Great Western

Well Name: Postle LC 11-259HC

Surface Location: Postle West Pad Sec.11-T3N-R68W

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

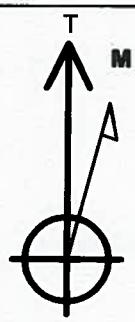
Ground Elevation: 4976.9

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1332047.22	3145640.83	40.243692	-104.978272	

RKB - 16.5' WELL @ 4993.4ft (RKB - 16.5')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1559'FNL & 422'FWL	1.0	0.0	0.0	Point
BHL 2025'FSL & 470'FEL	7321.4	-1692.9	4391.6	Point
Entry Pt. 2019'FSL & 460'FWL	7321.4	-1703.1	46.3	Point



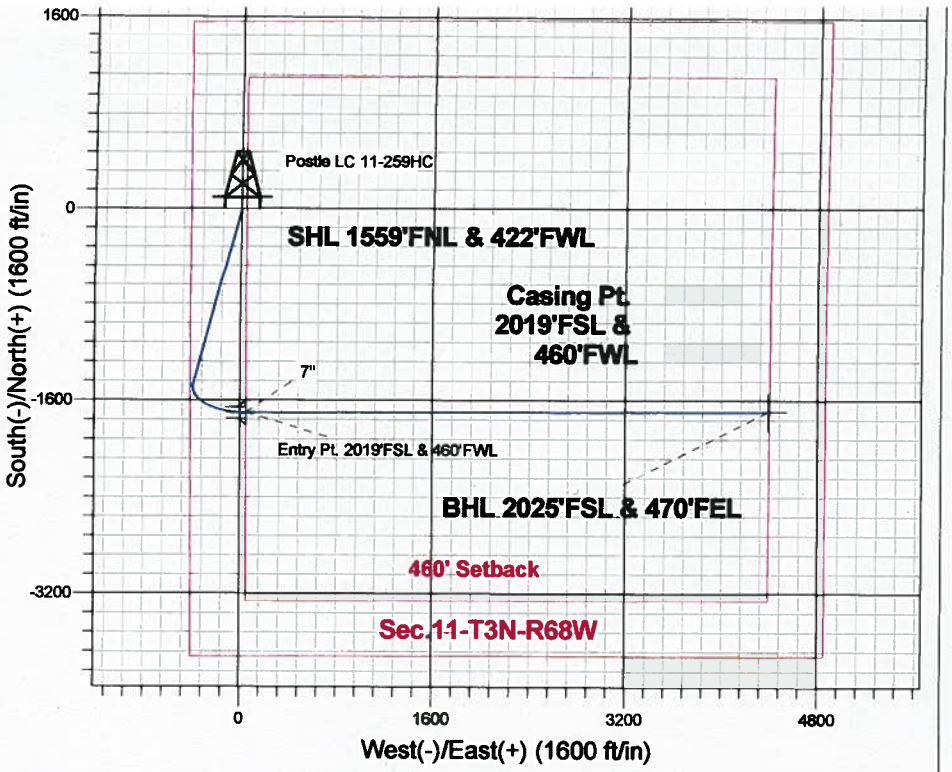
Azimuths to True North
Magnetic North: 8.63°

Magnetic Field
Strength: 52763.3snT
Dip Angle: 66.80°
Date: 12/10/2013
Model: IGRF2010

Postle West Pad Sec.11-T3N-R68W
Postle LC 11-259HC
Plan #1 (12-10-13)
10:38, December 12 2013

ANNOTATIONS

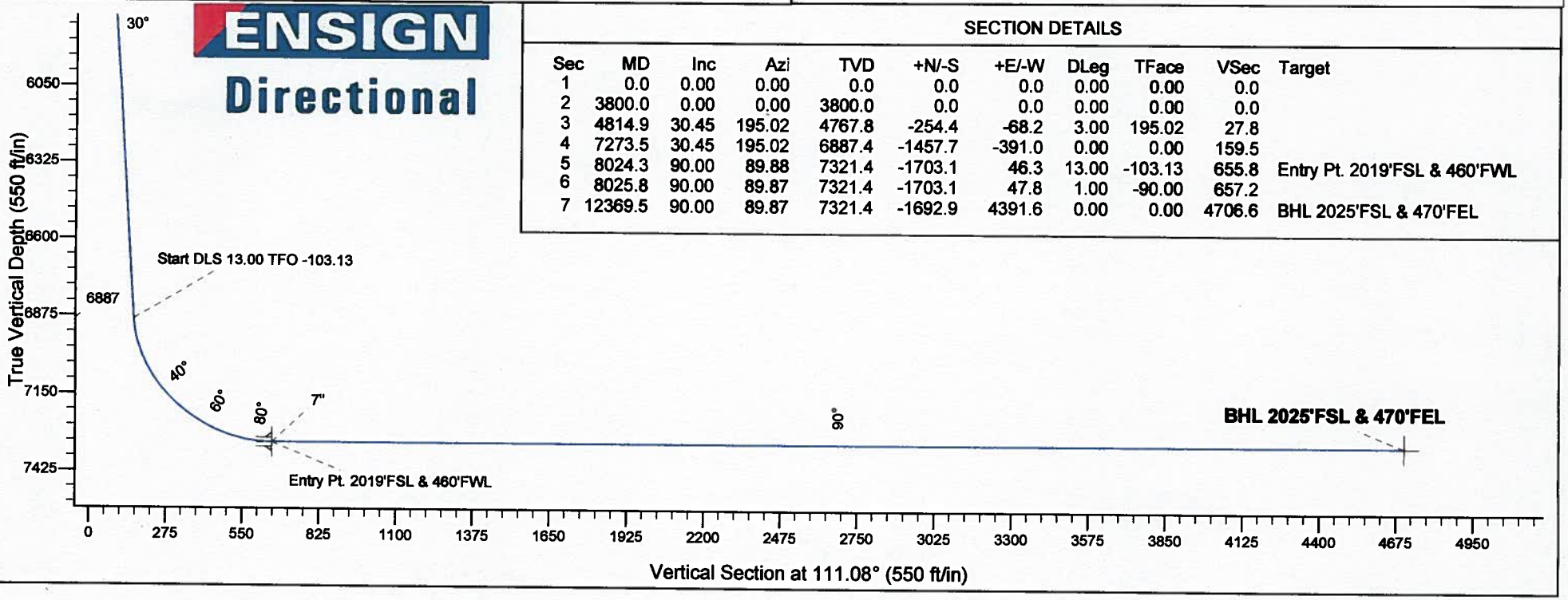
TVD	MD	Annotation
3800.0	3800.0	KOP - Start Build 3.00
6887.3	7273.5	Start DLS 13.00 TFO -103.13
7321.4	12369.5	TD at 12369.5



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	3800.0	0.00	0.00	3800.0	0.0	0.0	0.00	0.00	0.0	
3	4814.9	30.45	195.02	4767.8	-254.4	-68.2	3.00	195.02	27.8	
4	7273.5	30.45	195.02	6887.4	-1457.7	-391.0	0.00	0.00	159.5	
5	8024.3	90.00	89.88	7321.4	-1703.1	46.3	13.00	-103.13	655.8	Entry Pt. 2019'FSL & 460'FWL
6	8025.8	90.00	89.87	7321.4	-1703.1	47.8	1.00	-90.00	657.2	
7	12369.5	90.00	89.87	7321.4	-1692.9	4391.6	0.00	0.00	4706.6	BHL 2025'FSL & 470'FEL



ENSIGN
Directional

Great Western

SEC.11-T3N-R68W
Postle West Pad Sec.11-T3N-R68W
PostleTC 11-259HC

Wellbore #1

Plan: Plan #1 (12-10-13)

Standard Planning Report

12 December, 2013

Database:	Landmark	**Local Co-ordinate Reference:**	Well Postle 11-259HC
Company:	Great Western	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Project:	SEC.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site:	Postle West Pad Sec.11-T3N-R68W	**North Reference:**	True
Well:	Postle 11-259HC	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-10-13)		

Project SEC.11-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 West Pad Sec.11-T3N-R68W

Site Position:		**Northing:**	1,332,143.74 ft	**Latitude:**	40.243958
From:	Lat/Long	**Easting:**	3,145,575.78 ft	**Longitude:**	-104.978503
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.34 °

Well Postle 11-259HC

Well Position	**+N/-S**	-96.9 ft	**Northing:**	1,332,047.22 ft	**Latitude:**	40.243692
	+E/-W	64.5 ft	**Easting:**	3,145,640.83 ft	**Longitude:**	-104.978272
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,976.9 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/10/2013	8.63	66.80	52,763

Design Plan #1 (12-10-13)

