

# ENSIGN

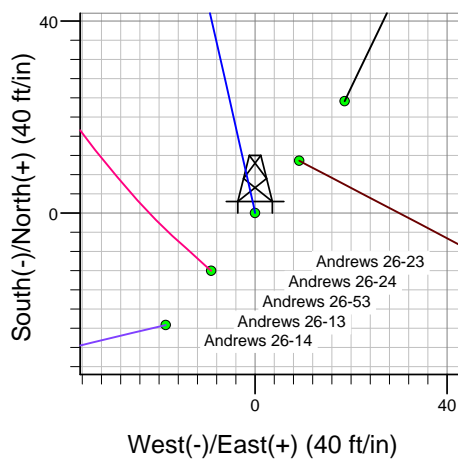
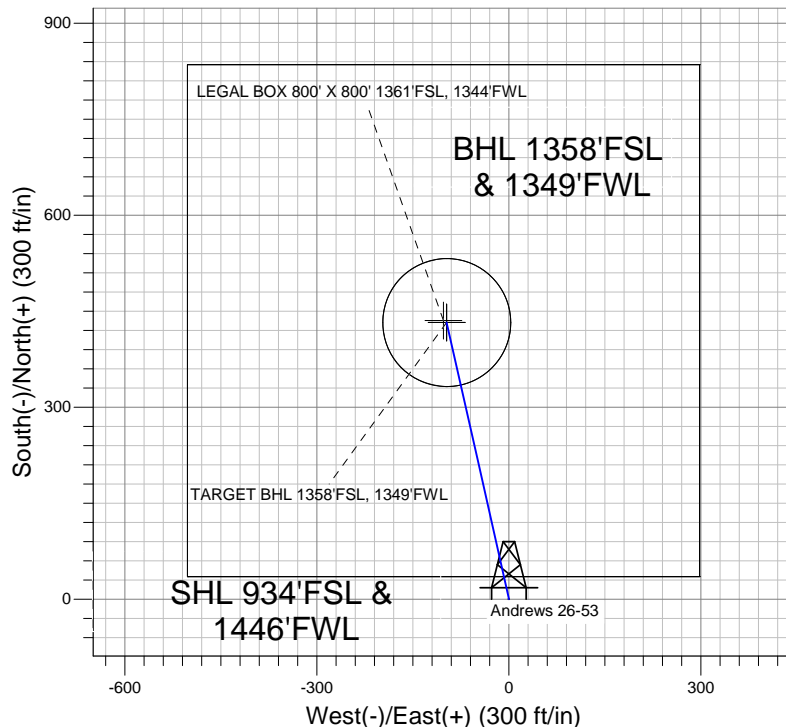
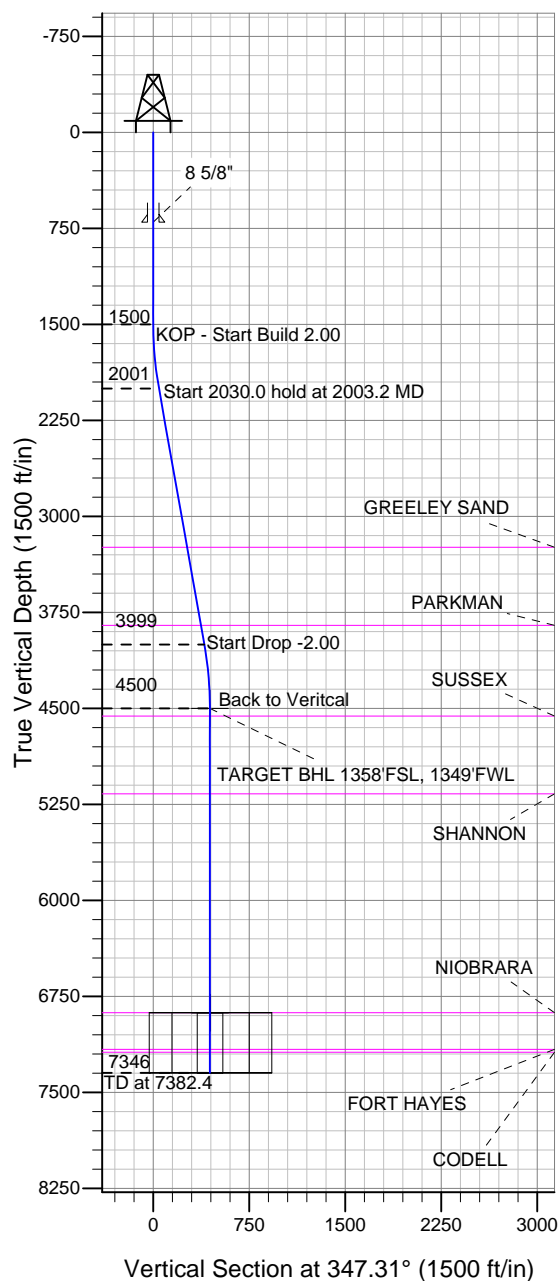
## Directional

### Well Name: Andrews 26-53

Surface Location: Andrews 26-23 Pad Sec.26-T7N-R65W  
North American Datum 1983, US State Plane 1983 Colorado Northern Zone  
Ground Elevation: 4871.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1441096.70	3240514.73	40.540989	-104.634611	
Original Well Elev				WELL @ 4885.0ft (Original Well Elev)		

## Great Western



Andrews 26-23 Pad Sec.26-T7N-R65W  
Andrews 26-53  
Plan #1 (5-14-12)  
7:30, May 17 2012



Azimuths to True North  
Magnetic North: 8.68°  
Magnetic Field  
Strength: 53122.2snT  
Dip Angle: 67.15°  
Date: 5/14/2012  
Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1358'FSL, 1349'FWL	4500.0	432.1	-97.3	40.542175	-104.634961	Point
LEGAL BOX 800' X 800' 1361'FSL, 1344'FWL	6877.0	435.1	-102.3	40.542183	-104.634979	Rectangle (Sides: L800.0 W800.0)
TARGET CIRCLE 1358'FSL & 1349'FWL	6877.0	432.1	-97.3	40.542175	-104.634961	Circle (Radius: 100.0)

### 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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	2003.2	10.06	347.31	2000.6	43.0	-9.7	2.00	347.31	44.1	
4	4033.2	10.06	347.31	3999.4	389.1	-87.6	0.00	0.00	398.8	
5	4536.4	0.00	0.00	4500.0	432.1	-97.3	2.00	180.00	442.9	TARGET BHL 1358'FSL, 1349'FWL
6	7382.4	0.00	0.00	7346.0	432.1	-97.3	0.00	0.00	442.9	



## **Great Western**

**SEC.26-T7N-R65W**

**Andrews 26-23 Pad Sec.26-T7N-R65W**

**Andrews 26-53**

**Wellbore #1**

**Plan: Plan #1 (5-14-12)**

## **Standard Planning Report**

**17 May, 2012**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Company:</b>	Great Western	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Project:</b>	SEC.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-14-12)		

<b>Project</b>	SEC.26-T7N-R65W, Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site Andrews 26-23 Pad Sec.26-T7N-R65W					
Site Position:		Northing:		1,441,120.20ft	
From:	Lat/Long	Easting:		3,240,533.12ft	
Position Uncertainty:		Slot Radius:		Grid Convergence:	
0.0 ft		"		40.541053 -104.634544 0.56 °	

Well	Andrews 26-53					
Well Position	+N-S	-23.3 ft	Northing:	1,441,096.70 ft	Latitude:	40.540989
	+E-W	-18.6 ft	Easting:	3,240,514.73 ft	Longitude:	-104.634611
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,871.0 ft

Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/14/2012	8.68	67.15	53,122

<b>Design</b>	Plan #1 (5-14-12)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	347.31

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,003.2	10.06	347.31	2,000.6	43.0	-9.7	2.00	2.00	0.00	347.31	
4,033.2	10.06	347.31	3,999.4	389.1	-87.6	0.00	0.00	0.00	0.00	
4,536.4	0.00	0.00	4,500.0	432.1	-97.3	2.00	-2.00	0.00	180.00	TARGET BHL 1358
7,382.4	0.00	0.00	7,346.0	432.1	-97.3	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Company:</b>	Great Western	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Project:</b>	SEC.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-14-12)		

