Great Western

Well Name: **Kodak North FD 27-182HN**

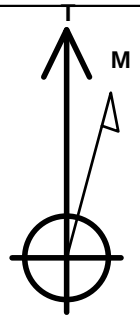
Surface Location: Kodak North Pad Sec.26-T6N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4760.1

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1410594.13	3177206.33	40.458736	-104.863178	

RKB - 16.5' WELL @ 4776.6ft (RKB - 16.5')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 2353'FNL & 1999'FWL, Sec.26	1.0	0.0	0.0	Point
BHL 2639'FNL & 470'FWL, Sec. 27	6930.6	-296.7	-6755.3	Point
Entry Pt. 2639'FNL & 1825'FWL, Sec. 26	6930.6	-286.3	-173.1	Point



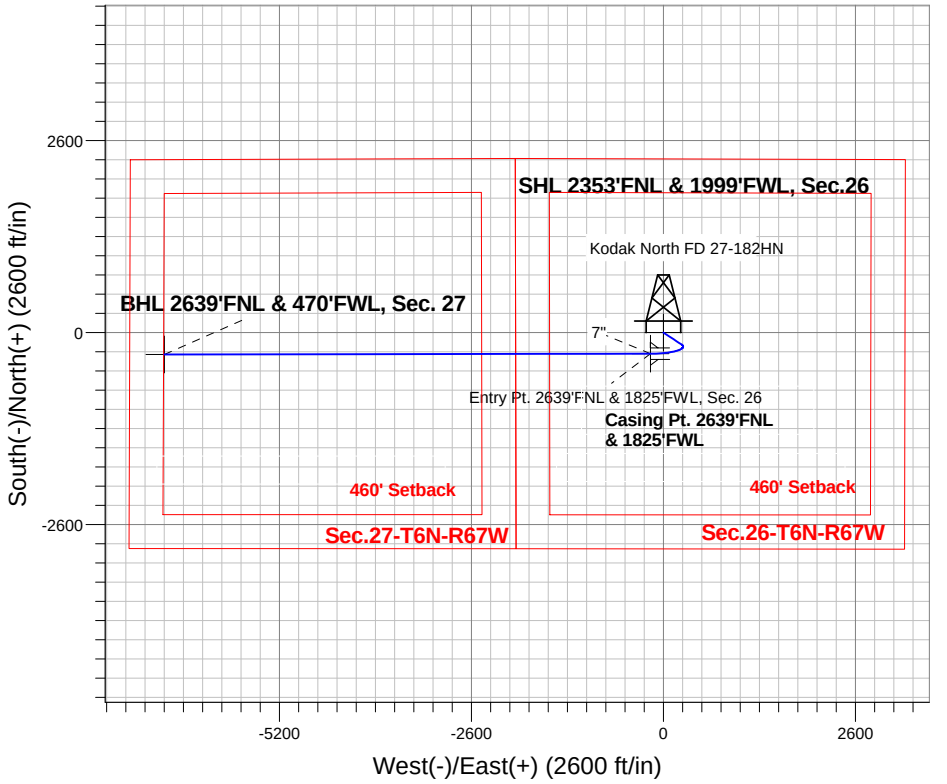
Azimuths to True North
Magnetic North: 8.59°

Magnetic Field
Strength: 52895.5snT
Dip Angle: 67.00°
Date: 11/21/2013
Model: IGRF2010

Kodak North Pad Sec.26-T6N-R67W
Kodak North FD 27-182HN
Plan #1 (11-21-13)
13:39, November 22 2013

ANNOTATIONS

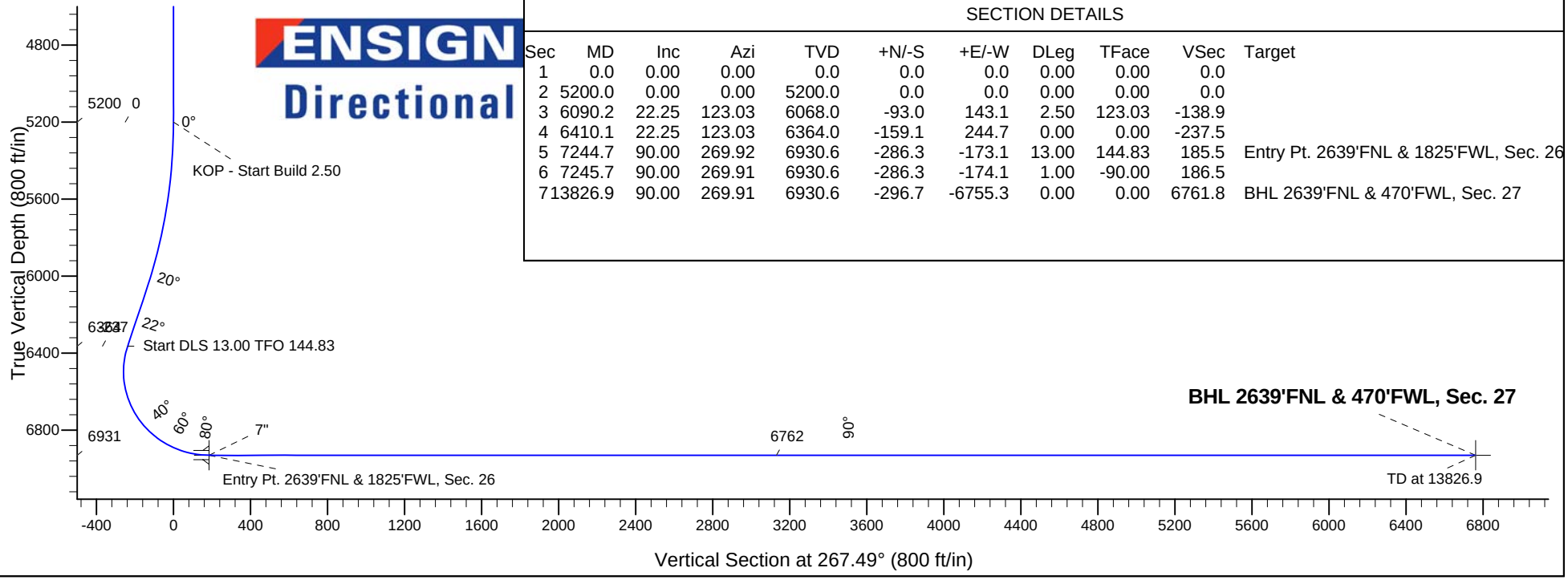
TVD	MD	Annotation
5200.0	5200.0	KOP - Start Build 2.50
6364.1	6410.1	Start DLS 13.00 TFO 144.83
6930.6	13826.9	TD at 13826.9



ENSIGN Directional

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	5200.0	0.00	0.00	5200.0	0.0	0.0	0.00	0.00	0.0	
3	6090.2	22.25	123.03	6068.0	-93.0	143.1	2.50	123.03	-138.9	
4	6410.1	22.25	123.03	6364.0	-159.1	244.7	0.00	0.00	-237.5	
5	7244.7	90.00	269.92	6930.6	-286.3	-173.1	13.00	144.83	185.5	Entry Pt. 2639'FNL & 1825'FWL, Sec. 26
6	7245.7	90.00	269.91	6930.6	-286.3	-174.1	1.00	-90.00	186.5	
7	13826.9	90.00	269.91	6930.6	-296.7	-6755.3	0.00	0.00	6761.8	BHL 2639'FNL & 470'FWL, Sec. 27



Great Western

SEC.26-T6N-R67W
Kodak North Pad Sec.26-T6N-R67W
Kodak North FD 27-182HN

Wellbore #1

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

Standard Planning Report

22 November, 2013

Database:	Landmark	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-21-13)		

Project SEC.26-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 Kodak North Pad Sec.26-T6N-R67W

Site Position:		**Northing:**	1,410,693.08 ft	**Latitude:**	40.459011
From:	Lat/Long	**Easting:**	3,177,026.41 ft	**Longitude:**	-104.863822
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.41 °

Well Kodak North FD 27-182HN

Well Position	**+N/-S**	-100.2 ft	**Northing:**	1,410,594.13 ft	**Latitude:**	40.458736
	+E/-W	179.2 ft	**Easting:**	3,177,206.33 ft	**Longitude:**	-104.863178
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,760.1 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/21/2013	8.59	67.00	52,895

Design Plan #1 (11-21-13)

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	267.49

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	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
6,090.2	22.25	123.03	6,068.0	-93.0	143.1	2.50	2.50	0.00	123.03	
6,410.1	22.25	123.03	6,364.0	-159.1	244.7	0.00	0.00	0.00	0.00	
7,244.7	90.00	269.92	6,930.6	-286.3	-173.1	13.00	8.12	17.60	144.83	Entry Pt. 2639'FNL
7,245.7	90.00	269.91	6,930.6	-286.3	-174.1	1.00	0.00	-1.00	-90.00	
13,826.9	90.00	269.91	6,930.6	-296.7	-6,755.3	0.00	0.00	0.00	0.00	BHL 2639'FNL & 47

Database:	Landmark	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 2353'FNL & 1999'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
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00

