.00
8,900.0	90.00	269.48	6,930.6	813.4	-1,616.9	1,699.0	0.00	0.00	0.00
9,000.0	90.00	269.48	6,930.6	812.5	-1,716.9	1,798.3	0.00	0.00	0.00
9,100.0	90.00	269.48	6,930.6	811.6	-1,816.9	1,897.5	0.00	0.00	0.00
9,200.0	90.00	269.48	6,930.6	810.7	-1,916.9	1,996.7	0.00	0.00	0.00
9,300.0	90.00	269.48	6,930.6	809.7	-2,016.9	2,096.0	0.00	0.00	0.00
9,400.0	90.00	269.48	6,930.6	808.8	-2,116.9	2,195.2	0.00	0.00	0.00
9,500.0	90.00	269.48	6,930.6	807.9	-2,216.9	2,294.5	0.00	0.00	0.00
9,600.0	90.00	269.48	6,930.6	807.0	-2,316.9	2,393.7	0.00	0.00	0.00
9,700.0	90.00	269.48	6,930.6	806.1	-2,416.9	2,492.9	0.00	0.00	0.00
9,800.0	90.00	269.48	6,930.6	805.2	-2,516.9	2,592.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
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Project:	SEC.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site:	Kodak North Pad Sec.26-T6N-R67W	North Reference:	True
Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-21-13)		

Planned 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)
9,900.0	90.00	269.48	6,930.6	804.3	-2,616.9	2,691.4	0.00	0.00	0.00
10,000.0	90.00	269.48	6,930.6	803.4	-2,716.9	2,790.7	0.00	0.00	0.00
10,100.0	90.00	269.48	6,930.6	802.4	-2,816.9	2,889.9	0.00	0.00	0.00
10,200.0	90.00	269.48	6,930.6	801.5	-2,916.9	2,989.2	0.00	0.00	0.00
10,300.0	90.00	269.48	6,930.6	800.6	-3,016.8	3,088.4	0.00	0.00	0.00
10,400.0	90.00	269.48	6,930.6	799.7	-3,116.8	3,187.6	0.00	0.00	0.00
10,500.0	90.00	269.48	6,930.6	798.8	-3,216.8	3,286.9	0.00	0.00	0.00
10,600.0	90.00	269.48	6,930.6	797.9	-3,316.8	3,386.1	0.00	0.00	0.00
10,700.0	90.00	269.48	6,930.6	797.0	-3,416.8	3,485.4	0.00	0.00	0.00
10,800.0	90.00	269.48	6,930.6	796.1	-3,516.8	3,584.6	0.00	0.00	0.00
10,900.0	90.00	269.48	6,930.6	795.1	-3,616.8	3,683.8	0.00	0.00	0.00
11,000.0	90.00	269.48	6,930.6	794.2	-3,716.8	3,783.1	0.00	0.00	0.00
11,100.0	90.00	269.48	6,930.6	793.3	-3,816.8	3,882.3	0.00	0.00	0.00
11,200.0	90.00	269.48	6,930.6	792.4	-3,916.8	3,981.6	0.00	0.00	0.00
11,300.0	90.00	269.48	6,930.6	791.5	-4,016.8	4,080.8	0.00	0.00	0.00
11,400.0	90.00	269.48	6,930.6	790.6	-4,116.8	4,180.0	0.00	0.00	0.00
11,500.0	90.00	269.48	6,930.6	789.7	-4,216.8	4,279.3	0.00	0.00	0.00
11,600.0	90.00	269.48	6,930.6	788.8	-4,316.8	4,378.5	0.00	0.00	0.00
11,700.0	90.00	269.48	6,930.6	787.8	-4,416.8	4,477.8	0.00	0.00	0.00
11,800.0	90.00	269.48	6,930.6	786.9	-4,516.8	4,577.0	0.00	0.00	0.00
11,900.0	90.00	269.48	6,930.6	786.0	-4,616.8	4,676.3	0.00	0.00	0.00
12,000.0	90.00	269.48	6,930.6	785.1	-4,716.8	4,775.5	0.00	0.00	0.00
12,100.0	90.00	269.48	6,930.6	784.2	-4,816.8	4,874.7	0.00	0.00	0.00
12,200.0	90.00	269.48	6,930.6	783.3	-4,916.8	4,974.0	0.00	0.00	0.00
12,300.0	90.00	269.48	6,930.6	782.4	-5,016.8	5,073.2	0.00	0.00	0.00
12,400.0	90.00	269.48	6,930.6	781.5	-5,116.8	5,172.5	0.00	0.00	0.00
12,500.0	90.00	269.48	6,930.6	780.5	-5,216.8	5,271.7	0.00	0.00	0.00
12,600.0	90.00	269.48	6,930.6	779.6	-5,316.8	5,370.9	0.00	0.00	0.00
12,700.0	90.00	269.48	6,930.6	778.7	-5,416.7	5,470.2	0.00	0.00	0.00
12,800.0	90.00	269.48	6,930.6	777.8	-5,516.7	5,569.4	0.00	0.00	0.00
12,900.0	90.00	269.48	6,930.6	776.9	-5,616.7	5,668.7	0.00	0.00	0.00
13,000.0	90.00	269.48	6,930.6	776.0	-5,716.7	5,767.9	0.00	0.00	0.00
13,100.0	90.00	269.48	6,930.6	775.1	-5,816.7	5,867.2	0.00	0.00	0.00
13,200.0	90.00	269.48	6,930.6	774.2	-5,916.7	5,966.4	0.00	0.00	0.00
13,300.0	90.00	269.48	6,930.6	773.2	-6,016.7	6,065.6	0.00	0.00	0.00
13,400.0	90.00	269.48	6,930.6	772.3	-6,116.7	6,164.9	0.00	0.00	0.00
13,500.0	90.00	269.48	6,930.6	771.4	-6,216.7	6,264.1	0.00	0.00	0.00
13,600.0	90.00	269.48	6,930.6	770.5	-6,316.7	6,363.4	0.00	0.00	0.00
13,700.0	90.00	269.48	6,930.6	769.6	-6,416.7	6,462.6	0.00	0.00	0.00
13,800.0	90.00	269.48	6,930.6	768.7	-6,516.7	6,561.8	0.00	0.00	0.00
13,900.0	90.00	269.48	6,930.6	767.8	-6,616.7	6,661.1	0.00	0.00	0.00
13,975.7	90.00	269.48	6,930.6	767.1	-6,692.4	6,736.2	0.00	0.00	0.00
BHL 1475'FNL & 470'FWL, Sec.27									

Database:	Landmark	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Company:	Great Western	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Project:	SEC.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site:	Kodak North Pad Sec.26-T6N-R67W	North Reference:	True
Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-21-13)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
BHL 1475'FNL & 470'	0.00	0.00	6,930.6	767.1	-6,692.4	1,411,412.91	3,170,448.60	40.461114	-104.887442
- plan hits target center									
- Point									
Entry Pt. 1425'FNL &	0.00	0.00	6,930.6	827.1	-115.8	1,411,520.15	3,177,024.37	40.461281	-104.863808
- plan hits target center									
- Point									
SHL 2252'FNL & 194'	0.00	0.00	1.0	0.0	0.0	1,410,693.90	3,177,146.07	40.459011	-104.863392
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(")	(")
7,398.8	6,930.6	7"		7	7-1/2

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
4,800.0	4,800.0	0.0	0.0	KOP - Start Build 3.00
6,597.4	6,442.6	580.2	313.8	Start DLS 13.00 TFO -115.48
13,975.7	6,930.6	767.1	-6,692.4	TD at 13975.7



Great Western

SEC.26-T6N-R67W

Kodak North Pad Sec.26-T6N-R67W

Kodak North FD 27-102HN

Wellbore #1

Plan #1 (11-21-13)

Anticollision Report

22 November, 2013

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (11-21-13)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 11/22/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	13,975.7	Plan #1 (11-21-13) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Kodak North Pad Sec.26-T6N-R67W						
Kodak North FD 25-119HC - Wellbore #1 - Plan #1 (11-2	4,800.0	4,800.0	30.1	8.7	1.408	Level 3, CC, ES, SF
Kodak North FD 27-019HN - Wellbore #1 - Plan #1 (11-2	2,900.0	2,900.0	89.9	77.1	7.016	CC
Kodak North FD 27-019HN - Wellbore #1 - Plan #1 (11-2	3,000.0	2,999.4	90.2	77.0	6.805	ES
Kodak North FD 27-019HN - Wellbore #1 - Plan #1 (11-2	3,100.0	3,098.2	91.6	77.9	6.687	SF
Kodak North FD 27-062HN - Wellbore #1 - Plan #1 (11-2	3,900.0	3,900.0	60.4	43.1	3.489	CC, ES
Kodak North FD 27-062HN - Wellbore #1 - Plan #1 (11-2	13,975.7	14,118.0	642.7	255.5	1.660	SF
Kodak North FD 27-099HC - Wellbore #1 - Plan #1 (11-2	4,600.0	4,600.0	30.3	9.9	1.483	Level 3, CC, ES
Kodak North FD 27-099HC - Wellbore #1 - Plan #1 (11-2	13,975.7	14,230.0	432.2	81.0	1.231	Level 2, SF