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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	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
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	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
8 5/8"									
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	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
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	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
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	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
1,240.0	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	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
1,440.0	0.00	0.00	1,440.0	0.0	0.0	0.0	0.00	0.00	0.00
1,480.0	0.00	0.00	1,480.0	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
KOP - Start Build 2.00									
1,520.0	0.40	347.31	1,520.0	0.1	0.0	0.1	2.00	2.00	0.00
1,560.0	1.20	347.31	1,560.0	0.6	-0.1	0.6	2.00	2.00	0.00
1,600.0	2.00	347.31	1,600.0	1.7	-0.4	1.7	2.00	2.00	0.00
1,640.0	2.80	347.31	1,639.9	3.3	-0.8	3.4	2.00	2.00	0.00
1,680.0	3.60	347.31	1,679.9	5.5	-1.2	5.7	2.00	2.00	0.00
1,720.0	4.40	347.31	1,719.8	8.2	-1.9	8.4	2.00	2.00	0.00
1,760.0	5.20	347.31	1,759.6	11.5	-2.6	11.8	2.00	2.00	0.00
1,800.0	6.00	347.31	1,799.5	15.3	-3.4	15.7	2.00	2.00	0.00
1,840.0	6.80	347.31	1,839.2	19.7	-4.4	20.2	2.00	2.00	0.00
1,880.0	7.60	347.31	1,878.9	24.6	-5.5	25.2	2.00	2.00	0.00
1,920.0	8.40	347.31	1,918.5	30.0	-6.7	30.7	2.00	2.00	0.00
1,960.0	9.20	347.31	1,958.0	36.0	-8.1	36.9	2.00	2.00	0.00

**Database:** Landmark  
**Company:** Great Western  
**Project:** SEC.26-T7N-R65W  
**Site:** Andrews 26-23 Pad Sec.26-T7N-R65W  
**Well:** Andrews 26-53  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-14-12)

**Local Co-ordinate Reference:** Well Andrews 26-53  
**TVD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

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)
2,000.0	10.00	347.31	1,997.5	42.5	-9.6	43.5	2.00	2.00	0.00
2,003.2	10.06	347.31	2,000.6	43.0	-9.7	44.1	2.00	2.00	0.00
Start 2030.0 hold at 2003.2 MD									
2,040.0	10.06	347.31	2,036.9	49.3	-11.1	50.5	0.00	0.00	0.00
2,080.0	10.06	347.31	2,076.2	56.1	-12.6	57.5	0.00	0.00	0.00
2,120.0	10.06	347.31	2,115.6	62.9	-14.2	64.5	0.00	0.00	0.00
2,160.0	10.06	347.31	2,155.0	69.7	-15.7	71.5	0.00	0.00	0.00
2,200.0	10.06	347.31	2,194.4	76.6	-17.2	78.5	0.00	0.00	0.00
2,240.0	10.06	347.31	2,233.8	83.4	-18.8	85.5	0.00	0.00	0.00
2,280.0	10.06	347.31	2,273.2	90.2	-20.3	92.5	0.00	0.00	0.00
2,320.0	10.06	347.31	2,312.5	97.0	-21.8	99.4	0.00	0.00	0.00
2,360.0	10.06	347.31	2,351.9	103.8	-23.4	106.4	0.00	0.00	0.00
2,400.0	10.06	347.31	2,391.3	110.7	-24.9	113.4	0.00	0.00	0.00
2,440.0	10.06	347.31	2,430.7	117.5	-26.4	120.4	0.00	0.00	0.00
2,480.0	10.06	347.31	2,470.1	124.3	-28.0	127.4	0.00	0.00	0.00
2,520.0	10.06	347.31	2,509.5	131.1	-29.5	134.4	0.00	0.00	0.00
2,560.0	10.06	347.31	2,548.8	137.9	-31.1	141.4	0.00	0.00	0.00
2,600.0	10.06	347.31	2,588.2	144.7	-32.6	148.4	0.00	0.00	0.00
2,640.0	10.06	347.31	2,627.6	151.6	-34.1	155.4	0.00	0.00	0.00
2,680.0	10.06	347.31	2,667.0	158.4	-35.7	162.4	0.00	0.00	0.00
2,720.0	10.06	347.31	2,706.4	165.2	-37.2	169.3	0.00	0.00	0.00
2,760.0	10.06	347.31	2,745.8	172.0	-38.7	176.3	0.00	0.00	0.00
2,800.0	10.06	347.31	2,785.2	178.8	-40.3	183.3	0.00	0.00	0.00
2,840.0	10.06	347.31	2,824.5	185.7	-41.8	190.3	0.00	0.00	0.00
2,880.0	10.06	347.31	2,863.9	192.5	-43.3	197.3	0.00	0.00	0.00
2,920.0	10.06	347.31	2,903.3	199.3	-44.9	204.3	0.00	0.00	0.00
2,960.0	10.06	347.31	2,942.7	206.1	-46.4	211.3	0.00	0.00	0.00
3,000.0	10.06	347.31	2,982.1	212.9	-47.9	218.3	0.00	0.00	0.00
3,040.0	10.06	347.31	3,021.5	219.8	-49.5	225.3	0.00	0.00	0.00
3,080.0	10.06	347.31	3,060.8	226.6	-51.0	232.3	0.00	0.00	0.00
3,120.0	10.06	347.31	3,100.2	233.4	-52.5	239.2	0.00	0.00	0.00
3,160.0	10.06	347.31	3,139.6	240.2	-54.1	246.2	0.00	0.00	0.00
3,200.0	10.06	347.31	3,179.0	247.0	-55.6	253.2	0.00	0.00	0.00
3,240.0	10.06	347.31	3,218.4	253.9	-57.2	260.2	0.00	0.00	0.00
3,263.0	10.06	347.31	3,241.0	257.8	-58.0	264.2	0.00	0.00	0.00
GREELEY SAND									
3,280.0	10.06	347.31	3,257.8	260.7	-58.7	267.2	0.00	0.00	0.00
3,320.0	10.06	347.31	3,297.2	267.5	-60.2	274.2	0.00	0.00	0.00
3,360.0	10.06	347.31	3,336.5	274.3	-61.8	281.2	0.00	0.00	0.00
3,400.0	10.06	347.31	3,375.9	281.1	-63.3	288.2	0.00	0.00	0.00
3,440.0	10.06	347.31	3,415.3	288.0	-64.8	295.2	0.00	0.00	0.00
3,480.0	10.06	347.31	3,454.7	294.8	-66.4	302.2	0.00	0.00	0.00
3,520.0	10.06	347.31	3,494.1	301.6	-67.9	309.1	0.00	0.00	0.00
3,560.0	10.06	347.31	3,533.5	308.4	-69.4	316.1	0.00	0.00	0.00
3,600.0	10.06	347.31	3,572.8	315.2	-71.0	323.1	0.00	0.00	0.00
3,640.0	10.06	347.31	3,612.2	322.1	-72.5	330.1	0.00	0.00	0.00
3,680.0	10.06	347.31	3,651.6	328.9	-74.0	337.1	0.00	0.00	0.00
3,720.0	10.06	347.31	3,691.0	335.7	-75.6	344.1	0.00	0.00	0.00
3,760.0	10.06	347.31	3,730.4	342.5	-77.1	351.1	0.00	0.00	0.00
3,800.0	10.06	347.31	3,769.8	349.3	-78.6	358.1	0.00	0.00	0.00
3,840.0	10.06	347.31	3,809.2	356.2	-80.2	365.1	0.00	0.00	0.00
3,880.0	10.06	347.31	3,848.5	363.0	-81.7	372.1	0.00	0.00	0.00
3,881.5	10.06	347.31	3,850.0	363.2	-81.8	372.3	0.00	0.00	0.00

**Database:** Landmark  
**Company:** Great Western  
**Project:** SEC.26-T7N-R65W  
**Site:** Andrews 26-23 Pad Sec.26-T7N-R65W  
**Well:** Andrews 26-53  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-14-12)