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	111.08

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	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,814.9	30.45	195.02	4,767.8	-254.4	-68.2	3.00	3.00	0.00	195.02	
7,273.5	30.45	195.02	6,887.4	-1,457.7	-391.0	0.00	0.00	0.00	0.00	
8,024.3	90.00	89.88	7,321.4	-1,703.1	46.3	13.00	7.93	-14.00	-103.13	Entry Pt. 2019'FSL
8,025.8	90.00	89.87	7,321.4	-1,703.1	47.8	1.00	0.00	-1.00	-90.00	
12,369.5	90.00	89.87	7,321.4	-1,692.9	4,391.6	0.00	0.00	0.00	0.00	BHL 2025'FSL & 47

Database:	Landmark	**Local Co-ordinate Reference:**	Well Postle IC 11-259HC
Company:	Great Western	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Project:	SEC.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site:	Postle West Pad Sec.11-T3N-R68W	**North Reference:**	True
Well:	Postle IC 11-259HC	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-10-13)		

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 1559'FNL & 422'FWL									
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
KOP - Start Build 3.00									
3,900.0	3.00	195.02	3,900.0	-2.5	-0.7	0.3	3.00	3.00	0.00
4,000.0	6.00	195.02	3,999.6	-10.1	-2.7	1.1	3.00	3.00	0.00
4,100.0	9.00	195.02	4,098.8	-22.7	-6.1	2.5	3.00	3.00	0.00
4,200.0	12.00	195.02	4,197.1	-40.3	-10.8	4.4	3.00	3.00	0.00
4,300.0	15.00	195.02	4,294.3	-62.9	-16.9	6.9	3.00	3.00	0.00
4,400.0	18.00	195.02	4,390.2	-90.3	-24.2	9.9	3.00	3.00	0.00
4,500.0	21.00	195.02	4,484.4	-122.5	-32.9	13.4	3.00	3.00	0.00
4,600.0	24.00	195.02	4,576.8	-159.5	-42.8	17.4	3.00	3.00	0.00
4,700.0	27.00	195.02	4,667.1	-201.1	-53.9	22.0	3.00	3.00	0.00
4,800.0	30.00	195.02	4,754.9	-247.1	-66.3	27.0	3.00	3.00	0.00
4,814.9	30.45	195.02	4,767.8	-254.4	-68.2	27.8	3.00	3.00	0.00
4,900.0	30.45	195.02	4,841.2	-296.0	-79.4	32.4	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well Postle 11-259HC
Company:	Great Western	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Project:	SEC.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site:	Postle West Pad Sec.11-T3N-R68W	**North Reference:**	True
Well:	Postle 11-259HC	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-10-13)		

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)
5,000.0	30.45	195.02	4,927.4	-345.0	-92.5	37.7	0.00	0.00	0.00
5,100.0	30.45	195.02	5,013.6	-393.9	-105.7	43.1	0.00	0.00	0.00
5,200.0	30.45	195.02	5,099.8	-442.9	-118.8	48.4	0.00	0.00	0.00
5,300.0	30.45	195.02	5,186.0	-491.8	-131.9	53.8	0.00	0.00	0.00
5,400.0	30.45	195.02	5,272.2	-540.8	-145.1	59.2	0.00	0.00	0.00
5,500.0	30.45	195.02	5,358.4	-589.7	-158.2	64.5	0.00	0.00	0.00
5,600.0	30.45	195.02	5,444.6	-638.6	-171.3	69.9	0.00	0.00	0.00
5,700.0	30.45	195.02	5,530.8	-687.6	-184.4	75.2	0.00	0.00	0.00
5,800.0	30.45	195.02	5,617.1	-736.5	-197.6	80.6	0.00	0.00	0.00
5,900.0	30.45	195.02	5,703.3	-785.5	-210.7	85.9	0.00	0.00	0.00
6,000.0	30.45	195.02	5,789.5	-834.4	-223.8	91.3	0.00	0.00	0.00
6,100.0	30.45	195.02	5,875.7	-883.4	-237.0	96.6	0.00	0.00	0.00
6,200.0	30.45	195.02	5,961.9	-932.3	-250.1	102.0	0.00	0.00	0.00
6,300.0	30.45	195.02	6,048.1	-981.3	-263.2	107.3	0.00	0.00	0.00
6,400.0	30.45	195.02	6,134.3	-1,030.2	-276.3	112.7	0.00	0.00	0.00
6,500.0	30.45	195.02	6,220.5	-1,079.1	-289.5	118.0	0.00	0.00	0.00
6,600.0	30.45	195.02	6,306.7	-1,128.1	-302.6	123.4	0.00	0.00	0.00
6,700.0	30.45	195.02	6,392.9	-1,177.0	-315.7	128.8	0.00	0.00	0.00
6,800.0	30.45	195.02	6,479.1	-1,226.0	-328.9	134.1	0.00	0.00	0.00
6,900.0	30.45	195.02	6,565.4	-1,274.9	-342.0	139.5	0.00	0.00	0.00
7,000.0	30.45	195.02	6,651.6	-1,323.9	-355.1	144.8	0.00	0.00	0.00
7,100.0	30.45	195.02	6,737.8	-1,372.8	-368.3	150.2	0.00	0.00	0.00
7,200.0	30.45	195.02	6,824.0	-1,421.8	-381.4	155.5	0.00	0.00	0.00
7,273.5	30.45	195.02	6,887.3	-1,457.7	-391.0	159.5	0.00	0.00	0.00
Start DLS 13.00 TFO -103.13									
7,300.0	29.84	188.26	6,910.3	-1,470.7	-393.7	161.6	13.00	-2.31	-25.49
7,400.0	30.75	162.39	6,997.0	-1,519.9	-389.5	183.2	13.00	0.91	-25.88
7,500.0	36.17	140.80	7,080.7	-1,567.4	-363.0	225.0	13.00	5.42	-21.59
7,600.0	44.45	125.22	7,157.1	-1,610.6	-315.6	284.9	13.00	8.29	-15.58
7,700.0	54.28	113.96	7,222.2	-1,647.5	-249.6	359.7	13.00	9.83	-11.26
7,800.0	64.93	105.27	7,272.8	-1,676.0	-168.5	445.6	13.00	10.64	-8.68
7,900.0	75.99	98.02	7,306.3	-1,694.8	-76.3	538.4	13.00	11.07	-7.26
8,000.0	87.25	91.44	7,320.8	-1,702.8	22.1	633.1	13.00	11.26	-6.58
8,024.3	90.00	89.88	7,321.4	-1,703.1	46.3	655.8	13.00	11.30	-6.42
7" - Entry Pt. 2019'FSL & 460'FWL									
8,025.8	90.00	89.87	7,321.4	-1,703.1	47.8	657.2	1.01	0.02	-1.01
8,100.0	90.00	89.87	7,321.4	-1,702.9	122.0	726.4	0.00	0.00	0.00
8,200.0	90.00	89.87	7,321.4	-1,702.7	222.0	819.6	0.00	0.00	0.00
8,300.0	90.00	89.87	7,321.4	-1,702.5	322.0	912.8	0.00	0.00	0.00
8,400.0	90.00	89.87	7,321.4	-1,702.2	422.0	1,006.1	0.00	0.00	0.00
8,500.0	90.00	89.87	7,321.4	-1,702.0	522.0	1,099.3	0.00	0.00	0.00
8,600.0	90.00	89.87	7,321.4	-1,701.7	622.0	1,192.5	0.00	0.00	0.00
8,700.0	90.00	89.87	7,321.4	-1,701.5	722.0	1,285.7	0.00	0.00	0.00
8,800.0	90.00	89.87	7,321.4	-1,701.3	822.0	1,378.9	0.00	0.00	0.00
8,900.0	90.00	89.87	7,321.4	-1,701.0	922.0	1,472.2	0.00	0.00	0.00
9,000.0	90.00	89.87	7,321.4	-1,700.8	1,022.0	1,565.4	0.00	0.00	0.00
9,100.0	90.00	89.87	7,321.4	-1,700.6	1,122.0	1,658.6	0.00	0.00	0.00
9,200.0	90.00	89.87	7,321.4	-1,700.3	1,222.0	1,751.8	0.00	0.00	0.00
9,300.0	90.00	89.87	7,321.4	-1,700.1	1,322.0	1,845.1	0.00	0.00	0.00
9,400.0	90.00	89.87	7,321.4	-1,699.9	1,422.0	1,938.3	0.00	0.00	0.00
9,500.0	90.00	89.87	7,321.4	-1,699.6	1,522.0	2,031.5	0.00	0.00	0.00
9,600.0	90.00	89.87	7,321.4	-1,699.4	1,622.0	2,124.7	0.00	0.00	0.00
9,700.0	90.00	89.87	7,321.4	-1,699.2	1,722.0	2,218.0	0.00	0.00	0.00
9,800.0	90.00	89.87	7,321.4	-1,698.9	1,822.0	2,311.2	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well Postle 11-259HC
Company:	Great Western	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Project:	SEC.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site:	Postle West Pad Sec.11-T3N-R68W	**North Reference:**	True
Well:	Postle 11-259HC	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (12-10-13)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,900.0	90.00	89.87	7,321.4	-1,698.7	1,922.0	2,404.4	0.00	0.00	0.00
10,000.0	90.00	89.87	7,321.4	-1,698.5	2,022.0	2,497.6	0.00	0.00	0.00
10,100.0	90.00	89.87	7,321.4	-1,698.2	2,122.0	2,590.8	0.00	0.00	0.00
10,200.0	90.00	89.87	7,321.4	-1,698.0	2,222.0	2,684.1	0.00	0.00	0.00
10,300.0	90.00	89.87	7,321.4	-1,697.7	2,322.0	2,777.3	0.00	0.00	0.00
10,400.0	90.00	89.87	7,321.4	-1,697.5	2,422.0	2,870.5	0.00	0.00	0.00
10,500.0	90.00	89.87	7,321.4	-1,697.3	2,522.0	2,963.7	0.00	0.00	0.00
10,600.0	90.00	89.87	7,321.4	-1,697.0	2,622.0	3,057.0	0.00	0.00	0.00
10,700.0	90.00	89.87	7,321.4	-1,696.8	2,722.0	3,150.2	0.00	0.00	0.00
10,800.0	90.00	89.87	7,321.4	-1,696.6	2,822.0	3,243.4	0.00	0.00	0.00
10,900.0	90.00	89.87	7,321.4	-1,696.3	2,922.0	3,336.6	0.00	0.00	0.00
11,000.0	90.00	89.87	7,321.4	-1,696.1	3,022.0	3,429.8	0.00	0.00	0.00
11,100.0	90.00	89.87	7,321.4	-1,695.9	3,122.0	3,523.1	0.00	0.00	0.00
11,200.0	90.00	89.87	7,321.4	-1,695.6	3,222.0	3,616.3	0.00	0.00	0.00
11,300.0	90.00	89.87	7,321.4	-1,695.4	3,322.0	3,709.5	0.00	0.00	0.00
11,400.0	90.00	89.87	7,321.4	-1,695.2	3,422.0	3,802.7	0.00	0.00	0.00
11,500.0	90.00	89.87	7,321.4	-1,694.9	3,522.0	3,896.0	0.00	0.00	0.00
11,600.0	90.00	89.87	7,321.4	-1,694.7	3,622.0	3,989.2	0.00	0.00	0.00
11,700.0	90.00	89.87	7,321.4	-1,694.5	3,722.0	4,082.4	0.00	0.00	0.00
11,800.0	90.00	89.87	7,321.4	-1,694.2	3,822.0	4,175.6	0.00	0.00	0.00
11,900.0	90.00	89.87	7,321.4	-1,694.0	3,922.0	4,268.8	0.00	0.00	0.00
12,000.0	90.00	89.87	7,321.4	-1,693.7	4,022.0	4,362.1	0.00	0.00	0.00
12,100.0	90.00	89.87	7,321.4	-1,693.5	4,122.0	4,455.3	0.00	0.00	0.00
12,200.0	90.00	89.87	7,321.4	-1,693.3	4,222.0	4,548.5	0.00	0.00	0.00
12,300.0	90.00	89.87	7,321.4	-1,693.0	4,322.0	4,641.7	0.00	0.00	0.00
12,369.5	90.00	89.87	7,321.4	-1,692.9	4,391.5	4,706.5	0.00	0.00	0.00
TD at 12369.5 - BHL 2025'FSL & 470'FEL									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
8,024.3	7,321.4	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
3,800.0	3,800.0	0.0	0.0	KOP - Start Build 3.00
7,273.5	6,887.3	-1,457.7	-391.0	Start DLS 13.00 TFO -103.13
12,369.5	7,321.4	-1,692.9	4,391.5	TD at 12369.5