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Site:	Kodak North Pad Sec.26-T6N-R67W	**North Reference:**	True
Well:	Kodak North FD 27-182HN	**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)
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.50									
5,300.0	2.50	123.03	5,300.0	-1.2	1.8	-1.8	2.50	2.50	0.00
5,400.0	5.00	123.03	5,399.7	-4.8	7.3	-7.1	2.50	2.50	0.00
5,500.0	7.50	123.03	5,499.1	-10.7	16.4	-16.0	2.50	2.50	0.00
5,600.0	10.00	123.03	5,598.0	-19.0	29.2	-28.3	2.50	2.50	0.00
5,700.0	12.50	123.03	5,696.0	-29.6	45.5	-44.2	2.50	2.50	0.00
5,800.0	15.00	123.03	5,793.2	-42.6	65.5	-63.5	2.50	2.50	0.00
5,900.0	17.50	123.03	5,889.2	-57.8	88.9	-86.3	2.50	2.50	0.00
6,000.0	20.00	123.03	5,983.9	-75.3	115.9	-112.5	2.50	2.50	0.00
6,090.2	22.25	123.03	6,068.0	-93.0	143.1	-138.9	2.50	2.50	0.00
6,100.0	22.25	123.03	6,077.1	-95.1	146.2	-141.9	0.00	0.00	0.00
6,200.0	22.25	123.03	6,169.6	-115.7	178.0	-172.8	0.00	0.00	0.00
6,300.0	22.25	123.03	6,262.2	-136.4	209.8	-203.6	0.00	0.00	0.00
6,400.0	22.25	123.03	6,354.7	-157.0	241.5	-234.4	0.00	0.00	0.00
6,410.1	22.25	123.03	6,364.1	-159.1	244.7	-237.5	0.00	0.00	0.00
Start DLS 13.00 TFO 144.83									
6,500.0	14.29	151.24	6,449.5	-178.2	264.4	-256.3	13.00	-8.86	31.38
6,600.0	14.02	206.38	6,546.9	-199.9	265.0	-255.9	13.00	-0.28	55.14
6,700.0	22.83	237.85	6,641.9	-221.2	243.1	-233.1	13.00	8.81	31.47
6,800.0	34.32	250.81	6,729.6	-240.9	199.8	-189.1	13.00	11.49	12.96
6,900.0	46.55	257.70	6,805.7	-257.9	137.5	-126.0	13.00	12.23	6.88
7,000.0	59.05	262.22	6,866.0	-271.5	59.2	-47.2	13.00	12.50	4.52
7,100.0	71.66	265.67	6,907.6	-281.0	-31.0	43.3	13.00	12.62	3.46
7,200.0	84.34	268.65	6,928.4	-285.7	-128.5	140.9	13.00	12.67	2.98
7,244.7	89.99	269.92	6,930.6	-286.3	-173.1	185.5	12.99	12.67	2.84
7" - Entry Pt. 2639'FNL & 1825'FWL, Sec. 26									
7,245.7	90.00	269.91	6,930.6	-286.3	-174.1	186.5	1.05	0.59	-0.87
7,300.0	90.00	269.91	6,930.6	-286.4	-228.4	240.8	0.00	0.00	0.00
7,400.0	90.00	269.91	6,930.6	-286.5	-328.4	340.7	0.00	0.00	0.00
7,500.0	90.00	269.91	6,930.6	-286.7	-428.4	440.6	0.00	0.00	0.00
7,600.0	90.00	269.91	6,930.6	-286.9	-528.4	540.5	0.00	0.00	0.00
7,700.0	90.00	269.91	6,930.6	-287.0	-628.4	640.4	0.00	0.00	0.00
7,800.0	90.00	269.91	6,930.6	-287.2	-728.4	740.3	0.00	0.00	0.00
7,900.0	90.00	269.91	6,930.6	-287.3	-828.4	840.2	0.00	0.00	0.00
8,000.0	90.00	269.91	6,930.6	-287.5	-928.4	940.2	0.00	0.00	0.00
8,100.0	90.00	269.91	6,930.6	-287.6	-1,028.4	1,040.1	0.00	0.00	0.00
8,200.0	90.00	269.91	6,930.6	-287.8	-1,128.4	1,140.0	0.00	0.00	0.00
8,300.0	90.00	269.91	6,930.6	-288.0	-1,228.4	1,239.9	0.00	0.00	0.00
8,400.0	90.00	269.91	6,930.6	-288.1	-1,328.4	1,339.8	0.00	0.00	0.00
8,500.0	90.00	269.91	6,930.6	-288.3	-1,428.4	1,439.7	0.00	0.00	0.00
8,600.0	90.00	269.91	6,930.6	-288.4	-1,528.4	1,539.6	0.00	0.00	0.00
8,700.0	90.00	269.91	6,930.6	-288.6	-1,628.4	1,639.5	0.00	0.00	0.00
8,800.0	90.00	269.91	6,930.6	-288.7	-1,728.4	1,739.4	0.00	0.00	0.00
8,900.0	90.00	269.91	6,930.6	-288.9	-1,828.4	1,839.4	0.00	0.00	0.00
9,000.0	90.00	269.91	6,930.6	-289.1	-1,928.4	1,939.3	0.00	0.00	0.00
9,100.0	90.00	269.91	6,930.6	-289.2	-2,028.4	2,039.2	0.00	0.00	0.00
9,200.0	90.00	269.91	6,930.6	-289.4	-2,128.4	2,139.1	0.00	0.00	0.00
9,300.0	90.00	269.91	6,930.6	-289.5	-2,228.4	2,239.0	0.00	0.00	0.00
9,400.0	90.00	269.91	6,930.6	-289.7	-2,328.4	2,338.9	0.00	0.00	0.00
9,500.0	90.00	269.91	6,930.6	-289.8	-2,428.4	2,438.8	0.00	0.00	0.00
9,600.0	90.00	269.91	6,930.6	-290.0	-2,528.4	2,538.7	0.00	0.00	0.00
9,700.0	90.00	269.91	6,930.6	-290.2	-2,628.4	2,638.6	0.00	0.00	0.00

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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 27-182HN	**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)
9,800.0	90.00	269.91	6,930.6	-290.3	-2,728.4	2,738.5	0.00	0.00	0.00
9,900.0	90.00	269.91	6,930.6	-290.5	-2,828.4	2,838.5	0.00	0.00	0.00
10,000.0	90.00	269.91	6,930.6	-290.6	-2,928.4	2,938.4	0.00	0.00	0.00
10,100.0	90.00	269.91	6,930.6	-290.8	-3,028.4	3,038.3	0.00	0.00	0.00
10,200.0	90.00	269.91	6,930.6	-291.0	-3,128.4	3,138.2	0.00	0.00	0.00
10,300.0	90.00	269.91	6,930.6	-291.1	-3,228.4	3,238.1	0.00	0.00	0.00
10,400.0	90.00	269.91	6,930.6	-291.3	-3,328.4	3,338.0	0.00	0.00	0.00
10,500.0	90.00	269.91	6,930.6	-291.4	-3,428.4	3,437.9	0.00	0.00	0.00
10,600.0	90.00	269.91	6,930.6	-291.6	-3,528.4	3,537.8	0.00	0.00	0.00
10,700.0	90.00	269.91	6,930.6	-291.7	-3,628.4	3,637.7	0.00	0.00	0.00
10,800.0	90.00	269.91	6,930.6	-291.9	-3,728.4	3,737.7	0.00	0.00	0.00
10,900.0	90.00	269.91	6,930.6	-292.1	-3,828.4	3,837.6	0.00	0.00	0.00
11,000.0	90.00	269.91	6,930.6	-292.2	-3,928.4	3,937.5	0.00	0.00	0.00
11,100.0	90.00	269.91	6,930.6	-292.4	-4,028.4	4,037.4	0.00	0.00	0.00
11,200.0	90.00	269.91	6,930.6	-292.5	-4,128.4	4,137.3	0.00	0.00	0.00
11,300.0	90.00	269.91	6,930.6	-292.7	-4,228.4	4,237.2	0.00	0.00	0.00
11,400.0	90.00	269.91	6,930.6	-292.8	-4,328.4	4,337.1	0.00	0.00	0.00
11,500.0	90.00	269.91	6,930.6	-293.0	-4,428.4	4,437.0	0.00	0.00	0.00
11,600.0	90.00	269.91	6,930.6	-293.2	-4,528.4	4,536.9	0.00	0.00	0.00
11,700.0	90.00	269.91	6,930.6	-293.3	-4,628.4	4,636.8	0.00	0.00	0.00
11,800.0	90.00	269.91	6,930.6	-293.5	-4,728.4	4,736.8	0.00	0.00	0.00
11,900.0	90.00	269.91	6,930.6	-293.6	-4,828.4	4,836.7	0.00	0.00	0.00
12,000.0	90.00	269.91	6,930.6	-293.8	-4,928.4	4,936.6	0.00	0.00	0.00
12,100.0	90.00	269.91	6,930.6	-293.9	-5,028.4	5,036.5	0.00	0.00	0.00
12,200.0	90.00	269.91	6,930.6	-294.1	-5,128.4	5,136.4	0.00	0.00	0.00
12,300.0	90.00	269.91	6,930.6	-294.3	-5,228.4	5,236.3	0.00	0.00	0.00
12,400.0	90.00	269.91	6,930.6	-294.4	-5,328.4	5,336.2	0.00	0.00	0.00
12,500.0	90.00	269.91	6,930.6	-294.6	-5,428.4	5,436.1	0.00	0.00	0.00
12,600.0	90.00	269.91	6,930.6	-294.7	-5,528.4	5,536.0	0.00	0.00	0.00
12,700.0	90.00	269.91	6,930.6	-294.9	-5,628.4	5,636.0	0.00	0.00	0.00
12,800.0	90.00	269.91	6,930.6	-295.0	-5,728.4	5,735.9	0.00	0.00	0.00
12,900.0	90.00	269.91	6,930.6	-295.2	-5,828.4	5,835.8	0.00	0.00	0.00
13,000.0	90.00	269.91	6,930.6	-295.4	-5,928.4	5,935.7	0.00	0.00	0.00
13,100.0	90.00	269.91	6,930.6	-295.5	-6,028.4	6,035.6	0.00	0.00	0.00
13,200.0	90.00	269.91	6,930.6	-295.7	-6,128.4	6,135.5	0.00	0.00	0.00
13,300.0	90.00	269.91	6,930.6	-295.8	-6,228.4	6,235.4	0.00	0.00	0.00
13,400.0	90.00	269.91	6,930.6	-296.0	-6,328.4	6,335.3	0.00	0.00	0.00
13,500.0	90.00	269.91	6,930.6	-296.1	-6,428.4	6,435.2	0.00	0.00	0.00
13,600.0	90.00	269.91	6,930.6	-296.3	-6,528.4	6,535.1	0.00	0.00	0.00
13,700.0	90.00	269.91	6,930.6	-296.5	-6,628.4	6,635.1	0.00	0.00	0.00
13,800.0	90.00	269.91	6,930.6	-296.6	-6,728.4	6,735.0	0.00	0.00	0.00
13,826.9	90.00	269.91	6,930.6	-296.7	-6,755.3	6,761.8	0.00	0.00	0.00
BHL 2639'FNL & 470'FWL, Sec. 27									