**Local Co-ordinate Reference:** Well Andrews 26-53  
**TVD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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)
<b>PARKMAN</b>									
3,920.0	10.06	347.31	3,887.9	369.8	-83.3	379.0	0.00	0.00	0.00
3,960.0	10.06	347.31	3,927.3	376.6	-84.8	386.0	0.00	0.00	0.00
4,000.0	10.06	347.31	3,966.7	383.4	-86.3	393.0	0.00	0.00	0.00
4,033.2	10.06	347.31	3,999.4	389.1	-87.6	398.8	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
4,040.0	9.93	347.31	4,006.1	390.2	-87.9	400.0	2.00	-2.00	0.00
4,080.0	9.13	347.31	4,045.5	396.7	-89.3	406.6	2.00	-2.00	0.00
4,120.0	8.33	347.31	4,085.1	402.6	-90.6	412.7	2.00	-2.00	0.00
4,160.0	7.53	347.31	4,124.7	408.0	-91.9	418.2	2.00	-2.00	0.00
4,200.0	6.73	347.31	4,164.4	412.8	-92.9	423.2	2.00	-2.00	0.00
4,240.0	5.93	347.31	4,204.1	417.1	-93.9	427.6	2.00	-2.00	0.00
4,280.0	5.13	347.31	4,243.9	420.9	-94.8	431.4	2.00	-2.00	0.00
4,320.0	4.33	347.31	4,283.8	424.1	-95.5	434.7	2.00	-2.00	0.00
4,360.0	3.53	347.31	4,323.7	426.8	-96.1	437.5	2.00	-2.00	0.00
4,400.0	2.73	347.31	4,363.6	428.9	-96.6	439.7	2.00	-2.00	0.00
4,440.0	1.93	347.31	4,403.6	430.5	-96.9	441.3	2.00	-2.00	0.00
4,480.0	1.13	347.31	4,443.6	431.6	-97.2	442.4	2.00	-2.00	0.00
4,520.0	0.33	347.31	4,483.6	432.0	-97.3	442.9	2.00	-2.00	0.00
4,536.4	0.00	0.00	4,500.0	432.1	-97.3	442.9	2.00	-2.00	0.00
<b>Back to Vertical - TARGET BHL 1358'FSL, 1349'FWL</b>									
4,560.0	0.00	0.00	4,523.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,595.4	0.00	0.00	4,559.0	432.1	-97.3	442.9	0.00	0.00	0.00
<b>SUSSEX</b>									
4,600.0	0.00	0.00	4,563.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,640.0	0.00	0.00	4,603.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,680.0	0.00	0.00	4,643.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,720.0	0.00	0.00	4,683.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,760.0	0.00	0.00	4,723.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,763.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,840.0	0.00	0.00	4,803.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,880.0	0.00	0.00	4,843.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,920.0	0.00	0.00	4,883.6	432.1	-97.3	442.9	0.00	0.00	0.00
4,960.0	0.00	0.00	4,923.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,963.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,040.0	0.00	0.00	5,003.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,080.0	0.00	0.00	5,043.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,120.0	0.00	0.00	5,083.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,160.0	0.00	0.00	5,123.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,163.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,203.4	0.00	0.00	5,167.0	432.1	-97.3	442.9	0.00	0.00	0.00
<b>SHANNON</b>									
5,240.0	0.00	0.00	5,203.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,280.0	0.00	0.00	5,243.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,320.0	0.00	0.00	5,283.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,360.0	0.00	0.00	5,323.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,363.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,440.0	0.00	0.00	5,403.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,480.0	0.00	0.00	5,443.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,520.0	0.00	0.00	5,483.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,560.0	0.00	0.00	5,523.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,563.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,640.0	0.00	0.00	5,603.6	432.1	-97.3	442.9	0.00	0.00	0.00

**Database:** Landmark  
**Company:** Great Western  
**Project:** SEC.26-T7N-R65W  
**Site:** Andrews 26-23 Pad Sec.26-T7N-R65W  
**Well:** Andrews 26-53  
**Wellbore:** Wellbore #1  
**Design:** Plan #1 (5-14-12)

**Local Co-ordinate Reference:** Well Andrews 26-53  
**TVD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

#### 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)
5,680.0	0.00	0.00	5,643.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,720.0	0.00	0.00	5,683.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,760.0	0.00	0.00	5,723.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,763.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,840.0	0.00	0.00	5,803.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,880.0	0.00	0.00	5,843.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,920.0	0.00	0.00	5,883.6	432.1	-97.3	442.9	0.00	0.00	0.00
5,960.0	0.00	0.00	5,923.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,963.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,040.0	0.00	0.00	6,003.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,080.0	0.00	0.00	6,043.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,120.0	0.00	0.00	6,083.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,160.0	0.00	0.00	6,123.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,163.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,240.0	0.00	0.00	6,203.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,280.0	0.00	0.00	6,243.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,283.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,323.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,363.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,403.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,443.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,483.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,523.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,563.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,603.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,680.0	0.00	0.00	6,643.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,683.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,723.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,763.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,803.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,843.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,913.4	0.00	0.00	6,877.0	432.1	-97.3	442.9	0.00	0.00	0.00
<b>NIORARA - LEGAL BOX 800' X 800' 1361'FSL, 1344'FWL - TARGET CIRCLE 1358'FSL &amp; 1349'FWL</b>									
6,920.0	0.00	0.00	6,883.6	432.1	-97.3	442.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,923.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,963.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,040.0	0.00	0.00	7,003.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,080.0	0.00	0.00	7,043.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,120.0	0.00	0.00	7,083.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,160.0	0.00	0.00	7,123.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,199.4	0.00	0.00	7,163.0	432.1	-97.3	442.9	0.00	0.00	0.00
<b>FORT HAYES</b>									
7,200.0	0.00	0.00	7,163.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,222.4	0.00	0.00	7,186.0	432.1	-97.3	442.9	0.00	0.00	0.00
<b>CODELL</b>									
7,240.0	0.00	0.00	7,203.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,280.0	0.00	0.00	7,243.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,320.0	0.00	0.00	7,283.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,360.0	0.00	0.00	7,323.6	432.1	-97.3	442.9	0.00	0.00	0.00
7,382.4	0.00	0.00	7,346.0	432.1	-97.3	442.9	0.00	0.00	0.00
<b>TD at 7382.4</b>									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Company:</b>	Great Western	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Project:</b>	SEC.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (5-14-12)		

Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting			
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		Latitude	Longitude
LEGAL BOX 800' X 800'	0.00	0.00	6,877.0	435.1	-102.3	1,441,530.76	3,240,408.19		40.542183	-104.634979
- plan misses target center by 5.9ft at 6913.4ft MD (6877.0 TVD, 432.1 N, -97.3 E)										
- Rectangle (sides W800.0 H800.0 D469.0)										
TARGET CIRCLE 1358'F	0.00	0.00	6,877.0	432.1	-97.3	1,441,527.81	3,240,413.24		40.542175	-104.634961
- plan hits target center										
- Circle (radius 100.0)										
TARGET BHL 1358'F	0.00	0.00	4,500.0	432.1	-97.3	1,441,527.81	3,240,413.24		40.542175	-104.634961
- plan hits target center										
- Point										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
700.0	700.0	8 5/8"	8-5/8	12-1/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,263.0	3,241.0	GREELEY SAND		0.00	
3,881.5	3,850.0	PARKMAN		0.00	
4,595.4	4,559.0	SUSSEX		0.00	
5,203.4	5,167.0	SHANNON		0.00	
6,913.4	6,877.0	NIOBRARA		0.00	
7,199.4	7,163.0	FORT HAYES		0.00	
7,222.4	7,186.0	CODELL		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
1,500.0	1,500.0	0.0	0.0	KOP - Start Build 2.00
2,003.2	2,000.6	43.0	-9.7	Start 2030.0 hold at 2003.2 MD
4,033.2	3,999.4	389.1	-87.6	Start Drop -2.00
4,536.4	4,500.0	432.1	-97.3	Back to Vertical
7,382.4	7,346.0	432.1	-97.3	TD at 7382.4





## **Great Western**

**SEC.26-T7N-R65W**

**Andrews 26-23 Pad Sec.26-T7N-R65W**

**Andrews 26-53**

**Wellbore #1**

**Plan #1 (5-14-12)**

## **Anticollision Report**

**17 May, 2012**

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Project:</b>	SEC.26-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Reference Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-14-12)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (5-14-12)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0ft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b> 5/16/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	7,382.4	Plan #1 (5-14-12) (Wellbore #1)	MWD	MWD - Standard