ENSIGN
Directional

Great Western

SEC.11-T3N-R68W
Postle West Pad Sec.11-T3N-R68W
PostleIC 11-259HC

Wellbore #1
Plan #1 (12-10-13)

Anticollision Report

12 December, 2013

ENSIGN Directional

Anticollision Report

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle IC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle IC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Reference Plan #1 (12-10-13)

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 10,000.0ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 12/11/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	12,369.0	Plan #1 (12-10-13) (Wellbore #1)	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Postle West Pad Sec.11-T3N-R68W						
Postle IC 11-4HN - Wellbore #1 - Wellbore #1	671.7	674.3	114.8	112.2	44.182	CC
Postle IC 11-4HN - Wellbore #1 - Wellbore #1	900.0	902.1	115.2	111.6	32.192	ES
Postle IC 11-4HN - Wellbore #1 - Wellbore #1	12,369.5	11,689.4	2,196.7	1,941.0	8.589	SF
Postle IC 11-162HN - Wellbore #1 - Plan #1 (12-10-13)	3,800.0	3,800.0	59.8	43.0	3.548	CC, ES
Postle IC 11-162HN - Wellbore #1 - Plan #1 (12-10-13)	3,900.0	3,900.0	60.7	43.4	3.512	SF
Postle IC 11-239HN - Wellbore #1 - Plan #1 (12-10-13)	3,800.0	3,800.0	30.2	13.3	1.789	CC, ES
Postle IC 11-239HN - Wellbore #1 - Plan #1 (12-10-13)	12,369.5	12,121.0	353.7	125.0	1.546	SF
Postle IC 11-279HN - Wellbore #1 - Plan #1 (12-10-13)	3,100.0	3,100.0	29.6	15.9	2.160	CC, ES
Postle IC 11-279HN - Wellbore #1 - Plan #1 (12-10-13)	12,369.5	12,273.0	353.4	118.8	1.507	SF

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle IC 11-4HN - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0ft

Survey Program: 229-MWD — **Offset Well Error:** 0.0ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	2.6	2.6	0.0	0.0	-33.64	96.9	-64.5	116.4	116.4	0.00	N/A	
100.0	100.0	102.7	102.7	0.1	0.1	-33.68	96.8	-64.5	116.3	116.1	0.23	510.160	
200.0	200.0	202.8	202.8	0.3	0.2	-33.77	96.6	-64.6	116.2	115.6	0.57	205.540	
300.0	300.0	302.9	302.9	0.6	0.4	-33.88	96.3	-64.7	116.0	115.0	0.97	118.968	
400.0	400.0	403.2	403.2	0.8	0.6	-33.98	95.9	-64.6	115.6	114.2	1.41	81.854	
500.0	500.0	503.1	503.1	1.0	0.8	-34.16	95.2	-64.6	115.1	113.2	1.85	62.164	
600.0	600.0	602.8	602.7	1.2	1.1	-34.61	94.5	-65.2	114.8	112.5	2.29	50.142	
671.7	671.7	674.3	674.3	1.4	1.2	-35.04	94.0	-65.9	114.8	112.2	2.60	44.182	CC
700.0	700.0	702.6	702.6	1.5	1.3	-35.20	93.8	-66.2	114.8	112.0	2.72	42.214	
800.0	800.0	802.4	802.4	1.7	1.5	-35.75	93.2	-67.1	114.9	111.7	3.15	36.511	
900.0	900.0	902.1	902.0	1.9	1.7	-36.34	92.8	-68.3	115.2	111.6	3.58	32.192	ES
1,000.0	1,000.0	1,001.8	1,001.8	2.1	1.9	-37.24	92.2	-70.1	115.8	111.8	4.02	28.806	
1,100.0	1,100.0	1,101.0	1,100.9	2.4	2.1	-38.34	91.6	-72.5	116.8	112.4	4.46	26.192	
1,200.0	1,200.0	1,200.6	1,200.5	2.6	2.3	-39.33	91.7	-75.1	118.5	113.6	4.89	24.225	
1,300.0	1,300.0	1,300.9	1,300.7	2.8	2.5	-40.04	92.0	-77.3	120.2	114.9	5.32	22.599	
1,400.0	1,400.0	1,400.8	1,400.6	3.0	2.7	-40.59	92.4	-79.2	121.7	116.0	5.75	21.186	
1,500.0	1,500.0	1,500.6	1,500.4	3.3	2.9	-40.84	93.4	-80.7	123.4	117.3	6.18	19.986	
1,600.0	1,600.0	1,601.0	1,600.8	3.5	3.1	-40.64	94.9	-81.5	125.1	118.5	6.61	18.934	

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

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle IC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle IC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle IC 11-4HN - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0ft

