

Great Western

Well Name: **Postle IC 11-342HC**

Surface Location: Postle East Pad Sec.12-T3N-R68W

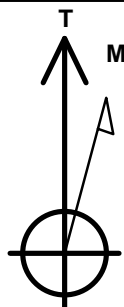
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4925.1

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1328860.82	3150763.24	40.234861	-104.959992	
RKB - 16.5' WELL @ 4941.6ft (RKB - 16.5')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 498'FSL & 250'FWL, Sec.12	1.0	0.0	0.0	Point
BHL 780'FSL & 470'FWL, Sec.11	7269.7	275.9	-5041.8	Point
Entry Pt. 781'FSL & 460'FEL, Sec.11	7269.7	280.5	-708.9	Point



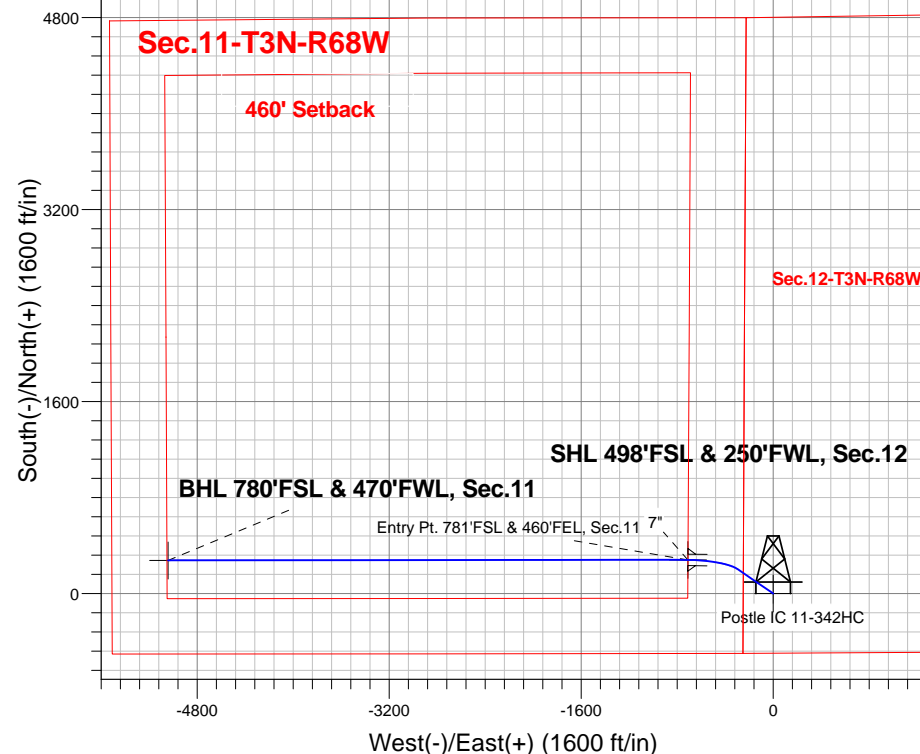
Azimuths to True North
Magnetic North: 8.64°

Magnetic Field
Strength: 52774.8snT
Dip Angle: 66.80°
Date: 10/23/2013
Model: IGRF2010

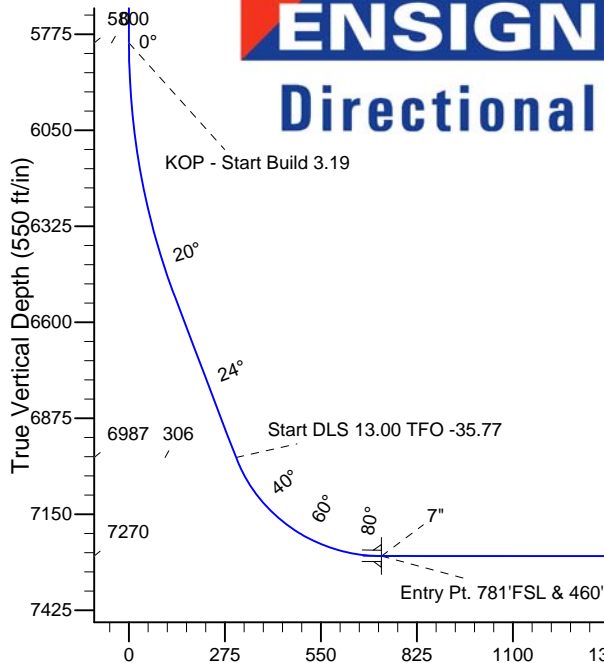
Postle East Pad Sec.12-T3N-R68W
Postle IC 11-342HC
Plan #1 (10-23-13)
11:05, October 24 2013

ANNOTATIONS

TVD	MD	Annotation
5800.0	5800.0	KOP - Start Build 3.19
6987.2	7052.3	Start DLS 13.00 TFO -35.77
7269.7	11924.6	TD at 11924.6



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	5800.0	0.00	0.00	5800.0	0.0	0.0	0.00	0.00	0.0	
3	6552.3	24.02	304.48	6530.4	88.0	-128.1	3.19	304.48	132.7	
4	7052.3	24.02	304.48	6987.2	203.2	-295.8	0.00	0.00	306.5	
5	7591.7	90.00	271.13	7269.7	280.5	-708.9	13.00	-35.77	723.2	Entry Pt. 781'FSL & 460'FEL, Sec.11
6	7712.5	90.00	269.92	7269.7	281.6	-829.6	1.00	-90.00	843.8	
7	11924.6	90.00	269.92	7269.7	275.9	-5041.8	0.00	0.00	5049.3	BHL 780'FSL & 470'FWL, Sec.11

Vertical Section at 273.13° (550 ft/in)



Great Western

Sec.12-T3N-R68W

Postle East Pad Sec.12-T3N-R68W

Postle IC 11-342HC

Wellbore #1

Plan: Plan #1 (10-23-13)

Standard Planning Report

24 October, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Company:	Great Western	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Project:	Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site:	Postle East Pad Sec.12-T3N-R68W	North Reference:	True
Well:	Postle IC 11-342HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-23-13)		

Project	Sec.12-T3N-R68W, Weld County, CO		
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						Postle East Pad Sec.12-T3N-R68W											
Site Position:						Northing:			1,328,801.08 ft			Latitude:			40.234697		
From:			Lat/Long			Easting:			3,150,763.05 ft			Longitude:			-104.959994		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.35 °		

Well	Postle IC 11-342HC					
Well Position	+N-S	59.7 ft	Northing:	1,328,860.82 ft	Latitude:	40.234861
	+E-W	0.6 ft	Easting:	3,150,763.24 ft	Longitude:	-104.959992
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,925.1 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/23/2013	8.64	66.80	52,775

Design	Plan #1 (10-23-13)			
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	273.13

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	
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
6,552.3	24.02	304.48	6,530.4	88.0	-128.1	3.19	3.19	0.00	304.48	
7,052.3	24.02	304.48	6,987.2	203.2	-295.8	0.00	0.00	0.00	0.00	
7,591.7	90.00	271.13	7,269.7	280.5	-708.9	13.00	12.23	-6.18	-35.77	Entry Pt. 781'FSL &
7,712.5	90.00	269.92	7,269.7	281.6	-829.6	1.00	0.00	-1.00	-90.00	
11,924.6	90.00	269.92	7,269.7	275.9	-5,041.8	0.00	0.00	0.00	0.00	BHL 780'FSL & 47C

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Project:	Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site:	Postle East Pad Sec.12-T3N-R68W	North Reference:	True
Well:	Postle IC 11-342HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-23-13)		

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 498'FSL & 250'FWL, Sec.12									
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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Company:	Great Western	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Project:	Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site:	Postle East Pad Sec.12-T3N-R68W	North Reference:	True
Well:	Postle IC 11-342HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-23-13)		