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Distance Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
Andrews 26-23 Pad Sec.26-T7N-R65W						
Andrews 26-13 - Wellbore #1 - Plan #2 (5-14-12)	284.3	284.3	15.1	14.0	14.345	CC
Andrews 26-13 - Wellbore #1 - Plan #2 (5-14-12)	300.0	300.0	15.1	14.0	13.458	ES
Andrews 26-13 - Wellbore #1 - Plan #2 (5-14-12)	500.0	499.1	20.7	18.7	10.162	SF
Andrews 26-23 - Wellbore #1 - Plan #1 (5-11-12)	200.0	200.0	29.8	29.2	44.258	CC, ES
Andrews 26-23 - Wellbore #1 - Plan #1 (5-11-12)	500.0	495.9	45.1	43.1	22.110	SF
Andrews 26-24 - Wellbore #1 - Plan #1 (5-11-12)	900.0	900.0	14.3	10.4	3.733	CC, ES
Andrews 26-24 - Wellbore #1 - Plan #1 (5-11-12)	1,000.0	999.9	14.7	10.5	3.466	SF

Offset Design		Andrews 26-23 Pad Sec.26-T7N-R65W - Andrews 26-13 - Wellbore #1 - Plan #2 (5-14-12)										Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-142.67	-12.0	-9.2	15.1	15.1	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-142.67	-12.0	-9.2	15.1	14.9	0.22	67.292		
200.0	200.0	200.0	200.0	0.3	0.3	-142.67	-12.0	-9.2	15.1	14.5	0.67	22.431		
284.3	284.3	284.3	284.3	0.5	0.5	-137.96	-11.2	-10.1	15.1	14.0	1.05	14.345	CC	
300.0	300.0	300.0	300.0	0.6	0.6	-136.05	-10.9	-10.5	15.1	14.0	1.12	13.458	ES	
400.0	400.0	399.8	399.6	0.8	0.8	-117.19	-7.4	-14.3	16.1	14.6	1.57	10.248		
500.0	500.0	499.1	498.6	1.0	1.0	-94.13	-1.5	-20.6	20.7	18.7	2.04	10.162	SF	
600.0	600.0	598.0	596.7	1.2	1.3	-75.66	7.3	-28.6	29.7	27.1	2.50	11.840		
700.0	700.0	695.9	693.5	1.5	1.6	-63.36	19.0	-37.9	42.9	39.9	2.97	14.422		
800.0	800.0	792.7	788.6	1.7	2.0	-55.41	33.5	-48.5	60.0	56.6	3.44	17.428		
900.0	900.0	888.1	881.7	1.9	2.4	-50.08	50.5	-60.4	80.9	76.9	3.92	20.609		
1,000.0	1,000.0	982.1	972.7	2.1	2.9	-46.35	70.1	-73.5	105.1	100.7	4.41	23.844		
1,100.0	1,100.0	1,076.6	1,063.5	2.4	3.3	-43.63	92.0	-87.7	132.3	127.3	4.90	26.970		
1,200.0	1,200.0	1,172.6	1,155.7	2.6	3.9	-41.76	114.6	-102.3	159.9	154.5	5.39	29.648		
1,300.0	1,300.0	1,268.6	1,247.8	2.8	4.4	-40.45	137.2	-117.0	187.7	181.8	5.89	31.871		
1,400.0	1,400.0	1,364.6	1,339.9	3.0	4.9	-39.47	159.8	-131.6	215.5	209.1	6.39	33.734		
1,500.0	1,500.0	1,460.6	1,432.1	3.3	5.5	-38.72	182.4	-146.2	243.4	236.5	6.89	35.312		
1,600.0	1,600.0	1,557.0	1,524.7	3.5	6.0	-25.36	205.1	-160.9	269.8	262.5	7.31	36.893		
1,700.0	1,699.8	1,654.2	1,618.0	3.7	6.6	-25.10	227.9	-175.7	293.1	285.3	7.81	37.513		
1,800.0	1,799.5	1,752.1	1,712.0	3.9	7.2	-25.15	251.0	-190.6	313.4	305.1	8.32	37.669		
1,900.0	1,898.7	1,850.6	1,806.5	4.2	7.7	-25.46	274.2	-205.6	330.6	321.8	8.83	37.436		