Database:	Landmark	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-21-13)		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
BHL 2639'FNL & 470' - plan hits target center - Point	0.00	0.00	6,930.6	-296.7	-6,755.3	1,410,248.97	3,170,453.57	40.457919	-104.887453
Entry Pt. 2639'FNL & - plan hits target center - Point	0.00	0.00	6,930.6	-286.3	-173.1	1,410,306.61	3,177,035.31	40.457950	-104.863800
SHL 2353'FNL & 199 - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,410,594.15	3,177,206.33	40.458736	-104.863178

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,244.7	6,930.6	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
5,200.0	5,200.0	0.0	0.0	KOP - Start Build 2.50
6,410.1	6,364.1	-159.1	244.7	Start DLS 13.00 TFO 144.83
13,826.9	6,930.6	-296.7	-6,755.3	TD at 13826.9

ENSIGN Directional

Great Western

SEC.26-T6N-R67W
Kodak North Pad Sec.26-T6N-R67W
Kodak North FD 27-182HN

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

Anticollision Report

22 November, 2013

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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	13,826.9	Plan #1 (11-21-13) (Wellbore #1)	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Kodak North Pad Sec.26-T6N-R67W						
Kodak North FD 25-122HN - Wellbore #1 - Plan #1 (11-2	5,200.0	5,200.0	89.6	66.5	3.871	CC, ES, SF
Kodak North FD 25-162HN - Wellbore #1 - Plan #1 (11-2	5,200.0	5,200.0	119.7	96.5	5.169	CC, ES, SF
Kodak North FD 27-179HC - Wellbore #1 - Plan #1 (11-2	5,200.0	5,200.0	30.1	6.9	1.298	Level 3, CC, ES
Kodak North FD 27-179HC - Wellbore #1 - Plan #1 (11-2	13,826.9	13,973.8	350.4	16.2	1.048	Level 2, SF
Kodak North FD 27-179HN - Wellbore #1 - Plan #1 (11-2	5,200.0	5,200.0	60.1	37.0	2.596	CC, ES
Kodak North FD 27-179HN - Wellbore #1 - Plan #1 (11-2	13,826.9	13,846.6	479.8	90.6	1.233	Level 2, SF

Offset Design Kodak North Pad Sec.26-T6N-R67W - Kodak North FD 25-122HN - Wellbore #1 - Plan #1 (11-21-13)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-89.6	89.6				
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	0.0	-89.6	89.6	89.4	0.22	398.664	
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-89.6	89.6	88.9	0.67	132.888	
300.0	300.0	300.0	300.0	0.6	0.6	-89.98	0.0	-89.6	89.6	88.5	1.12	79.733	
400.0	400.0	400.0	400.0	0.8	0.8	-89.98	0.0	-89.6	89.6	88.0	1.57	56.952	
500.0	500.0	500.0	500.0	1.0	1.0	-89.98	0.0	-89.6	89.6	87.6	2.02	44.296	
600.0	600.0	600.0	600.0	1.2	1.2	-89.98	0.0	-89.6	89.6	87.1	2.47	36.242	
700.0	700.0	700.0	700.0	1.5	1.5	-89.98	0.0	-89.6	89.6	86.7	2.92	30.666	
800.0	800.0	800.0	800.0	1.7	1.7	-89.98	0.0	-89.6	89.6	86.2	3.37	26.578	
900.0	900.0	900.0	900.0	1.9	1.9	-89.98	0.0	-89.6	89.6	85.8	3.82	23.451	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-89.98	0.0	-89.6	89.6	85.3	4.27	20.982	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-89.98	0.0	-89.6	89.6	84.9	4.72	18.984	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-89.98	0.0	-89.6	89.6	84.4	5.17	17.333	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-89.98	0.0	-89.6	89.6	84.0	5.62	15.947	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-89.98	0.0	-89.6	89.6	83.5	6.07	14.765	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-89.98	0.0	-89.6	89.6	83.1	6.52	13.747	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-89.98	0.0	-89.6	89.6	82.6	6.97	12.860	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-89.98	0.0	-89.6	89.6	82.2	7.42	12.081	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-89.98	0.0	-89.6	89.6	81.7	7.87	11.390	
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	-89.98	0.0	-89.6	89.6	81.3	8.32	10.775	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-89.98	0.0	-89.6	89.6	80.8	8.77	10.222	

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

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 25-122HN - Wellbore #1 - Plan #1 (11-21-13) **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-89.98	0.0	-89.6	89.6	80.4	9.22	9.724	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-89.98	0.0	-89.6	89.6	79.9	9.66	9.271	
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	-89.98	0.0	-89.6	89.6	79.5	10.11	8.859	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-89.98	0.0	-89.6	89.6	79.0	10.56	8.482	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-89.98	0.0	-89.6	89.6	78.6	11.01	8.136	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-89.98	0.0	-89.6	89.6	78.1	11.46	7.817	
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	-89.98	0.0	-89.6	89.6	77.7	11.91	7.522	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-89.98	0.0	-89.6	89.6	77.2	12.36	7.248	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-89.98	0.0	-89.6	89.6	76.8	12.81	6.994	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-89.98	0.0	-89.6	89.6	76.3	13.26	6.757	
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	-89.98	0.0	-89.6	89.6	75.9	13.71	6.535	
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	-89.98	0.0	-89.6	89.6	75.4	14.16	6.328	
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	-89.98	0.0	-89.6	89.6	75.0	14.61	6.133	
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	-89.98	0.0	-89.6	89.6	74.5	15.06	5.950	
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	-89.98	0.0	-89.6	89.6	74.1	15.51	5.778	
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	-89.98	0.0	-89.6	89.6	73.6	15.96	5.615	
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	-89.98	0.0	-89.6	89.6	73.2	16.41	5.461	
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	-89.98	0.0	-89.6	89.6	72.7	16.86	5.316	
3,900.0	3,900.0	3,900.0	3,900.0	8.7	8.7	-89.98	0.0	-89.6	89.6	72.3	17.31	5.177	
4,000.0	4,000.0	4,000.0	4,000.0	8.9	8.9	-89.98	0.0	-89.6	89.6	71.8	17.76	5.046	
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	-89.98	0.0	-89.6	89.6	71.4	18.21	4.922	
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	-89.98	0.0	-89.6	89.6	71.0	18.66	4.803	
4,300.0	4,300.0	4,300.0	4,300.0	9.6	9.6	-89.98	0.0	-89.6	89.6	70.5	19.11	4.690	
4,400.0	4,400.0	4,400.0	4,400.0	9.8	9.8	-89.98	0.0	-89.6	89.6	70.1	19.55	4.582	
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	-89.98	0.0	-89.6	89.6	69.6	20.00	4.479	
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	-89.98	0.0	-89.6	89.6	69.2	20.45	4.381	
4,700.0	4,700.0	4,700.0	4,700.0	10.5	10.5	-89.98	0.0	-89.6	89.6	68.7	20.90	4.287	
4,800.0	4,800.0	4,800.0	4,800.0	10.7	10.7	-89.98	0.0	-89.6	89.6	68.3	21.35	4.196	
4,900.0	4,900.0	4,900.0	4,900.0	10.9	10.9	-89.98	0.0	-89.6	89.6	67.8	21.80	4.110	
5,000.0	5,000.0	5,000.0	5,000.0	11.1	11.1	-89.98	0.0	-89.6	89.6	67.4	22.25	4.027	
5,100.0	5,100.0	5,100.0	5,100.0	11.4	11.4	-89.98	0.0	-89.6	89.6	66.9	22.70	3.947	
5,200.0	5,200.0	5,200.0	5,200.0	11.6	11.6	-89.98	0.0	-89.6	89.6	66.5	23.15	3.871	CC, ES, SF
5,300.0	5,300.0	5,300.0	5,300.0	11.8	11.8	147.72	0.0	-89.6	91.4	67.9	23.56	3.881	
5,400.0	5,399.7	5,399.7	5,399.7	12.0	12.0	149.71	0.0	-89.6	97.0	73.1	23.93	4.056	
5,500.0	5,499.1	5,490.1	5,489.9	12.2	12.2	154.03	3.7	-92.9	110.7	86.4	24.23	4.568	
5,600.0	5,598.0	5,575.1	5,573.7	12.4	12.4	160.21	14.0	-102.0	137.4	112.9	24.46	5.616	
5,700.0	5,696.0	5,650.0	5,646.1	12.6	12.6	165.65	28.4	-114.7	177.6	153.0	24.63	7.209	
5,800.0	5,793.2	5,720.2	5,712.1	12.8	12.8	170.08	46.4	-130.6	230.0	205.3	24.75	9.293	
5,900.0	5,889.2	5,778.9	5,765.5	13.1	12.9	173.15	64.6	-146.7	292.9	268.1	24.81	11.807	
6,000.0	5,983.9	5,828.6	5,809.3	13.4	13.1	175.35	82.2	-162.3	364.2	339.4	24.81	14.682	
6,100.0	6,077.1	5,887.4	5,859.9	13.7	13.3	177.58	104.6	-182.1	441.4	416.6	24.81	17.789	
6,200.0	6,169.6	5,948.5	5,912.5	14.1	13.6	179.42	127.9	-202.7	520.0	494.8	25.11	20.704	
6,300.0	6,262.2	6,009.6	5,965.1	14.6	13.9	-179.21	151.2	-223.3	598.7	573.3	25.42	23.555	
6,400.0	6,354.7	6,070.6	6,017.6	15.0	14.2	-178.16	174.5	-243.9	677.6	651.8	25.74	26.324	
6,500.0	6,449.5	6,136.5	6,074.3	15.4	14.6	149.22	199.6	-266.1	751.6	724.4	27.20	27.631	
6,600.0	6,546.9	6,211.8	6,139.1	15.6	15.0	92.79	228.3	-291.5	812.0	783.9	28.06	28.934	
6,700.0	6,641.9	7,550.8	6,922.6	15.8	22.7	125.93	584.0	234.7	852.8	816.1	36.68	23.249	
6,800.0	6,729.6	7,507.4	6,922.6	15.9	21.9	112.64	583.6	191.3	846.8	810.7	36.10	23.454	
6,816.2	6,742.9	7,498.5	6,922.6	15.9	21.7	111.03	583.5	182.4	846.7	810.7	36.01	23.509	
6,900.0	6,805.7	7,444.9	6,922.6	15.9	20.8	103.80	582.9	128.7	849.0	813.4	35.58	23.859	
7,000.0	6,866.0	7,366.4	6,922.6	16.1	19.5	96.97	582.1	50.3	855.6	820.5	35.13	24.353	
7,100.0	6,907.6	7,027.7	6,825.2	16.7	18.5	81.02	535.4	-262.3	852.4	819.7	32.78	26.007	