Offset Design		Kodak North Pad Sec.26-T6N-R67W - Kodak North FD 25-119HC - Wellbore #1 - Plan #1 (11-21-13)										Offset Site Error:		0.0 ft		
Survey Program: 0-MWD														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
0.0	0.0	0.0	0.0	0.0	0.0	-90.08	0.0	-30.1	30.1							
100.0	100.0	100.0	100.0	0.1	0.1	-90.08	0.0	-30.1	30.1	29.8	0.22	133.713				
200.0	200.0	200.0	200.0	0.3	0.3	-90.08	0.0	-30.1	30.1	29.4	0.67	44.571				
300.0	300.0	300.0	300.0	0.6	0.6	-90.08	0.0	-30.1	30.1	28.9	1.12	26.743				
400.0	400.0	400.0	400.0	0.8	0.8	-90.08	0.0	-30.1	30.1	28.5	1.57	19.102				
500.0	500.0	500.0	500.0	1.0	1.0	-90.08	0.0	-30.1	30.1	28.0	2.02	14.857				
600.0	600.0	600.0	600.0	1.2	1.2	-90.08	0.0	-30.1	30.1	27.6	2.47	12.156				
700.0	700.0	700.0	700.0	1.5	1.5	-90.08	0.0	-30.1	30.1	27.1	2.92	10.286				
800.0	800.0	800.0	800.0	1.7	1.7	-90.08	0.0	-30.1	30.1	26.7	3.37	8.914				
900.0	900.0	900.0	900.0	1.9	1.9	-90.08	0.0	-30.1	30.1	26.2	3.82	7.865				
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-90.08	0.0	-30.1	30.1	25.8	4.27	7.038				
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-90.08	0.0	-30.1	30.1	25.3	4.72	6.367				
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-90.08	0.0	-30.1	30.1	24.9	5.17	5.814				
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-90.08	0.0	-30.1	30.1	24.4	5.62	5.349				
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-90.08	0.0	-30.1	30.1	24.0	6.07	4.952				
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-90.08	0.0	-30.1	30.1	23.5	6.52	4.611				
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-90.08	0.0	-30.1	30.1	23.1	6.97	4.313				
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-90.08	0.0	-30.1	30.1	22.6	7.42	4.052				
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-90.08	0.0	-30.1	30.1	22.2	7.87	3.820				
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	-90.08	0.0	-30.1	30.1	21.7	8.32	3.614				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-90.08	0.0	-30.1	30.1	21.3	8.77	3.429		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-90.08	0.0	-30.1	30.1	20.8	9.22	3.261		
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-90.08	0.0	-30.1	30.1	20.4	9.66	3.110		
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	-90.08	0.0	-30.1	30.1	19.9	10.11	2.971		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-90.08	0.0	-30.1	30.1	19.5	10.56	2.845		
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-90.08	0.0	-30.1	30.1	19.0	11.01	2.729		
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-90.08	0.0	-30.1	30.1	18.6	11.46	2.622		
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	-90.08	0.0	-30.1	30.1	18.1	11.91	2.523		
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-90.08	0.0	-30.1	30.1	17.7	12.36	2.431		
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-90.08	0.0	-30.1	30.1	17.2	12.81	2.346		
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-90.08	0.0	-30.1	30.1	16.8	13.26	2.266		
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	-90.08	0.0	-30.1	30.1	16.3	13.71	2.192		
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	-90.08	0.0	-30.1	30.1	15.9	14.16	2.122		
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	-90.08	0.0	-30.1	30.1	15.4	14.61	2.057		
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	-90.08	0.0	-30.1	30.1	15.0	15.06	1.996		
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	-90.08	0.0	-30.1	30.1	14.5	15.51	1.938		
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	-90.08	0.0	-30.1	30.1	14.1	15.96	1.883		
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	-90.08	0.0	-30.1	30.1	13.6	16.41	1.832		
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	-90.08	0.0	-30.1	30.1	13.2	16.86	1.783		
3,900.0	3,900.0	3,900.0	3,900.0	8.7	8.7	-90.08	0.0	-30.1	30.1	12.7	17.31	1.737		
4,000.0	4,000.0	4,000.0	4,000.0	8.9	8.9	-90.08	0.0	-30.1	30.1	12.3	17.76	1.693		
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	-90.08	0.0	-30.1	30.1	11.8	18.21	1.651		
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	-90.08	0.0	-30.1	30.1	11.4	18.66	1.611		
4,300.0	4,300.0	4,300.0	4,300.0	9.6	9.6	-90.08	0.0	-30.1	30.1	10.9	19.11	1.573		
4,400.0	4,400.0	4,400.0	4,400.0	9.8	9.8	-90.08	0.0	-30.1	30.1	10.5	19.55	1.537		
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	-90.08	0.0	-30.1	30.1	10.0	20.00	1.502		
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	-90.08	0.0	-30.1	30.1	9.6	20.45	1.469	Level 3	
4,700.0	4,700.0	4,700.0	4,700.0	10.5	10.5	-90.08	0.0	-30.1	30.1	9.2	20.90	1.438	Level 3	
4,800.0	4,800.0	4,800.0	4,800.0	10.7	10.7	-90.08	0.0	-30.1	30.1	8.7	21.35	1.408	Level 3, CC, ES, SF	
4,900.0	4,900.0	4,900.0	4,900.0	10.9	10.9	-122.65	0.0	-30.1	31.4	9.6	21.79	1.440	Level 3	
5,000.0	4,999.6	4,999.6	4,999.6	11.1	11.1	-133.03	0.0	-30.1	36.2	14.0	22.19	1.632		
5,100.0	5,098.8	5,098.8	5,098.8	11.3	11.3	-144.75	0.0	-30.1	46.2	23.6	22.53	2.049		
5,200.0	5,197.1	5,197.1	5,197.1	11.6	11.6	-154.28	0.0	-30.1	62.0	39.2	22.79	2.720		
5,300.0	5,294.3	5,294.3	5,294.3	11.8	11.8	-161.00	0.0	-30.1	83.7	60.7	22.98	3.641		
5,400.0	5,390.2	5,391.5	5,391.5	12.1	12.0	-165.14	0.7	-30.5	110.8	87.6	23.13	4.789		
5,500.0	5,484.4	5,490.4	5,489.9	12.4	12.2	-164.67	8.7	-35.5	140.7	117.5	23.25	6.051		
5,600.0	5,576.8	5,588.6	5,586.1	12.7	12.5	-161.32	25.1	-45.7	173.1	149.7	23.40	7.397		
5,700.0	5,667.1	5,684.6	5,677.8	13.1	12.7	-156.60	49.2	-60.7	208.7	185.1	23.61	8.838		
5,800.0	5,754.9	5,777.2	5,763.1	13.6	12.9	-151.35	79.8	-79.7	248.5	224.5	23.96	10.373		
5,900.0	5,841.2	5,866.0	5,841.3	14.1	13.2	-146.53	115.4	-101.9	291.7	267.0	24.76	11.782		
6,000.0	5,927.4	5,953.1	5,916.6	14.7	13.6	-142.51	152.6	-125.0	336.4	310.7	25.70	13.090		
6,100.0	6,013.7	6,040.3	5,992.0	15.3	14.0	-139.41	189.8	-148.1	382.1	355.4	26.68	14.323		
6,200.0	6,099.9	6,127.4	6,067.3	16.0	14.5	-136.95	227.0	-171.3	428.6	400.9	27.70	15.471		
6,300.0	6,186.1	6,214.6	6,142.7	16.7	15.0	-134.96	264.2	-194.4	475.5	446.8	28.77	16.530		
6,400.0	6,272.3	6,301.8	6,218.0	17.4	15.5	-133.33	301.4	-217.5	522.9	493.0	29.88	17.502		
6,500.0	6,358.6	6,388.9	6,293.4	18.1	16.0	-131.96	338.6	-240.7	570.5	539.5	31.02	18.389		
6,600.0	6,444.8	6,476.1	6,368.8	18.9	16.6	-130.23	375.8	-263.8	618.4	586.1	32.25	19.171		
6,700.0	6,532.8	7,806.6	7,108.6	19.5	23.7	-178.17	753.3	324.9	589.5	552.5	37.02	15.925		
6,800.0	6,621.2	7,797.0	7,108.6	20.0	23.5	169.06	753.1	315.3	494.2	454.8	39.31	12.572		
6,900.0	6,705.2	7,765.4	7,108.6	20.4	22.9	172.97	752.6	283.6	405.1	368.2	36.89	10.983		
7,000.0	6,780.8	7,713.2	7,108.6	20.7	22.1	-179.71	751.9	231.5	327.8	294.7	33.08	9.908		
7,100.0	6,843.9	7,643.3	7,108.6	20.9	21.1	-171.94	750.8	161.6	266.9	237.9	28.95	9.218		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design Kodak North Pad Sec.26-T6N-R67W - Kodak North FD 25-119HC - Wellbore #1 - Plan #1 (11-21-13)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis			Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,200.0	6,891.4	7,555.4	7,108.5	21.0	20.6	-163.98	749.5	73.7	225.1	199.4	25.70	8.756	
7,300.0	6,920.8	7,425.8	7,089.0	21.1	20.5	-151.09	737.9	-53.4	191.9	165.7	26.14	7.342	
7,400.0	6,930.6	7,318.0	7,048.2	21.4	20.5	-136.72	716.0	-150.4	165.2	134.8	30.32	5.447	
7,500.0	6,930.6	7,232.1	7,001.2	22.1	20.5	-117.69	691.6	-218.0	152.0	116.3	35.70	4.256	
7,504.7	6,930.6	7,228.7	6,999.1	22.2	20.5	-116.80	690.5	-220.4	151.9	116.0	35.92	4.230	
7,600.0	6,930.6	7,169.2	6,959.8	23.4	20.4	-100.64	670.4	-260.2	167.5	128.6	38.99	4.298	
7,700.0	6,930.6	7,125.0	6,927.7	25.2	20.3	-89.02	654.0	-285.7	215.1	174.5	40.59	5.299	
7,800.0	6,930.6	7,088.1	6,899.2	27.1	20.2	-80.40	639.5	-304.1	283.0	241.4	41.61	6.803	
7,900.0	6,930.6	7,061.3	6,877.7	29.2	20.1	-74.94	628.6	-315.8	362.1	319.4	42.69	8.481	
8,000.0	6,930.6	7,040.2	6,860.3	31.4	20.1	-71.10	619.8	-324.0	447.3	403.4	43.94	10.181	
8,100.0	6,930.6	7,025.0	6,847.6	33.7	20.0	-68.59	613.4	-329.3	536.4	490.9	45.44	11.804	
8,200.0	6,930.6	7,009.2	6,834.2	36.1	20.0	-66.19	606.7	-334.2	627.9	581.0	46.91	13.386	
8,300.0	6,930.6	7,000.0	6,826.3	38.5	20.0	-64.88	602.7	-336.9	721.2	672.4	48.71	14.806	
8,400.0	6,930.6	6,987.8	6,815.8	41.0	19.9	-63.24	597.4	-340.1	815.6	765.3	50.34	16.202	
8,500.0	6,930.6	6,975.0	6,804.7	43.5	19.9	-61.64	591.8	-343.2	911.1	859.1	51.93	17.542	