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

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Project:</b>	SEC.26-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Reference Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-14-12)	<b>Offset TVD Reference:</b>	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	1,997.5	1,949.5	1,901.5	4.4	8.3	-26.01	297.4	-220.7	344.7	335.3	9.35	36.868		
2,100.0	2,095.9	2,048.6	1,996.6	4.7	8.9	-26.76	320.8	-235.8	357.2	347.3	9.89	36.117		
2,200.0	2,194.4	2,147.8	2,091.7	5.0	9.4	-27.47	344.1	-250.9	369.7	359.3	10.44	35.414		
2,300.0	2,292.8	2,246.9	2,186.9	5.3	10.0	-28.12	367.4	-266.0	382.3	371.3	11.00	34.757		
2,400.0	2,391.3	2,346.0	2,282.0	5.6	10.6	-28.74	390.7	-281.1	395.0	383.4	11.57	34.143		
2,500.0	2,489.8	2,445.1	2,377.1	5.9	11.1	-29.32	414.1	-296.2	407.7	395.5	12.14	33.567		
2,600.0	2,588.2	2,544.2	2,472.3	6.3	11.7	-29.86	437.4	-311.3	420.4	407.7	12.73	33.028		
2,700.0	2,686.7	2,643.3	2,567.4	6.6	12.3	-30.37	460.7	-326.4	433.2	419.8	13.32	32.522		
2,800.0	2,785.2	2,742.4	2,662.5	7.0	12.9	-30.85	484.0	-341.5	446.0	432.0	13.92	32.047		
2,900.0	2,883.6	2,841.5	2,757.7	7.3	13.4	-31.31	507.3	-356.5	458.8	444.3	14.52	31.600		
3,000.0	2,982.1	2,940.6	2,852.8	7.7	14.0	-31.74	530.7	-371.6	471.6	456.5	15.13	31.179		
3,100.0	3,080.5	3,039.7	2,948.0	8.0	14.6	-32.14	554.0	-386.7	484.5	468.8	15.74	30.783		
3,200.0	3,179.0	3,138.9	3,043.1	8.4	15.2	-32.53	577.3	-401.8	497.4	481.1	16.36	30.409		
3,300.0	3,277.5	3,238.0	3,138.2	8.8	15.7	-32.89	600.6	-416.9	510.3	493.4	16.98	30.056		
3,400.0	3,375.9	3,337.1	3,233.4	9.1	16.3	-33.24	624.0	-432.0	523.3	505.7	17.61	29.722		
3,500.0	3,474.4	3,436.2	3,328.5	9.5	16.9	-33.57	647.3	-447.1	536.2	518.0	18.24	29.406		
3,600.0	3,572.8	3,535.3	3,423.6	9.9	17.5	-33.89	670.6	-462.2	549.2	530.3	18.87	29.106		
3,700.0	3,671.3	3,634.4	3,518.8	10.2	18.0	-34.19	693.9	-477.3	562.2	542.7	19.51	28.822		
3,800.0	3,769.8	3,733.5	3,613.9	10.6	18.6	-34.48	717.3	-492.4	575.2	555.1	20.15	28.553		
3,900.0	3,868.2	3,832.6	3,709.0	11.0	19.2	-34.75	740.6	-507.5	588.2	567.4	20.79	28.296		
4,000.0	3,966.7	3,931.7	3,804.2	11.4	19.8	-35.02	763.9	-522.6	601.3	579.8	21.43	28.053		
4,100.0	4,065.3	4,030.8	3,899.2	11.7	20.4	-35.34	787.2	-537.7	614.9	592.9	22.05	27.891		
4,200.0	4,164.4	4,129.4	3,993.9	12.0	20.9	-35.55	810.4	-552.7	631.3	608.7	22.58	27.961		
4,300.0	4,263.9	4,227.6	4,088.1	12.2	21.5	-35.62	833.5	-567.7	650.4	627.4	23.05	28.212		
4,400.0	4,363.6	4,325.0	4,181.7	12.4	22.1	-35.56	856.5	-582.5	672.3	648.9	23.48	28.636		
4,500.0	4,463.6	4,421.8	4,274.6	12.6	22.6	-35.38	879.2	-597.3	697.1	673.2	23.85	29.227		
4,600.0	4,563.6	4,517.8	4,366.8	12.7	23.2	-47.61	901.8	-611.9	724.0	699.8	24.22	29.896		
4,700.0	4,663.6	4,613.8	4,458.9	12.9	23.7	-47.07	924.4	-626.5	751.2	726.6	24.63	30.502		
4,800.0	4,763.6	4,709.8	4,551.1	13.1	24.3	-46.57	947.0	-641.1	778.5	753.5	25.05	31.082		
4,900.0	4,863.6	4,805.8	4,643.2	13.2	24.9	-46.10	969.6	-655.8	805.8	780.4	25.47	31.638		
5,000.0	4,963.6	4,901.8	4,735.3	13.4	25.4	-45.66	992.2	-670.4	833.2	807.3	25.90	32.170		
5,100.0	5,063.6	4,997.8	4,827.5	13.6	26.0	-45.25	1,014.8	-685.0	860.6	834.3	26.33	32.680		
5,200.0	5,163.6	5,093.8	4,919.6	13.8	26.5	-44.86	1,037.4	-699.6	888.1	861.3	26.77	33.170		
5,300.0	5,263.6	5,196.8	5,018.6	14.0	27.1	-44.47	1,061.5	-715.3	915.5	888.3	27.23	33.622		
5,400.0	5,363.6	5,338.8	5,156.1	14.1	27.7	-44.03	1,091.2	-734.5	939.9	912.2	27.72	33.906		
5,500.0	5,463.6	5,484.2	5,298.5	14.3	28.2	-43.69	1,115.6	-750.3	959.6	931.4	28.21	34.016		
5,600.0	5,563.6	5,632.2	5,444.8	14.5	28.6	-43.45	1,134.2	-762.3	974.3	945.6	28.68	33.967		
5,700.0	5,663.6	5,782.1	5,594.0	14.7	28.9	-43.29	1,146.5	-770.3	983.9	954.8	29.14	33.765		
5,800.0	5,763.6	5,933.2	5,744.9	14.9	29.1	-43.22	1,152.3	-774.0	988.4	958.9	29.58	33.420		
5,900.0	5,863.6	6,051.9	5,863.6	15.1	29.3	-43.21	1,152.7	-774.3	988.8	958.8	29.96	32.998		
6,000.0	5,963.6	6,151.9	5,963.6	15.2	29.3	-43.21	1,152.7	-774.3	988.8	958.4	30.34	32.594		
6,100.0	6,063.6	6,251.9	6,063.6	15.4	29.4	-43.21	1,152.7	-774.3	988.8	958.1	30.71	32.197		
6,200.0	6,163.6	6,351.9	6,163.6	15.6	29.5	-43.21	1,152.7	-774.3	988.8	957.7	31.09	31.807		
6,300.0	6,263.6	6,451.9	6,263.6	15.8	29.6	-43.21	1,152.7	-774.3	988.8	957.3	31.46	31.425		
6,400.0	6,363.6	6,551.9	6,363.6	16.0	29.7	-43.21	1,152.7	-774.3	988.8	956.9	31.84	31.051		
6,500.0	6,463.6	6,651.9	6,463.6	16.2	29.8	-43.21	1,152.7	-774.3	988.8	956.6	32.23	30.684		
6,600.0	6,563.6	6,751.9	6,563.6	16.4	29.9	-43.21	1,152.7	-774.3	988.8	956.2	32.61	30.323		
6,700.0	6,663.6	6,851.9	6,663.6	16.6	30.0	-43.21	1,152.7	-774.3	988.8	955.8	32.99	29.970		
6,800.0	6,763.6	6,951.9	6,763.6	16.8	30.2	-43.21	1,152.7	-774.3	988.8	955.4	33.38	29.624		
6,900.0	6,863.6	7,051.9	6,863.6	17.0	30.3	-43.21	1,152.7	-774.3	988.8	955.0	33.77	29.284		
7,000.0	6,963.6	7,151.9	6,963.6	17.2	30.4	-43.21	1,152.7	-774.3	988.8	954.6	34.15	28.950		
7,100.0	7,063.6	7,251.9	7,063.6	17.4	30.5	-43.21	1,152.7	-774.3	988.8	954.2	34.54	28.623		

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

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Project:</b>	SEC.26-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Reference Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-14-12)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Andrews 26-23 Pad Sec.26-T7N-R65W - Andrews 26-13 - Wellbore #1 - Plan #2 (5-14-12)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,200.0	7,163.6	7,351.9	7,163.6	17.6	30.6	-43.21	1,152.7	-774.3	988.8	953.8	34.94	28.302	
7,300.0	7,263.6	7,451.9	7,263.6	17.8	30.7	-43.21	1,152.7	-774.3	988.8	953.5	35.33	27.988	
7,382.4	7,346.0	7,534.3	7,346.0	17.9	30.8	-43.21	1,152.7	-774.3	988.8	953.1	35.65	27.733	