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

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 25-122HN - Wellbore #1 - Plan #1 (11-21-13)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,200.0	6,928.4	6,877.1	6,719.7	17.8	18.3	73.64	487.2	-357.1	832.6	799.6	33.00	25.233	
7,300.0	6,930.6	6,801.4	6,657.0	19.2	18.2	69.85	458.9	-388.5	809.8	776.1	33.77	23.978	
7,400.0	6,930.6	6,761.7	6,622.4	20.9	18.1	67.11	443.3	-400.1	795.5	760.7	34.77	22.875	
7,474.8	6,930.6	6,743.3	6,606.0	22.3	18.1	65.81	435.9	-404.4	792.1	756.3	35.77	22.143	
7,500.0	6,930.6	6,738.3	6,601.6	22.8	18.0	65.46	433.9	-405.4	792.5	756.4	36.12	21.939	
7,600.0	6,930.6	6,725.0	6,589.7	24.9	18.0	64.51	428.6	-407.8	801.6	763.9	37.75	21.233	
7,700.0	6,930.6	6,712.1	6,578.1	27.1	18.0	63.60	423.3	-409.8	822.6	783.1	39.48	20.838	
7,800.0	6,930.6	6,700.0	6,567.1	29.4	17.9	62.73	418.4	-411.3	854.7	813.5	41.27	20.708	
7,900.0	6,930.6	6,700.0	6,567.1	31.7	17.9	62.73	418.4	-411.3	896.8	853.4	43.41	20.659	
8,000.0	6,930.6	6,693.0	6,560.7	34.2	17.9	62.22	415.6	-412.1	947.5	902.1	45.42	20.862	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 25-162HN - Wellbore #1 - Plan #1 (11-21-13)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-119.7	119.7				
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	0.0	-119.7	119.7	119.4	0.22	532.377	
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-119.7	119.7	119.0	0.67	177.459	
300.0	300.0	300.0	300.0	0.6	0.6	-89.98	0.0	-119.7	119.7	118.5	1.12	106.475	
400.0	400.0	400.0	400.0	0.8	0.8	-89.98	0.0	-119.7	119.7	118.1	1.57	76.054	
500.0	500.0	500.0	500.0	1.0	1.0	-89.98	0.0	-119.7	119.7	117.6	2.02	59.153	
600.0	600.0	600.0	600.0	1.2	1.2	-89.98	0.0	-119.7	119.7	117.2	2.47	48.398	
700.0	700.0	700.0	700.0	1.5	1.5	-89.98	0.0	-119.7	119.7	116.7	2.92	40.952	
800.0	800.0	800.0	800.0	1.7	1.7	-89.98	0.0	-119.7	119.7	116.3	3.37	35.492	
900.0	900.0	900.0	900.0	1.9	1.9	-89.98	0.0	-119.7	119.7	115.8	3.82	31.316	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-89.98	0.0	-119.7	119.7	115.4	4.27	28.020	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-89.98	0.0	-119.7	119.7	114.9	4.72	25.351	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-89.98	0.0	-119.7	119.7	114.5	5.17	23.147	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-89.98	0.0	-119.7	119.7	114.0	5.62	21.295	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-89.98	0.0	-119.7	119.7	113.6	6.07	19.718	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-89.98	0.0	-119.7	119.7	113.1	6.52	18.358	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-89.98	0.0	-119.7	119.7	112.7	6.97	17.173	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-89.98	0.0	-119.7	119.7	112.2	7.42	16.133	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-89.98	0.0	-119.7	119.7	111.8	7.87	15.211	
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	-89.98	0.0	-119.7	119.7	111.3	8.32	14.389	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-89.98	0.0	-119.7	119.7	110.9	8.77	13.651	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-89.98	0.0	-119.7	119.7	110.4	9.22	12.985	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-89.98	0.0	-119.7	119.7	110.0	9.66	12.381	
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	-89.98	0.0	-119.7	119.7	109.5	10.11	11.831	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-89.98	0.0	-119.7	119.7	109.1	10.56	11.327	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-89.98	0.0	-119.7	119.7	108.6	11.01	10.865	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-89.98	0.0	-119.7	119.7	108.2	11.46	10.439	
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	-89.98	0.0	-119.7	119.7	107.7	11.91	10.045	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-89.98	0.0	-119.7	119.7	107.3	12.36	9.680	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-89.98	0.0	-119.7	119.7	106.8	12.81	9.340	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-89.98	0.0	-119.7	119.7	106.4	13.26	9.023	
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	-89.98	0.0	-119.7	119.7	105.9	13.71	8.727	
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	-89.98	0.0	-119.7	119.7	105.5	14.16	8.450	
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	-89.98	0.0	-119.7	119.7	105.1	14.61	8.190	
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	-89.98	0.0	-119.7	119.7	104.6	15.06	7.946	
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	-89.98	0.0	-119.7	119.7	104.2	15.51	7.716	
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	-89.98	0.0	-119.7	119.7	103.7	15.96	7.498	
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	-89.98	0.0	-119.7	119.7	103.3	16.41	7.293	
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	-89.98	0.0	-119.7	119.7	102.8	16.86	7.098	
3,900.0	3,900.0	3,900.0	3,900.0	8.7	8.7	-89.98	0.0	-119.7	119.7	102.4	17.31	6.914	
4,000.0	4,000.0	4,000.0	4,000.0	8.9	8.9	-89.98	0.0	-119.7	119.7	101.9	17.76	6.739	
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	-89.98	0.0	-119.7	119.7	101.5	18.21	6.573	
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	-89.98	0.0	-119.7	119.7	101.0	18.66	6.414	
4,300.0	4,300.0	4,300.0	4,300.0	9.6	9.6	-89.98	0.0	-119.7	119.7	100.6	19.11	6.263	
4,400.0	4,400.0	4,400.0	4,400.0	9.8	9.8	-89.98	0.0	-119.7	119.7	100.1	19.55	6.119	
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	-89.98	0.0	-119.7	119.7	99.7	20.00	5.982	
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	-89.98	0.0	-119.7	119.7	99.2	20.45	5.850	
4,700.0	4,700.0	4,700.0	4,700.0	10.5	10.5	-89.98	0.0	-119.7	119.7	98.8	20.90	5.724	
4,800.0	4,800.0	4,800.0	4,800.0	10.7	10.7	-89.98	0.0	-119.7	119.7	98.3	21.35	5.604	
4,900.0	4,900.0	4,900.0	4,900.0	10.9	10.9	-89.98	0.0	-119.7	119.7	97.9	21.80	5.488	
5,000.0	5,000.0	5,000.0	5,000.0	11.1	11.1	-89.98	0.0	-119.7	119.7	97.4	22.25	5.378	
5,100.0	5,100.0	5,100.0	5,100.0	11.4	11.4	-89.98	0.0	-119.7	119.7	97.0	22.70	5.271	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 25-162HN - Wellbore #1 - Plan #1 (11-21-13) **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,200.0	5,200.0	5,200.0	11.6	11.6	-89.98	0.0	-119.7	119.7	96.5	23.15	5.169	CC, ES, SF
5,300.0	5,300.0	5,294.9	5,294.9	11.8	11.8	147.57	0.3	-121.6	123.6	100.0	23.54	5.249	
5,400.0	5,399.7	5,388.9	5,388.6	12.0	12.0	149.09	0.9	-127.4	135.3	111.4	23.87	5.668	
5,500.0	5,499.1	5,480.9	5,480.2	12.2	12.2	151.06	2.0	-136.7	154.9	130.7	24.16	6.410	
5,600.0	5,598.0	5,570.3	5,568.7	12.4	12.4	153.05	3.5	-149.3	182.3	157.9	24.41	7.466	
5,700.0	5,696.0	5,656.1	5,653.1	12.6	12.6	154.79	5.2	-164.6	217.3	192.7	24.62	8.824	
5,800.0	5,793.2	5,737.9	5,733.0	12.8	12.8	156.19	7.3	-182.1	259.6	234.8	24.79	10.470	
5,900.0	5,889.2	5,815.1	5,807.8	13.1	13.0	157.24	9.5	-201.2	308.7	283.8	24.92	12.387	
6,000.0	5,983.9	5,887.4	5,877.2	13.4	13.2	157.98	11.8	-221.3	364.2	339.2	25.02	14.561	
6,100.0	6,077.1	5,954.6	5,941.0	13.7	13.4	158.51	14.2	-241.9	425.6	400.5	25.10	16.955	
6,200.0	6,169.6	6,017.8	6,000.6	14.1	13.6	159.43	16.6	-263.1	490.5	465.1	25.43	19.292	
6,300.0	6,262.2	6,090.2	6,068.3	14.6	13.9	160.23	19.6	-288.5	556.9	531.1	25.78	21.606	
6,400.0	6,354.7	7,432.5	6,922.6	15.0	22.2	-150.60	62.7	241.0	608.9	575.2	33.71	18.061	
6,500.0	6,449.5	7,455.4	6,922.6	15.4	22.6	-160.27	62.7	263.8	530.9	494.4	36.50	14.546	
6,600.0	6,546.9	7,455.9	6,922.6	15.6	22.6	159.81	62.7	264.3	458.4	421.4	37.01	12.386	
6,700.0	6,641.9	7,433.9	6,922.6	15.8	22.2	135.80	62.7	242.3	399.2	363.0	36.20	11.028	
6,800.0	6,729.6	7,390.6	6,922.6	15.9	21.4	123.60	62.6	199.1	359.6	324.3	35.25	10.200	
6,900.0	6,805.7	7,328.2	6,922.6	15.9	20.3	112.75	62.4	136.7	341.0	306.3	34.74	9.817	
6,969.3	6,849.3	7,275.4	6,922.6	16.0	19.4	105.30	62.3	83.9	338.1	303.5	34.62	9.767	
7,000.0	6,866.0	7,249.7	6,922.6	16.1	19.0	102.16	62.2	58.2	338.5	304.0	34.54	9.800	
7,100.0	6,907.6	7,153.5	6,917.9	16.7	17.8	92.64	61.3	-37.8	342.5	308.1	34.41	9.953	
7,200.0	6,928.4	7,063.0	6,895.7	17.8	16.8	84.79	59.5	-125.4	346.8	312.3	34.47	10.062	
7,300.0	6,930.6	6,981.1	6,860.5	19.2	16.3	78.47	57.2	-199.2	351.9	317.1	34.76	10.123	
7,400.0	6,930.6	6,913.4	6,821.6	20.9	16.0	72.29	54.9	-254.4	366.0	330.8	35.25	10.383	
7,500.0	6,930.6	6,859.4	6,784.7	22.8	15.8	66.74	52.9	-293.8	393.3	357.5	35.82	10.982	
7,600.0	6,930.6	6,816.5	6,752.2	24.9	15.8	62.15	51.1	-321.7	434.5	398.0	36.48	11.912	
7,700.0	6,930.6	6,782.2	6,724.3	27.1	15.7	58.47	49.7	-341.7	488.0	450.8	37.26	13.098	
7,800.0	6,930.6	6,750.0	6,696.8	29.4	15.7	55.08	48.2	-358.3	551.5	513.5	38.00	14.515	
7,900.0	6,930.6	6,725.0	6,674.7	31.7	15.7	52.52	47.1	-369.9	622.6	583.7	38.91	15.999	
8,000.0	6,930.6	6,712.8	6,663.7	34.2	15.7	51.30	46.6	-375.0	699.3	659.0	40.33	17.340	
8,100.0	6,930.6	6,700.0	6,651.9	36.7	15.7	50.04	46.0	-380.1	780.5	738.8	41.70	18.718	
8,200.0	6,930.6	6,683.4	6,636.5	39.2	15.6	48.45	45.2	-386.2	865.0	822.2	42.84	20.189	
8,300.0	6,930.6	6,675.0	6,628.6	41.8	15.6	47.66	44.8	-389.1	952.1	907.7	44.37	21.459	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 27-179HC - Wellbore #1 - Plan #1 (11-21-13)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-30.1	30.1				
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	0.0	-30.1	30.1	29.8	0.22	133.713	
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-30.1	30.1	29.4	0.67	44.571	
300.0	300.0	300.0	300.0	0.6	0.6	-89.98	0.0	-30.1	30.1	28.9	1.12	26.743	
400.0	400.0	400.0	400.0	0.8	0.8	-89.98	0.0	-30.1	30.1	28.5	1.57	19.102	
500.0	500.0	500.0	500.0	1.0	1.0	-89.98	0.0	-30.1	30.1	28.0	2.02	14.857	
600.0	600.0	600.0	600.0	1.2	1.2	-89.98	0.0	-30.1	30.1	27.6	2.47	12.156	
700.0	700.0	700.0	700.0	1.5	1.5	-89.98	0.0	-30.1	30.1	27.1	2.92	10.286	
800.0	800.0	800.0	800.0	1.7	1.7	-89.98	0.0	-30.1	30.1	26.7	3.37	8.914	
900.0	900.0	900.0	900.0	1.9	1.9	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	0.0	-30.1	30.1	21.7	8.32	3.614	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	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	-89.98	0.0	-30.1	30.1	10.1	20.00	1.502	
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	-89.98	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	-89.98	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	-89.98	0.0	-30.1	30.1	8.7	21.35	1.408	Level 3
4,900.0	4,900.0	4,900.0	4,900.0	10.9	10.9	-89.98	0.0	-30.1	30.1	8.3	21.80	1.378	Level 3
5,000.0	5,000.0	5,000.0	5,000.0	11.1	11.1	-89.98	0.0	-30.1	30.1	7.8	22.25	1.351	Level 3
5,100.0	5,100.0	5,100.0	5,100.0	11.4	11.4	-89.98	0.0	-30.1	30.1	7.4	22.70	1.324	Level 3