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
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 3.19									
5,900.0	3.19	304.48	5,899.9	1.6	-2.3	2.4	3.19	3.19	0.00
6,000.0	6.39	304.48	5,999.6	6.3	-9.2	9.5	3.19	3.19	0.00
6,100.0	9.58	304.48	6,098.6	14.2	-20.6	21.4	3.19	3.19	0.00
6,200.0	12.77	304.48	6,196.7	25.1	-36.6	37.9	3.19	3.19	0.00
6,300.0	15.96	304.48	6,293.6	39.2	-57.0	59.1	3.19	3.19	0.00
6,400.0	19.16	304.48	6,388.9	56.3	-81.9	84.9	3.19	3.19	0.00
6,500.0	22.35	304.48	6,482.4	76.3	-111.1	115.1	3.19	3.19	0.00
6,552.3	24.02	304.48	6,530.4	88.0	-128.1	132.7	3.19	3.19	0.00
6,600.0	24.02	304.48	6,574.0	99.0	-144.1	149.3	0.00	0.00	0.00
6,700.0	24.02	304.48	6,665.4	122.0	-177.6	184.0	0.00	0.00	0.00
6,800.0	24.02	304.48	6,756.7	145.0	-211.2	218.8	0.00	0.00	0.00
6,900.0	24.02	304.48	6,848.1	168.1	-244.8	253.6	0.00	0.00	0.00
7,000.0	24.02	304.48	6,939.4	191.1	-278.3	288.3	0.00	0.00	0.00
7,052.3	24.02	304.48	6,987.2	203.2	-295.9	306.5	0.00	0.00	0.00
Start DLS 13.00 TFO -35.77									
7,100.0	29.26	297.05	7,029.8	214.0	-314.3	325.5	13.00	10.99	-15.56
7,200.0	41.06	287.46	7,111.5	235.0	-367.6	379.9	13.00	11.80	-9.60
7,300.0	53.35	281.63	7,179.3	253.1	-438.5	451.7	13.00	12.29	-5.83
7,400.0	65.84	277.44	7,229.8	267.1	-523.4	537.2	13.00	12.49	-4.19
7,500.0	78.43	274.01	7,260.5	276.5	-617.9	632.1	13.00	12.59	-3.43
7,591.7	90.00	271.13	7,269.7	280.5	-708.9	723.2	13.00	12.62	-3.14
7" - Entry Pt. 781'FSL & 460'FEL, Sec.11									
7,600.0	90.00	271.05	7,269.7	280.7	-717.2	731.4	1.00	0.01	-1.00
7,700.0	90.00	270.05	7,269.7	281.6	-817.2	831.3	1.00	0.00	-1.00
7,712.5	90.00	269.92	7,269.7	281.6	-829.6	843.8	1.00	0.00	-1.00
7,800.0	90.00	269.92	7,269.7	281.5	-917.2	931.2	0.00	0.00	0.00
7,900.0	90.00	269.92	7,269.7	281.4	-1,017.2	1,031.0	0.00	0.00	0.00
8,000.0	90.00	269.92	7,269.7	281.3	-1,117.2	1,130.9	0.00	0.00	0.00
8,100.0	90.00	269.92	7,269.7	281.1	-1,217.2	1,230.7	0.00	0.00	0.00
8,200.0	90.00	269.92	7,269.7	281.0	-1,317.2	1,330.6	0.00	0.00	0.00
8,300.0	90.00	269.92	7,269.7	280.8	-1,417.2	1,430.4	0.00	0.00	0.00
8,400.0	90.00	269.92	7,269.7	280.7	-1,517.2	1,530.2	0.00	0.00	0.00
8,500.0	90.00	269.92	7,269.7	280.6	-1,617.2	1,630.1	0.00	0.00	0.00
8,600.0	90.00	269.92	7,269.7	280.4	-1,717.2	1,729.9	0.00	0.00	0.00
8,700.0	90.00	269.92	7,269.7	280.3	-1,817.2	1,829.8	0.00	0.00	0.00
8,800.0	90.00	269.92	7,269.7	280.2	-1,917.2	1,929.6	0.00	0.00	0.00
8,900.0	90.00	269.92	7,269.7	280.0	-2,017.2	2,029.5	0.00	0.00	0.00
9,000.0	90.00	269.92	7,269.7	279.9	-2,117.2	2,129.3	0.00	0.00	0.00
9,100.0	90.00	269.92	7,269.7	279.8	-2,217.2	2,229.1	0.00	0.00	0.00
9,200.0	90.00	269.92	7,269.7	279.6	-2,317.2	2,329.0	0.00	0.00	0.00
9,300.0	90.00	269.92	7,269.7	279.5	-2,417.2	2,428.8	0.00	0.00	0.00
9,400.0	90.00	269.92	7,269.7	279.4	-2,517.2	2,528.7	0.00	0.00	0.00
9,500.0	90.00	269.92	7,269.7	279.2	-2,617.2	2,628.5	0.00	0.00	0.00
9,600.0	90.00	269.92	7,269.7	279.1	-2,717.2	2,728.4	0.00	0.00	0.00
9,700.0	90.00	269.92	7,269.7	278.9	-2,817.2	2,828.2	0.00	0.00	0.00

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Company:	Great Western	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
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Site:	Postle East Pad Sec.12-T3N-R68W	North Reference:	True
Well:	Postle IC 11-342HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-23-13)		

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	269.92	7,269.7	278.8	-2,917.2	2,928.0	0.00	0.00	0.00	
9,900.0	90.00	269.92	7,269.7	278.7	-3,017.2	3,027.9	0.00	0.00	0.00	
10,000.0	90.00	269.92	7,269.7	278.5	-3,117.2	3,127.7	0.00	0.00	0.00	
10,100.0	90.00	269.92	7,269.7	278.4	-3,217.2	3,227.6	0.00	0.00	0.00	
10,200.0	90.00	269.92	7,269.7	278.3	-3,317.2	3,327.4	0.00	0.00	0.00	
10,300.0	90.00	269.92	7,269.7	278.1	-3,417.2	3,427.3	0.00	0.00	0.00	
10,400.0	90.00	269.92	7,269.7	278.0	-3,517.2	3,527.1	0.00	0.00	0.00	
10,500.0	90.00	269.92	7,269.7	277.9	-3,617.2	3,626.9	0.00	0.00	0.00	
10,600.0	90.00	269.92	7,269.7	277.7	-3,717.2	3,726.8	0.00	0.00	0.00	
10,700.0	90.00	269.92	7,269.7	277.6	-3,817.2	3,826.6	0.00	0.00	0.00	
10,800.0	90.00	269.92	7,269.7	277.5	-3,917.2	3,926.5	0.00	0.00	0.00	
10,900.0	90.00	269.92	7,269.7	277.3	-4,017.2	4,026.3	0.00	0.00	0.00	
11,000.0	90.00	269.92	7,269.7	277.2	-4,117.2	4,126.2	0.00	0.00	0.00	
11,100.0	90.00	269.92	7,269.7	277.1	-4,217.2	4,226.0	0.00	0.00	0.00	
11,200.0	90.00	269.92	7,269.7	276.9	-4,317.2	4,325.9	0.00	0.00	0.00	
11,300.0	90.00	269.92	7,269.7	276.8	-4,417.2	4,425.7	0.00	0.00	0.00	
11,400.0	90.00	269.92	7,269.7	276.6	-4,517.2	4,525.5	0.00	0.00	0.00	
11,500.0	90.00	269.92	7,269.7	276.5	-4,617.2	4,625.4	0.00	0.00	0.00	
11,600.0	90.00	269.92	7,269.7	276.4	-4,717.2	4,725.2	0.00	0.00	0.00	
11,700.0	90.00	269.92	7,269.7	276.2	-4,817.2	4,825.1	0.00	0.00	0.00	
11,800.0	90.00	269.92	7,269.7	276.1	-4,917.2	4,924.9	0.00	0.00	0.00	
11,900.0	90.00	269.92	7,269.7	276.0	-5,017.2	5,024.8	0.00	0.00	0.00	
11,924.6	90.00	269.92	7,269.7	275.9	-5,041.8	5,049.3	0.00	0.00	0.00	
BHL 780'FSL & 470'FWL, Sec.11										

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Entry Pt. 781'FSL & 41'FWL	0.00	0.00	7,269.7	280.5	-708.9	1,329,137.02	3,150,052.69	40.235631	-104.962531
- plan hits target center									
- Point									
SHL 498'FSL & 250'F	0.00	0.00	1.0	0.0	0.0	1,328,860.83	3,150,763.24	40.234861	-104.959992
- plan hits target center									
- Point									
BHL 780'FSL & 470'F	0.00	0.00	7,269.7	275.9	-5,041.8	1,329,106.04	3,145,720.12	40.235617	-104.978050
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,591.7	7,269.7	7"	7	7-1/2	

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Company:	Great Western	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Project:	Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site:	Postle East Pad Sec.12-T3N-R68W	North Reference:	True
Well:	Postle IC 11-342HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-23-13)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
5,800.0	5,800.0	0.0	0.0	KOP - Start Build 3.19
7,052.3	6,987.2	88.0	-128.1	Start DLS 13.00 TFO -35.77
11,924.6	7,269.7	203.2	-295.8	TD at 11924.6



Great Western

Sec.12-T3N-R68W

Postle East Pad Sec.12-T3N-R68W

Postle IC 11-342HC

Wellbore #1

Plan #1 (10-23-13)

Anticollision Report

24 October, 2013

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (10-23-13)		
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 10/24/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	7,355.0	Plan #1 (10-23-13) (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
7,355.0	11,924.6	Plan #1 (10-23-13) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Postle East Pad Sec.12-T3N-R68W						
Postle IC 11-302HN - Wellbore #1 - Plan #1 (10-23-13)	5,433.6	5,433.6	30.2	1.7	1.058	Level 2, CC, ES, SF
Postle IC 11-379HN - Wellbore #1 - Plan #1 (10-23-13)	5,800.0	5,800.0	29.1	-1.4	0.955	Level 1, CC, ES, SF
Postle IC 11-382HN - Wellbore #1 - Plan #1 (10-23-13)	5,600.0	5,600.0	59.8	30.3	2.028	CC, ES, SF

Offset Design Postle East Pad Sec.12-T3N-R68W - Postle IC 11-302HN - Wellbore #1 - Plan #1 (10-23-13)												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7230-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	0.00	30.2	0.0	30.2				
100.0	100.0	100.0	100.0	0.1	0.1	0.00	30.2	0.0	30.2	30.0	0.27	113.910	
200.0	200.0	200.0	200.0	0.4	0.4	0.00	30.2	0.0	30.2	29.4	0.80	37.970	
300.0	300.0	300.0	300.0	0.7	0.7	0.00	30.2	0.0	30.2	28.9	1.33	22.782	
400.0	400.0	400.0	400.0	0.9	0.9	0.00	30.2	0.0	30.2	28.4	1.86	16.273	
500.0	500.0	500.0	500.0	1.2	1.2	0.00	30.2	0.0	30.2	27.8	2.39	12.657	
600.0	600.0	600.0	600.0	1.5	1.5	0.00	30.2	0.0	30.2	27.3	2.92	10.355	
700.0	700.0	700.0	700.0	1.7	1.7	0.00	30.2	0.0	30.2	26.8	3.45	8.762	
800.0	800.0	800.0	800.0	2.0	2.0	0.00	30.2	0.0	30.2	26.3	3.98	7.594	
900.0	900.0	900.0	900.0	2.3	2.3	0.00	30.2	0.0	30.2	25.7	4.51	6.701	
1,000.0	1,000.0	1,000.0	1,000.0	2.5	2.5	0.00	30.2	0.0	30.2	25.2	5.04	5.995	
1,100.0	1,100.0	1,100.0	1,100.0	2.8	2.8	0.00	30.2	0.0	30.2	24.7	5.57	5.424	
1,200.0	1,200.0	1,200.0	1,200.0	3.1	3.1	0.00	30.2	0.0	30.2	24.1	6.11	4.953	
1,300.0	1,300.0	1,300.0	1,300.0	3.3	3.3	0.00	30.2	0.0	30.2	23.6	6.64	4.556	
1,400.0	1,400.0	1,400.0	1,400.0	3.6	3.6	0.00	30.2	0.0	30.2	23.1	7.17	4.219	
1,500.0	1,500.0	1,500.0	1,500.0	3.8	3.8	0.00	30.2	0.0	30.2	22.5	7.70	3.928	
1,600.0	1,600.0	1,600.0	1,600.0	4.1	4.1	0.00	30.2	0.0	30.2	22.0	8.23	3.675	
1,700.0	1,700.0	1,700.0	1,700.0	4.4	4.4	0.00	30.2	0.0	30.2	21.5	8.76	3.452	
1,800.0	1,800.0	1,800.0	1,800.0	4.6	4.6	0.00	30.2	0.0	30.2	20.9	9.29	3.255	
1,900.0	1,900.0	1,900.0	1,900.0	4.9	4.9	0.00	30.2	0.0	30.2	20.4	9.82	3.079	
2,000.0	2,000.0	2,000.0	2,000.0	5.2	5.2	0.00	30.2	0.0	30.2	19.9	10.35	2.921	
2,100.0	2,100.0	2,100.0	2,100.0	5.4	5.4	0.00	30.2	0.0	30.2	19.4	10.88	2.778	
2,200.0	2,200.0	2,200.0	2,200.0	5.7	5.7	0.00	30.2	0.0	30.2	18.8	11.41	2.649	