Survey Program: 229-MWD — **Offset Well Error:** 0.0ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
1,700.0	1,700.0	1,701.8	1,701.6	3.7	3.3	-40.59	95.9	-82.1	126.3	119.2	7.04	17.928	
1,800.0	1,800.0	1,801.1	1,800.9	3.9	3.5	-40.63	96.6	-82.8	127.2	119.8	7.47	17.022	
1,900.0	1,900.0	1,901.1	1,900.9	4.2	3.8	-40.77	97.4	-84.0	128.6	120.7	7.91	16.253	
2,000.0	2,000.0	2,001.9	2,001.7	4.4	4.0	-40.85	98.0	-84.7	129.6	121.2	8.35	15.524	
2,100.0	2,100.0	2,101.3	2,101.1	4.6	4.2	-40.72	98.9	-85.1	130.5	121.7	8.78	14.871	
2,200.0	2,200.0	2,201.1	2,200.8	4.8	4.4	-40.66	100.0	-85.9	131.8	122.6	9.21	14.310	
2,300.0	2,300.0	2,301.5	2,301.3	5.1	4.6	-40.76	100.7	-86.8	133.0	123.3	9.65	13.781	
2,400.0	2,400.0	2,401.8	2,401.6	5.3	4.8	-41.35	100.5	-88.4	133.9	123.8	10.09	13.272	
2,500.0	2,500.0	2,502.4	2,502.1	5.5	5.0	-42.03	99.8	-90.0	134.4	123.9	10.52	12.775	
2,600.0	2,600.0	2,602.8	2,602.5	5.7	5.2	-42.45	99.3	-90.9	134.6	123.7	10.95	12.289	
2,700.0	2,700.0	2,703.1	2,702.8	6.0	5.4	-42.77	98.8	-91.4	134.6	123.2	11.39	11.816	
2,800.0	2,800.0	2,803.2	2,802.9	6.2	5.7	-43.13	98.1	-91.9	134.4	122.5	11.82	11.363	
2,900.0	2,900.0	2,903.0	2,902.8	6.4	5.9	-43.58	97.2	-92.5	134.2	121.9	12.26	10.944	
2,953.7	2,953.7	2,956.6	2,956.3	6.5	6.0	-43.88	96.7	-93.0	134.1	121.7	12.50	10.735	
3,000.0	3,000.0	3,002.4	3,002.1	6.6	6.1	-44.17	96.3	-93.5	134.2	121.5	12.70	10.572	
3,100.0	3,100.0	3,101.6	3,101.3	6.9	6.3	-44.83	95.7	-95.1	135.0	121.8	13.13	10.278	
3,200.0	3,200.0	3,201.7	3,201.4	7.1	6.5	-45.57	95.2	-97.1	136.0	122.4	13.57	10.020	
3,300.0	3,300.0	3,300.8	3,300.4	7.3	6.7	-46.53	94.3	-99.4	137.1	123.1	14.00	9.787	
3,400.0	3,400.0	3,400.2	3,399.8	7.5	6.9	-47.58	93.7	-102.6	139.0	124.5	14.44	9.624	
3,500.0	3,500.0	3,498.0	3,497.5	7.8	7.1	-48.75	93.3	-106.4	141.6	126.7	14.88	9.519	
3,600.0	3,600.0	3,596.9	3,596.3	8.0	7.4	-50.00	93.6	-111.5	145.7	130.4	15.31	9.517	
3,700.0	3,700.0	3,696.3	3,695.5	8.2	7.6	-51.16	94.1	-116.9	150.2	134.5	15.75	9.540	
3,800.0	3,800.0	3,794.7	3,793.7	8.4	7.8	-52.43	94.6	-123.0	155.4	139.2	16.19	9.600	
3,900.0	3,900.0	3,893.2	3,891.9	8.6	8.0	111.80	95.1	-130.1	162.5	145.9	16.61	9.784	
4,000.0	3,999.6	3,992.5	3,991.0	8.8	8.3	112.56	95.7	-137.9	172.1	155.1	16.99	10.130	
4,100.0	4,098.8	4,093.4	4,091.6	9.0	8.5	114.77	96.2	-145.3	183.3	166.0	17.35	10.564	
4,200.0	4,197.1	4,191.9	4,189.8	9.2	8.7	117.90	96.1	-152.2	196.7	179.0	17.72	11.104	
4,300.0	4,294.3	4,288.2	4,285.9	9.4	8.9	121.48	95.9	-159.5	213.7	195.6	18.07	11.823	
4,400.0	4,390.2	4,383.7	4,381.0	9.6	9.2	125.26	95.6	-167.4	234.9	216.5	18.42	12.756	
4,500.0	4,484.4	4,478.4	4,475.4	9.9	9.4	129.08	95.3	-175.5	260.6	241.9	18.74	13.910	
4,600.0	4,576.8	4,569.8	4,566.4	10.2	9.6	132.62	95.1	-183.7	291.3	272.3	19.03	15.310	
4,700.0	4,667.1	4,659.3	4,655.5	10.6	9.8	135.84	95.2	-192.2	327.2	307.9	19.29	16.965	
4,800.0	4,754.9	4,747.4	4,743.2	11.1	10.0	138.76	95.5	-200.7	368.3	348.8	19.52	18.869	
4,900.0	4,841.2	4,834.5	4,830.0	11.7	10.2	142.03	95.9	-209.0	413.0	393.1	19.90	20.754	
5,000.0	4,927.4	4,921.2	4,916.3	12.4	10.5	144.81	96.2	-217.1	458.6	438.3	20.33	22.561	
5,100.0	5,013.6	5,008.5	5,003.1	13.0	10.7	147.14	96.7	-225.0	505.1	484.3	20.78	24.303	
5,200.0	5,099.8	5,095.3	5,089.7	13.7	10.9	149.12	97.1	-232.6	552.0	530.7	21.25	25.974	
5,300.0	5,186.0	5,181.8	5,175.9	14.5	11.1	150.81	97.6	-240.0	599.4	577.6	21.73	27.578	
5,400.0	5,272.2	5,269.0	5,262.7	15.3	11.3	152.30	98.1	-247.1	647.1	624.9	22.23	29.112	
5,500.0	5,358.4	5,356.0	5,349.5	16.0	11.5	153.63	98.7	-253.8	695.1	672.3	22.73	30.582	
5,600.0	5,444.6	5,442.6	5,435.9	16.9	11.7	154.83	99.3	-259.9	743.3	720.1	23.23	31.995	
5,700.0	5,530.8	5,533.9	5,527.0	17.7	11.9	156.00	99.7	-265.6	791.5	767.7	23.74	33.336	
5,800.0	5,617.1	5,618.3	5,611.2	18.5	12.1	156.98	100.0	-270.5	839.8	815.5	24.25	34.625	
5,900.0	5,703.3	5,703.1	5,695.9	19.4	12.3	157.87	100.5	-275.5	888.4	863.6	24.77	35.864	
6,000.0	5,789.5	5,782.9	5,775.6	20.3	12.5	158.64	101.3	-279.9	937.6	912.3	25.29	37.079	
6,100.0	5,875.7	5,863.0	5,855.6	21.2	12.6	159.41	102.8	-283.3	987.5	961.7	25.79	38.289	
6,200.0	5,961.9	5,936.8	5,929.3	22.1	12.8	160.13	104.6	-285.4	1,038.1	1,011.9	26.28	39.497	
6,300.0	6,048.1	6,007.0	5,999.4	23.0	12.9	160.81	107.9	-286.6	1,090.6	1,063.8	26.77	40.743	
6,400.0	6,134.3	6,076.4	6,068.7	23.9	13.1	161.43	111.8	-287.9	1,144.1	1,116.9	27.25	41.979	
6,500.0	6,220.5	6,121.5	6,113.7	24.8	13.2	161.79	114.9	-288.9	1,199.1	1,171.3	27.73	43.242	
6,600.0	6,306.7	6,149.0	6,141.0	25.7	13.2	161.99	118.0	-289.9	1,257.4	1,229.2	28.20	44.595	
6,700.0	6,392.9	6,198.0	6,189.4	26.6	13.4	162.28	125.4	-292.3	1,318.9	1,290.2	28.70	45.954	

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

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle IC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle IC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle IC 11-4HN - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0ft