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.70	-1.1	89.9	89.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.70	-1.1	89.9	89.9	89.7	0.22	399.930		
200.0	200.0	200.0	200.0	0.3	0.3	90.70	-1.1	89.9	89.9	89.2	0.67	133.310		
300.0	300.0	300.0	300.0	0.6	0.6	90.70	-1.1	89.9	89.9	88.8	1.12	79.986		
400.0	400.0	400.0	400.0	0.8	0.8	90.70	-1.1	89.9	89.9	88.3	1.57	57.133		
500.0	500.0	500.0	500.0	1.0	1.0	90.70	-1.1	89.9	89.9	87.9	2.02	44.437		
600.0	600.0	600.0	600.0	1.2	1.2	90.70	-1.1	89.9	89.9	87.4	2.47	36.357		
700.0	700.0	700.0	700.0	1.5	1.5	90.70	-1.1	89.9	89.9	87.0	2.92	30.764		
800.0	800.0	800.0	800.0	1.7	1.7	90.70	-1.1	89.9	89.9	86.5	3.37	26.662		
900.0	900.0	900.0	900.0	1.9	1.9	90.70	-1.1	89.9	89.9	86.1	3.82	23.525		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.70	-1.1	89.9	89.9	85.6	4.27	21.049		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	90.70	-1.1	89.9	89.9	85.2	4.72	19.044		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	90.70	-1.1	89.9	89.9	84.7	5.17	17.388		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	90.70	-1.1	89.9	89.9	84.3	5.62	15.997		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	90.70	-1.1	89.9	89.9	83.8	6.07	14.812		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	90.70	-1.1	89.9	89.9	83.4	6.52	13.791		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	90.70	-1.1	89.9	89.9	82.9	6.97	12.901		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	90.70	-1.1	89.9	89.9	82.5	7.42	12.119		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	90.70	-1.1	89.9	89.9	82.0	7.87	11.427		
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	90.70	-1.1	89.9	89.9	81.6	8.32	10.809		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	90.70	-1.1	89.9	89.9	81.1	8.77	10.255		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	90.70	-1.1	89.9	89.9	80.7	9.22	9.754		
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	90.70	-1.1	89.9	89.9	80.2	9.66	9.301		
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	90.70	-1.1	89.9	89.9	79.8	10.11	8.887		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	90.70	-1.1	89.9	89.9	79.3	10.56	8.509		
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	90.70	-1.1	89.9	89.9	78.9	11.01	8.162		
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	90.70	-1.1	89.9	89.9	78.4	11.46	7.842		
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	90.70	-1.1	89.9	89.9	78.0	11.91	7.546		
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	90.70	-1.1	89.9	89.9	77.5	12.36	7.271		
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	90.70	-1.1	89.9	89.9	77.1	12.81	7.016 CC		
3,000.0	3,000.0	2,999.4	2,999.3	6.6	6.6	89.06	1.5	90.2	90.2	77.0	13.26	6.805 ES		
3,100.0	3,100.0	3,098.2	3,097.9	6.9	6.9	84.30	9.1	91.2	91.6	77.9	13.70	6.687 SF		
3,200.0	3,200.0	3,196.0	3,194.8	7.1	7.1	76.87	21.6	92.7	95.4	81.2	14.15	6.739		
3,300.0	3,300.0	3,292.3	3,289.5	7.3	7.3	67.79	38.7	94.9	103.0	88.4	14.60	7.057		
3,400.0	3,400.0	3,386.6	3,381.3	7.5	7.5	58.38	60.1	97.6	116.1	101.0	15.04	7.717		
3,500.0	3,500.0	3,478.5	3,469.7	7.8	7.8	49.78	85.2	100.7	135.3	119.9	15.48	8.742		
3,600.0	3,600.0	3,567.7	3,554.2	8.0	8.1	42.56	113.5	104.3	160.8	144.9	15.91	10.108		
3,700.0	3,700.0	3,654.0	3,634.6	8.2	8.4	36.79	144.7	108.2	192.1	175.8	16.34	11.762		
3,800.0	3,800.0	3,737.2	3,710.6	8.4	8.8	32.26	178.1	112.4	228.7	212.0	16.76	13.648		
3,900.0	3,900.0	3,817.1	3,782.2	8.7	9.2	28.71	213.2	116.8	270.1	252.9	17.19	15.718		
4,000.0	4,000.0	3,900.0	3,854.9	8.9	9.7	25.72	252.8	121.8	315.9	298.2	17.63	17.915		
4,100.0	4,100.0	3,973.4	3,918.0	9.1	10.1	23.56	290.0	126.4	365.0	346.9	18.07	20.203		
4,200.0	4,200.0	4,059.2	3,991.6	9.3	10.7	21.57	333.8	131.9	415.0	396.5	18.54	22.381		
4,300.0	4,300.0	4,144.9	4,065.1	9.6	11.4	20.00	377.5	137.4	465.4	446.4	19.04	24.444		
4,400.0	4,400.0	4,230.7	4,138.7	9.8	12.0	18.74	421.3	142.9	516.0	496.4	19.55	26.390		
4,500.0	4,500.0	4,316.5	4,212.2	10.0	12.7	17.70	465.1	148.4	566.7	546.6	20.08	28.222		
4,600.0	4,600.0	4,402.2	4,285.8	10.2	13.4	16.83	508.8	153.9	617.5	596.9	20.62	29.945		
4,700.0	4,700.0	4,488.0	4,359.3	10.5	14.1	16.09	552.6	159.4	668.4	647.3	21.18	31.563		
4,800.0	4,800.0	4,573.7	4,432.9	10.7	14.8	15.46	596.3	164.9	719.4	697.7	21.75	33.083		
4,900.0	4,900.0	4,660.7	4,507.5	10.9	15.5	-13.17	640.7	170.5	768.3	746.5	21.78	35.281		
5,000.0	4,999.6	4,750.0	4,584.0	11.1	16.3	-13.46	686.3	176.2	812.7	790.4	22.28	36.474		
5,100.0	5,098.8	4,841.2	4,662.3	11.3	17.1	-13.81	732.8	182.0	852.6	829.8	22.76	37.460		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design Kodak North Pad Sec.26-T6N-R67W - Kodak North FD 27-019HN - Wellbore #1 - Plan #1 (11-21-13)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.0	5,197.1	4,934.3	4,742.1	11.6	18.0	-14.22	780.3	188.0	887.8	864.6	23.21	38.255	
5,300.0	5,294.3	5,028.9	4,823.2	11.8	18.8	-14.70	828.6	194.0	918.4	894.8	23.63	38.870	
5,400.0	5,390.2	5,124.7	4,905.4	12.1	19.7	-15.25	877.5	200.2	944.3	920.3	24.02	39.313	
5,500.0	5,484.4	5,221.5	4,988.5	12.4	20.6	-15.88	926.9	206.4	965.4	941.0	24.39	39.588	
5,600.0	5,576.8	5,319.1	5,072.1	12.7	21.5	-16.59	976.7	212.6	981.8	957.1	24.73	39.696	
5,700.0	5,667.1	5,417.1	5,156.2	13.1	22.4	-17.41	1,026.7	218.9	993.5	968.4	25.07	39.631	