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

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7230-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		
2,300.0	2,300.0	2,300.0	2,300.0	6.0	6.0	0.00	30.2	0.0	30.2	18.3	11.95	2.531		
2,400.0	2,400.0	2,400.0	2,400.0	6.2	6.2	0.00	30.2	0.0	30.2	17.8	12.48	2.424		
2,500.0	2,500.0	2,500.0	2,500.0	6.5	6.5	0.00	30.2	0.0	30.2	17.2	13.01	2.325		
2,600.0	2,600.0	2,600.0	2,600.0	6.8	6.8	0.00	30.2	0.0	30.2	16.7	13.54	2.234		
2,700.0	2,700.0	2,700.0	2,700.0	7.0	7.0	0.00	30.2	0.0	30.2	16.2	14.07	2.149		
2,800.0	2,800.0	2,800.0	2,800.0	7.3	7.3	0.00	30.2	0.0	30.2	15.6	14.60	2.071		
2,900.0	2,900.0	2,900.0	2,900.0	7.6	7.6	0.00	30.2	0.0	30.2	15.1	15.13	1.998		
3,000.0	3,000.0	3,000.0	3,000.0	7.8	7.8	0.00	30.2	0.0	30.2	14.6	15.66	1.931		
3,100.0	3,100.0	3,100.0	3,100.0	8.1	8.1	0.00	30.2	0.0	30.2	14.0	16.19	1.867		
3,200.0	3,200.0	3,200.0	3,200.0	8.4	8.4	0.00	30.2	0.0	30.2	13.5	16.72	1.808		
3,300.0	3,300.0	3,300.0	3,300.0	8.6	8.6	0.00	30.2	0.0	30.2	13.0	17.25	1.752		
3,400.0	3,400.0	3,400.0	3,400.0	8.9	8.9	0.00	30.2	0.0	30.2	12.5	17.78	1.700		
3,500.0	3,500.0	3,500.0	3,500.0	9.2	9.2	0.00	30.2	0.0	30.2	11.9	18.32	1.651		
3,600.0	3,600.0	3,600.0	3,600.0	9.4	9.4	0.00	30.2	0.0	30.2	11.4	18.85	1.604		
3,700.0	3,700.0	3,700.0	3,700.0	9.7	9.7	0.00	30.2	0.0	30.2	10.9	19.38	1.560		
3,800.0	3,800.0	3,800.0	3,800.0	10.0	10.0	0.00	30.2	0.0	30.2	10.3	19.91	1.519		
3,900.0	3,900.0	3,900.0	3,900.0	10.2	10.2	0.00	30.2	0.0	30.2	9.8	20.44	1.479 Level 3		
4,000.0	4,000.0	4,000.0	4,000.0	10.5	10.5	0.00	30.2	0.0	30.2	9.3	20.97	1.442 Level 3		
4,100.0	4,100.0	4,100.0	4,100.0	10.8	10.8	0.00	30.2	0.0	30.2	8.7	21.50	1.406 Level 3		
4,200.0	4,200.0	4,200.0	4,200.0	11.0	11.0	0.00	30.2	0.0	30.2	8.2	22.03	1.372 Level 3		
4,300.0	4,300.0	4,300.0	4,300.0	11.3	11.3	0.00	30.2	0.0	30.2	7.7	22.56	1.340 Level 3		
4,400.0	4,400.0	4,400.0	4,400.0	11.5	11.5	0.00	30.2	0.0	30.2	7.1	23.09	1.309 Level 3		
4,500.0	4,500.0	4,500.0	4,500.0	11.8	11.8	0.00	30.2	0.0	30.2	6.6	23.62	1.280 Level 3		
4,600.0	4,600.0	4,600.0	4,600.0	12.1	12.1	0.00	30.2	0.0	30.2	6.1	24.16	1.252 Level 3		
4,700.0	4,700.0	4,700.0	4,700.0	12.3	12.3	0.00	30.2	0.0	30.2	5.6	24.69	1.225 Level 2		
4,800.0	4,800.0	4,800.0	4,800.0	12.6	12.6	0.00	30.2	0.0	30.2	5.0	25.22	1.199 Level 2		
4,900.0	4,900.0	4,900.0	4,900.0	12.9	12.9	0.00	30.2	0.0	30.2	4.5	25.75	1.174 Level 2		
5,000.0	5,000.0	5,000.0	5,000.0	13.1	13.1	0.00	30.2	0.0	30.2	4.0	26.28	1.151 Level 2		
5,100.0	5,100.0	5,100.0	5,100.0	13.4	13.4	0.00	30.2	0.0	30.2	3.4	26.81	1.128 Level 2		
5,200.0	5,200.0	5,200.0	5,200.0	13.7	13.7	0.00	30.2	0.0	30.2	2.9	27.34	1.106 Level 2		
5,300.0	5,300.0	5,300.0	5,300.0	13.9	13.9	0.00	30.2	0.0	30.2	2.4	27.87	1.085 Level 2		
5,400.0	5,400.0	5,400.0	5,400.0	14.2	14.2	0.00	30.2	0.0	30.2	1.8	28.40	1.065 Level 2		
5,433.6	5,433.6	5,433.6	5,433.6	14.3	14.3	0.00	30.2	0.0	30.2	1.7	28.58	1.058 Level 2, CC, ES, SF		
5,500.0	5,500.0	5,499.3	5,499.3	14.5	14.5	-0.68	30.8	-0.4	30.8	1.9	28.93	1.064 Level 2		
5,600.0	5,600.0	5,597.7	5,597.6	14.7	14.7	-5.32	35.1	-3.3	35.3	5.9	29.43	1.200 Level 2		
5,700.0	5,700.0	5,695.3	5,694.6	15.0	14.9	-11.67	43.6	-9.0	44.8	14.9	29.93	1.498 Level 3		
5,800.0	5,800.0	5,791.5	5,789.6	15.3	15.2	-17.27	56.0	-17.4	59.6	29.2	30.43	1.959		
5,900.0	5,899.9	5,886.5	5,882.5	15.5	15.4	34.88	72.3	-28.4	77.4	46.6	30.85	2.509		
6,000.0	5,999.6	5,980.5	5,973.4	15.7	15.6	33.85	92.3	-41.9	95.6	64.5	31.19	3.067		
6,100.0	6,098.6	6,073.7	6,062.2	15.9	15.9	34.02	115.8	-57.7	114.1	82.7	31.46	3.628		
6,200.0	6,196.7	6,166.0	6,148.6	16.1	16.1	34.87	142.6	-75.9	132.9	101.2	31.69	4.194		
6,300.0	6,293.6	6,257.3	6,232.4	16.3	16.3	36.12	172.7	-96.1	151.9	120.1	31.87	4.767		
6,400.0	6,388.9	6,347.8	6,313.6	16.5	16.6	37.61	205.7	-118.4	171.3	139.3	32.03	5.348		
6,500.0	6,482.4	6,437.4	6,392.0	16.8	16.8	39.24	241.6	-142.7	191.0	158.8	32.18	5.937		
6,600.0	6,574.0	6,533.7	6,474.8	17.0	17.1	41.37	282.4	-170.2	210.2	177.7	32.54	6.459		
6,700.0	6,665.4	6,631.6	6,558.9	17.2	17.4	43.48	323.9	-198.2	229.2	196.1	33.12	6.921		
6,800.0	6,756.7	6,729.4	6,643.0	17.5	17.7	45.26	365.4	-226.2	248.4	214.7	33.69	7.375		
6,900.0	6,848.1	6,827.3	6,727.1	17.7	18.0	46.79	406.9	-254.3	267.9	233.6	34.26	7.820		
7,000.0	6,939.4	6,925.1	6,811.1	18.0	18.3	48.11	448.4	-282.3	287.5	252.7	34.83	8.254		
7,100.0	7,029.8	7,022.5	6,892.0	18.2	18.7	53.47	488.3	-318.5	307.0	271.8	35.17	8.729		
7,200.0	7,111.5	7,119.6	6,963.7	18.5	19.0	58.66	523.6	-373.4	324.3	289.1	35.17	9.219		
7,300.0	7,179.3	7,216.8	7,022.8	18.8	19.3	60.54	552.7	-444.5	338.1	303.0	35.10	9.634		