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 27-179HC - Wellbore #1 - Plan #1 (11-21-13) **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,200.0	5,200.0	5,200.0	11.6	11.6	-89.98	0.0	-30.1	30.1	6.9	23.15	1.298	Level 3, CC, ES
5,300.0	5,300.0	5,300.0	5,300.0	11.8	11.8	149.11	0.0	-30.1	31.9	8.3	23.56	1.354	Level 3
5,400.0	5,399.7	5,399.7	5,399.7	12.0	12.0	154.16	0.0	-30.1	37.7	13.7	23.92	1.575	
5,500.0	5,499.1	5,500.8	5,500.8	12.2	12.2	160.21	-0.1	-28.2	45.9	21.7	24.22	1.895	
5,600.0	5,598.0	5,602.1	5,601.9	12.4	12.4	166.50	-0.6	-22.6	55.1	30.6	24.46	2.252	
5,700.0	5,696.0	5,703.5	5,702.8	12.6	12.6	172.66	-1.3	-13.2	65.6	40.9	24.67	2.660	
5,800.0	5,793.2	5,804.9	5,803.4	12.8	12.9	178.46	-2.4	-0.2	77.6	52.8	24.84	3.126	
5,900.0	5,889.2	5,906.4	5,903.5	13.1	13.1	-176.21	-3.7	16.7	91.4	66.4	24.99	3.658	
6,000.0	5,983.9	6,007.9	6,002.9	13.4	13.3	-171.39	-5.3	37.2	107.0	81.9	25.15	4.256	
6,100.0	6,077.1	6,109.4	6,101.4	13.7	13.6	-167.09	-7.2	61.4	124.6	99.2	25.36	4.911	
6,200.0	6,169.6	6,211.2	6,199.3	14.1	13.9	-163.06	-9.5	89.3	141.6	115.7	25.92	5.463	
6,300.0	6,262.2	6,313.3	6,296.4	14.6	14.2	-158.88	-12.0	120.9	156.6	130.1	26.55	5.899	
6,400.0	6,354.7	6,415.6	6,392.3	15.0	14.6	-154.45	-14.8	156.2	170.1	142.8	27.30	6.229	
6,500.0	6,449.5	6,513.8	6,483.5	15.4	15.0	-175.39	-17.7	192.7	179.0	150.4	28.67	6.245	
6,600.0	6,546.9	6,602.3	6,565.8	15.6	15.4	141.09	-20.3	224.8	185.0	155.2	29.80	6.210	
6,700.0	6,641.9	6,686.9	6,648.3	15.8	15.6	120.67	-22.9	242.9	198.4	168.0	30.38	6.528	
6,800.0	6,729.6	6,780.2	6,741.4	15.9	15.8	117.63	-26.0	243.2	219.6	189.1	30.45	7.211	
6,900.0	6,805.7	6,885.8	6,843.8	15.9	15.9	119.35	-29.3	218.8	245.6	215.6	30.02	8.183	
7,000.0	6,866.0	7,008.6	6,950.7	16.1	16.0	122.21	-32.9	159.6	272.4	243.1	29.35	9.281	
7,100.0	6,907.6	7,152.5	7,048.0	16.7	16.4	124.92	-36.2	54.5	294.9	265.8	29.07	10.144	
7,200.0	6,928.4	7,316.3	7,108.4	17.8	17.6	126.56	-38.3	-96.7	307.6	277.5	30.15	10.202	
7,300.0	6,930.6	7,447.1	7,115.6	19.2	19.3	126.74	-38.5	-226.9	309.3	276.7	32.54	9.505	
7,400.0	6,930.6	7,547.1	7,115.6	20.9	20.9	126.65	-37.9	-326.9	309.9	274.7	35.22	8.799	
7,500.0	6,930.6	7,647.1	7,115.6	22.8	22.7	126.57	-37.3	-426.9	310.5	272.3	38.25	8.118	
7,600.0	6,930.6	7,747.1	7,115.6	24.9	24.7	126.49	-36.7	-526.9	311.1	269.5	41.58	7.483	
7,700.0	6,930.6	7,847.1	7,115.6	27.1	26.9	126.40	-36.1	-626.9	311.7	266.6	45.14	6.906	
7,800.0	6,930.6	7,947.1	7,115.6	29.4	29.1	126.32	-35.5	-726.9	312.4	263.5	48.89	6.389	
7,900.0	6,930.6	8,047.1	7,115.6	31.7	31.5	126.24	-34.9	-826.9	313.0	260.2	52.79	5.929	
8,000.0	6,930.6	8,147.1	7,115.6	34.2	33.9	126.15	-34.3	-926.9	313.6	256.8	56.80	5.521	
8,100.0	6,930.6	8,247.1	7,115.6	36.7	36.4	126.07	-33.7	-1,026.9	314.2	253.3	60.92	5.158	
8,200.0	6,930.6	8,347.1	7,115.6	39.2	38.9	125.99	-33.1	-1,126.9	314.8	249.7	65.11	4.835	
8,300.0	6,930.6	8,447.1	7,115.6	41.8	41.5	125.91	-32.5	-1,226.9	315.4	246.1	69.38	4.547	
8,400.0	6,930.6	8,547.0	7,115.6	44.4	44.1	125.83	-31.9	-1,326.9	316.1	242.4	73.70	4.288	
8,500.0	6,930.6	8,647.0	7,115.6	47.0	46.7	125.75	-31.3	-1,426.9	316.7	238.6	78.07	4.056	
8,600.0	6,930.6	8,747.0	7,115.6	49.7	49.3	125.67	-30.7	-1,526.9	317.3	234.8	82.48	3.847	
8,700.0	6,930.6	8,847.0	7,115.6	52.3	52.0	125.59	-30.1	-1,626.9	317.9	231.0	86.94	3.657	
8,800.0	6,930.6	8,947.0	7,115.6	55.0	54.6	125.51	-29.4	-1,726.9	318.5	227.1	91.42	3.484	
8,900.0	6,930.6	9,047.0	7,115.6	57.7	57.3	125.43	-28.8	-1,826.9	319.2	223.2	95.94	3.327	
9,000.0	6,930.6	9,147.0	7,115.6	60.4	60.0	125.35	-28.2	-1,926.9	319.8	219.3	100.48	3.182	
9,100.0	6,930.6	9,247.0	7,115.6	63.1	62.7	125.27	-27.6	-2,026.9	320.4	215.3	105.05	3.050	
9,200.0	6,930.6	9,347.0	7,115.6	65.8	65.4	125.19	-27.0	-2,126.9	321.0	211.4	109.64	2.928	
9,300.0	6,930.6	9,447.0	7,115.6	68.6	68.2	125.11	-26.4	-2,226.8	321.6	207.4	114.24	2.815	
9,400.0	6,930.6	9,547.0	7,115.6	71.3	70.9	125.03	-25.8	-2,326.8	322.3	203.4	118.87	2.711	
9,500.0	6,930.6	9,647.0	7,115.6	74.0	73.6	124.96	-25.2	-2,426.8	322.9	199.4	123.52	2.614	
9,600.0	6,930.6	9,747.0	7,115.6	76.8	76.4	124.88	-24.6	-2,526.8	323.5	195.3	128.18	2.524	
9,700.0	6,930.6	9,847.0	7,115.6	79.5	79.1	124.80	-24.0	-2,626.8	324.1	191.3	132.86	2.440	
9,800.0	6,930.6	9,947.0	7,115.6	82.3	81.9	124.73	-23.4	-2,726.8	324.8	187.2	137.55	2.361	
9,900.0	6,930.6	10,047.0	7,115.6	85.0	84.6	124.65	-22.8	-2,826.8	325.4	183.1	142.26	2.287	
10,000.0	6,930.6	10,147.0	7,115.6	87.8	87.4	124.57	-22.2	-2,926.8	326.0	179.0	146.97	2.218	
10,100.0	6,930.6	10,247.0	7,115.6	90.5	90.1	124.50	-21.6	-3,026.8	326.7	174.9	151.71	2.153	
10,200.0	6,930.6	10,347.0	7,115.6	93.3	92.9	124.42	-21.0	-3,126.8	327.3	170.8	156.45	2.092	
10,300.0	6,930.6	10,447.0	7,115.6	96.1	95.7	124.35	-20.4	-3,226.8	327.9	166.7	161.20	2.034	