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Project:</b>	SEC.26-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Reference Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-14-12)	<b>Offset TVD Reference:</b>	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	38.61	23.3	18.6	29.8					
100.0	100.0	100.0	100.0	0.1	0.1	38.61	23.3	18.6	29.8	29.6	0.22	132.775		
200.0	200.0	200.0	200.0	0.3	0.3	38.61	23.3	18.6	29.8	29.2	0.67	44.258 CC, ES		
300.0	300.0	299.0	298.9	0.6	0.6	37.91	24.9	19.4	31.5	30.4	1.12	28.091		
400.0	400.0	397.7	397.5	0.8	0.8	36.20	29.5	21.6	36.6	35.0	1.58	23.191		
500.0	500.0	495.9	495.4	1.0	1.0	34.21	37.1	25.2	45.1	43.1	2.04	22.110 SF		
600.0	600.0	593.5	592.3	1.2	1.3	32.44	47.7	30.3	57.0	54.5	2.51	22.745		
700.0	700.0	690.1	687.7	1.5	1.6	31.01	61.0	36.7	72.3	69.3	2.98	24.277		
800.0	800.0	785.7	781.6	1.7	2.0	29.93	77.1	44.4	90.9	87.4	3.45	26.312		
900.0	900.0	879.9	873.5	1.9	2.4	29.12	95.7	53.3	112.7	108.8	3.94	28.641		
1,000.0	1,000.0	976.2	967.0	2.1	2.8	28.50	116.6	63.3	136.8	132.3	4.43	30.899		
1,100.0	1,100.0	1,073.3	1,061.2	2.4	3.3	28.07	137.8	73.5	160.9	156.0	4.91	32.763		
1,200.0	1,200.0	1,170.3	1,155.4	2.6	3.7	27.75	158.9	83.6	185.0	179.6	5.40	34.268		
1,300.0	1,300.0	1,267.4	1,249.6	2.8	4.2	27.50	180.0	93.7	209.1	203.2	5.89	35.505		
1,400.0	1,400.0	1,364.4	1,343.8	3.0	4.7	27.30	201.1	103.8	233.2	226.8	6.38	36.539		
1,500.0	1,500.0	1,461.5	1,437.9	3.3	5.1	27.14	222.2	113.9	257.3	250.5	6.88	37.415		
1,600.0	1,600.0	1,558.8	1,532.4	3.5	5.6	39.64	243.4	124.1	280.1	272.9	7.26	38.592		
1,700.0	1,699.8	1,656.7	1,627.4	3.7	6.1	39.89	264.7	134.3	300.3	292.6	7.75	38.744		
1,800.0	1,799.5	1,755.0	1,722.8	3.9	6.6	40.53	286.1	144.6	318.0	309.7	8.25	38.540		
1,900.0	1,898.7	1,853.7	1,818.5	4.2	7.1	41.51	307.6	154.8	333.1	324.3	8.76	38.031		
2,000.0	1,997.5	1,952.5	1,914.4	4.4	7.6	42.80	329.1	165.1	345.8	336.5	9.28	37.250		
2,100.0	2,095.9	2,051.3	2,010.4	4.7	8.1	44.37	350.6	175.4	357.4	347.5	9.83	36.336		
2,200.0	2,194.4	2,150.2	2,106.3	5.0	8.6	45.84	372.1	185.8	369.2	358.8	10.41	35.477		
2,300.0	2,292.8	2,249.1	2,202.3	5.3	9.1	47.21	393.6	196.1	381.2	370.3	11.00	34.673		
2,400.0	2,391.3	2,347.9	2,298.2	5.6	9.5	48.51	415.1	206.4	393.5	381.9	11.60	33.919		
2,500.0	2,489.8	2,446.8	2,394.1	5.9	10.0	49.72	436.6	216.7	406.0	393.7	12.22	33.215		
2,600.0	2,588.2	2,545.6	2,490.1	6.3	10.5	50.87	458.1	227.0	418.6	405.7	12.86	32.556		
2,700.0	2,686.7	2,644.5	2,586.0	6.6	11.0	51.94	479.6	237.3	431.4	417.9	13.51	31.939		
2,800.0	2,785.2	2,743.4	2,682.0	7.0	11.5	52.96	501.1	247.6	444.3	430.1	14.17	31.364		
2,900.0	2,883.6	2,842.2	2,777.9	7.3	12.0	53.91	522.7	257.9	457.3	442.5	14.84	30.825		
3,000.0	2,982.1	2,941.1	2,873.8	7.7	12.5	54.82	544.2	268.2	470.5	455.0	15.52	30.322		
3,100.0	3,080.5	3,040.0	2,969.8	8.0	13.0	55.67	565.7	278.5	483.8	467.6	16.21	29.851		
3,200.0	3,179.0	3,138.8	3,065.7	8.4	13.5	56.48	587.2	288.8	497.2	480.3	16.90	29.411		
3,300.0	3,277.5	3,237.7	3,161.7	8.8	14.0	57.25	608.7	299.1	510.6	493.0	17.61	28.998		
3,400.0	3,375.9	3,336.5	3,257.6	9.1	14.5	57.98	630.2	309.5	524.2	505.9	18.32	28.611		
3,500.0	3,474.4	3,435.4	3,353.5	9.5	15.0	58.67	651.7	319.8	537.8	518.8	19.04	28.249		
3,600.0	3,572.8	3,534.3	3,449.5	9.9	15.5	59.32	673.2	330.1	551.6	531.8	19.76	27.908		
3,700.0	3,671.3	3,633.1	3,545.4	10.2	16.0	59.95	694.7	340.4	565.3	544.8	20.49	27.589		
3,800.0	3,769.8	3,732.0	3,641.4	10.6	16.5	60.54	716.3	350.7	579.2	557.9	21.22	27.288		
3,900.0	3,868.2	3,830.8	3,737.3	11.0	17.0	61.11	737.8	361.0	593.1	571.1	21.96	27.004		
4,000.0	3,966.7	3,929.7	3,833.3	11.4	17.5	61.65	759.3	371.3	607.0	584.3	22.70	26.737		
4,100.0	4,065.3	4,028.6	3,929.2	11.7	18.0	62.28	780.8	381.6	621.4	598.0	23.41	26.539		
4,200.0	4,164.4	4,127.3	4,025.0	12.0	18.5	62.73	802.3	391.9	637.3	613.3	24.02	26.531		
4,300.0	4,263.9	4,225.7	4,120.5	12.2	18.9	62.93	823.7	402.2	654.8	630.2	24.56	26.655		
4,400.0	4,363.6	4,323.8	4,215.7	12.4	19.4	62.90	845.0	412.4	673.8	648.8	25.04	26.907		
4,500.0	4,463.6	4,421.3	4,310.4	12.6	19.9	62.66	866.2	422.6	694.5	669.1	25.46	27.283		
4,600.0	4,563.6	4,518.4	4,404.6	12.7	20.4	49.33	887.4	432.7	716.5	690.7	25.81	27.762		
4,700.0	4,663.6	4,615.5	4,498.8	12.9	20.9	48.58	908.5	442.8	738.8	712.6	26.18	28.222		
4,800.0	4,763.6	4,712.5	4,592.9	13.1	21.4	47.88	929.6	452.9	761.2	734.6	26.55	28.667		
4,900.0	4,863.6	4,809.6	4,687.1	13.2	21.9	47.21	950.7	463.0	783.6	756.7	26.93	29.098		
5,000.0	4,963.6	4,906.6	4,781.3	13.4	22.4	46.58	971.8	473.2	806.2	778.9	27.32	29.514		
5,100.0	5,063.6	5,003.7	4,875.5	13.6	22.8	45.99	993.0	483.3	828.9	801.1	27.71	29.917		

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

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Project:</b>	SEC.26-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Reference Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-14-12)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Andrews 26-23 Pad Sec.26-T7N-R65W - Andrews 26-23 - Wellbore #1 - Plan #1 (5-11-12)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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	5,163.6	5,100.7	4,969.6	13.8	23.3	45.42	1,014.1	493.4	851.6	823.5	28.10	30.306	
5,300.0	5,263.6	5,220.8	5,086.4	14.0	23.9	44.79	1,039.2	505.5	873.7	845.1	28.52	30.634	
5,400.0	5,363.6	5,359.5	5,222.6	14.1	24.3	44.23	1,063.0	516.9	891.7	862.8	28.93	30.819	
5,500.0	5,463.6	5,500.4	5,362.1	14.3	24.7	43.82	1,081.1	525.5	905.2	875.9	29.35	30.843	
5,600.0	5,563.6	5,643.1	5,504.1	14.5	25.0	43.56	1,093.1	531.3	914.1	884.3	29.76	30.719	
5,700.0	5,663.6	5,786.7	5,647.6	14.7	25.2	43.44	1,098.7	534.0	918.2	888.1	30.16	30.448	
5,800.0	5,763.6	5,902.7	5,763.6	14.9	25.3	43.43	1,099.2	534.2	918.5	888.0	30.52	30.095	
5,900.0	5,863.6	6,002.7	5,863.6	15.1	25.4	43.43	1,099.2	534.2	918.5	887.7	30.88	29.744	
6,000.0	5,963.6	6,102.7	5,963.6	15.2	25.5	43.43	1,099.2	534.2	918.5	887.3	31.24	29.399	
6,100.0	6,063.6	6,202.7	6,063.6	15.4	25.7	43.43	1,099.2	534.2	918.5	886.9	31.61	29.059	
6,200.0	6,163.6	6,302.7	6,163.6	15.6	25.8	43.43	1,099.2	534.2	918.5	886.6	31.98	28.726	
6,300.0	6,263.6	6,402.7	6,263.6	15.8	25.9	43.43	1,099.2	534.2	918.5	886.2	32.35	28.398	
6,400.0	6,363.6	6,502.7	6,363.6	16.0	26.0	43.43	1,099.2	534.2	918.5	885.8	32.72	28.076	
6,500.0	6,463.6	6,602.7	6,463.6	16.2	26.1	43.43	1,099.2	534.2	918.5	885.5	33.09	27.759	
6,600.0	6,563.6	6,702.7	6,563.6	16.4	26.2	43.43	1,099.2	534.2	918.5	885.1	33.46	27.448	
6,700.0	6,663.6	6,802.7	6,663.6	16.6	26.3	43.43	1,099.2	534.2	918.5	884.7	33.84	27.143	
6,800.0	6,763.6	6,902.7	6,763.6	16.8	26.5	43.43	1,099.2	534.2	918.5	884.3	34.22	26.843	
6,900.0	6,863.6	7,002.7	6,863.6	17.0	26.6	43.43	1,099.2	534.2	918.5	883.9	34.60	26.548	
7,000.0	6,963.6	7,102.7	6,963.6	17.2	26.7	43.43	1,099.2	534.2	918.5	883.6	34.98	26.258	
7,100.0	7,063.6	7,202.7	7,063.6	17.4	26.8	43.43	1,099.2	534.2	918.5	883.2	35.36	25.974	
7,200.0	7,163.6	7,302.7	7,163.6	17.6	26.9	43.43	1,099.2	534.2	918.5	882.8	35.75	25.694	
7,300.0	7,263.6	7,402.7	7,263.6	17.8	27.1	43.43	1,099.2	534.2	918.5	882.4	36.13	25.420	
7,382.4	7,346.0	7,485.1	7,346.0	17.9	27.2	43.43	1,099.2	534.2	918.5	882.1	36.45	25.197	