Survey Program: 229-MWD — **Offset Well Error:** 0.0ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,800.0	6,479.1	6,245.0	6,235.6	27.5	13.5	162.53	133.3	-294.8	1,381.8	1,352.6	29.19	47.331	
6,900.0	6,565.4	6,293.0	6,282.8	28.5	13.6	162.78	142.1	-297.4	1,446.1	1,416.4	29.69	48.702	
7,000.0	6,651.6	6,319.2	6,308.3	29.4	13.7	162.89	147.8	-299.1	1,512.8	1,482.6	30.17	50.134	
7,100.0	6,737.8	6,340.0	6,328.4	30.3	13.7	162.96	152.8	-300.7	1,581.7	1,551.0	30.65	51.600	
7,200.0	6,824.0	6,388.0	6,374.4	31.3	13.8	163.14	165.9	-303.8	1,652.6	1,621.5	31.17	53.025	
7,300.0	6,910.3	6,388.0	6,374.4	32.2	13.8	172.74	165.9	-303.8	1,725.3	1,694.4	30.95	55.746	
7,400.0	6,997.0	6,435.0	6,418.9	32.9	14.0	-151.02	181.0	-305.2	1,799.3	1,768.4	30.87	58.289	
7,500.0	7,080.7	6,435.0	6,418.9	33.6	14.0	-120.31	181.0	-305.2	1,871.2	1,838.4	32.80	57.053	
7,600.0	7,157.1	6,462.3	6,444.5	34.1	14.0	-99.02	190.7	-305.3	1,938.1	1,904.0	34.18	56.705	
7,700.0	7,222.2	6,484.0	6,464.5	34.5	14.1	-84.85	198.9	-305.2	1,997.6	1,963.6	33.93	58.869	
7,800.0	7,272.8	6,509.0	6,487.6	34.8	14.2	-75.91	208.6	-304.8	2,047.2	2,014.7	32.53	62.935	
7,900.0	7,306.3	6,580.7	6,553.9	34.9	14.4	-71.94	235.8	-303.2	2,085.3	2,053.9	31.39	66.435	
8,000.0	7,320.8	6,593.9	6,566.2	35.0	14.4	-69.11	240.6	-303.0	2,110.9	2,080.0	30.87	68.381	
8,100.0	7,321.4	6,595.1	6,567.3	35.0	14.4	-68.74	241.0	-303.0	2,128.9	2,097.2	31.70	67.156	
8,200.0	7,321.4	6,595.8	6,567.9	35.2	14.4	-68.76	241.2	-303.0	2,150.9	2,117.9	32.99	65.202	
8,300.0	7,321.4	7,496.5	7,141.4	35.5	18.3	-85.18	460.9	165.4	2,176.7	2,135.3	41.38	52.608	
8,400.0	7,321.4	7,570.0	7,139.8	36.0	19.4	-85.15	466.3	238.7	2,184.0	2,139.7	44.30	49.296	
8,500.0	7,321.4	7,642.3	7,136.1	36.7	20.7	-85.06	472.8	310.7	2,193.1	2,145.6	47.51	46.157	
8,600.0	7,321.4	7,904.7	7,128.4	37.7	26.0	-84.89	486.4	572.5	2,197.4	2,142.4	54.98	39.966	
8,700.0	7,321.4	8,078.1	7,126.8	38.9	30.0	-84.85	488.5	745.8	2,199.0	2,137.8	61.22	35.921	
8,800.0	7,321.4	8,253.3	7,128.9	40.4	34.2	-84.90	484.8	920.9	2,197.0	2,129.2	67.82	32.394	
8,900.0	7,321.4	8,321.1	7,129.2	42.2	35.9	-84.90	482.0	988.7	2,192.8	2,120.9	71.90	30.497	
9,000.0	7,321.4	8,375.9	7,128.6	44.1	37.3	-84.88	481.0	1,043.4	2,190.6	2,114.9	75.71	28.934	
9,100.0	7,321.4	8,510.2	7,127.8	46.1	40.7	-84.86	479.2	1,177.7	2,189.3	2,107.7	81.63	26.820	
9,200.0	7,321.4	8,607.6	7,127.8	48.3	43.2	-84.85	476.6	1,275.0	2,186.4	2,099.7	86.68	25.224	
9,300.0	7,321.4	8,676.0	7,126.8	50.6	45.0	-84.82	475.4	1,343.5	2,184.5	2,093.5	91.01	24.003	
9,347.6	7,321.4	8,697.1	7,126.3	51.7	45.6	-84.81	475.3	1,364.6	2,184.2	2,091.5	92.78	23.541	
9,400.0	7,321.4	8,728.9	7,125.5	52.9	46.4	-84.79	475.5	1,396.3	2,184.5	2,089.6	94.96	23.004	
9,500.0	7,321.4	8,857.7	7,123.2	55.3	49.8	-84.73	476.3	1,525.2	2,185.2	2,084.2	100.95	21.645	
9,568.8	7,321.4	8,913.0	7,122.6	57.0	51.3	-84.71	476.1	1,580.4	2,184.9	2,080.7	104.22	20.964	
9,600.0	7,321.4	8,934.5	7,122.5	57.8	51.9	-84.71	476.2	1,601.9	2,185.0	2,079.4	105.61	20.689	
9,700.0	7,321.4	9,017.4	7,123.1	60.2	54.1	-84.73	477.8	1,684.8	2,186.5	2,076.0	110.46	19.795	
9,800.0	7,321.4	9,125.5	7,123.3	62.8	57.0	-84.74	479.6	1,792.9	2,187.9	2,071.9	116.01	18.861	
9,900.0	7,321.4	9,294.0	7,124.5	65.3	61.5	-84.77	479.9	1,961.4	2,188.1	2,064.8	123.22	17.758	
10,000.0	7,321.4	9,380.4	7,124.0	67.9	63.9	-84.75	478.5	2,047.8	2,186.3	2,058.1	128.23	17.050	
10,100.0	7,321.4	9,516.7	7,123.9	70.4	67.6	-84.74	475.6	2,184.0	2,183.9	2,049.3	134.61	16.224	
10,200.0	7,321.4	9,602.9	7,121.9	73.0	69.9	-84.68	473.1	2,270.1	2,181.0	2,041.4	139.64	15.619	
10,300.0	7,321.4	9,692.5	7,119.4	75.7	72.4	-84.61	471.2	2,359.7	2,178.9	2,034.2	144.76	15.052	
10,400.0	7,321.4	9,752.0	7,119.4	78.3	74.0	-84.61	470.7	2,419.2	2,177.8	2,028.7	149.09	14.607	
10,404.8	7,321.4	9,754.5	7,119.4	78.4	74.0	-84.61	470.7	2,421.7	2,177.8	2,028.5	149.29	14.588	
10,500.0	7,321.4	9,847.4	7,118.7	80.9	76.6	-84.59	471.2	2,514.6	2,178.2	2,023.8	154.41	14.107	
10,596.0	7,321.4	9,945.7	7,117.5	83.5	79.3	-84.56	471.0	2,612.9	2,177.8	2,018.1	159.70	13.637	
10,600.0	7,321.4	9,948.4	7,117.4	83.6	79.4	-84.56	471.0	2,615.5	2,177.8	2,018.0	159.88	13.622	
10,700.0	7,321.4	10,047.1	7,118.4	86.3	82.1	-84.58	471.6	2,714.3	2,178.2	2,012.9	165.31	13.176	
10,800.0	7,321.4	10,126.7	7,119.4	88.9	84.3	-84.61	472.3	2,793.9	2,178.7	2,008.4	170.23	12.799	
10,900.0	7,321.4	10,183.5	7,119.4	91.6	85.8	-84.61	473.5	2,850.6	2,180.6	2,006.1	174.51	12.495	
11,000.0	7,321.4	10,244.0	7,119.0	94.3	87.5	-84.61	476.1	2,911.1	2,184.7	2,005.8	178.90	12.212	
11,100.0	7,321.4	10,388.0	7,119.0	97.0	91.4	-84.62	481.6	3,055.0	2,188.1	2,002.5	185.59	11.790	
11,200.0	7,321.4	10,518.3	7,117.9	99.7	95.0	-84.60	485.3	3,185.2	2,190.9	1,999.0	191.90	11.417	
11,300.0	7,321.4	10,664.5	7,117.9	102.4	99.1	-84.60	485.2	3,331.5	2,190.3	1,991.7	198.68	11.025	
11,400.0	7,321.4	10,780.6	7,117.9	105.1	102.3	-84.60	484.0	3,447.5	2,189.1	1,984.4	204.63	10.698	
11,500.0	7,321.4	10,877.7	7,118.5	107.9	105.0	-84.61	483.4	3,544.6	2,188.1	1,978.0	210.07	10.416	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle IC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle IC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle IC 11-4HN - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0ft

Survey Program: 229-MWD

Offset Well Error: 0.0ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,600.0	7,321.4	10,959.0	7,119.7	110.6	107.2	-84.64	483.1	3,625.9	2,187.4	1,972.3	215.08	10.170	
11,628.3	7,321.4	10,978.4	7,119.9	111.3	107.8	-84.65	483.1	3,645.2	2,187.3	1,970.9	216.39	10.108	
11,700.0	7,321.4	11,029.3	7,120.6	113.3	109.2	-84.66	483.6	3,696.1	2,187.6	1,967.9	219.78	9.954	
11,800.0	7,321.4	11,117.3	7,120.6	116.0	111.6	-84.67	485.0	3,784.2	2,189.0	1,964.1	224.97	9.731	
11,900.0	7,321.4	11,197.3	7,118.4	118.8	113.8	-84.61	486.4	3,864.1	2,190.8	1,960.9	229.91	9.529	
12,000.0	7,321.4	11,335.6	7,115.6	121.5	117.7	-84.55	489.0	4,002.4	2,192.8	1,956.3	236.46	9.273	
12,100.0	7,321.4	11,423.7	7,113.5	124.2	120.1	-84.49	490.0	4,090.4	2,193.9	1,952.2	241.64	9.079	
12,200.0	7,321.4	11,512.7	7,112.9	127.0	122.6	-84.48	491.2	4,179.4	2,195.1	1,948.2	246.86	8.892	
12,300.0	7,321.4	11,635.2	7,115.1	129.7	126.0	-84.54	492.9	4,301.8	2,196.0	1,942.9	253.03	8.679	
12,369.5	7,321.4	11,689.4	7,115.2	131.0	127.5	-84.55	493.6	4,356.1	2,196.7	1,941.0	255.77	8.589	SF