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

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7230-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,400.0	7,229.8	7,314.0	7,066.7	20.0	20.3	61.20	574.3	-528.3	347.9	313.0	34.88	9.972	
7,500.0	7,260.5	7,411.2	7,093.0	20.1	20.4	61.39	587.2	-620.7	353.0	317.9	35.08	10.061	
7,600.0	7,269.7	7,508.6	7,100.7	20.2	20.6	61.41	590.9	-717.6	353.3	317.0	36.29	9.734	
7,700.0	7,269.7	7,608.6	7,100.7	20.9	21.3	61.34	590.8	-817.6	352.3	314.2	38.15	9.235	
7,739.7	7,269.7	7,648.3	7,100.7	21.4	21.8	61.33	590.7	-857.2	352.3	313.2	39.10	9.009	
7,800.0	7,269.7	7,708.6	7,100.7	22.2	22.7	61.34	590.7	-917.6	352.3	311.7	40.58	8.683	
7,900.0	7,269.7	7,808.6	7,100.7	23.8	24.3	61.34	590.5	-1,017.6	352.3	308.9	43.45	8.110	
8,000.0	7,269.7	7,908.6	7,100.7	25.7	26.2	61.34	590.4	-1,117.6	352.3	305.7	46.67	7.549	
8,100.0	7,269.7	8,008.6	7,100.7	27.6	28.2	61.34	590.3	-1,217.6	352.3	302.2	50.18	7.021	
8,200.0	7,269.7	8,108.6	7,100.7	29.8	30.4	61.34	590.2	-1,317.6	352.4	298.4	53.93	6.534	
8,300.0	7,269.7	8,208.6	7,100.7	32.0	32.6	61.34	590.0	-1,417.6	352.4	294.5	57.86	6.090	
8,400.0	7,269.7	8,308.6	7,100.7	34.3	34.9	61.34	589.9	-1,517.6	352.4	290.4	61.94	5.689	
8,500.0	7,269.7	8,408.6	7,100.7	36.7	37.3	61.34	589.8	-1,617.6	352.4	286.2	66.15	5.327	
8,600.0	7,269.7	8,508.6	7,100.7	39.1	39.8	61.34	589.7	-1,717.6	352.4	282.0	70.45	5.002	
8,700.0	7,269.7	8,608.6	7,100.7	41.6	42.3	61.34	589.6	-1,817.6	352.4	277.6	74.84	4.709	
8,800.0	7,269.7	8,708.6	7,100.7	44.1	44.8	61.35	589.4	-1,917.6	352.4	273.1	79.30	4.444	
8,900.0	7,269.7	8,808.6	7,100.7	46.7	47.4	61.35	589.3	-2,017.6	352.4	268.6	83.82	4.205	
9,000.0	7,269.7	8,908.6	7,100.7	49.2	50.0	61.35	589.2	-2,117.6	352.4	264.1	88.39	3.987	
9,100.0	7,269.7	9,008.6	7,100.7	51.8	52.6	61.35	589.1	-2,217.6	352.5	259.5	93.00	3.790	
9,200.0	7,269.7	9,108.6	7,100.7	54.5	55.2	61.35	588.9	-2,317.6	352.5	254.8	97.65	3.610	
9,300.0	7,269.7	9,208.6	7,100.7	57.1	57.8	61.35	588.8	-2,417.6	352.5	250.2	102.32	3.445	
9,400.0	7,269.7	9,308.6	7,100.7	59.8	60.5	61.35	588.7	-2,517.6	352.5	245.5	107.03	3.293	
9,500.0	7,269.7	9,408.6	7,100.7	62.4	63.2	61.35	588.6	-2,617.6	352.5	240.7	111.76	3.154	
9,600.0	7,269.7	9,508.6	7,100.7	65.1	65.9	61.35	588.4	-2,717.6	352.5	236.0	116.51	3.026	
9,700.0	7,269.7	9,608.6	7,100.7	67.8	68.6	61.35	588.3	-2,817.6	352.5	231.2	121.28	2.907	
9,800.0	7,269.7	9,708.6	7,100.7	70.5	71.3	61.36	588.2	-2,917.6	352.5	226.5	126.06	2.797	
9,900.0	7,269.7	9,808.6	7,100.7	73.2	74.0	61.36	588.1	-3,017.6	352.5	221.7	130.86	2.694	
10,000.0	7,269.7	9,908.6	7,100.7	75.9	76.7	61.36	588.0	-3,117.6	352.6	216.9	135.68	2.599	
10,100.0	7,269.7	10,008.6	7,100.7	78.6	79.4	61.36	587.8	-3,217.6	352.6	212.1	140.50	2.509	
10,200.0	7,269.7	10,108.6	7,100.7	81.4	82.1	61.36	587.7	-3,317.6	352.6	207.2	145.34	2.426	
10,300.0	7,269.7	10,208.6	7,100.7	84.1	84.9	61.36	587.6	-3,417.6	352.6	202.4	150.18	2.348	
10,400.0	7,269.7	10,308.6	7,100.7	86.8	87.6	61.36	587.5	-3,517.6	352.6	197.6	155.03	2.274	
10,500.0	7,269.7	10,408.6	7,100.7	89.6	90.3	61.36	587.3	-3,617.6	352.6	192.7	159.90	2.205	
10,600.0	7,269.7	10,508.6	7,100.7	92.3	93.1	61.36	587.2	-3,717.6	352.6	187.9	164.76	2.140	
10,700.0	7,269.7	10,608.6	7,100.7	95.1	95.8	61.36	587.1	-3,817.6	352.6	183.0	169.64	2.079	
10,800.0	7,269.7	10,708.6	7,100.7	97.8	98.6	61.36	587.0	-3,917.6	352.6	178.1	174.52	2.021	
10,900.0	7,269.7	10,808.6	7,100.7	100.6	101.3	61.37	586.9	-4,017.6	352.7	173.3	179.41	1.966	
11,000.0	7,269.7	10,908.6	7,100.7	103.3	104.1	61.37	586.7	-4,117.6	352.7	168.4	184.30	1.914	
11,100.0	7,269.7	11,008.6	7,100.7	106.1	106.9	61.37	586.6	-4,217.6	352.7	163.5	189.20	1.864	
11,200.0	7,269.7	11,108.6	7,100.7	108.9	109.6	61.37	586.5	-4,317.5	352.7	158.6	194.10	1.817	
11,300.0	7,269.7	11,208.6	7,100.7	111.6	112.4	61.37	586.4	-4,417.5	352.7	153.7	199.00	1.772	
11,400.0	7,269.7	11,308.6	7,100.7	114.4	115.2	61.37	586.2	-4,517.5	352.7	148.8	203.91	1.730	
11,500.0	7,269.7	11,408.6	7,100.7	117.2	117.9	61.37	586.1	-4,617.5	352.7	143.9	208.82	1.689	
11,600.0	7,269.7	11,508.6	7,100.7	119.9	120.7	61.37	586.0	-4,717.5	352.7	139.0	213.74	1.650	
11,700.0	7,269.7	11,608.6	7,100.7	122.7	123.5	61.37	585.9	-4,817.5	352.7	134.1	218.66	1.613	
11,800.0	7,269.7	11,708.6	7,100.7	125.5	126.2	61.37	585.7	-4,917.5	352.8	129.2	223.58	1.578	
11,900.0	7,269.7	11,808.6	7,100.7	128.2	129.0	61.38	585.6	-5,017.5	352.8	124.3	228.50	1.544	
11,925.4	7,269.7	11,834.0	7,100.7	128.9	129.7	61.38	585.6	-5,042.9	352.8	123.0	229.75	1.535	