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Project:</b>	SEC.26-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Reference Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-14-12)	<b>Offset TVD Reference:</b>	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	40.02	10.9	9.2	14.3	14.3	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	40.02	10.9	9.2	14.3	14.0	0.22	63.453		
200.0	200.0	200.0	200.0	0.3	0.3	40.02	10.9	9.2	14.3	13.6	0.67	21.151		
300.0	300.0	300.0	300.0	0.6	0.6	40.02	10.9	9.2	14.3	13.1	1.12	12.691		
400.0	400.0	400.0	400.0	0.8	0.8	40.02	10.9	9.2	14.3	12.7	1.57	9.065		
500.0	500.0	500.0	500.0	1.0	1.0	40.02	10.9	9.2	14.3	12.2	2.02	7.050		
600.0	600.0	600.0	600.0	1.2	1.2	40.02	10.9	9.2	14.3	11.8	2.47	5.768		
700.0	700.0	700.0	700.0	1.5	1.5	40.02	10.9	9.2	14.3	11.3	2.92	4.881		
800.0	800.0	800.0	800.0	1.7	1.7	40.02	10.9	9.2	14.3	10.9	3.37	4.230		
900.0	900.0	900.0	900.0	1.9	1.9	40.02	10.9	9.2	14.3	10.4	3.82	3.733 CC, ES		
1,000.0	1,000.0	999.9	999.8	2.1	2.1	46.65	10.1	10.7	14.7	10.5	4.25	3.466 SF		
1,100.0	1,100.0	1,099.5	1,099.3	2.4	2.3	63.33	7.7	15.3	17.2	12.5	4.67	3.676		
1,200.0	1,200.0	1,198.6	1,198.1	2.6	2.5	80.86	3.7	22.9	23.3	18.2	5.09	4.578		
1,300.0	1,300.0	1,297.0	1,295.7	2.8	2.8	93.17	-1.9	33.5	33.8	28.3	5.52	6.121		
1,400.0	1,400.0	1,394.5	1,392.0	3.0	3.0	100.73	-8.9	46.9	48.4	42.4	5.96	8.115		
1,500.0	1,500.0	1,492.5	1,488.5	3.3	3.3	105.26	-17.0	62.3	65.6	59.2	6.40	10.256		
1,600.0	1,600.0	1,590.7	1,585.1	3.5	3.6	121.32	-25.2	77.9	84.1	77.2	6.84	12.286		
1,700.0	1,699.8	1,688.3	1,681.2	3.7	4.0	124.94	-33.3	93.4	104.7	97.4	7.28	14.387		
1,800.0	1,799.5	1,785.3	1,776.6	3.9	4.3	128.49	-41.4	108.7	127.8	120.1	7.71	16.571		
1,900.0	1,898.7	1,881.6	1,871.3	4.2	4.7	131.81	-49.4	124.0	153.5	145.3	8.14	18.847		
2,000.0	1,997.5	1,976.9	1,965.1	4.4	5.0	134.84	-57.3	139.1	182.0	173.4	8.58	21.212		
2,100.0	2,095.9	2,071.8	2,058.4	4.7	5.4	137.70	-65.2	154.1	212.2	203.2	9.04	23.470		
2,200.0	2,194.4	2,166.6	2,151.7	5.0	5.8	139.85	-73.1	169.2	242.9	233.3	9.52	25.511		
2,300.0	2,292.8	2,261.4	2,245.0	5.3	6.1	141.53	-81.0	184.2	273.7	263.7	10.01	27.357		
2,400.0	2,391.3	2,356.3	2,338.3	5.6	6.5	142.87	-88.9	199.3	304.8	294.3	10.50	29.028		
2,500.0	2,489.8	2,451.1	2,431.6	5.9	6.9	143.96	-96.8	214.3	336.0	325.0	11.00	30.544		
2,600.0	2,588.2	2,546.0	2,524.9	6.3	7.2	144.86	-104.7	229.3	367.2	355.7	11.50	31.923		
2,700.0	2,686.7	2,640.8	2,618.2	6.6	7.6	145.63	-112.6	244.4	398.5	386.5	12.01	33.180		
2,800.0	2,785.2	2,735.6	2,711.5	7.0	8.0	146.28	-120.5	259.4	429.9	417.4	12.52	34.330		
2,900.0	2,883.6	2,830.5	2,804.8	7.3	8.4	146.85	-128.4	274.4	461.3	448.3	13.04	35.385		
3,000.0	2,982.1	2,925.3	2,898.2	7.7	8.8	147.34	-136.3	289.5	492.8	479.3	13.56	36.355		
3,100.0	3,080.5	3,020.2	2,991.5	8.0	9.1	147.77	-144.2	304.5	524.3	510.2	14.08	37.249		
3,200.0	3,179.0	3,115.0	3,084.8	8.4	9.5	148.15	-152.1	319.5	555.8	541.2	14.60	38.076		
3,300.0	3,277.5	3,209.9	3,178.1	8.8	9.9	148.50	-160.0	334.6	587.4	572.2	15.12	38.843		
3,400.0	3,375.9	3,304.7	3,271.4	9.1	10.3	148.81	-167.9	349.6	618.9	603.3	15.65	39.555		
3,500.0	3,474.4	3,399.5	3,364.7	9.5	10.7	149.08	-175.8	364.6	650.5	634.3	16.17	40.218		
3,600.0	3,572.8	3,494.4	3,458.0	9.9	11.1	149.34	-183.7	379.7	682.1	665.4	16.70	40.836		
3,700.0	3,671.3	3,589.2	3,551.3	10.2	11.5	149.57	-191.6	394.7	713.6	696.4	17.23	41.414		
3,800.0	3,769.8	3,684.1	3,644.6	10.6	11.8	149.78	-199.5	409.7	745.2	727.5	17.76	41.956		
3,900.0	3,868.2	3,778.9	3,737.9	11.0	12.2	149.97	-207.4	424.8	776.9	758.6	18.29	42.464		
4,000.0	3,966.7	3,873.8	3,831.2	11.4	12.6	150.15	-215.3	439.8	808.5	789.6	18.83	42.942		
4,100.0	4,065.3	3,968.8	3,924.8	11.7	13.0	150.50	-223.2	454.9	839.4	820.0	19.40	43.279		
4,200.0	4,164.4	4,064.7	4,019.1	12.0	13.4	150.80	-231.2	470.1	867.7	847.7	19.94	43.523		
4,300.0	4,263.9	4,161.5	4,114.3	12.2	13.8	150.96	-239.3	485.4	893.0	872.5	20.45	43.662		
4,400.0	4,363.6	4,258.9	4,210.1	12.4	14.2	150.98	-247.4	500.8	915.3	894.4	20.94	43.711		
4,500.0	4,463.6	4,365.6	4,315.2	12.6	14.6	150.84	-256.2	517.6	934.6	913.2	21.42	43.641		
4,600.0	4,563.6	4,508.7	4,456.8	12.7	15.0	137.78	-265.8	536.0	948.4	926.5	21.91	43.293		
4,700.0	4,663.6	4,653.6	4,601.0	12.9	15.3	137.50	-272.2	548.1	957.3	934.9	22.39	42.758		
4,800.0	4,763.6	4,799.5	4,746.8	13.1	15.6	137.37	-275.2	553.8	961.5	938.6	22.85	42.071		
4,900.0	4,863.6	4,916.4	4,863.6	13.2	15.7	137.36	-275.4	554.2	961.8	938.5	23.26	41.348		
5,000.0	4,963.6	5,016.4	4,963.6	13.4	15.9	137.36	-275.4	554.2	961.8	938.1	23.64	40.682		
5,100.0	5,063.6	5,116.4	5,063.6	13.6	16.0	137.36	-275.4	554.2	961.8	937.8	24.02	40.034		

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

<b>Company:</b>	Great Western	<b>Local Co-ordinate Reference:</b>	Well Andrews 26-53
<b>Project:</b>	SEC.26-T7N-R65W	<b>TVD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Reference Site:</b>	Andrews 26-23 Pad Sec.26-T7N-R65W	<b>MD Reference:</b>	WELL @ 4885.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Andrews 26-53	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #1 (5-14-12)	<b>Offset TVD Reference:</b>	Offset Datum