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	60.4	60.4					
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	60.4	60.4	60.2	0.22	268.664		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	60.4	60.4	59.7	0.67	89.555		
300.0	300.0	300.0	300.0	0.6	0.6	90.00	0.0	60.4	60.4	59.3	1.12	53.733		
400.0	400.0	400.0	400.0	0.8	0.8	90.00	0.0	60.4	60.4	58.8	1.57	38.381		
500.0	500.0	500.0	500.0	1.0	1.0	90.00	0.0	60.4	60.4	58.4	2.02	29.852		
600.0	600.0	600.0	600.0	1.2	1.2	90.00	0.0	60.4	60.4	57.9	2.47	24.424		
700.0	700.0	700.0	700.0	1.5	1.5	90.00	0.0	60.4	60.4	57.5	2.92	20.666		
800.0	800.0	800.0	800.0	1.7	1.7	90.00	0.0	60.4	60.4	57.0	3.37	17.911		
900.0	900.0	900.0	900.0	1.9	1.9	90.00	0.0	60.4	60.4	56.6	3.82	15.804		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.00	0.0	60.4	60.4	56.1	4.27	14.140		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	90.00	0.0	60.4	60.4	55.7	4.72	12.794		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	90.00	0.0	60.4	60.4	55.2	5.17	11.681		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	90.00	0.0	60.4	60.4	54.8	5.62	10.747		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	90.00	0.0	60.4	60.4	54.3	6.07	9.951		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	90.00	0.0	60.4	60.4	53.9	6.52	9.264		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	90.00	0.0	60.4	60.4	53.4	6.97	8.667		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	90.00	0.0	60.4	60.4	53.0	7.42	8.141		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	90.00	0.0	60.4	60.4	52.5	7.87	7.676		
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	90.00	0.0	60.4	60.4	52.1	8.32	7.261		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	90.00	0.0	60.4	60.4	51.6	8.77	6.889		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	90.00	0.0	60.4	60.4	51.2	9.22	6.553		
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	90.00	0.0	60.4	60.4	50.7	9.66	6.248		
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	90.00	0.0	60.4	60.4	50.3	10.11	5.970		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	90.00	0.0	60.4	60.4	49.8	10.56	5.716		
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	90.00	0.0	60.4	60.4	49.4	11.01	5.483		
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	90.00	0.0	60.4	60.4	48.9	11.46	5.268		
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	90.00	0.0	60.4	60.4	48.5	11.91	5.069		
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	90.00	0.0	60.4	60.4	48.0	12.36	4.885		
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	90.00	0.0	60.4	60.4	47.6	12.81	4.713		
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	90.00	0.0	60.4	60.4	47.1	13.26	4.554		
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	90.00	0.0	60.4	60.4	46.7	13.71	4.404		
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	90.00	0.0	60.4	60.4	46.2	14.16	4.265		
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	90.00	0.0	60.4	60.4	45.8	14.61	4.133		
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	90.00	0.0	60.4	60.4	45.3	15.06	4.010		
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	90.00	0.0	60.4	60.4	44.9	15.51	3.894		
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	90.00	0.0	60.4	60.4	44.4	15.96	3.784		
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	90.00	0.0	60.4	60.4	44.0	16.41	3.680		
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	90.00	0.0	60.4	60.4	43.5	16.86	3.582		
3,900.0	3,900.0	3,900.0	3,900.0	8.7	8.7	90.00	0.0	60.4	60.4	43.1	17.31	3.489 CC, ES		
4,000.0	4,000.0	3,999.2	3,999.2	8.9	8.9	87.64	2.5	60.9	61.0	43.2	17.75	3.436		
4,100.0	4,100.0	4,097.9	4,097.6	9.1	9.1	80.92	10.0	62.6	63.4	45.2	18.20	3.486		
4,200.0	4,200.0	4,195.6	4,194.4	9.3	9.3	71.15	22.3	65.3	69.2	50.6	18.64	3.714		
4,300.0	4,300.0	4,291.7	4,289.0	9.6	9.5	60.48	39.1	69.0	80.1	61.0	19.08	4.196		
4,400.0	4,400.0	4,385.9	4,380.6	9.8	9.8	50.82	60.0	73.6	97.0	77.4	19.52	4.966		
4,500.0	4,500.0	4,477.7	4,468.9	10.0	10.0	43.05	84.7	79.1	120.0	100.0	19.96	6.011		
4,600.0	4,600.0	4,566.8	4,553.3	10.2	10.3	37.15	112.5	85.2	148.7	128.3	20.38	7.294		
4,700.0	4,700.0	4,653.0	4,633.6	10.5	10.6	32.74	143.1	92.0	182.6	161.8	20.81	8.774		
4,800.0	4,800.0	4,736.1	4,709.6	10.7	10.9	29.43	175.9	99.2	221.2	200.0	21.23	10.418		
4,900.0	4,900.0	4,816.9	4,782.1	10.9	11.3	-1.49	210.8	106.9	261.8	240.2	21.64	12.101		
5,000.0	4,999.6	4,900.3	4,855.2	11.1	11.7	-3.55	250.0	115.6	301.8	279.8	21.99	13.722		
5,100.0	5,098.8	4,988.0	4,931.1	11.3	12.2	-5.30	292.8	125.0	339.3	317.0	22.32	15.200		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.0	5,197.1	5,081.9	5,012.4	11.6	12.7	-6.84	338.7	135.2	372.3	349.6	22.63	16.451	
5,300.0	5,294.3	5,177.3	5,095.1	11.8	13.4	-8.23	385.3	145.5	400.5	377.6	22.90	17.486	
5,400.0	5,390.2	5,274.0	5,178.8	12.1	14.0	-9.53	432.5	155.9	424.0	400.9	23.16	18.312	
5,500.0	5,484.4	5,371.6	5,263.3	12.4	14.7	-10.83	480.2	166.4	442.7	419.3	23.38	18.932	
5,600.0	5,576.8	5,470.0	5,348.6	12.7	15.4	-12.17	528.2	177.0	456.6	433.0	23.60	19.349	
5,700.0	5,667.1	5,568.9	5,434.2	13.1	16.2	-13.59	576.5	187.7	465.7	441.9	23.81	19.563	
5,800.0	5,754.9	5,667.9	5,519.9	13.6	17.0	-15.15	624.9	198.4	470.1	446.0	24.02	19.568	
5,900.0	5,841.2	5,766.9	5,605.7	14.1	17.8	-16.82	673.2	209.0	471.6	447.0	24.64	19.144	
6,000.0	5,927.4	5,866.0	5,691.4	14.7	18.6	-18.48	721.6	219.7	473.5	448.2	25.36	18.676	
6,100.0	6,013.7	5,965.0	5,777.2	15.3	19.4	-20.12	769.9	230.4	475.8	449.7	26.13	18.213	
6,200.0	6,099.9	6,064.0	5,862.9	16.0	20.2	-21.75	818.3	241.1	478.6	451.6	26.96	17.754	
6,300.0	6,186.1	6,163.0	5,948.7	16.7	21.0	-23.36	866.7	251.8	481.7	453.8	27.84	17.300	
6,400.0	6,272.3	6,262.0	6,034.4	17.4	21.9	-24.95	915.0	262.4	485.1	456.4	28.79	16.850	
6,500.0	6,358.6	6,361.1	6,120.1	18.1	22.8	-26.51	963.4	273.1	489.0	459.2	29.80	16.407	
6,600.0	6,444.8	6,460.1	6,205.9	18.9	23.6	-27.55	1,011.7	283.8	493.2	462.3	30.88	15.971	
6,700.0	6,532.8	6,559.8	6,292.2	19.5	24.5	-4.88	1,060.4	294.5	497.1	465.4	31.64	15.712	
6,800.0	6,621.2	6,657.3	6,376.7	20.0	25.4	21.01	1,108.0	305.1	500.1	468.2	31.89	15.682	
6,900.0	6,705.2	6,747.6	6,454.9	20.4	26.2	42.04	1,152.1	314.8	504.8	472.7	32.09	15.730	
7,000.0	6,780.8	6,831.5	6,527.6	20.7	26.9	57.01	1,193.2	323.1	515.8	483.2	32.60	15.822	
7,100.0	6,843.9	6,937.1	6,619.1	20.9	27.7	68.42	1,244.7	315.6	534.5	501.1	33.47	15.971	
7,200.0	6,891.4	7,075.3	6,731.9	21.0	28.5	77.80	1,308.3	268.8	558.5	524.0	34.58	16.152	