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

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 27-179HC - Wellbore #1 - Plan #1 (11-21-13)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	6,930.6	10,547.0	7,115.6	98.8	98.4	124.27	-19.8	-3,326.8	328.5	162.6	165.97	1.980	
10,500.0	6,930.6	10,647.0	7,115.6	101.6	101.2	124.20	-19.2	-3,426.8	329.2	158.4	170.75	1.928	
10,600.0	6,930.6	10,747.0	7,115.6	104.4	104.0	124.12	-18.6	-3,526.8	329.8	154.3	175.54	1.879	
10,700.0	6,930.6	10,847.0	7,115.6	107.2	106.7	124.05	-18.0	-3,626.8	330.4	150.1	180.33	1.832	
10,800.0	6,930.6	10,947.0	7,115.6	109.9	109.5	123.97	-17.3	-3,726.8	331.1	145.9	185.14	1.788	
10,900.0	6,930.6	11,047.0	7,115.6	112.7	112.3	123.90	-16.7	-3,826.8	331.7	141.7	189.96	1.746	
11,000.0	6,930.6	11,147.0	7,115.6	115.5	115.1	123.83	-16.1	-3,926.8	332.3	137.6	194.78	1.706	
11,100.0	6,930.6	11,247.0	7,115.6	118.3	117.9	123.75	-15.5	-4,026.8	333.0	133.4	199.62	1.668	
11,200.0	6,930.6	11,347.0	7,115.6	121.1	120.6	123.68	-14.9	-4,126.8	333.6	129.1	204.46	1.632	
11,300.0	6,930.6	11,447.0	7,115.6	123.8	123.4	123.61	-14.3	-4,226.8	334.2	124.9	209.31	1.597	
11,400.0	6,930.6	11,547.0	7,115.6	126.6	126.2	123.54	-13.7	-4,326.7	334.9	120.7	214.17	1.564	
11,500.0	6,930.6	11,647.0	7,115.6	129.4	129.0	123.46	-13.1	-4,426.7	335.5	116.5	219.04	1.532	
11,600.0	6,930.6	11,747.0	7,115.6	132.2	131.8	123.39	-12.5	-4,526.7	336.1	112.2	223.91	1.501	
11,700.0	6,930.6	11,847.0	7,115.6	135.0	134.6	123.32	-11.9	-4,626.7	336.8	108.0	228.80	1.472	Level 3
11,800.0	6,930.6	11,946.9	7,115.6	137.8	137.4	123.25	-11.3	-4,726.7	337.4	103.7	233.69	1.444	Level 3
11,900.0	6,930.6	12,046.9	7,115.6	140.6	140.2	123.18	-10.7	-4,826.7	338.1	99.5	238.59	1.417	Level 3
12,000.0	6,930.6	12,146.9	7,115.6	143.4	142.9	123.11	-10.1	-4,926.7	338.7	95.2	243.49	1.391	Level 3
12,100.0	6,930.6	12,246.9	7,115.6	146.1	145.7	123.04	-9.5	-5,026.7	339.3	90.9	248.41	1.366	Level 3
12,200.0	6,930.6	12,346.9	7,115.6	148.9	148.5	122.97	-8.9	-5,126.7	340.0	86.6	253.33	1.342	Level 3
12,300.0	6,930.6	12,446.9	7,115.6	151.7	151.3	122.90	-8.3	-5,226.7	340.6	82.4	258.25	1.319	Level 3
12,400.0	6,930.6	12,546.9	7,115.6	154.5	154.1	122.83	-7.7	-5,326.7	341.3	78.1	263.19	1.297	Level 3
12,500.0	6,930.6	12,646.9	7,115.6	157.3	156.9	122.76	-7.1	-5,426.7	341.9	73.8	268.13	1.275	Level 3
12,600.0	6,930.6	12,746.9	7,115.6	160.1	159.7	122.69	-6.5	-5,526.7	342.5	69.5	273.08	1.254	Level 3
12,700.0	6,930.6	12,846.9	7,115.6	162.9	162.5	122.62	-5.9	-5,626.7	343.2	65.1	278.03	1.234	Level 2
12,800.0	6,930.6	12,946.9	7,115.6	165.7	165.3	122.55	-5.2	-5,726.7	343.8	60.8	282.99	1.215	Level 2
12,900.0	6,930.6	13,046.9	7,115.6	168.5	168.1	122.48	-4.6	-5,826.7	344.5	56.5	287.96	1.196	Level 2
13,000.0	6,930.6	13,146.9	7,115.6	171.3	170.9	122.42	-4.0	-5,926.7	345.1	52.2	292.93	1.178	Level 2
13,100.0	6,930.6	13,246.9	7,115.6	174.1	173.7	122.35	-3.4	-6,026.7	345.8	47.8	297.91	1.161	Level 2
13,200.0	6,930.6	13,346.9	7,115.6	176.9	176.5	122.28	-2.8	-6,126.7	346.4	43.5	302.90	1.144	Level 2
13,300.0	6,930.6	13,446.9	7,115.6	179.7	179.3	122.21	-2.2	-6,226.7	347.0	39.2	307.89	1.127	Level 2
13,400.0	6,930.6	13,546.9	7,115.6	182.5	182.1	122.15	-1.6	-6,326.7	347.7	34.8	312.89	1.111	Level 2
13,500.0	6,930.6	13,646.9	7,115.6	185.3	184.9	122.08	-1.0	-6,426.6	348.3	30.4	317.89	1.096	Level 2
13,600.0	6,930.6	13,746.9	7,115.6	188.1	187.7	122.01	-0.4	-6,526.6	349.0	26.1	322.90	1.081	Level 2
13,700.0	6,930.6	13,846.9	7,115.6	190.9	190.5	121.95	0.2	-6,626.6	349.6	21.7	327.92	1.066	Level 2
13,800.0	6,930.6	13,946.9	7,115.6	193.7	193.3	121.88	0.8	-6,726.6	350.3	17.3	332.94	1.052	Level 2
13,826.9	6,930.6	13,973.8	7,115.6	194.4	194.0	121.86	1.0	-6,753.5	350.4	16.2	334.29	1.048	Level 2, SF