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7190-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	180.00	-29.1	0.0	29.1					
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-29.1	0.0	29.1	28.9	0.27	109.793		
200.0	200.0	200.0	200.0	0.4	0.4	180.00	-29.1	0.0	29.1	28.3	0.80	36.598		
300.0	300.0	300.0	300.0	0.7	0.7	180.00	-29.1	0.0	29.1	27.8	1.33	21.959		
400.0	400.0	400.0	400.0	0.9	0.9	180.00	-29.1	0.0	29.1	27.3	1.86	15.685		
500.0	500.0	500.0	500.0	1.2	1.2	180.00	-29.1	0.0	29.1	26.8	2.39	12.199		
600.0	600.0	600.0	600.0	1.5	1.5	180.00	-29.1	0.0	29.1	26.2	2.92	9.981		
700.0	700.0	700.0	700.0	1.7	1.7	180.00	-29.1	0.0	29.1	25.7	3.45	8.446		
800.0	800.0	800.0	800.0	2.0	2.0	180.00	-29.1	0.0	29.1	25.2	3.98	7.320		
900.0	900.0	900.0	900.0	2.3	2.3	180.00	-29.1	0.0	29.1	24.6	4.51	6.458		
1,000.0	1,000.0	1,000.0	1,000.0	2.5	2.5	180.00	-29.1	0.0	29.1	24.1	5.04	5.779		
1,100.0	1,100.0	1,100.0	1,100.0	2.8	2.8	180.00	-29.1	0.0	29.1	23.6	5.57	5.228		
1,200.0	1,200.0	1,200.0	1,200.0	3.1	3.1	180.00	-29.1	0.0	29.1	23.0	6.11	4.774		
1,300.0	1,300.0	1,300.0	1,300.0	3.3	3.3	180.00	-29.1	0.0	29.1	22.5	6.64	4.392		
1,400.0	1,400.0	1,400.0	1,400.0	3.6	3.6	180.00	-29.1	0.0	29.1	22.0	7.17	4.066		
1,500.0	1,500.0	1,500.0	1,500.0	3.8	3.8	180.00	-29.1	0.0	29.1	21.4	7.70	3.786		
1,600.0	1,600.0	1,600.0	1,600.0	4.1	4.1	180.00	-29.1	0.0	29.1	20.9	8.23	3.542		
1,700.0	1,700.0	1,700.0	1,700.0	4.4	4.4	180.00	-29.1	0.0	29.1	20.4	8.76	3.327		
1,800.0	1,800.0	1,800.0	1,800.0	4.6	4.6	180.00	-29.1	0.0	29.1	19.9	9.29	3.137		
1,900.0	1,900.0	1,900.0	1,900.0	4.9	4.9	180.00	-29.1	0.0	29.1	19.3	9.82	2.967		
2,000.0	2,000.0	2,000.0	2,000.0	5.2	5.2	180.00	-29.1	0.0	29.1	18.8	10.35	2.815		
2,100.0	2,100.0	2,100.0	2,100.0	5.4	5.4	180.00	-29.1	0.0	29.1	18.3	10.88	2.678		
2,200.0	2,200.0	2,200.0	2,200.0	5.7	5.7	180.00	-29.1	0.0	29.1	17.7	11.41	2.553		
2,300.0	2,300.0	2,300.0	2,300.0	6.0	6.0	180.00	-29.1	0.0	29.1	17.2	11.95	2.440		
2,400.0	2,400.0	2,400.0	2,400.0	6.2	6.2	180.00	-29.1	0.0	29.1	16.7	12.48	2.336		
2,500.0	2,500.0	2,500.0	2,500.0	6.5	6.5	180.00	-29.1	0.0	29.1	16.1	13.01	2.241		
2,600.0	2,600.0	2,600.0	2,600.0	6.8	6.8	180.00	-29.1	0.0	29.1	15.6	13.54	2.153		
2,700.0	2,700.0	2,700.0	2,700.0	7.0	7.0	180.00	-29.1	0.0	29.1	15.1	14.07	2.072		
2,800.0	2,800.0	2,800.0	2,800.0	7.3	7.3	180.00	-29.1	0.0	29.1	14.5	14.60	1.996		
2,900.0	2,900.0	2,900.0	2,900.0	7.6	7.6	180.00	-29.1	0.0	29.1	14.0	15.13	1.926		
3,000.0	3,000.0	3,000.0	3,000.0	7.8	7.8	180.00	-29.1	0.0	29.1	13.5	15.66	1.861		
3,100.0	3,100.0	3,100.0	3,100.0	8.1	8.1	180.00	-29.1	0.0	29.1	13.0	16.19	1.800		
3,200.0	3,200.0	3,200.0	3,200.0	8.4	8.4	180.00	-29.1	0.0	29.1	12.4	16.72	1.743		
3,300.0	3,300.0	3,300.0	3,300.0	8.6	8.6	180.00	-29.1	0.0	29.1	11.9	17.25	1.689		
3,400.0	3,400.0	3,400.0	3,400.0	8.9	8.9	180.00	-29.1	0.0	29.1	11.4	17.78	1.639		
3,500.0	3,500.0	3,500.0	3,500.0	9.2	9.2	180.00	-29.1	0.0	29.1	10.8	18.32	1.591		
3,600.0	3,600.0	3,600.0	3,600.0	9.4	9.4	180.00	-29.1	0.0	29.1	10.3	18.85	1.546		
3,700.0	3,700.0	3,700.0	3,700.0	9.7	9.7	180.00	-29.1	0.0	29.1	9.8	19.38	1.504		
3,800.0	3,800.0	3,800.0	3,800.0	10.0	10.0	180.00	-29.1	0.0	29.1	9.2	19.91	1.464 Level 3		
3,900.0	3,900.0	3,900.0	3,900.0	10.2	10.2	180.00	-29.1	0.0	29.1	8.7	20.44	1.426 Level 3		
4,000.0	4,000.0	4,000.0	4,000.0	10.5	10.5	180.00	-29.1	0.0	29.1	8.2	20.97	1.390 Level 3		
4,100.0	4,100.0	4,100.0	4,100.0	10.8	10.8	180.00	-29.1	0.0	29.1	7.6	21.50	1.355 Level 3		
4,200.0	4,200.0	4,200.0	4,200.0	11.0	11.0	180.00	-29.1	0.0	29.1	7.1	22.03	1.323 Level 3		
4,300.0	4,300.0	4,300.0	4,300.0	11.3	11.3	180.00	-29.1	0.0	29.1	6.6	22.56	1.292 Level 3		
4,400.0	4,400.0	4,400.0	4,400.0	11.5	11.5	180.00	-29.1	0.0	29.1	6.1	23.09	1.262 Level 3		
4,500.0	4,500.0	4,500.0	4,500.0	11.8	11.8	180.00	-29.1	0.0	29.1	5.5	23.62	1.234 Level 2		
4,600.0	4,600.0	4,600.0	4,600.0	12.1	12.1	180.00	-29.1	0.0	29.1	5.0	24.16	1.207 Level 2		
4,700.0	4,700.0	4,700.0	4,700.0	12.3	12.3	180.00	-29.1	0.0	29.1	4.5	24.69	1.181 Level 2		
4,800.0	4,800.0	4,800.0	4,800.0	12.6	12.6	180.00	-29.1	0.0	29.1	3.9	25.22	1.156 Level 2		
4,900.0	4,900.0	4,900.0	4,900.0	12.9	12.9	180.00	-29.1	0.0	29.1	3.4	25.75	1.132 Level 2		
5,000.0	5,000.0	5,000.0	5,000.0	13.1	13.1	180.00	-29.1	0.0	29.1	2.9	26.28	1.109 Level 2		
5,100.0	5,100.0	5,100.0	5,100.0	13.4	13.4	180.00	-29.1	0.0	29.1	2.3	26.81	1.087 Level 2		

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

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7190-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,200.0	5,200.0	5,200.0	5,200.0	13.7	13.7	180.00	-29.1	0.0	29.1	1.8	27.34	1.066	Level 2	
5,300.0	5,300.0	5,300.0	5,300.0	13.9	13.9	180.00	-29.1	0.0	29.1	1.3	27.87	1.046	Level 2	
5,400.0	5,400.0	5,400.0	5,400.0	14.2	14.2	180.00	-29.1	0.0	29.1	0.7	28.40	1.026	Level 2	
5,500.0	5,500.0	5,500.0	5,500.0	14.5	14.5	180.00	-29.1	0.0	29.1	0.2	28.93	1.007	Level 2	
5,600.0	5,600.0	5,600.0	5,600.0	14.7	14.7	180.00	-29.1	0.0	29.1	-0.3	29.46	0.989	Level 1	
5,700.0	5,700.0	5,700.0	5,700.0	15.0	15.0	180.00	-29.1	0.0	29.1	-0.9	30.00	0.972	Level 1	
5,800.0	5,800.0	5,800.0	5,800.0	15.3	15.3	180.00	-29.1	0.0	29.1	-1.4	30.53	0.955	Level 1, CC, ES, SF	
5,900.0	5,899.9	5,899.9	5,899.9	15.5	15.5	-128.71	-29.1	0.0	30.8	-0.2	31.01	0.994	Level 1	
6,000.0	5,999.6	5,999.6	5,999.6	15.7	15.8	-138.82	-29.1	0.0	36.6	5.2	31.39	1.167	Level 2	
6,100.0	6,098.6	6,100.1	6,100.0	15.9	16.0	-145.09	-29.2	-4.1	46.4	14.8	31.60	1.467	Level 3	
6,200.0	6,196.7	6,201.0	6,200.0	16.1	16.1	-144.35	-29.2	-16.7	57.9	26.2	31.72	1.826		
6,300.0	6,293.6	6,301.6	6,298.5	16.3	16.2	-140.03	-29.2	-37.5	71.3	39.4	31.87	2.237		
6,400.0	6,388.9	6,401.6	6,394.2	16.5	16.4	-134.10	-29.3	-66.2	87.1	55.0	32.10	2.714		
6,500.0	6,482.4	6,500.4	6,486.2	16.8	16.5	-127.72	-29.3	-102.3	106.1	73.7	32.43	3.271		
6,600.0	6,574.0	6,597.6	6,573.4	17.0	16.6	-121.63	-29.4	-145.0	128.4	95.4	32.94	3.897		
6,700.0	6,665.4	6,693.0	6,655.9	17.2	16.8	-115.18	-29.5	-193.1	152.6	119.0	33.58	4.545		
6,800.0	6,756.7	6,788.6	6,737.7	17.5	16.9	-110.06	-29.6	-242.4	178.4	144.3	34.14	5.226		
6,900.0	6,848.1	6,884.1	6,819.5	17.7	17.1	-106.23	-29.7	-291.8	205.3	170.6	34.66	5.923		
7,000.0	6,939.4	6,977.3	6,899.2	18.0	17.3	-103.30	-29.8	-340.1	232.9	197.8	35.16	6.625		
7,100.0	7,029.8	7,055.3	6,960.6	18.2	17.5	-91.29	-29.9	-388.0	264.0	228.3	35.66	7.403		
7,200.0	7,111.5	7,130.4	7,010.9	18.5	17.6	-77.55	-30.0	-443.7	293.5	257.9	35.62	8.238		
7,300.0	7,179.3	7,204.1	7,050.4	18.8	18.7	-69.51	-30.0	-505.8	318.3	283.3	34.97	9.101		
7,400.0	7,229.8	7,275.0	7,078.1	20.0	18.8	-64.73	-30.1	-571.0	337.1	303.5	33.62	10.028		
7,500.0	7,260.5	7,350.0	7,095.7	20.1	18.8	-62.18	-30.2	-643.8	349.1	316.2	32.86	10.625		
7,600.0	7,269.7	7,423.4	7,100.7	20.2	18.9	-61.47	-30.2	-716.9	353.9	320.3	33.55	10.547		
7,700.0	7,269.7	7,523.4	7,100.7	20.9	20.0	-61.55	-30.3	-816.9	354.8	319.2	35.54	9.984		
7,800.0	7,269.7	7,623.4	7,100.7	22.2	21.4	-61.55	-30.4	-916.9	354.7	316.7	38.03	9.329		
7,900.0	7,269.7	7,723.4	7,100.7	23.8	23.0	-61.55	-30.5	-1,016.9	354.7	313.7	40.98	8.656		
8,000.0	7,269.7	7,823.4	7,100.7	25.7	24.9	-61.54	-30.5	-1,116.9	354.7	310.4	44.29	8.007		
8,100.0	7,269.7	7,923.4	7,100.7	27.6	26.9	-61.54	-30.6	-1,216.9	354.6	306.7	47.89	7.404		
8,200.0	7,269.7	8,023.4	7,100.7	29.8	29.1	-61.53	-30.7	-1,316.9	354.6	302.8	51.72	6.855		
8,300.0	7,269.7	8,123.4	7,100.7	32.0	31.4	-61.53	-30.8	-1,416.9	354.5	298.8	55.73	6.361		
8,400.0	7,269.7	8,223.4	7,100.7	34.3	33.7	-61.52	-30.9	-1,516.9	354.5	294.6	59.89	5.919		
8,500.0	7,269.7	8,323.4	7,100.7	36.7	36.1	-61.52	-31.0	-1,616.9	354.4	290.3	64.16	5.524		
8,600.0	7,269.7	8,423.4	7,100.7	39.1	38.6	-61.52	-31.0	-1,716.9	354.4	285.8	68.53	5.171		
8,700.0	7,269.7	8,523.4	7,100.7	41.6	41.1	-61.51	-31.1	-1,816.9	354.3	281.3	72.97	4.856		
8,800.0	7,269.7	8,623.4	7,100.7	44.1	43.6	-61.51	-31.2	-1,916.9	354.3	276.8	77.48	4.572		
8,900.0	7,269.7	8,723.4	7,100.7	46.7	46.2	-61.50	-31.3	-2,016.9	354.2	272.2	82.04	4.318		
9,000.0	7,269.7	8,823.4	7,100.7	49.2	48.8	-61.50	-31.4	-2,116.9	354.2	267.5	86.65	4.087		
9,100.0	7,269.7	8,923.4	7,100.7	51.8	51.4	-61.50	-31.4	-2,216.9	354.1	262.8	91.29	3.879		
9,200.0	7,269.7	9,023.4	7,100.7	54.5	54.1	-61.49	-31.5	-2,316.9	354.1	258.1	95.97	3.689		
9,300.0	7,269.7	9,123.4	7,100.7	57.1	56.7	-61.49	-31.6	-2,416.9	354.0	253.4	100.68	3.517		
9,400.0	7,269.7	9,223.4	7,100.7	59.8	59.4	-61.48	-31.7	-2,516.9	354.0	248.6	105.40	3.358		
9,500.0	7,269.7	9,323.4	7,100.7	62.4	62.1	-61.48	-31.8	-2,616.9	353.9	243.8	110.15	3.213		
9,600.0	7,269.7	9,423.4	7,100.7	65.1	64.8	-61.47	-31.8	-2,716.9	353.9	239.0	114.92	3.079		
9,700.0	7,269.7	9,523.4	7,100.7	67.8	67.5	-61.47	-31.9	-2,816.9	353.8	234.1	119.71	2.956		
9,800.0	7,269.7	9,623.4	7,100.7	70.5	70.2	-61.47	-32.0	-2,916.9	353.8	229.3	124.51	2.842		
9,900.0	7,269.7	9,723.4	7,100.7	73.2	72.9	-61.46	-32.1	-3,016.9	353.7	224.4	129.32	2.735		
10,000.0	7,269.7	9,823.4	7,100.7	75.9	75.6	-61.46	-32.2	-3,116.9	353.7	219.6	134.14	2.637		
10,100.0	7,269.7	9,923.4	7,100.7	78.6	78.4	-61.45	-32.2	-3,216.9	353.6	214.7	138.97	2.545		
10,200.0	7,269.7	10,023.4	7,100.7	81.4	81.1	-61.45	-32.3	-3,316.9	353.6	209.8	143.81	2.459		
10,300.0	7,269.7	10,123.4	7,100.7	84.1	83.8	-61.44	-32.4	-3,416.9	353.6	204.9	148.66	2.378		