7,300.0	6,920.8	7,273.4	6,859.6	21.1	29.5	86.00	1,380.1	138.0	581.7	545.8	35.90	16.205	
7,400.0	6,930.6	7,546.2	6,930.6	21.4	30.3	90.00	1,419.7	-117.8	592.7	554.0	38.66	15.332	
7,500.0	6,930.6	7,646.2	6,930.6	22.1	30.7	90.00	1,419.6	-217.9	593.4	552.0	41.38	14.340	
7,600.0	6,930.6	7,746.2	6,930.6	23.4	31.2	90.00	1,419.4	-317.9	594.2	549.5	44.64	13.310	
7,700.0	6,930.6	7,846.2	6,930.6	25.2	32.0	90.00	1,419.3	-417.9	594.9	546.6	48.33	12.309	
7,800.0	6,930.6	7,946.2	6,930.6	27.1	33.1	90.00	1,419.1	-517.9	595.7	543.3	52.37	11.375	
7,900.0	6,930.6	8,046.2	6,930.6	29.2	34.4	90.00	1,419.0	-617.9	596.5	539.8	56.67	10.524	
8,000.0	6,930.6	8,146.2	6,930.6	31.4	36.0	90.00	1,418.8	-717.9	597.2	536.0	61.19	9.760	
8,100.0	6,930.6	8,246.2	6,930.6	33.7	37.8	90.00	1,418.7	-817.9	598.0	532.1	65.88	9.077	
8,200.0	6,930.6	8,346.2	6,930.6	36.1	39.8	90.00	1,418.5	-917.8	598.7	528.0	70.70	8.469	
8,300.0	6,930.6	8,446.2	6,930.6	38.5	41.9	90.00	1,418.4	-1,017.8	599.5	523.9	75.63	7.926	
8,400.0	6,930.6	8,546.2	6,930.6	41.0	44.1	90.00	1,418.2	-1,117.8	600.3	519.6	80.65	7.442	
8,500.0	6,930.6	8,646.2	6,930.6	43.5	46.4	90.00	1,418.1	-1,217.8	601.0	515.3	85.75	7.009	
8,600.0	6,930.6	8,746.2	6,930.6	46.1	48.8	90.00	1,417.9	-1,317.8	601.8	510.9	90.91	6.620	
8,700.0	6,930.6	8,846.1	6,930.6	48.6	51.2	90.00	1,417.8	-1,417.8	602.5	506.4	96.11	6.269	
8,800.0	6,930.6	8,946.1	6,930.6	51.3	53.6	90.00	1,417.6	-1,517.8	603.3	501.9	101.36	5.952	
8,900.0	6,930.6	9,046.1	6,930.6	53.9	56.1	90.00	1,417.5	-1,617.8	604.1	497.4	106.65	5.664	
9,000.0	6,930.6	9,146.1	6,930.6	56.5	58.6	90.00	1,417.3	-1,717.8	604.8	492.9	111.97	5.402	
9,100.0	6,930.6	9,246.1	6,930.6	59.2	61.2	90.00	1,417.2	-1,817.8	605.6	488.3	117.32	5.162	
9,200.0	6,930.6	9,346.1	6,930.6	61.8	63.8	90.00	1,417.0	-1,917.8	606.3	483.7	122.69	4.942	
9,300.0	6,930.6	9,446.1	6,930.6	64.5	66.4	90.00	1,416.9	-2,017.8	607.1	479.0	128.08	4.740	
9,400.0	6,930.6	9,546.1	6,930.6	67.2	69.0	90.00	1,416.7	-2,117.8	607.9	474.4	133.49	4.554	
9,500.0	6,930.6	9,646.1	6,930.6	69.9	71.6	90.00	1,416.6	-2,217.8	608.6	469.7	138.92	4.381	
9,600.0	6,930.6	9,746.1	6,930.6	72.6	74.3	90.00	1,416.4	-2,317.8	609.4	465.0	144.36	4.221	
9,700.0	6,930.6	9,846.1	6,930.6	75.3	76.9	90.00	1,416.2	-2,417.8	610.1	460.3	149.81	4.073	
9,800.0	6,930.6	9,946.1	6,930.6	78.0	79.6	90.00	1,416.1	-2,517.8	610.9	455.6	155.28	3.934	
9,900.0	6,930.6	10,046.1	6,930.6	80.8	82.3	90.00	1,415.9	-2,617.8	611.7	450.9	160.75	3.805	
10,000.0	6,930.6	10,146.1	6,930.6	83.5	84.9	90.00	1,415.8	-2,717.8	612.4	446.2	166.24	3.684	
10,100.0	6,930.6	10,246.1	6,930.6	86.2	87.6	90.00	1,415.6	-2,817.8	613.2	441.5	171.73	3.571	
10,200.0	6,930.6	10,346.1	6,930.6	89.0	90.3	90.00	1,415.5	-2,917.8	614.0	436.7	177.23	3.464	
10,300.0	6,930.6	10,446.1	6,930.6	91.7	93.0	90.00	1,415.3	-3,017.8	614.7	432.0	182.74	3.364	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	6,930.6	10,546.1	6,930.6	94.5	95.8	90.00	1,415.2	-3,117.8	615.5	427.2	188.25	3.269	
10,500.0	6,930.6	10,646.1	6,930.6	97.2	98.5	90.00	1,415.0	-3,217.8	616.2	422.5	193.77	3.180	
10,600.0	6,930.6	10,746.1	6,930.6	100.0	101.2	90.00	1,414.9	-3,317.8	617.0	417.7	199.29	3.096	
10,700.0	6,930.6	10,846.1	6,930.6	102.7	103.9	90.00	1,414.7	-3,417.8	617.8	412.9	204.82	3.016	
10,800.0	6,930.6	10,946.1	6,930.6	105.5	106.7	90.00	1,414.6	-3,517.8	618.5	408.2	210.36	2.940	
10,900.0	6,930.6	11,046.1	6,930.6	108.2	109.4	90.00	1,414.4	-3,617.8	619.3	403.4	215.89	2.868	
11,000.0	6,930.6	11,146.1	6,930.6	111.0	112.1	90.00	1,414.3	-3,717.8	620.0	398.6	221.44	2.800	
11,100.0	6,930.6	11,246.1	6,930.6	113.8	114.9	90.00	1,414.1	-3,817.8	620.8	393.8	226.98	2.735	
11,200.0	6,930.6	11,346.1	6,930.6	116.5	117.6	90.00	1,414.0	-3,917.8	621.6	389.0	232.53	2.673	
11,300.0	6,930.6	11,446.1	6,930.6	119.3	120.4	90.00	1,413.8	-4,017.8	622.3	384.2	238.08	2.614	
11,400.0	6,930.6	11,546.1	6,930.6	122.1	123.1	90.00	1,413.7	-4,117.8	623.1	379.4	243.64	2.557	
11,500.0	6,930.6	11,646.1	6,930.6	124.9	125.9	90.00	1,413.5	-4,217.7	623.8	374.6	249.19	2.503	
11,600.0	6,930.6	11,746.1	6,930.6	127.6	128.6	90.00	1,413.4	-4,317.7	624.6	369.8	254.75	2.452	
11,700.0	6,930.6	11,846.1	6,930.6	130.4	131.4	90.00	1,413.2	-4,417.7	625.4	365.0	260.32	2.402	
11,800.0	6,930.6	11,946.1	6,930.6	133.2	134.2	90.00	1,413.0	-4,517.7	626.1	360.2	265.88	2.355	
11,900.0	6,930.6	12,046.1	6,930.6	136.0	136.9	90.00	1,412.9	-4,617.7	626.9	355.4	271.45	2.309	
12,000.0	6,930.6	12,146.1	6,930.6	138.7	139.7	90.00	1,412.7	-4,717.7	627.6	350.6	277.02	2.266	
12,100.0	6,930.6	12,246.0	6,930.6	141.5	142.4	90.00	1,412.6	-4,817.7	628.4	345.8	282.59	2.224	
12,200.0	6,930.6	12,346.0	6,930.6	144.3	145.2	90.00	1,412.4	-4,917.7	629.2	341.0	288.16	2.183	
12,300.0	6,930.6	12,446.0	6,930.6	147.1	148.0	90.00	1,412.3	-5,017.7	629.9	336.2	293.73	2.145	
12,400.0	6,930.6	12,546.0	6,930.6	149.9	150.8	90.00	1,412.1	-5,117.7	630.7	331.4	299.31	2.107	
12,500.0	6,930.6	12,646.0	6,930.6	152.6	153.5	90.00	1,412.0	-5,217.7	631.4	326.6	304.88	2.071	
12,600.0	6,930.6	12,746.0	6,930.6	155.4	156.3	90.00	1,411.8	-5,317.7	632.2	321.7	310.46	2.036	
12,700.0	6,930.6	12,846.0	6,930.6	158.2	159.1	90.00	1,411.7	-5,417.7	633.0	316.9	316.04	2.003	
12,800.0	6,930.6	12,946.0	6,930.6	161.0	161.8	90.00	1,411.5	-5,517.7	633.7	312.1	321.62	1.970	
12,900.0	6,930.6	13,046.0	6,930.6	163.8	164.6	90.00	1,411.4	-5,617.7	634.5	307.3	327.20	1.939	
13,000.0	6,930.6	13,146.0	6,930.6	166.6	167.4	90.00	1,411.2	-5,717.7	635.2	302.5	332.78	1.909	
13,100.0	6,930.6	13,246.0	6,930.6	169.4	170.2	90.00	1,411.1	-5,817.7	636.0	297.6	338.37	1.880	
13,200.0	6,930.6	13,346.0	6,930.6	172.2	173.0	90.00	1,410.9	-5,917.7	636.8	292.8	343.95	1.851	
13,300.0	6,930.6	13,446.0	6,930.6	174.9	175.7	90.00	1,410.8	-6,017.7	637.5	288.0	349.54	1.824	
13,400.0	6,930.6	13,546.0	6,930.6	177.7	178.5	90.00	1,410.6	-6,117.7	638.3	283.2	355.12	1.797	
13,500.0	6,930.6	13,646.0	6,930.6	180.5	181.3	90.00	1,410.5	-6,217.7	639.0	278.3	360.71	1.772	
13,600.0	6,930.6	13,746.0	6,930.6	183.3	184.1	90.00	1,410.3	-6,317.7	639.8	273.5	366.30	1.747	
13,700.0	6,930.6	13,846.0	6,930.6	186.1	186.9	90.00	1,410.2	-6,417.7	640.6	268.7	371.89	1.722	
13,800.0	6,930.6	13,946.0	6,930.6	188.9	189.7	90.00	1,410.0	-6,517.7	641.3	263.9	377.47	1.699	
13,900.0	6,930.6	14,046.0	6,930.6	191.7	192.4	90.00	1,409.9	-6,617.7	642.1	259.0	383.07	1.676	
13,975.7	6,930.6	14,118.0	6,930.6	193.8	194.4	90.00	1,409.7	-6,689.7	642.7	255.5	387.19	1.660 SF	