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 27-179HN - Wellbore #1 - Plan #1 (11-21-13)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-60.1	60.1				
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	0.0	-60.1	60.1	59.9	0.22	267.427	
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-60.1	60.1	59.4	0.67	89.142	
300.0	300.0	300.0	300.0	0.6	0.6	-89.98	0.0	-60.1	60.1	59.0	1.12	53.485	
400.0	400.0	400.0	400.0	0.8	0.8	-89.98	0.0	-60.1	60.1	58.5	1.57	38.204	
500.0	500.0	500.0	500.0	1.0	1.0	-89.98	0.0	-60.1	60.1	58.1	2.02	29.714	
600.0	600.0	600.0	600.0	1.2	1.2	-89.98	0.0	-60.1	60.1	57.6	2.47	24.312	
700.0	700.0	700.0	700.0	1.5	1.5	-89.98	0.0	-60.1	60.1	57.2	2.92	20.571	
800.0	800.0	800.0	800.0	1.7	1.7	-89.98	0.0	-60.1	60.1	56.7	3.37	17.828	
900.0	900.0	900.0	900.0	1.9	1.9	-89.98	0.0	-60.1	60.1	56.3	3.82	15.731	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-89.98	0.0	-60.1	60.1	55.8	4.27	14.075	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-89.98	0.0	-60.1	60.1	55.4	4.72	12.735	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-89.98	0.0	-60.1	60.1	54.9	5.17	11.627	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-89.98	0.0	-60.1	60.1	54.5	5.62	10.697	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-89.98	0.0	-60.1	60.1	54.0	6.07	9.905	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-89.98	0.0	-60.1	60.1	53.6	6.52	9.222	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-89.98	0.0	-60.1	60.1	53.1	6.97	8.627	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-89.98	0.0	-60.1	60.1	52.7	7.42	8.104	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-89.98	0.0	-60.1	60.1	52.2	7.87	7.641	
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	-89.98	0.0	-60.1	60.1	51.8	8.32	7.228	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-89.98	0.0	-60.1	60.1	51.3	8.77	6.857	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-89.98	0.0	-60.1	60.1	50.9	9.22	6.523	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-89.98	0.0	-60.1	60.1	50.4	9.66	6.219	
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	-89.98	0.0	-60.1	60.1	50.0	10.11	5.943	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-89.98	0.0	-60.1	60.1	49.5	10.56	5.690	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-89.98	0.0	-60.1	60.1	49.1	11.01	5.458	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-89.98	0.0	-60.1	60.1	48.6	11.46	5.244	
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	-89.98	0.0	-60.1	60.1	48.2	11.91	5.046	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-89.98	0.0	-60.1	60.1	47.7	12.36	4.862	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-89.98	0.0	-60.1	60.1	47.3	12.81	4.692	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-89.98	0.0	-60.1	60.1	46.8	13.26	4.533	
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	-89.98	0.0	-60.1	60.1	46.4	13.71	4.384	
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	-89.98	0.0	-60.1	60.1	45.9	14.16	4.245	
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	-89.98	0.0	-60.1	60.1	45.5	14.61	4.114	
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	-89.98	0.0	-60.1	60.1	45.0	15.06	3.991	
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	-89.98	0.0	-60.1	60.1	44.6	15.51	3.876	
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	-89.98	0.0	-60.1	60.1	44.2	15.96	3.767	
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	-89.98	0.0	-60.1	60.1	43.7	16.41	3.663	
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	-89.98	0.0	-60.1	60.1	43.3	16.86	3.566	
3,900.0	3,900.0	3,900.0	3,900.0	8.7	8.7	-89.98	0.0	-60.1	60.1	42.8	17.31	3.473	
4,000.0	4,000.0	4,000.0	4,000.0	8.9	8.9	-89.98	0.0	-60.1	60.1	42.4	17.76	3.385	
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	-89.98	0.0	-60.1	60.1	41.9	18.21	3.302	
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	-89.98	0.0	-60.1	60.1	41.5	18.66	3.222	
4,300.0	4,300.0	4,300.0	4,300.0	9.6	9.6	-89.98	0.0	-60.1	60.1	41.0	19.11	3.146	
4,400.0	4,400.0	4,400.0	4,400.0	9.8	9.8	-89.98	0.0	-60.1	60.1	40.6	19.55	3.074	
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	-89.98	0.0	-60.1	60.1	40.1	20.00	3.005	
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	-89.98	0.0	-60.1	60.1	39.7	20.45	2.939	
4,700.0	4,700.0	4,700.0	4,700.0	10.5	10.5	-89.98	0.0	-60.1	60.1	39.2	20.90	2.876	
4,800.0	4,800.0	4,800.0	4,800.0	10.7	10.7	-89.98	0.0	-60.1	60.1	38.8	21.35	2.815	
4,900.0	4,900.0	4,900.0	4,900.0	10.9	10.9	-89.98	0.0	-60.1	60.1	38.3	21.80	2.757	
5,000.0	5,000.0	5,000.0	5,000.0	11.1	11.1	-89.98	0.0	-60.1	60.1	37.9	22.25	2.701	
5,100.0	5,100.0	5,100.0	5,100.0	11.4	11.4	-89.98	0.0	-60.1	60.1	37.4	22.70	2.648	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 27-179HN - Wellbore #1 - Plan #1 (11-21-13) **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,200.0	5,200.0	5,200.0	11.6	11.6	-89.98	0.0	-60.1	60.1	37.0	23.15	2.596	CC, ES
5,300.0	5,300.0	5,300.0	5,300.0	11.8	11.8	148.07	0.0	-60.1	61.9	38.4	23.56	2.629	
5,400.0	5,399.7	5,399.7	5,399.7	12.0	12.0	150.93	0.0	-60.1	67.6	43.7	23.92	2.825	
5,500.0	5,499.1	5,499.1	5,499.1	12.2	12.2	154.75	0.0	-60.1	77.3	53.0	24.25	3.188	
5,600.0	5,598.0	5,598.0	5,598.0	12.4	12.5	158.69	0.0	-60.1	91.3	66.8	24.53	3.722	
5,700.0	5,696.0	5,709.4	5,708.9	12.6	12.7	165.23	2.5	-52.2	103.6	78.9	24.76	4.187	
5,800.0	5,793.2	5,820.0	5,816.6	12.8	13.0	176.37	10.0	-28.1	109.8	84.9	24.93	4.406	
5,900.0	5,889.2	5,925.9	5,914.7	13.1	13.2	-168.29	21.7	9.5	115.3	90.1	25.19	4.577	
6,000.0	5,983.9	6,022.1	5,998.9	13.4	13.6	-151.90	35.5	53.9	127.9	102.2	25.74	4.969	
6,100.0	6,077.1	6,114.4	6,079.0	13.7	14.0	-139.62	49.2	97.8	152.2	125.7	26.54	5.734	
6,200.0	6,169.6	6,206.7	6,159.1	14.1	14.4	-131.35	62.9	141.6	182.5	155.0	27.57	6.621	
6,300.0	6,262.2	6,299.0	6,239.1	14.6	14.9	-125.40	76.5	185.5	215.5	186.9	28.59	7.536	
6,400.0	6,354.7	6,390.2	6,318.8	15.0	15.4	-121.36	90.1	227.8	250.1	220.5	29.57	8.456	
6,500.0	6,449.5	6,480.6	6,403.3	15.4	15.8	-151.07	104.5	255.9	286.5	256.4	30.10	9.519	
6,600.0	6,546.9	6,571.9	6,492.6	15.6	16.0	152.00	119.7	266.1	324.2	293.7	30.51	10.626	
6,700.0	6,641.9	6,665.6	6,584.3	15.8	16.2	119.01	135.3	256.9	361.3	330.5	30.87	11.706	
6,800.0	6,729.6	6,763.3	6,675.7	15.9	16.2	105.01	150.8	226.6	396.2	365.0	31.21	12.697	
6,900.0	6,805.7	6,866.4	6,762.5	15.9	16.3	97.70	165.4	173.4	427.1	395.4	31.63	13.501	
7,000.0	6,866.0	6,975.9	6,838.7	16.1	16.5	93.49	178.3	96.3	452.2	419.8	32.40	13.956	
7,100.0	6,907.6	7,091.6	6,896.3	16.7	17.2	91.12	187.9	-3.2	469.9	436.0	33.85	13.880	
7,200.0	6,928.4	7,212.0	6,927.1	17.8	18.4	90.09	193.0	-119.1	478.8	442.6	36.19	13.232	
7,300.0	6,930.6	7,322.2	6,930.6	19.2	20.0	90.00	193.4	-229.2	479.8	440.7	39.11	12.269	
7,400.0	6,930.6	7,422.2	6,930.6	20.9	21.7	90.00	193.3	-329.2	479.8	437.4	42.44	11.306	