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-162HN - Wellbore #1 - Plan #1 (12-10-13) — Offset Site Error: 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	87.21	2.9	59.7	59.8				
100.0	100.0	100.0	100.0	0.1	0.1	87.21	2.9	59.7	59.8	59.6	0.22	266.110	
200.0	200.0	200.0	200.0	0.3	0.3	87.21	2.9	59.7	59.8	59.1	0.67	88.703	
300.0	300.0	300.0	300.0	0.6	0.6	87.21	2.9	59.7	59.8	58.7	1.12	53.222	
400.0	400.0	400.0	400.0	0.8	0.8	87.21	2.9	59.7	59.8	58.2	1.57	38.016	
500.0	500.0	500.0	500.0	1.0	1.0	87.21	2.9	59.7	59.8	57.8	2.02	29.568	
600.0	600.0	600.0	600.0	1.2	1.2	87.21	2.9	59.7	59.8	57.3	2.47	24.192	
700.0	700.0	700.0	700.0	1.5	1.5	87.21	2.9	59.7	59.8	56.9	2.92	20.470	
800.0	800.0	800.0	800.0	1.7	1.7	87.21	2.9	59.7	59.8	56.4	3.37	17.741	
900.0	900.0	900.0	900.0	1.9	1.9	87.21	2.9	59.7	59.8	56.0	3.82	15.654	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	87.21	2.9	59.7	59.8	55.5	4.27	14.006	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	87.21	2.9	59.7	59.8	55.1	4.72	12.672	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	87.21	2.9	59.7	59.8	54.6	5.17	11.570	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	87.21	2.9	59.7	59.8	54.2	5.62	10.644	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	87.21	2.9	59.7	59.8	53.7	6.07	9.856	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	87.21	2.9	59.7	59.8	53.3	6.52	9.176	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	87.21	2.9	59.7	59.8	52.8	6.97	8.584	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	87.21	2.9	59.7	59.8	52.4	7.42	8.064	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	87.21	2.9	59.7	59.8	51.9	7.87	7.603	
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	87.21	2.9	59.7	59.8	51.5	8.32	7.192	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	87.21	2.9	59.7	59.8	51.0	8.77	6.823	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	87.21	2.9	59.7	59.8	50.6	9.22	6.490	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	87.21	2.9	59.7	59.8	50.1	9.66	6.189	
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	87.21	2.9	59.7	59.8	49.7	10.11	5.914	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	87.21	2.9	59.7	59.8	49.2	10.56	5.662	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	87.21	2.9	59.7	59.8	48.8	11.01	5.431	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	87.21	2.9	59.7	59.8	48.3	11.46	5.218	
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	87.21	2.9	59.7	59.8	47.9	11.91	5.021	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	87.21	2.9	59.7	59.8	47.5	12.36	4.838	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	87.21	2.9	59.7	59.8	47.0	12.81	4.669	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	87.21	2.9	59.7	59.8	46.6	13.26	4.510	
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	87.21	2.9	59.7	59.8	46.1	13.71	4.362	
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	87.21	2.9	59.7	59.8	45.7	14.16	4.224	
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	87.21	2.9	59.7	59.8	45.2	14.61	4.094	
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	87.21	2.9	59.7	59.8	44.8	15.06	3.972	
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	87.21	2.9	59.7	59.8	44.3	15.51	3.857	
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	87.21	2.9	59.7	59.8	43.9	15.96	3.748	
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	87.21	2.9	59.7	59.8	43.4	16.41	3.645	
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	87.21	2.9	59.7	59.8	43.0	16.86	3.548	CC, ES
3,900.0	3,900.0	3,900.0	3,900.0	8.6	8.7	-110.14	2.9	59.7	60.7	43.4	17.27	3.512	SF
4,000.0	3,999.6	3,999.6	3,999.6	8.8	8.9	-116.67	2.9	59.7	63.8	46.1	17.65	3.614	
4,100.0	4,098.8	4,098.8	4,098.8	9.0	9.1	-125.95	2.9	59.7	70.6	52.6	18.00	3.926	
4,200.0	4,197.1	4,197.1	4,197.1	9.2	9.3	-135.88	2.9	59.7	82.7	64.5	18.29	4.525	
4,300.0	4,294.3	4,294.3	4,294.3	9.4	9.5	-144.73	2.9	59.7	101.0	82.5	18.51	5.454	
4,400.0	4,390.2	4,390.2	4,390.2	9.6	9.8	-151.82	2.9	59.7	125.4	106.8	18.67	6.717	
4,500.0	4,484.4	4,484.4	4,484.4	9.9	10.0	-157.21	2.9	59.7	155.9	137.1	18.78	8.300	
4,600.0	4,576.8	4,576.8	4,576.8	10.2	10.2	-161.23	2.9	59.7	192.0	173.2	18.85	10.188	
4,700.0	4,667.1	4,667.1	4,667.1	10.6	10.4	-164.24	2.9	59.7	233.5	214.6	18.88	12.369	
4,800.0	4,754.9	4,754.9	4,754.9	11.1	10.6	-166.51	2.9	59.7	280.0	261.1	18.87	14.839	
4,900.0	4,841.2	4,841.2	4,841.2	11.7	10.8	-168.50	2.9	59.7	329.7	310.6	19.19	17.183	
5,000.0	4,927.4	4,929.1	4,929.1	12.4	11.0	-170.05	2.9	59.7	379.7	360.1	19.59	19.381	
5,100.0	5,013.6	5,039.2	5,039.1	13.0	11.2	-171.64	0.0	57.4	427.1	407.1	20.02	21.340	