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.12	-0.1	30.3	30.3					
100.0	100.0	100.0	100.0	0.1	0.1	90.12	-0.1	30.3	30.3	30.1	0.22	134.951		
200.0	200.0	200.0	200.0	0.3	0.3	90.12	-0.1	30.3	30.3	29.7	0.67	44.984		
300.0	300.0	300.0	300.0	0.6	0.6	90.12	-0.1	30.3	30.3	29.2	1.12	26.990		
400.0	400.0	400.0	400.0	0.8	0.8	90.12	-0.1	30.3	30.3	28.8	1.57	19.279		
500.0	500.0	500.0	500.0	1.0	1.0	90.12	-0.1	30.3	30.3	28.3	2.02	14.995		
600.0	600.0	600.0	600.0	1.2	1.2	90.12	-0.1	30.3	30.3	27.9	2.47	12.268		
700.0	700.0	700.0	700.0	1.5	1.5	90.12	-0.1	30.3	30.3	27.4	2.92	10.381		
800.0	800.0	800.0	800.0	1.7	1.7	90.12	-0.1	30.3	30.3	27.0	3.37	8.997		
900.0	900.0	900.0	900.0	1.9	1.9	90.12	-0.1	30.3	30.3	26.5	3.82	7.938		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.12	-0.1	30.3	30.3	26.1	4.27	7.103		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	90.12	-0.1	30.3	30.3	25.6	4.72	6.426		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	90.12	-0.1	30.3	30.3	25.2	5.17	5.867		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	90.12	-0.1	30.3	30.3	24.7	5.62	5.398		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	90.12	-0.1	30.3	30.3	24.3	6.07	4.998		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	90.12	-0.1	30.3	30.3	23.8	6.52	4.653		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	90.12	-0.1	30.3	30.3	23.4	6.97	4.353		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	90.12	-0.1	30.3	30.3	22.9	7.42	4.089		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	90.12	-0.1	30.3	30.3	22.5	7.87	3.856		
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	90.12	-0.1	30.3	30.3	22.0	8.32	3.647		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	90.12	-0.1	30.3	30.3	21.6	8.77	3.460		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	90.12	-0.1	30.3	30.3	21.1	9.22	3.291		
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	90.12	-0.1	30.3	30.3	20.7	9.66	3.138		
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	90.12	-0.1	30.3	30.3	20.2	10.11	2.999		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	90.12	-0.1	30.3	30.3	19.8	10.56	2.871		
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	90.12	-0.1	30.3	30.3	19.3	11.01	2.754		
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	90.12	-0.1	30.3	30.3	18.9	11.46	2.646		
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	90.12	-0.1	30.3	30.3	18.4	11.91	2.546		
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	90.12	-0.1	30.3	30.3	18.0	12.36	2.454		
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	90.12	-0.1	30.3	30.3	17.5	12.81	2.368		
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	90.12	-0.1	30.3	30.3	17.1	13.26	2.287		
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	90.12	-0.1	30.3	30.3	16.6	13.71	2.212		
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	90.12	-0.1	30.3	30.3	16.2	14.16	2.142		
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	90.12	-0.1	30.3	30.3	15.7	14.61	2.076		
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	90.12	-0.1	30.3	30.3	15.3	15.06	2.014		
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	90.12	-0.1	30.3	30.3	14.8	15.51	1.956		
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	90.12	-0.1	30.3	30.3	14.4	15.96	1.901		
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	90.12	-0.1	30.3	30.3	13.9	16.41	1.849		
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	90.12	-0.1	30.3	30.3	13.5	16.86	1.799		
3,900.0	3,900.0	3,900.0	3,900.0	8.7	8.7	90.12	-0.1	30.3	30.3	13.0	17.31	1.753		
4,000.0	4,000.0	4,000.0	4,000.0	8.9	8.9	90.12	-0.1	30.3	30.3	12.6	17.76	1.708		
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	90.12	-0.1	30.3	30.3	12.1	18.21	1.666		
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	90.12	-0.1	30.3	30.3	11.7	18.66	1.626		
4,300.0	4,300.0	4,300.0	4,300.0	9.6	9.6	90.12	-0.1	30.3	30.3	11.2	19.11	1.588		
4,400.0	4,400.0	4,400.0	4,400.0	9.8	9.8	90.12	-0.1	30.3	30.3	10.8	19.55	1.551		
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	90.12	-0.1	30.3	30.3	10.3	20.00	1.516		
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	90.12	-0.1	30.3	30.3	9.9	20.45	1.483 Level 3, CC, ES		
4,700.0	4,700.0	4,699.4	4,699.4	10.5	10.4	85.61	2.4	31.1	31.2	10.3	20.90	1.495 Level 3		
4,800.0	4,800.0	4,798.3	4,797.9	10.7	10.7	73.88	9.7	33.6	35.0	13.7	21.34	1.640		
4,900.0	4,900.0	4,896.5	4,895.3	10.9	10.9	33.28	21.7	37.6	41.4	19.7	21.76	1.904		
5,000.0	4,999.6	4,994.1	4,991.3	11.1	11.1	23.82	38.4	43.1	48.7	26.6	22.13	2.201		
5,100.0	5,098.8	5,091.2	5,085.8	11.3	11.3	16.19	59.6	50.1	56.5	34.1	22.45	2.517		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Kodak North Pad Sec.26-T6N-R67W - Kodak North FD 27-099HC - Wellbore #1 - Plan #1 (11-21-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.0	5,197.1	5,187.8	5,178.6	11.6	11.6	9.81	85.1	58.5	64.7	42.0	22.70	2.849		
5,300.0	5,294.3	5,283.9	5,269.4	11.8	11.9	4.32	114.9	68.4	73.2	50.3	22.91	3.194		
5,400.0	5,390.2	5,379.5	5,358.0	12.1	12.2	-0.54	148.9	79.6	81.9	58.9	23.07	3.552		
5,500.0	5,484.4	5,474.6	5,444.3	12.4	12.6	-4.92	186.7	92.2	90.9	67.7	23.20	3.920		
5,600.0	5,576.8	5,569.2	5,528.1	12.7	13.0	-8.91	228.4	106.0	100.2	76.9	23.32	4.297		
5,700.0	5,667.1	5,666.0	5,611.8	13.1	13.5	-12.72	274.6	121.3	109.1	85.7	23.47	4.650		
5,800.0	5,754.9	5,765.5	5,697.6	13.6	14.0	-16.72	322.5	137.1	114.1	90.4	23.69	4.816		
5,900.0	5,841.2	5,865.1	5,783.5	14.1	14.6	-20.97	370.5	153.0	116.5	92.1	24.42	4.770		
6,000.0	5,927.4	5,964.7	5,869.3	14.7	15.3	-25.04	418.4	168.9	119.4	94.1	25.32	4.717		
6,100.0	6,013.7	6,064.4	5,955.1	15.3	16.0	-28.89	466.4	184.8	123.0	96.6	26.35	4.667		
6,200.0	6,099.9	6,164.0	6,041.0	16.0	16.7	-32.52	514.4	200.7	127.0	99.5	27.50	4.620		
6,300.0	6,186.1	6,263.6	6,126.8	16.7	17.4	-35.91	562.3	216.5	131.6	102.8	28.76	4.575		
6,400.0	6,272.3	6,363.2	6,212.6	17.4	18.2	-39.06	610.3	232.4	136.5	106.4	30.12	4.533		
6,500.0	6,358.6	6,462.8	6,298.5	18.1	18.9	-41.98	658.3	248.3	141.9	110.3	31.58	4.493		
6,600.0	6,444.8	6,562.4	6,384.3	18.9	19.7	-44.19	706.2	264.2	147.6	114.5	33.12	4.457		
6,700.0	6,532.8	6,662.0	6,470.2	19.5	20.5	-19.38	754.2	280.1	149.6	116.3	33.27	4.496		
6,800.0	6,621.2	6,758.3	6,553.2	20.0	21.3	14.53	800.6	295.4	147.0	115.1	31.90	4.608		
6,822.4	6,640.5	6,779.0	6,571.0	20.1	21.5	22.28	810.5	298.7	146.8	115.2	31.60	4.646		
6,900.0	6,705.2	6,846.3	6,629.0	20.4	22.1	47.23	843.0	309.4	151.2	119.9	31.25	4.838		
7,000.0	6,780.8	6,928.3	6,699.8	20.7	22.7	72.94	882.5	321.3	177.0	145.0	31.99	5.534		
7,100.0	6,843.9	7,029.6	6,787.9	20.9	23.4	92.53	931.9	318.2	222.2	189.9	32.31	6.877		
7,200.0	6,891.4	7,163.1	6,898.8	21.0	24.1	107.11	994.2	279.2	274.9	243.5	31.39	8.757		
7,300.0	6,920.8	7,360.9	7,032.3	21.1	24.9	117.95	1,069.7	157.0	322.3	292.4	29.90	10.781		
7,400.0	6,930.6	7,651.9	7,115.6	21.4	25.7	122.46	1,118.0	-112.1	344.8	313.9	30.85	11.176		
7,500.0	6,930.6	7,755.1	7,115.6	22.1	26.2	122.32	1,118.6	-215.2	346.1	312.8	33.24	10.410		
7,600.0	6,930.6	7,855.0	7,115.6	23.4	26.9	122.19	1,119.2	-315.2	347.3	311.2	36.09	9.624		
7,700.0	6,930.6	7,955.0	7,115.6	25.2	28.1	122.05	1,119.8	-415.2	348.6	309.3	39.34	8.862		
7,800.0	6,930.6	8,055.0	7,115.6	27.1	29.6	121.92	1,120.4	-515.2	349.9	307.0	42.90	8.156		
7,900.0	6,930.6	8,155.0	7,115.6	29.2	31.3	121.79	1,121.0	-615.2	351.2	304.5	46.71	7.519		
8,000.0	6,930.6	8,255.0	7,115.6	31.4	33.3	121.66	1,121.6	-715.1	352.5	301.8	50.71	6.951		
8,100.0	6,930.6	8,355.0	7,115.6	33.7	35.4	121.53	1,122.2	-815.1	353.8	298.9	54.86	6.449		
8,200.0	6,930.6	8,455.0	7,115.6	36.1	37.6	121.40	1,122.8	-915.1	355.1	295.9	59.14	6.004		
8,300.0	6,930.6	8,555.0	7,115.6	38.5	39.9	121.28	1,123.4	-1,015.1	356.4	292.8	63.51	5.611		
8,400.0	6,930.6	8,654.9	7,115.6	41.0	42.3	121.15	1,124.0	-1,115.1	357.7	289.7	67.98	5.262		
8,500.0	6,930.6	8,754.9	7,115.6	43.5	44.7	121.03	1,124.7	-1,215.1	359.0	286.4	72.51	4.950		
8,600.0	6,930.6	8,854.9	7,115.6	46.1	47.2	120.90	1,125.3	-1,315.1	360.3	283.1	77.10	4.672		
8,700.0	6,930.6	8,954.9	7,115.6	48.6	49.7	120.78	1,125.9	-1,415.0	361.6	279.8	81.75	4.423		
8,800.0	6,930.6	9,054.9	7,115.6	51.3	52.3	120.66	1,126.5	-1,515.0	362.9	276.4	86.44	4.198		
8,900.0	6,930.6	9,154.9	7,115.6	53.9	54.8	120.53	1,127.1	-1,615.0	364.2	273.0	91.17	3.994		
9,000.0	6,930.6	9,254.9	7,115.6	56.5	57.4	120.41	1,127.7	-1,715.0	365.5	269.5	95.93	3.810		
9,100.0	6,930.6	9,354.9	7,115.6	59.2	60.1	120.29	1,128.3	-1,815.0	366.8	266.0	100.73	3.641		
9,200.0	6,930.6	9,454.9	7,115.6	61.8	62.7	120.18	1,128.9	-1,915.0	368.1	262.5	105.55	3.487		
9,300.0	6,930.6	9,554.8	7,115.6	64.5	65.3	120.06	1,129.5	-2,015.0	369.4	259.0	110.41	3.346		
9,400.0	6,930.6	9,654.8	7,115.6	67.2	68.0	119.94	1,130.1	-2,115.0	370.7	255.4	115.28	3.216		
9,500.0	6,930.6	9,754.8	7,115.6	69.9	70.7	119.82	1,130.7	-2,214.9	372.0	251.8	120.18	3.096		
9,600.0	6,930.6	9,854.8	7,115.6	72.6	73.3	119.71	1,131.3	-2,314.9	373.3	248.2	125.10	2.984		
9,700.0	6,930.6	9,954.8	7,115.6	75.3	76.0	119.59	1,131.9	-2,414.9	374.6	244.6	130.03	2.881		
9,800.0	6,930.6	10,054.8	7,115.6	78.0	78.7	119.48	1,132.5	-2,514.9	376.0	241.0	134.99	2.785		
9,900.0	6,930.6	10,154.8	7,115.6	80.8	81.4	119.37	1,133.1	-2,614.9	377.3	237.3	139.96	2.696		
10,000.0	6,930.6	10,254.8	7,115.6	83.5	84.2	119.25	1,133.7	-2,714.9	378.6	233.7	144.94	2.612		
10,100.0	6,930.6	10,354.8	7,115.6	86.2	86.9	119.14	1,134.3	-2,814.9	379.9	230.0	149.95	2.534		
10,200.0	6,930.6	10,454.7	7,115.6	89.0	89.6	119.03	1,134.9	-2,914.8	381.3	226.3	154.96	2.460		