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

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Offset Design Postle East Pad Sec.12-T3N-R68W - Postle IC 11-379HN - Wellbore #1 - Plan #1 (10-23-13)												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7190-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	7,269.7	10,223.4	7,100.7	86.8	86.6	-61.44	-32.5	-3,516.9	353.5	200.0	153.52	2.303	
10,500.0	7,269.7	10,323.4	7,100.7	89.6	89.3	-61.44	-32.6	-3,616.9	353.5	195.1	158.38	2.232	
10,600.0	7,269.7	10,423.4	7,100.7	92.3	92.1	-61.43	-32.7	-3,716.9	353.4	190.2	163.25	2.165	
10,700.0	7,269.7	10,523.4	7,100.7	95.1	94.8	-61.43	-32.7	-3,816.9	353.4	185.2	168.12	2.102	
10,800.0	7,269.7	10,623.4	7,100.7	97.8	97.6	-61.42	-32.8	-3,916.9	353.3	180.3	173.00	2.042	
10,900.0	7,269.7	10,723.4	7,100.7	100.6	100.3	-61.42	-32.9	-4,016.9	353.3	175.4	177.89	1.986	
11,000.0	7,269.7	10,823.4	7,100.7	103.3	103.1	-61.42	-33.0	-4,116.9	353.2	170.4	182.77	1.933	
11,100.0	7,269.7	10,923.4	7,100.7	106.1	105.9	-61.41	-33.1	-4,216.9	353.2	165.5	187.66	1.882	
11,200.0	7,269.7	11,023.4	7,100.7	108.9	108.6	-61.41	-33.1	-4,316.9	353.1	160.6	192.56	1.834	
11,300.0	7,269.7	11,123.4	7,100.7	111.6	111.4	-61.40	-33.2	-4,416.9	353.1	155.6	197.46	1.788	
11,400.0	7,269.7	11,223.4	7,100.7	114.4	114.2	-61.40	-33.3	-4,516.9	353.0	150.7	202.36	1.745	
11,500.0	7,269.7	11,323.4	7,100.7	117.2	116.9	-61.39	-33.4	-4,616.9	353.0	145.7	207.26	1.703	
11,600.0	7,269.7	11,423.4	7,100.7	119.9	119.7	-61.39	-33.5	-4,716.9	352.9	140.8	212.17	1.663	
11,700.0	7,269.7	11,523.4	7,100.7	122.7	122.5	-61.39	-33.5	-4,816.9	352.9	135.8	217.07	1.626	
11,800.0	7,269.7	11,623.4	7,100.7	125.5	125.3	-61.38	-33.6	-4,916.9	352.8	130.8	221.98	1.589	
11,900.0	7,269.7	11,723.4	7,100.7	128.2	128.0	-61.38	-33.7	-5,016.9	352.8	125.9	226.90	1.555	
11,922.2	7,269.7	11,745.6	7,100.7	128.9	128.7	-61.38	-33.7	-5,039.1	352.8	124.8	227.98	1.547	
11,925.4	7,269.7	11,746.6	7,100.7	128.9	128.7	-61.38	-33.7	-5,040.2	352.8	124.7	228.08	1.547	