7,500.0	6,930.6	7,522.2	6,930.6	22.8	23.6	90.00	193.1	-429.2	479.8	433.6	46.21	10.383	
7,600.0	6,930.6	7,622.2	6,930.6	24.9	25.6	90.00	192.9	-529.2	479.8	429.5	50.33	9.533	
7,700.0	6,930.6	7,722.2	6,930.6	27.1	27.8	90.00	192.8	-629.2	479.8	425.1	54.72	8.769	
7,800.0	6,930.6	7,822.2	6,930.6	29.4	30.1	90.00	192.6	-729.2	479.8	420.5	59.31	8.089	
7,900.0	6,930.6	7,922.2	6,930.6	31.7	32.5	90.00	192.5	-829.2	479.8	415.7	64.07	7.489	
8,000.0	6,930.6	8,022.2	6,930.6	34.2	34.9	90.00	192.3	-929.2	479.8	410.8	68.96	6.958	
8,100.0	6,930.6	8,122.2	6,930.6	36.7	37.4	90.00	192.2	-1,029.2	479.8	405.9	73.95	6.488	
8,200.0	6,930.6	8,222.2	6,930.6	39.2	39.9	90.00	192.0	-1,129.2	479.8	400.8	79.02	6.072	
8,300.0	6,930.6	8,322.2	6,930.6	41.8	42.5	90.00	191.8	-1,229.2	479.8	395.6	84.17	5.701	
8,400.0	6,930.6	8,422.2	6,930.6	44.4	45.1	90.00	191.7	-1,329.2	479.8	390.4	89.37	5.369	
8,500.0	6,930.6	8,522.2	6,930.6	47.0	47.7	90.00	191.5	-1,429.2	479.8	385.2	94.62	5.071	
8,600.0	6,930.6	8,622.2	6,930.6	49.7	50.3	90.00	191.4	-1,529.2	479.8	379.9	99.90	4.803	
8,700.0	6,930.6	8,722.2	6,930.6	52.3	53.0	90.00	191.2	-1,629.2	479.8	374.6	105.23	4.560	
8,800.0	6,930.6	8,822.2	6,930.6	55.0	55.7	90.00	191.1	-1,729.2	479.8	369.2	110.58	4.339	
8,900.0	6,930.6	8,922.2	6,930.6	57.7	58.3	90.00	190.9	-1,829.2	479.8	363.8	115.95	4.138	
9,000.0	6,930.6	9,022.2	6,930.6	60.4	61.0	90.00	190.7	-1,929.2	479.8	358.4	121.35	3.954	
9,100.0	6,930.6	9,122.2	6,930.6	63.1	63.7	90.00	190.6	-2,029.2	479.8	353.0	126.77	3.785	
9,200.0	6,930.6	9,222.2	6,930.6	65.8	66.4	90.00	190.4	-2,129.2	479.8	347.6	132.20	3.629	
9,300.0	6,930.6	9,322.2	6,930.6	68.6	69.2	90.00	190.3	-2,229.2	479.8	342.1	137.65	3.486	
9,400.0	6,930.6	9,422.2	6,930.6	71.3	71.9	90.00	190.1	-2,329.2	479.8	336.7	143.11	3.353	
9,500.0	6,930.6	9,522.2	6,930.6	74.0	74.6	90.00	189.9	-2,429.2	479.8	331.2	148.58	3.229	
9,600.0	6,930.6	9,622.2	6,930.6	76.8	77.4	90.00	189.8	-2,529.2	479.8	325.7	154.07	3.114	
9,700.0	6,930.6	9,722.2	6,930.6	79.5	80.1	90.00	189.6	-2,629.2	479.8	320.2	159.56	3.007	
9,800.0	6,930.6	9,822.2	6,930.6	82.3	82.9	90.00	189.5	-2,729.2	479.8	314.7	165.06	2.907	
9,900.0	6,930.6	9,922.2	6,930.6	85.0	85.6	90.00	189.3	-2,829.2	479.8	309.2	170.57	2.813	
10,000.0	6,930.6	10,022.2	6,930.6	87.8	88.4	90.00	189.2	-2,929.2	479.8	303.7	176.08	2.725	
10,100.0	6,930.6	10,122.2	6,930.6	90.5	91.1	90.00	189.0	-3,029.2	479.8	298.2	181.60	2.642	
10,200.0	6,930.6	10,222.2	6,930.6	93.3	93.9	90.00	188.8	-3,129.2	479.8	292.7	187.13	2.564	
10,300.0	6,930.6	10,322.2	6,930.6	96.1	96.6	90.00	188.7	-3,229.2	479.8	287.1	192.66	2.490	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 27-179HN - Wellbore #1 - Plan #1 (11-21-13) — **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	6,930.6	10,422.2	6,930.6	98.8	99.4	90.00	188.5	-3,329.2	479.8	281.6	198.20	2.421	
10,500.0	6,930.6	10,522.2	6,930.6	101.6	102.2	90.00	188.4	-3,429.2	479.8	276.1	203.74	2.355	
10,600.0	6,930.6	10,622.2	6,930.6	104.4	105.0	90.00	188.2	-3,529.2	479.8	270.5	209.28	2.293	
10,700.0	6,930.6	10,722.2	6,930.6	107.2	107.7	90.00	188.1	-3,629.2	479.8	265.0	214.83	2.233	
10,800.0	6,930.6	10,822.2	6,930.6	109.9	110.5	90.00	187.9	-3,729.2	479.8	259.4	220.38	2.177	
10,900.0	6,930.6	10,922.2	6,930.6	112.7	113.3	90.00	187.7	-3,829.2	479.8	253.9	225.94	2.124	
11,000.0	6,930.6	11,022.2	6,930.6	115.5	116.1	90.00	187.6	-3,929.2	479.8	248.3	231.50	2.073	
11,100.0	6,930.6	11,122.2	6,930.6	118.3	118.8	90.00	187.4	-4,029.2	479.8	242.7	237.06	2.024	
11,200.0	6,930.6	11,222.2	6,930.6	121.1	121.6	90.00	187.3	-4,129.2	479.8	237.2	242.62	1.978	
11,300.0	6,930.6	11,322.2	6,930.6	123.8	124.4	90.00	187.1	-4,229.2	479.8	231.6	248.19	1.933	
11,400.0	6,930.6	11,422.2	6,930.6	126.6	127.2	90.00	187.0	-4,329.2	479.8	226.0	253.75	1.891	
11,500.0	6,930.6	11,522.2	6,930.6	129.4	130.0	90.00	186.8	-4,429.2	479.8	220.5	259.32	1.850	
11,600.0	6,930.6	11,622.2	6,930.6	132.2	132.7	90.00	186.6	-4,529.2	479.8	214.9	264.90	1.811	
11,700.0	6,930.6	11,722.2	6,930.6	135.0	135.5	90.00	186.5	-4,629.2	479.8	209.3	270.47	1.774	
11,800.0	6,930.6	11,822.2	6,930.6	137.8	138.3	90.00	186.3	-4,729.2	479.8	203.7	276.05	1.738	
11,900.0	6,930.6	11,922.2	6,930.6	140.6	141.1	90.00	186.2	-4,829.2	479.8	198.2	281.62	1.704	
12,000.0	6,930.6	12,022.2	6,930.6	143.4	143.9	90.00	186.0	-4,929.2	479.8	192.6	287.20	1.671	
12,100.0	6,930.6	12,122.2	6,930.6	146.1	146.7	90.00	185.8	-5,029.2	479.8	187.0	292.78	1.639	
12,200.0	6,930.6	12,222.2	6,930.6	148.9	149.5	90.00	185.7	-5,129.2	479.8	181.4	298.36	1.608	
12,300.0	6,930.6	12,322.2	6,930.6	151.7	152.3	90.00	185.5	-5,229.2	479.8	175.8	303.94	1.579	
12,400.0	6,930.6	12,422.2	6,930.6	154.5	155.1	90.00	185.4	-5,329.2	479.8	170.3	309.53	1.550	
12,500.0	6,930.6	12,522.2	6,930.6	157.3	157.8	90.00	185.2	-5,429.2	479.8	164.7	315.11	1.523	
12,600.0	6,930.6	12,622.2	6,930.6	160.1	160.6	90.00	185.1	-5,529.2	479.8	159.1	320.70	1.496	Level 3
12,700.0	6,930.6	12,722.2	6,930.6	162.9	163.4	90.00	184.9	-5,629.2	479.8	153.5	326.29	1.470	Level 3
12,800.0	6,930.6	12,822.2	6,930.6	165.7	166.2	90.00	184.7	-5,729.2	479.8	147.9	331.87	1.446	Level 3
12,900.0	6,930.6	12,922.2	6,930.6	168.5	169.0	90.00	184.6	-5,829.2	479.8	142.3	337.46	1.422	Level 3
13,000.0	6,930.6	13,022.2	6,930.6	171.3	171.8	90.00	184.4	-5,929.2	479.8	136.7	343.05	1.399	Level 3
13,100.0	6,930.6	13,122.2	6,930.6	174.1	174.6	90.00	184.3	-6,029.2	479.8	131.1	348.64	1.376	Level 3
13,200.0	6,930.6	13,222.2	6,930.6	176.9	177.4	90.00	184.1	-6,129.2	479.8	125.6	354.23	1.354	Level 3
13,300.0	6,930.6	13,322.2	6,930.6	179.7	180.2	90.00	184.0	-6,229.2	479.8	120.0	359.83	1.333	Level 3
13,400.0	6,930.6	13,422.2	6,930.6	182.5	183.0	90.00	183.8	-6,329.2	479.8	114.4	365.42	1.313	Level 3
13,500.0	6,930.6	13,522.2	6,930.6	185.3	185.8	90.00	183.6	-6,429.2	479.8	108.8	371.01	1.293	Level 3
13,600.0	6,930.6	13,622.2	6,930.6	188.1	188.6	90.00	183.5	-6,529.2	479.8	103.2	376.61	1.274	Level 3
13,700.0	6,930.6	13,722.2	6,930.6	190.9	191.4	90.00	183.3	-6,629.2	479.8	97.6	382.20	1.255	Level 3
13,800.0	6,930.6	13,822.2	6,930.6	193.7	194.2	90.00	183.2	-6,729.2	479.8	92.0	387.80	1.237	Level 2
13,822.0	6,930.6	13,844.2	6,930.6	194.3	194.8	90.00	183.1	-6,751.2	479.8	90.8	389.03	1.233	Level 2
13,826.9	6,930.6	13,846.6	6,930.6	194.4	194.9	90.00	183.1	-6,753.5	479.8	90.6	389.23	1.233	Level 2, SF

Company:	Great Western	**Local Co-ordinate Reference:**	Well Kodak North FD 27-182HN
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 27-182HN	**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 27-182HN
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 27-182HN
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 27-182HN	**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')	Coordinates are relative to: Kodak North FD 27-182HN
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °	Grid Convergence at Surface is: 0.41°