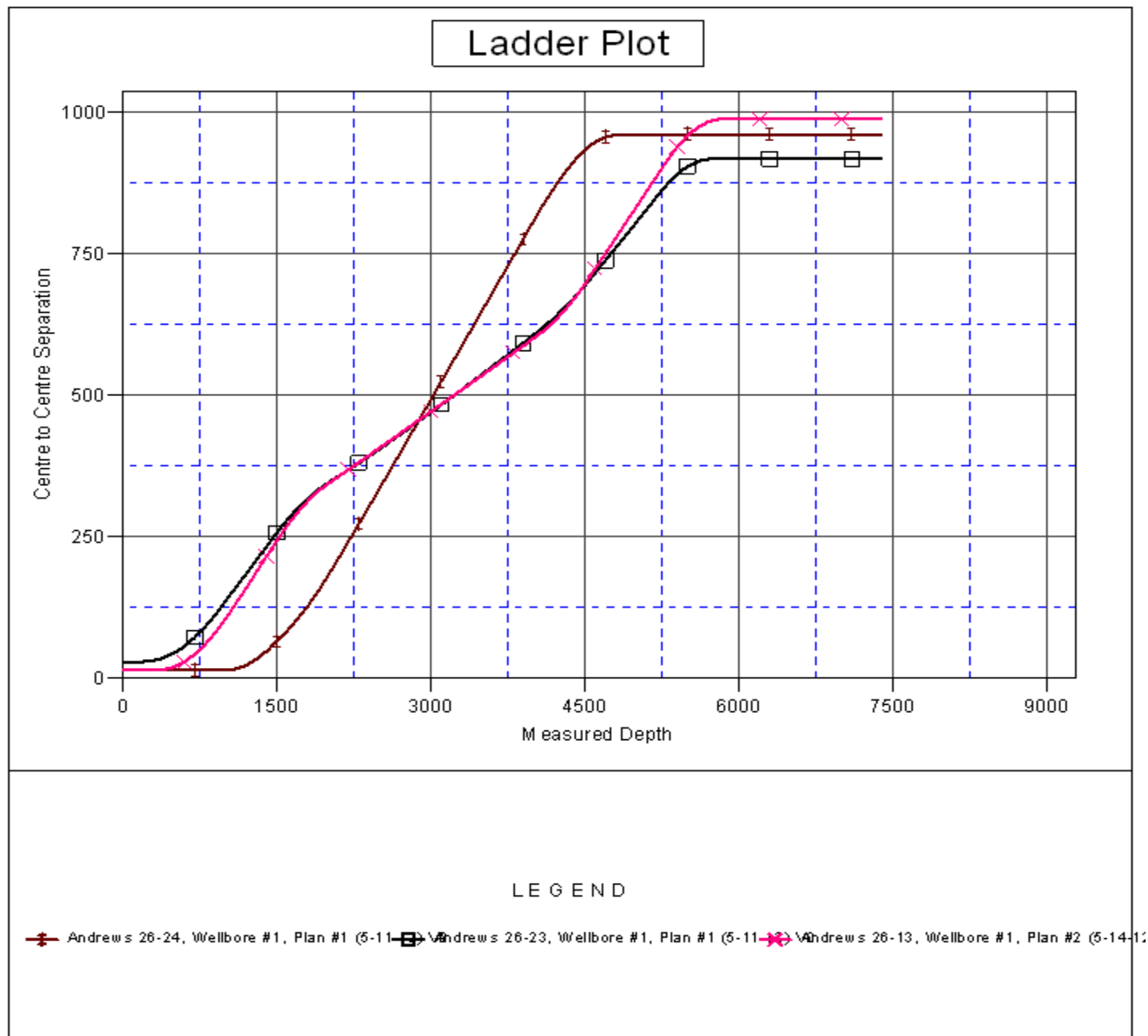
<b>Offset Design</b> Andrews 26-23 Pad Sec.26-T7N-R65W - Andrews 26-24 - Wellbore #1 - Plan #1 (5-11-12)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (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
5,200.0	5,163.6	5,216.4	5,163.6	13.8	16.2	137.36	-275.4	554.2	961.8	937.4	24.41	39.402	
5,300.0	5,263.6	5,316.4	5,263.6	14.0	16.3	137.36	-275.4	554.2	961.8	937.0	24.80	38.786	
5,400.0	5,363.6	5,416.4	5,363.6	14.1	16.4	137.36	-275.4	554.2	961.8	936.6	25.19	38.187	
5,500.0	5,463.6	5,516.4	5,463.6	14.3	16.6	137.36	-275.4	554.2	961.8	936.2	25.58	37.602	
5,600.0	5,563.6	5,616.4	5,563.6	14.5	16.7	137.36	-275.4	554.2	961.8	935.8	25.97	37.033	
5,700.0	5,663.6	5,716.4	5,663.6	14.7	16.9	137.36	-275.4	554.2	961.8	935.4	26.37	36.478	
5,800.0	5,763.6	5,816.4	5,763.6	14.9	17.0	137.36	-275.4	554.2	961.8	935.0	26.76	35.937	
5,900.0	5,863.6	5,916.4	5,863.6	15.1	17.2	137.36	-275.4	554.2	961.8	934.6	27.16	35.410	
6,000.0	5,963.6	6,016.4	5,963.6	15.2	17.3	137.36	-275.4	554.2	961.8	934.2	27.56	34.896	
6,100.0	6,063.6	6,116.4	6,063.6	15.4	17.5	137.36	-275.4	554.2	961.8	933.8	27.96	34.395	
6,200.0	6,163.6	6,216.4	6,163.6	15.6	17.7	137.36	-275.4	554.2	961.8	933.4	28.37	33.907	
6,300.0	6,263.6	6,316.4	6,263.6	15.8	17.8	137.36	-275.4	554.2	961.8	933.0	28.77	33.430	
6,400.0	6,363.6	6,416.4	6,363.6	16.0	18.0	137.36	-275.4	554.2	961.8	932.6	29.18	32.965	
6,500.0	6,463.6	6,516.4	6,463.6	16.2	18.1	137.36	-275.4	554.2	961.8	932.2	29.58	32.512	
6,600.0	6,563.6	6,616.4	6,563.6	16.4	18.3	137.36	-275.4	554.2	961.8	931.8	29.99	32.070	
6,700.0	6,663.6	6,716.4	6,663.6	16.6	18.5	137.36	-275.4	554.2	961.8	931.4	30.40	31.638	
6,800.0	6,763.6	6,816.4	6,763.6	16.8	18.6	137.36	-275.4	554.2	961.8	931.0	30.81	31.217	
6,900.0	6,863.6	6,916.4	6,863.6	17.0	18.8	137.36	-275.4	554.2	961.8	930.6	31.22	30.805	
7,000.0	6,963.6	7,016.4	6,963.6	17.2	19.0	137.36	-275.4	554.2	961.8	930.1	31.63	30.404	
7,100.0	7,063.6	7,116.4	7,063.6	17.4	19.1	137.36	-275.4	554.2	961.8	929.7	32.05	30.011	
7,200.0	7,163.6	7,216.4	7,163.6	17.6	19.3	137.36	-275.4	554.2	961.8	929.3	32.46	29.628	
7,300.0	7,263.6	7,316.4	7,263.6	17.8	19.5	137.36	-275.4	554.2	961.8	928.9	32.88	29.254	
7,350.3	7,313.9	7,366.6	7,313.9	17.9	19.6	137.36	-275.4	554.2	961.8	928.7	33.09	29.069	
7,382.4	7,346.0	7,386.8	7,334.0	17.9	19.6	137.36	-275.4	554.2	961.8	928.7	33.20	28.975	



**Company:** Great Western  
**Project:** SEC.26-T7N-R65W  
**Reference Site:** Andrews 26-23 Pad Sec.26-T7N-R65W  
**Site Error:** 0.0ft  
**Reference Well:** Andrews 26-53  
**Well Error:** 0.0ft  
**Reference Wellbore:** Wellbore #1  
**Reference Design:** Plan #1 (5-14-12)

**Local Co-ordinate Reference:** Well Andrews 26-53  
**TVD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**MD Reference:** WELL @ 4885.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** Landmark  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to WELL @ 4885.0ft (Original Well Elev) Coordinates are relative to: Andrews 26-53  
 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: 0.56°



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