Postle East Pad Sec.12-T3N-R68W - Postle IC 11-382HN - Wellbore #1 - Plan #1 (10-23-13)													Offset Site Error:	0.0 ft
Survey Program: 0-N5-GYRO-MS, 7215-MWVD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	-179.46	-59.7	-0.6	59.8					
100.0	100.0	100.0	100.0	0.1	0.1	-179.46	-59.7	-0.6	59.8	59.5	0.27	225.101		
200.0	200.0	200.0	200.0	0.4	0.4	-179.46	-59.7	-0.6	59.8	59.0	0.80	75.034		
300.0	300.0	300.0	300.0	0.7	0.7	-179.46	-59.7	-0.6	59.8	58.4	1.33	45.020		
400.0	400.0	400.0	400.0	0.9	0.9	-179.46	-59.7	-0.6	59.8	57.9	1.86	32.157		
500.0	500.0	500.0	500.0	1.2	1.2	-179.46	-59.7	-0.6	59.8	57.4	2.39	25.011		
600.0	600.0	600.0	600.0	1.5	1.5	-179.46	-59.7	-0.6	59.8	56.8	2.92	20.464		
700.0	700.0	700.0	700.0	1.7	1.7	-179.46	-59.7	-0.6	59.8	56.3	3.45	17.315		
800.0	800.0	800.0	800.0	2.0	2.0	-179.46	-59.7	-0.6	59.8	55.8	3.98	15.007		
900.0	900.0	900.0	900.0	2.3	2.3	-179.46	-59.7	-0.6	59.8	55.2	4.51	13.241		
1,000.0	1,000.0	1,000.0	1,000.0	2.5	2.5	-179.46	-59.7	-0.6	59.8	54.7	5.04	11.847		
1,100.0	1,100.0	1,100.0	1,100.0	2.8	2.8	-179.46	-59.7	-0.6	59.8	54.2	5.57	10.719		
1,200.0	1,200.0	1,200.0	1,200.0	3.1	3.1	-179.46	-59.7	-0.6	59.8	53.6	6.11	9.787		
1,300.0	1,300.0	1,300.0	1,300.0	3.3	3.3	-179.46	-59.7	-0.6	59.8	53.1	6.64	9.004		
1,400.0	1,400.0	1,400.0	1,400.0	3.6	3.6	-179.46	-59.7	-0.6	59.8	52.6	7.17	8.337		
1,500.0	1,500.0	1,500.0	1,500.0	3.8	3.8	-179.46	-59.7	-0.6	59.8	52.1	7.70	7.762		
1,600.0	1,600.0	1,600.0	1,600.0	4.1	4.1	-179.46	-59.7	-0.6	59.8	51.5	8.23	7.261		
1,700.0	1,700.0	1,700.0	1,700.0	4.4	4.4	-179.46	-59.7	-0.6	59.8	51.0	8.76	6.821		
1,800.0	1,800.0	1,800.0	1,800.0	4.6	4.6	-179.46	-59.7	-0.6	59.8	50.5	9.29	6.431		
1,900.0	1,900.0	1,900.0	1,900.0	4.9	4.9	-179.46	-59.7	-0.6	59.8	49.9	9.82	6.084		
2,000.0	2,000.0	2,000.0	2,000.0	5.2	5.2	-179.46	-59.7	-0.6	59.8	49.4	10.35	5.772		
2,100.0	2,100.0	2,100.0	2,100.0	5.4	5.4	-179.46	-59.7	-0.6	59.8	48.9	10.88	5.490		
2,200.0	2,200.0	2,200.0	2,200.0	5.7	5.7	-179.46	-59.7	-0.6	59.8	48.3	11.41	5.235		
2,300.0	2,300.0	2,300.0	2,300.0	6.0	6.0	-179.46	-59.7	-0.6	59.8	47.8	11.95	5.002		
2,400.0	2,400.0	2,400.0	2,400.0	6.2	6.2	-179.46	-59.7	-0.6	59.8	47.3	12.48	4.789		
2,500.0	2,500.0	2,500.0	2,500.0	6.5	6.5	-179.46	-59.7	-0.6	59.8	46.7	13.01	4.594		
2,600.0	2,600.0	2,600.0	2,600.0	6.8	6.8	-179.46	-59.7	-0.6	59.8	46.2	13.54	4.414		
2,700.0	2,700.0	2,700.0	2,700.0	7.0	7.0	-179.46	-59.7	-0.6	59.8	45.7	14.07	4.247		
2,800.0	2,800.0	2,800.0	2,800.0	7.3	7.3	-179.46	-59.7	-0.6	59.8	45.2	14.60	4.093		
2,900.0	2,900.0	2,900.0	2,900.0	7.6	7.6	-179.46	-59.7	-0.6	59.8	44.6	15.13	3.949		
3,000.0	3,000.0	3,000.0	3,000.0	7.8	7.8	-179.46	-59.7	-0.6	59.8	44.1	15.66	3.815		
3,100.0	3,100.0	3,100.0	3,100.0	8.1	8.1	-179.46	-59.7	-0.6	59.8	43.6	16.19	3.690		
3,200.0	3,200.0	3,200.0	3,200.0	8.4	8.4	-179.46	-59.7	-0.6	59.8	43.0	16.72	3.573		
3,300.0	3,300.0	3,300.0	3,300.0	8.6	8.6	-179.46	-59.7	-0.6	59.8	42.5	17.25	3.463		
3,400.0	3,400.0	3,400.0	3,400.0	8.9	8.9	-179.46	-59.7	-0.6	59.8	42.0	17.78	3.360		
3,500.0	3,500.0	3,500.0	3,500.0	9.2	9.2	-179.46	-59.7	-0.6	59.8	41.4	18.32	3.262		
3,600.0	3,600.0	3,600.0	3,600.0	9.4	9.4	-179.46	-59.7	-0.6	59.8	40.9	18.85	3.170		
3,700.0	3,700.0	3,700.0	3,700.0	9.7	9.7	-179.46	-59.7	-0.6	59.8	40.4	19.38	3.084		
3,800.0	3,800.0	3,800.0	3,800.0	10.0	10.0	-179.46	-59.7	-0.6	59.8	39.8	19.91	3.001		
3,900.0	3,900.0	3,900.0	3,900.0	10.2	10.2	-179.46	-59.7	-0.6	59.8	39.3	20.44	2.923		
4,000.0	4,000.0	4,000.0	4,000.0	10.5	10.5	-179.46	-59.7	-0.6	59.8	38.8	20.97	2.849		
4,100.0	4,100.0	4,100.0	4,100.0	10.8	10.8	-179.46	-59.7	-0.6	59.8	38.3	21.50	2.779		
4,200.0	4,200.0	4,200.0	4,200.0	11.0	11.0	-179.46	-59.7	-0.6	59.8	37.7	22.03	2.712		
4,300.0	4,300.0	4,300.0	4,300.0	11.3	11.3	-179.46	-59.7	-0.6	59.8	37.2	22.56	2.648		
4,400.0	4,400.0	4,400.0	4,400.0	11.5	11.5	-179.46	-59.7	-0.6	59.8	36.7	23.09	2.587		
4,500.0	4,500.0	4,500.0	4,500.0	11.8	11.8	-179.46	-59.7	-0.6	59.8	36.1	23.62	2.529		
4,600.0	4,600.0	4,600.0	4,600.0	12.1	12.1	-179.46	-59.7	-0.6	59.8	35.6	24.16	2.474		
4,700.0	4,700.0	4,700.0	4,700.0	12.3	12.3	-179.46	-59.7	-0.6	59.8	35.1	24.69	2.420		
4,800.0	4,800.0	4,800.0	4,800.0	12.6	12.6	-179.46	-59.7	-0.6	59.8	34.5	25.22	2.369		
4,900.0	4,900.0	4,900.0	4,900.0	12.9	12.9	-179.46	-59.7	-0.6	59.8	34.0	25.75	2.321		
5,000.0	5,000.0	5,000.0	5,000.0	13.1	13.1	-179.46	-59.7	-0.6	59.8	33.5	26.28	2.274		
5,100.0	5,100.0	5,100.0	5,100.0	13.4	13.4	-179.46	-59.7	-0.6	59.8	32.9	26.81	2.229		

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7215-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,200.0	5,200.0	5,200.0	13.7	13.7	-179.46	-59.7	-0.6	59.8	32.4	27.34	2.185	
5,300.0	5,300.0	5,300.0	5,300.0	13.9	13.9	-179.46	-59.7	-0.6	59.8	31.9	27.87	2.144	
5,400.0	5,400.0	5,400.0	5,400.0	14.2	14.2	-179.46	-59.7	-0.6	59.8	31.3	28.40	2.104	
5,500.0	5,500.0	5,500.0	5,500.0	14.5	14.5	-179.46	-59.7	-0.6	59.8	30.8	28.93	2.065	
5,600.0	5,600.0	5,600.0	5,600.0	14.7	14.7	-179.46	-59.7	-0.6	59.8	30.3	29.46	2.028	CC, ES, SF
5,700.0	5,700.0	5,697.4	5,697.4	15.0	14.9	-177.79	-61.7	-2.4	61.8	32.0	29.86	2.071	
5,800.0	5,800.0	5,794.3	5,793.9	15.3	14.9	-173.44	-67.7	-7.8	68.4	38.2	30.14	2.269	
5,900.0	5,899.9	5,890.0	5,888.7	15.5	14.9	-113.73	-77.3	-16.6	81.0	50.6	30.38	2.666	
6,000.0	5,999.6	5,983.9	5,980.8	15.7	14.9	-111.83	-90.5	-28.7	100.5	69.9	30.58	3.287	
6,100.0	6,098.6	6,075.4	6,069.6	15.9	14.9	-111.33	-106.8	-43.6	126.5	95.7	30.78	4.110	
6,200.0	6,196.7	6,163.9	6,154.3	16.1	15.0	-111.47	-125.8	-61.0	158.7	127.7	30.97	5.124	
6,300.0	6,293.6	6,249.0	6,234.4	16.3	15.0	-111.77	-147.0	-80.4	196.7	165.6	31.15	6.316	
6,400.0	6,388.9	6,330.4	6,309.6	16.5	15.0	-112.01	-169.9	-101.3	240.5	209.1	31.33	7.675	
6,500.0	6,482.4	6,407.8	6,379.7	16.8	15.1	-112.06	-194.1	-123.4	289.5	258.0	31.51	9.187	
6,600.0	6,574.0	6,481.2	6,444.9	17.0	15.1	-112.70	-219.1	-146.3	343.3	311.6	31.71	10.824	
6,700.0	6,665.4	6,556.1	6,509.9	17.2	15.2	-113.74	-246.5	-171.4	400.0	368.0	31.96	12.514	
6,800.0	6,756.7	6,637.9	6,580.7	17.5	15.3	-114.53	-276.8	-199.1	457.2	425.0	32.23	14.188	
6,900.0	6,848.1	6,719.8	6,651.4	17.7	15.4	-115.15	-307.1	-226.8	514.6	482.1	32.51	15.829	
7,000.0	6,939.4	6,801.6	6,722.2	18.0	15.5	-115.65	-337.4	-254.6	571.9	539.1	32.81	17.434	
7,100.0	7,029.8	6,883.5	6,793.0	18.2	15.6	-105.53	-367.8	-282.3	628.9	595.6	33.31	18.882	
7,200.0	7,111.5	6,969.8	6,867.1	18.5	15.7	-92.14	-399.5	-313.3	682.2	648.3	33.82	20.171	
7,300.0	7,179.3	7,071.7	6,946.6	18.8	15.9	-84.61	-433.6	-366.6	728.6	694.5	34.06	21.392	
7,400.0	7,229.8	7,189.8	7,021.9	20.0	16.2	-80.38	-465.9	-451.3	765.3	731.2	34.11	22.435	
7,500.0	7,260.5	7,326.2	7,079.5	20.1	17.3	-78.33	-490.6	-571.8	789.5	755.0	34.49	22.889	
7,600.0	7,269.7	7,473.7	7,100.7	20.2	17.6	-77.78	-499.8	-716.8	798.6	762.4	36.14	22.099	
7,700.0	7,269.7	7,573.7	7,100.7	20.9	18.7	-77.80	-499.9	-816.7	799.6	761.1	38.43	20.804	
7,800.0	7,269.7	7,673.7	7,100.7	22.2	20.3	-77.80	-499.9	-916.7	799.5	758.2	41.31	19.355	
7,900.0	7,269.7	7,773.7	7,100.7	23.8	22.1	-77.80	-500.0	-1,016.7	799.4	754.8	44.67	17.896	
8,000.0	7,269.7	7,873.7	7,100.7	25.7	24.1	-77.79	-500.0	-1,116.7	799.3	750.9	48.43	16.507	
8,100.0	7,269.7	7,973.7	7,100.7	27.6	26.2	-77.79	-500.1	-1,216.7	799.3	746.8	52.49	15.228	
8,200.0	7,269.7	8,073.7	7,100.7	29.8	28.5	-77.79	-500.1	-1,316.7	799.2	742.4	56.79	14.073	
8,300.0	7,269.7	8,173.7	7,100.7	32.0	30.8	-77.79	-500.2	-1,416.7	799.1	737.8	61.28	13.041	
8,400.0	7,269.7	8,273.7	7,100.7	34.3	33.2	-77.79	-500.3	-1,516.7	799.0	733.1	65.92	12.121	
8,500.0	7,269.7	8,373.7	7,100.7	36.7	35.7	-77.79	-500.3	-1,616.7	799.0	728.3	70.68	11.303	
8,600.0	7,269.7	8,473.7	7,100.7	39.1	38.3	-77.79	-500.4	-1,716.7	798.9	723.3	75.55	10.575	
8,700.0	7,269.7	8,573.7	7,100.7	41.6	40.8	-77.79	-500.4	-1,816.7	798.8	718.3	80.49	9.924	
8,800.0	7,269.7	8,673.7	7,100.7	44.1	43.4	-77.78	-500.5	-1,916.7	798.7	713.2	85.50	9.342	
8,900.0	7,269.7	8,773.7	7,100.7	46.7	46.0	-77.78	-500.5	-2,016.7	798.6	708.1	90.56	8.819	
9,000.0	7,269.7	8,873.7	7,100.7	49.2	48.7	-77.78	-500.6	-2,116.7	798.6	702.9	95.68	8.347	
9,100.0	7,269.7	8,973.7	7,100.7	51.8	51.3	-77.78	-500.6	-2,216.7	798.5	697.7	100.83	7.919	
9,200.0	7,269.7	9,073.7	7,100.7	54.5	54.0	-77.78	-500.7	-2,316.7	798.4	692.4	106.01	7.531	
9,300.0	7,269.7	9,173.7	7,100.7	57.1	56.7	-77.78	-500.8	-2,416.7	798.3	687.1	111.23	7.177	
9,400.0	7,269.7	9,273.7	7,100.7	59.8	59.4	-77.78	-500.8	-2,516.7	798.3	681.8	116.47	6.854	
9,500.0	7,269.7	9,373.7	7,100.7	62.4	62.1	-77.78	-500.9	-2,616.7	798.2	676.4	121.73	6.557	
9,600.0	7,269.7	9,473.7	7,100.7	65.1	64.8	-77.77	-500.9	-2,716.7	798.1	671.1	127.01	6.284	
9,700.0	7,269.7	9,573.7	7,100.7	67.8	67.5	-77.77	-501.0	-2,816.7	798.0	665.7	132.31	6.032	
9,800.0	7,269.7	9,673.7	7,100.7	70.5	70.2	-77.77	-501.0	-2,916.7	797.9	660.3	137.62	5.798	
9,900.0	7,269.7	9,773.7	7,100.7	73.2	73.0	-77.77	-501.1	-3,016.7	797.9	654.9	142.95	5.582	
10,000.0	7,269.7	9,873.7	7,100.7	75.9	75.7	-77.77	-501.1	-3,116.7	797.8	649.5	148.29	5.380	
10,100.0	7,269.7	9,973.7	7,100.7	78.6	78.4	-77.77	-501.2	-3,216.7	797.7	644.1	153.64	5.192	
10,200.0	7,269.7	10,073.7	7,100.7	81.4	81.2	-77.77	-501.3	-3,316.7	797.6	638.6	158.99	5.017	
10,300.0	7,269.7	10,173.7	7,100.7	84.1	83.9	-77.77	-501.3	-3,416.7	797.6	633.2	164.36	4.852	