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

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-162HN - Wellbore #1 - Plan #1 (12-10-13) — Offset Site Error: 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,099.8	5,155.4	5,154.8	13.7	11.4	-173.19	-8.3	50.6	469.6	449.2	20.45	22.969	
5,300.0	5,186.0	5,277.3	5,275.2	14.5	11.6	-174.78	-22.9	38.7	506.9	486.0	20.90	24.247	
5,400.0	5,272.2	5,404.3	5,399.2	15.3	11.9	-176.45	-44.4	21.2	538.6	517.2	21.39	25.174	
5,500.0	5,358.4	5,535.6	5,525.0	16.0	12.2	-178.26	-73.3	-2.4	564.5	542.6	21.93	25.745	
5,600.0	5,444.6	5,670.0	5,650.9	16.9	12.6	179.75	-109.8	-32.1	584.5	562.0	22.51	25.970	
5,700.0	5,530.8	5,806.4	5,774.9	17.7	13.1	177.52	-153.7	-67.8	598.5	575.3	23.16	25.837	
5,800.0	5,617.1	5,938.6	5,891.0	18.5	13.7	175.12	-202.7	-107.7	606.7	582.8	23.92	25.367	
5,900.0	5,703.3	6,036.4	5,975.5	19.4	14.2	173.27	-240.9	-138.8	613.1	588.5	24.65	24.875	
6,000.0	5,789.5	6,134.1	6,060.0	20.3	14.8	171.47	-279.0	-169.9	620.2	594.7	25.45	24.367	
6,100.0	5,875.7	6,231.9	6,144.5	21.2	15.5	169.70	-317.1	-200.9	627.8	601.5	26.33	23.842	
6,200.0	5,961.9	6,329.7	6,229.0	22.1	16.1	167.98	-355.3	-232.0	636.1	608.8	27.30	23.304	
6,300.0	6,048.1	6,427.4	6,313.5	23.0	16.8	166.30	-393.4	-263.1	645.0	616.6	28.34	22.759	
6,400.0	6,134.3	6,525.2	6,398.0	23.9	17.6	164.66	-431.5	-294.1	654.4	624.9	29.46	22.211	
6,500.0	6,220.5	6,623.0	6,482.5	24.8	18.3	163.08	-469.7	-325.2	664.3	633.7	30.66	21.666	
6,600.0	6,306.7	6,720.7	6,567.0	25.7	19.1	161.53	-507.8	-356.2	674.8	642.8	31.94	21.128	
6,700.0	6,392.9	6,825.1	6,657.7	26.6	19.9	160.09	-548.8	-387.6	685.6	652.3	33.27	20.608	
6,800.0	6,479.1	6,943.8	6,765.1	27.5	20.5	160.53	-597.1	-399.1	694.4	660.4	33.99	20.431	
6,900.0	6,565.4	7,052.7	6,862.8	28.5	20.9	163.17	-641.1	-381.7	701.3	667.4	33.92	20.677	
7,000.0	6,651.6	7,142.3	6,938.4	29.4	21.1	166.79	-675.0	-348.0	709.5	675.9	33.53	21.160	
7,100.0	6,737.8	7,211.8	6,991.9	30.3	21.1	170.39	-699.0	-310.7	722.5	689.2	33.24	21.734	
7,200.0	6,824.0	7,265.0	7,028.8	31.3	21.1	173.50	-715.5	-276.3	742.8	709.6	33.20	22.376	
7,300.0	6,910.3	7,306.3	7,054.7	32.2	21.1	-176.94	-727.0	-246.3	771.8	738.5	33.35	23.143	
7,400.0	6,997.0	7,350.0	7,079.2	32.9	21.1	-147.46	-738.0	-211.8	806.1	771.9	34.21	23.562	
7,500.0	7,080.7	7,388.4	7,098.1	33.6	21.1	-123.05	-746.4	-179.4	841.5	805.8	35.62	23.624	
7,600.0	7,157.1	7,431.6	7,116.2	34.1	21.0	-105.51	-754.4	-141.1	874.8	838.1	36.74	23.813	
7,700.0	7,222.2	7,475.0	7,130.8	34.5	21.0	-93.71	-760.8	-100.7	903.7	866.6	37.09	24.366	
7,800.0	7,272.8	7,525.0	7,143.1	34.8	20.9	-86.01	-766.2	-52.6	926.3	889.3	36.99	25.041	
7,900.0	7,306.3	7,564.9	7,149.2	34.9	20.8	-81.63	-768.9	-13.3	941.2	904.3	36.95	25.475	
8,000.0	7,320.8	7,609.9	7,152.3	35.0	20.7	-79.81	-770.1	31.6	947.9	910.1	37.73	25.120	
8,100.0	7,321.4	7,697.2	7,152.4	35.0	20.5	-79.73	-769.9	118.9	948.2	908.4	39.79	23.829	
8,200.0	7,321.4	7,797.2	7,152.4	35.2	22.0	-79.73	-769.5	218.9	948.3	905.7	42.61	22.257	
8,300.0	7,321.4	7,897.2	7,152.4	35.5	23.9	-79.74	-769.2	318.9	948.4	902.5	45.92	20.656	
8,400.0	7,321.4	7,997.2	7,152.4	36.0	25.9	-79.74	-768.9	418.9	948.5	898.9	49.62	19.115	
8,500.0	7,321.4	8,097.2	7,152.4	36.7	28.0	-79.74	-768.5	518.9	948.6	895.0	53.64	17.685	
8,600.0	7,321.4	8,197.2	7,152.4	37.7	30.2	-79.74	-768.2	618.9	948.7	890.8	57.91	16.382	
8,700.0	7,321.4	8,297.2	7,152.4	38.9	32.5	-79.74	-767.9	718.9	948.8	886.5	62.38	15.211	
8,800.0	7,321.4	8,397.2	7,152.4	40.4	34.9	-79.74	-767.5	818.9	948.9	881.9	67.01	14.162	
8,900.0	7,321.4	8,497.2	7,152.4	42.2	37.4	-79.74	-767.2	918.9	949.0	877.3	71.76	13.225	
9,000.0	7,321.4	8,597.2	7,152.4	44.1	39.8	-79.74	-766.9	1,018.9	949.1	872.5	76.62	12.388	
9,100.0	7,321.4	8,697.2	7,152.4	46.1	42.3	-79.74	-766.5	1,118.9	949.2	867.7	81.56	11.638	
9,200.0	7,321.4	8,797.2	7,152.4	48.3	44.9	-79.75	-766.2	1,218.9	949.3	862.7	86.58	10.965	
9,300.0	7,321.4	8,897.2	7,152.4	50.6	47.5	-79.75	-765.8	1,318.9	949.4	857.8	91.65	10.359	
9,400.0	7,321.4	8,997.2	7,152.4	52.9	50.1	-79.75	-765.5	1,418.9	949.5	852.7	96.77	9.812	
9,500.0	7,321.4	9,097.2	7,152.4	55.3	52.7	-79.75	-765.2	1,518.9	949.6	847.7	101.94	9.315	
9,600.0	7,321.4	9,197.2	7,152.4	57.8	55.3	-79.75	-764.8	1,618.9	949.7	842.6	107.14	8.864	
9,700.0	7,321.4	9,297.2	7,152.4	60.2	58.0	-79.75	-764.5	1,718.9	949.8	837.4	112.38	8.452	
9,800.0	7,321.4	9,397.2	7,152.4	62.8	60.6	-79.75	-764.2	1,818.9	949.9	832.3	117.64	8.075	
9,900.0	7,321.4	9,497.2	7,152.4	65.3	63.3	-79.75	-763.8	1,918.9	950.0	827.1	122.92	7.729	
10,000.0	7,321.4	9,597.2	7,152.4	67.9	66.0	-79.75	-763.5	2,018.9	950.1	821.9	128.23	7.410	
10,100.0	7,321.4	9,697.2	7,152.4	70.4	68.7	-79.76	-763.2	2,118.9	950.2	816.7	133.55	7.115	
10,200.0	7,321.4	9,797.2	7,152.4	73.0	71.4	-79.76	-762.8	2,218.9	950.3	811.4	138.89	6.842	
10,300.0	7,321.4	9,897.2	7,152.4	75.7	74.1	-79.76	-762.5	2,318.9	950.4	806.2	144.24	6.589	