Offset Design Kodak North Pad Sec.26-T6N-R67W - Kodak North FD 27-099HC - Wellbore #1 - Plan #1 (11-21-13)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
10,300.0	6,930.6	10,554.7	7,115.6	91.7	92.3	118.92	1,135.5	-3,014.8	382.6	222.6	159.99	2.391	
10,400.0	6,930.6	10,654.7	7,115.6	94.5	95.1	118.81	1,136.1	-3,114.8	383.9	218.9	165.03	2.326	
10,500.0	6,930.6	10,754.7	7,115.6	97.2	97.8	118.70	1,136.7	-3,214.8	385.2	215.1	170.09	2.265	
10,600.0	6,930.6	10,854.7	7,115.6	100.0	100.5	118.60	1,137.3	-3,314.8	386.6	211.4	175.15	2.207	
10,700.0	6,930.6	10,954.7	7,115.6	102.7	103.3	118.49	1,137.9	-3,414.8	387.9	207.7	180.23	2.152	
10,800.0	6,930.6	11,054.7	7,115.6	105.5	106.0	118.38	1,138.5	-3,514.8	389.2	203.9	185.32	2.100	
10,900.0	6,930.6	11,154.7	7,115.6	108.2	108.8	118.28	1,139.1	-3,614.8	390.6	200.1	190.42	2.051	
11,000.0	6,930.6	11,254.7	7,115.6	111.0	111.6	118.17	1,139.7	-3,714.7	391.9	196.4	195.53	2.004	
11,100.0	6,930.6	11,354.6	7,115.6	113.8	114.3	118.07	1,140.3	-3,814.7	393.2	192.6	200.65	1.960	
11,200.0	6,930.6	11,454.6	7,115.6	116.5	117.1	117.96	1,140.9	-3,914.7	394.6	188.8	205.78	1.917	
11,300.0	6,930.6	11,554.6	7,115.6	119.3	119.8	117.86	1,141.5	-4,014.7	395.9	185.0	210.92	1.877	
11,400.0	6,930.6	11,654.6	7,115.6	122.1	122.6	117.76	1,142.1	-4,114.7	397.2	181.2	216.07	1.839	
11,500.0	6,930.6	11,754.6	7,115.6	124.9	125.4	117.66	1,142.7	-4,214.7	398.6	177.4	221.22	1.802	
11,600.0	6,930.6	11,854.6	7,115.6	127.6	128.1	117.56	1,143.3	-4,314.7	399.9	173.5	226.39	1.767	
11,700.0	6,930.6	11,954.6	7,115.6	130.4	130.9	117.46	1,143.9	-4,414.6	401.3	169.7	231.56	1.733	
11,800.0	6,930.6	12,054.6	7,115.6	133.2	133.7	117.36	1,144.5	-4,514.6	402.6	165.9	236.74	1.701	
11,900.0	6,930.6	12,154.5	7,115.6	136.0	136.4	117.26	1,145.1	-4,614.6	404.0	162.0	241.93	1.670	
12,000.0	6,930.6	12,254.5	7,115.6	138.7	139.2	117.16	1,145.7	-4,714.6	405.3	158.2	247.13	1.640	
12,100.0	6,930.6	12,354.5	7,115.6	141.5	142.0	117.06	1,146.3	-4,814.6	406.7	154.3	252.34	1.612	
12,200.0	6,930.6	12,454.5	7,115.6	144.3	144.8	116.97	1,146.9	-4,914.6	408.0	150.5	257.55	1.584	
12,300.0	6,930.6	12,554.5	7,115.6	147.1	147.6	116.87	1,147.5	-5,014.6	409.4	146.6	262.77	1.558	
12,400.0	6,930.6	12,654.5	7,115.6	149.9	150.3	116.77	1,148.1	-5,114.6	410.7	142.7	267.99	1.533	
12,500.0	6,930.6	12,754.5	7,115.6	152.6	153.1	116.68	1,148.7	-5,214.5	412.1	138.8	273.23	1.508	
12,600.0	6,930.6	12,854.5	7,115.6	155.4	155.9	116.59	1,149.3	-5,314.5	413.4	135.0	278.47	1.485 Level 3	
12,700.0	6,930.6	12,954.5	7,115.6	158.2	158.7	116.49	1,149.9	-5,414.5	414.8	131.1	283.71	1.462 Level 3	
12,800.0	6,930.6	13,054.4	7,115.6	161.0	161.5	116.40	1,150.5	-5,514.5	416.1	127.2	288.97	1.440 Level 3	
12,900.0	6,930.6	13,154.4	7,115.6	163.8	164.2	116.31	1,151.1	-5,614.5	417.5	123.3	294.23	1.419 Level 3	
13,000.0	6,930.6	13,254.4	7,115.6	166.6	167.0	116.21	1,151.7	-5,714.5	418.8	119.4	299.49	1.399 Level 3	
13,100.0	6,930.6	13,354.4	7,115.6	169.4	169.8	116.12	1,152.4	-5,814.5	420.2	115.4	304.76	1.379 Level 3	
13,200.0	6,930.6	13,454.4	7,115.6	172.2	172.6	116.03	1,153.0	-5,914.4	421.6	111.5	310.04	1.360 Level 3	
13,300.0	6,930.6	13,554.4	7,115.6	174.9	175.4	115.94	1,153.6	-6,014.4	422.9	107.6	315.32	1.341 Level 3	
13,400.0	6,930.6	13,654.4	7,115.6	177.7	178.2	115.85	1,154.2	-6,114.4	424.3	103.7	320.61	1.323 Level 3	
13,500.0	6,930.6	13,754.4	7,115.6	180.5	181.0	115.76	1,154.8	-6,214.4	425.7	99.7	325.91	1.306 Level 3	
13,600.0	6,930.6	13,854.4	7,115.6	183.3	183.8	115.68	1,155.4	-6,314.4	427.0	95.8	331.21	1.289 Level 3	
13,700.0	6,930.6	13,954.3	7,115.6	186.1	186.6	115.59	1,156.0	-6,414.4	428.4	91.9	336.51	1.273 Level 3	
13,800.0	6,930.6	14,054.3	7,115.6	188.9	189.3	115.50	1,156.6	-6,514.4	429.8	87.9	341.82	1.257 Level 3	
13,900.0	6,930.6	14,154.3	7,115.6	191.7	192.1	115.41	1,157.2	-6,614.4	431.1	84.0	347.14	1.242 Level 2	
13,975.7	6,930.6	14,230.0	7,115.6	193.8	194.2	115.35	1,157.6	-6,690.0	432.2	81.0	351.17	1.231 Level 2, SF	

Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kodak North FD 27-102HN	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (11-21-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4776.6ft (RKB - 16.5')

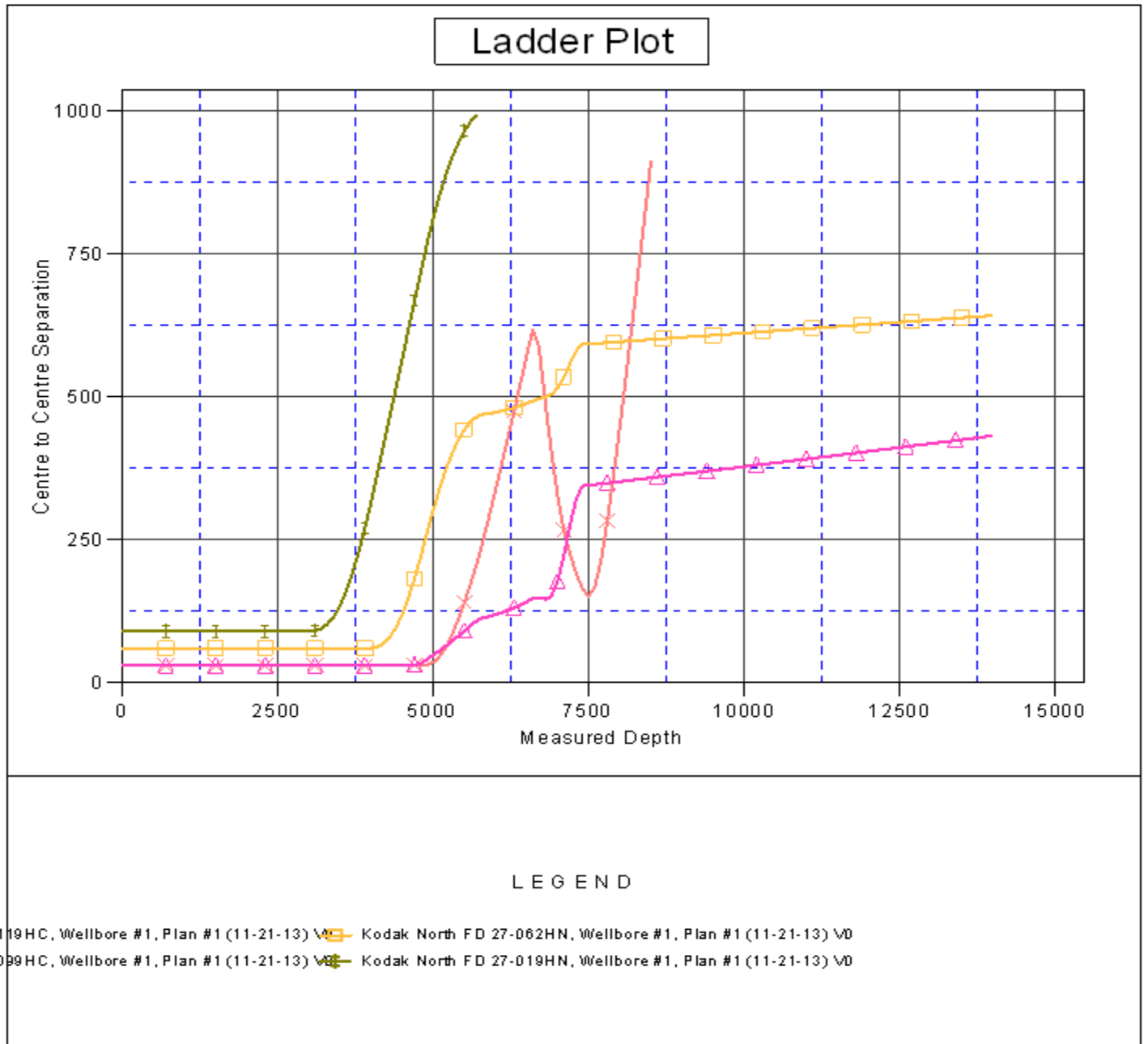
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Kodak North FD 27-102HN

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.41°



Company:	Great Western	Local Co-ordinate Reference:	Well Kodak North FD 27-102HN
Project:	SEC.26-T6N-R67W	TVD Reference:	WELL @ 4776.6ft (RKB - 16.5')
Reference Site:	Kodak North Pad Sec.26-T6N-R67W	MD Reference:	WELL @ 4776.6ft (RKB - 16.5')
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Well Error:	0.0ft	Output errors are at	2.00 sigma
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Reference Depths are relative to WELL @ 4776.6ft (RKB - 16.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Kodak North FD 27-102HN
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.41°