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

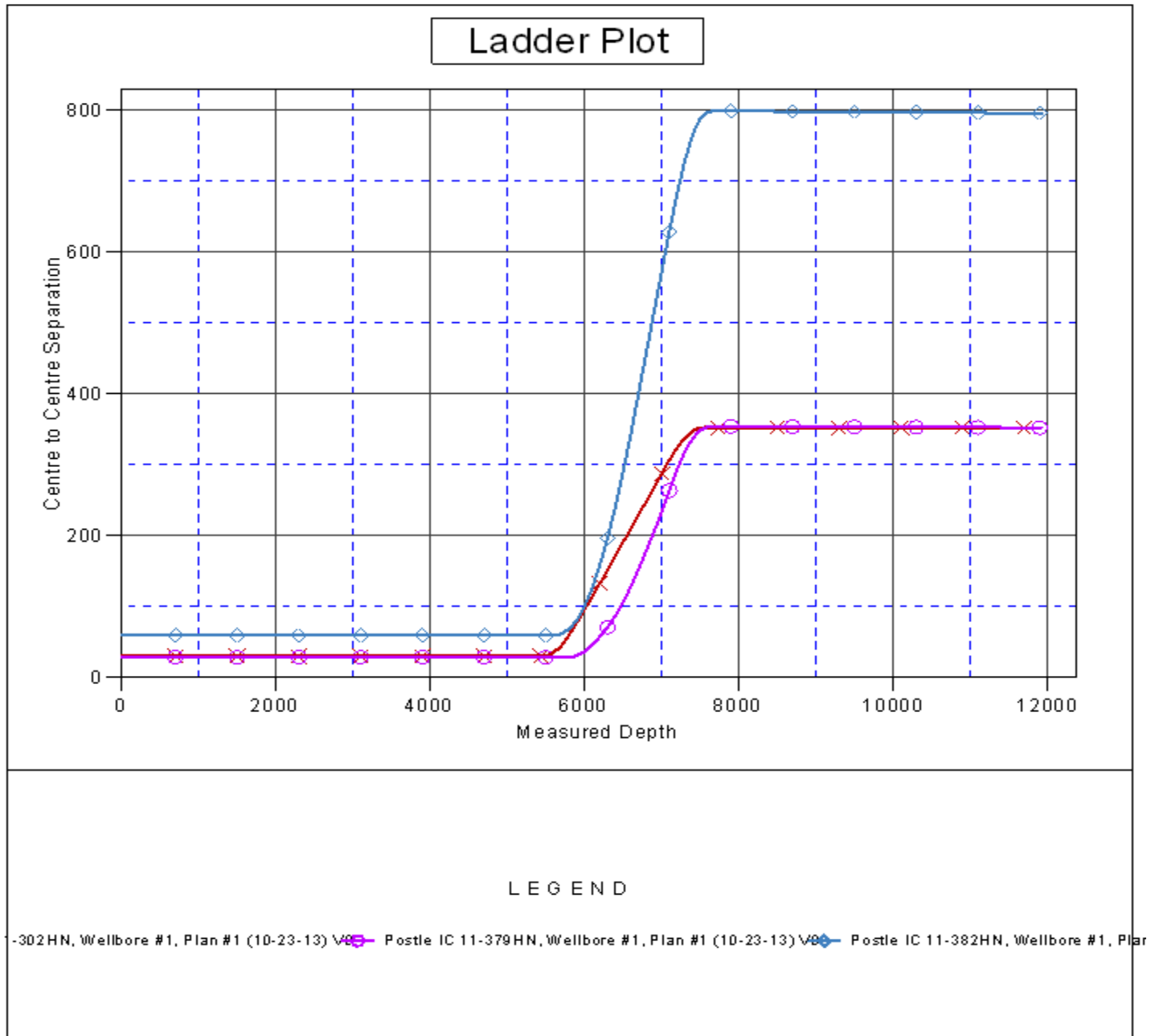
Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Offset Design Postle East Pad Sec.12-T3N-R68W - Postle IC 11-382HN - Wellbore #1 - Plan #1 (10-23-13)												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS, 7215-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	7,269.7	10,273.7	7,100.7	86.8	86.7	-77.77	-501.4	-3,516.7	797.5	627.7	169.73	4.698	
10,500.0	7,269.7	10,373.7	7,100.7	89.6	89.5	-77.76	-501.4	-3,616.7	797.4	622.3	175.12	4.554	
10,600.0	7,269.7	10,473.7	7,100.7	92.3	92.2	-77.76	-501.5	-3,716.7	797.3	616.8	180.50	4.417	
10,700.0	7,269.7	10,573.7	7,100.7	95.1	95.0	-77.76	-501.5	-3,816.7	797.2	611.3	185.90	4.289	
10,800.0	7,269.7	10,673.7	7,100.7	97.8	97.7	-77.76	-501.6	-3,916.7	797.2	605.9	191.30	4.167	
10,900.0	7,269.7	10,773.7	7,100.7	100.6	100.5	-77.76	-501.6	-4,016.7	797.1	600.4	196.70	4.052	
11,000.0	7,269.7	10,873.7	7,100.7	103.3	103.3	-77.76	-501.7	-4,116.7	797.0	594.9	202.11	3.943	
11,100.0	7,269.7	10,973.7	7,100.7	106.1	106.1	-77.76	-501.8	-4,216.7	796.9	589.4	207.52	3.840	
11,200.0	7,269.7	11,073.7	7,100.7	108.9	108.8	-77.76	-501.8	-4,316.7	796.9	583.9	212.94	3.742	
11,300.0	7,269.7	11,173.7	7,100.7	111.6	111.6	-77.75	-501.9	-4,416.7	796.8	578.4	218.36	3.649	
11,400.0	7,269.7	11,273.7	7,100.7	114.4	114.4	-77.75	-501.9	-4,516.7	796.7	572.9	223.78	3.560	
11,500.0	7,269.7	11,373.7	7,100.7	117.2	117.2	-77.75	-502.0	-4,616.7	796.6	567.4	229.21	3.475	
11,600.0	7,269.7	11,473.7	7,100.7	119.9	119.9	-77.75	-502.0	-4,716.7	796.5	561.9	234.64	3.395	
11,700.0	7,269.7	11,573.7	7,100.7	122.7	122.7	-77.75	-502.1	-4,816.7	796.5	556.4	240.07	3.318	
11,800.0	7,269.7	11,673.7	7,100.7	125.5	125.5	-77.75	-502.1	-4,916.7	796.4	550.9	245.51	3.244	
11,900.0	7,269.7	11,773.7	7,100.7	128.2	128.3	-77.75	-502.2	-5,016.7	796.3	545.4	250.94	3.173	
11,921.9	7,269.7	11,794.9	7,100.7	128.8	128.9	-77.75	-502.2	-5,038.0	796.3	544.2	252.11	3.158	
11,925.4	7,269.7	11,794.9	7,100.7	128.9	128.9	-77.75	-502.2	-5,038.0	796.3	544.1	252.21	3.157	

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4941.6ft (RKB - 16.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Postle IC 11-342HC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.35°



Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-342HC
Project:	Sec.12-T3N-R68W	TVD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Reference Site:	Postle East Pad Sec.12-T3N-R68W	MD Reference:	WELL @ 4941.6ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 11-342HC	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 (10-23-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4941.6ft (RKB - 16.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Postle IC 11-342HC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.35°