ENSIGN
Directional

Anticollision Report

Company:	Great Western	**Local Co-ordinate Reference:**	Well PostleIC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	PostleIC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-162HN - Wellbore #1 - Plan #1 (12-10-13) — **Offset Site Error:** 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	7,321.4	9,997.2	7,152.4	78.3	76.8	-79.76	-762.2	2,418.9	950.5	800.9	149.61	6.353	
10,500.0	7,321.4	10,097.2	7,152.4	80.9	79.6	-79.76	-761.8	2,518.9	950.6	795.6	154.99	6.133	
10,600.0	7,321.4	10,197.2	7,152.4	83.6	82.3	-79.76	-761.5	2,618.9	950.7	790.3	160.38	5.928	
10,700.0	7,321.4	10,297.2	7,152.4	86.3	85.0	-79.76	-761.2	2,718.9	950.8	785.0	165.77	5.736	
10,800.0	7,321.4	10,397.2	7,152.4	88.9	87.8	-79.76	-760.8	2,818.9	950.9	779.7	171.18	5.555	
10,900.0	7,321.4	10,497.2	7,152.4	91.6	90.5	-79.76	-760.5	2,918.9	951.0	774.4	176.59	5.385	
11,000.0	7,321.4	10,597.2	7,152.4	94.3	93.2	-79.76	-760.2	3,018.9	951.1	769.1	182.01	5.225	
11,100.0	7,321.4	10,697.2	7,152.4	97.0	96.0	-79.77	-759.8	3,118.9	951.2	763.7	187.44	5.075	
11,200.0	7,321.4	10,797.2	7,152.4	99.7	98.7	-79.77	-759.5	3,218.9	951.3	758.4	192.87	4.932	
11,300.0	7,321.4	10,897.2	7,152.4	102.4	101.5	-79.77	-759.1	3,318.9	951.4	753.1	198.31	4.797	
11,400.0	7,321.4	10,997.2	7,152.4	105.1	104.3	-79.77	-758.8	3,418.9	951.5	747.7	203.76	4.670	
11,500.0	7,321.4	11,097.2	7,152.4	107.9	107.0	-79.77	-758.5	3,518.9	951.6	742.4	209.20	4.549	
11,600.0	7,321.4	11,197.2	7,152.4	110.6	109.8	-79.77	-758.1	3,618.9	951.7	737.0	214.66	4.433	
11,700.0	7,321.4	11,297.2	7,152.4	113.3	112.5	-79.77	-757.8	3,718.9	951.8	731.7	220.11	4.324	
11,800.0	7,321.4	11,397.2	7,152.4	116.0	115.3	-79.77	-757.5	3,818.9	951.9	726.3	225.57	4.220	
11,900.0	7,321.4	11,497.2	7,152.4	118.8	118.1	-79.77	-757.1	3,918.9	952.0	720.9	231.04	4.120	
12,000.0	7,321.4	11,597.2	7,152.4	121.5	120.8	-79.78	-756.8	4,018.9	952.1	715.6	236.50	4.026	
12,100.0	7,321.4	11,697.2	7,152.4	124.2	123.6	-79.78	-756.5	4,118.9	952.2	710.2	241.97	3.935	
12,200.0	7,321.4	11,797.2	7,152.4	127.0	126.4	-79.78	-756.1	4,218.9	952.3	704.8	247.44	3.848	
12,300.0	7,321.4	11,897.2	7,152.4	129.7	129.2	-79.78	-755.8	4,318.9	952.4	699.4	252.92	3.766	
12,369.5	7,321.4	11,966.8	7,152.4	131.0	130.4	-79.78	-755.6	4,388.4	952.4	697.1	255.38	3.730	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-239HN - Wellbore #1 - Plan #1 (12-10-13) — Offset Site Error: 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	88.62	0.7	30.1	30.2				
100.0	100.0	100.0	100.0	0.1	0.1	88.62	0.7	30.1	30.2	29.9	0.22	134.178	
200.0	200.0	200.0	200.0	0.3	0.3	88.62	0.7	30.1	30.2	29.5	0.67	44.726	
300.0	300.0	300.0	300.0	0.6	0.6	88.62	0.7	30.1	30.2	29.0	1.12	26.836	
400.0	400.0	400.0	400.0	0.8	0.8	88.62	0.7	30.1	30.2	28.6	1.57	19.168	
500.0	500.0	500.0	500.0	1.0	1.0	88.62	0.7	30.1	30.2	28.1	2.02	14.909	
600.0	600.0	600.0	600.0	1.2	1.2	88.62	0.7	30.1	30.2	27.7	2.47	12.198	
700.0	700.0	700.0	700.0	1.5	1.5	88.62	0.7	30.1	30.2	27.2	2.92	10.321	
800.0	800.0	800.0	800.0	1.7	1.7	88.62	0.7	30.1	30.2	26.8	3.37	8.945	
900.0	900.0	900.0	900.0	1.9	1.9	88.62	0.7	30.1	30.2	26.3	3.82	7.893	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	88.62	0.7	30.1	30.2	25.9	4.27	7.062	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	88.62	0.7	30.1	30.2	25.4	4.72	6.389	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	88.62	0.7	30.1	30.2	25.0	5.17	5.834	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	88.62	0.7	30.1	30.2	24.5	5.62	5.367	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	88.62	0.7	30.1	30.2	24.1	6.07	4.970	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	88.62	0.7	30.1	30.2	23.6	6.52	4.627	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	88.62	0.7	30.1	30.2	23.2	6.97	4.328	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	88.62	0.7	30.1	30.2	22.7	7.42	4.066	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	88.62	0.7	30.1	30.2	22.3	7.87	3.834	
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	88.62	0.7	30.1	30.2	21.8	8.32	3.626	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	88.62	0.7	30.1	30.2	21.4	8.77	3.440	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	88.62	0.7	30.1	30.2	20.9	9.22	3.273	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	88.62	0.7	30.1	30.2	20.5	9.66	3.120	
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	88.62	0.7	30.1	30.2	20.0	10.11	2.982	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	88.62	0.7	30.1	30.2	19.6	10.56	2.855	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	88.62	0.7	30.1	30.2	19.1	11.01	2.738	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	88.62	0.7	30.1	30.2	18.7	11.46	2.631	
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	88.62	0.7	30.1	30.2	18.2	11.91	2.532	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	88.62	0.7	30.1	30.2	17.8	12.36	2.440	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	88.62	0.7	30.1	30.2	17.3	12.81	2.354	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	88.62	0.7	30.1	30.2	16.9	13.26	2.274	
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	88.62	0.7	30.1	30.2	16.4	13.71	2.200	
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	88.62	0.7	30.1	30.2	16.0	14.16	2.130	
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	88.62	0.7	30.1	30.2	15.5	14.61	2.064	
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	88.62	0.7	30.1	30.2	15.1	15.06	2.003	
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	88.62	0.7	30.1	30.2	14.6	15.51	1.945	
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	88.62	0.7	30.1	30.2	14.2	15.96	1.890	
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	88.62	0.7	30.1	30.2	13.8	16.41	1.838	
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	88.62	0.7	30.1	30.2	13.3	16.86	1.789	CC, ES
3,900.0	3,900.0	3,900.0	3,900.0	8.6	8.7	-111.02	0.7	30.1	31.0	13.7	17.27	1.795	
4,000.0	3,999.6	3,999.6	3,999.6	8.8	8.9	-123.12	0.7	30.1	34.6	17.0	17.64	1.961	
4,100.0	4,098.8	4,098.8	4,098.8	9.0	9.1	-137.56	0.7	30.1	43.2	25.2	17.96	2.403	
4,200.0	4,197.1	4,199.7	4,199.7	9.2	9.3	-148.88	-1.7	29.3	55.7	37.5	18.19	3.062	
4,300.0	4,294.3	4,301.6	4,301.2	9.4	9.5	-155.93	-9.3	26.5	69.3	50.9	18.35	3.777	
4,400.0	4,390.2	4,404.3	4,403.0	9.6	9.7	-161.07	-22.0	21.8	83.4	64.9	18.46	4.515	
4,500.0	4,484.4	4,507.9	4,504.8	9.9	9.8	-164.97	-40.0	15.2	97.6	79.1	18.54	5.266	
4,600.0	4,576.8	4,612.4	4,606.3	10.2	10.1	-168.11	-63.4	6.6	112.0	93.4	18.59	6.021	
4,700.0	4,667.1	4,717.8	4,707.1	10.6	10.3	-170.74	-92.3	-3.9	126.2	107.6	18.62	6.779	
4,800.0	4,754.9	4,824.1	4,808.8	11.1	10.6	-173.04	-126.6	-16.5	140.4	121.7	18.62	7.537	
4,900.0	4,841.2	4,931.5	4,905.4	11.7	11.0	-175.07	-166.5	-31.2	152.4	133.4	18.99	8.025	
5,000.0	4,927.4	5,040.0	5,002.5	12.4	11.5	-176.86	-212.1	-47.9	159.0	139.6	19.46	8.174	
5,100.0	5,013.6	5,146.0	5,094.6	13.0	12.0	-178.56	-261.3	-65.9	160.4	140.5	19.95	8.040	

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

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-239HN - Wellbore #1 - Plan #1 (12-10-13) — **Offset Site Error:** 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,099.8	5,245.9	5,180.8	13.7	12.6	179.83	-308.7	-83.3	160.7	140.2	20.47	7.848	
5,300.0	5,188.0	5,345.8	5,267.0	14.5	13.2	178.23	-356.2	-100.7	161.0	140.0	21.03	7.659	
5,400.0	5,272.2	5,445.7	5,353.1	15.3	13.9	176.64	-403.6	-118.1	161.5	139.9	21.62	7.470	
5,500.0	5,358.4	5,545.6	5,439.3	16.0	14.6	175.05	-451.0	-135.5	162.1	139.9	22.26	7.283	
5,600.0	5,444.6	5,645.5	5,525.5	16.9	15.4	173.48	-498.5	-152.9	162.9	139.9	22.95	7.096	
5,700.0	5,530.8	5,745.4	5,611.7	17.7	16.1	171.93	-545.9	-170.2	163.7	140.0	23.70	6.909	
5,800.0	5,617.1	5,845.2	5,697.9	18.5	16.9	170.39	-593.3	-187.6	164.7	140.2	24.50	6.723	
5,900.0	5,703.3	5,945.1	5,784.1	19.4	17.7	168.87	-640.8	-205.0	165.8	140.5	25.36	6.538	
6,000.0	5,789.5	6,045.0	5,870.2	20.3	18.6	167.37	-688.2	-222.4	167.0	140.8	26.29	6.354	
6,100.0	5,875.7	6,144.9	5,956.4	21.2	19.4	165.90	-735.6	-239.8	168.4	141.1	27.28	6.171	
6,200.0	5,961.9	6,244.8	6,042.6	22.1	20.3	164.45	-783.1	-257.2	169.8	141.5	28.34	5.992	
6,300.0	6,048.1	6,344.7	6,128.8	23.0	21.1	163.02	-830.5	-274.6	171.4	141.9	29.46	5.816	
6,400.0	6,134.3	6,444.6	6,215.0	23.9	22.0	161.62	-877.9	-292.0	173.0	142.3	30.65	5.644	
6,500.0	6,220.5	6,544.5	6,301.1	24.8	22.9	160.25	-925.4	-309.4	174.8	142.8	31.91	5.477	
6,600.0	6,306.7	6,644.4	6,387.3	25.7	23.8	158.91	-972.8	-326.7	176.6	143.4	33.23	5.315	
6,700.0	6,392.9	6,744.3	6,473.5	26.6	24.7	157.59	-1,020.2	-344.1	178.5	143.9	34.60	5.160	
6,800.0	6,479.1	6,844.2	6,559.7	27.5	25.6	156.31	-1,067.7	-361.5	180.6	144.5	36.04	5.010	
6,900.0	6,565.4	6,944.1	6,645.9	28.5	26.5	155.05	-1,115.1	-378.9	182.7	145.2	37.53	4.868	
7,000.0	6,651.6	7,047.9	6,735.7	29.4	27.4	154.40	-1,164.5	-394.9	184.5	145.7	38.83	4.752	
7,100.0	6,737.8	7,154.1	6,828.4	30.3	28.1	160.11	-1,215.5	-390.4	182.9	145.5	37.43	4.886	
7,146.9	6,778.2	7,199.6	6,867.4	30.8	28.4	164.97	-1,236.9	-380.7	182.3	146.2	36.05	5.056	
7,200.0	6,824.0	7,246.9	6,906.7	31.3	28.6	171.42	-1,258.5	-365.9	183.6	149.0	34.65	5.301	
7,300.0	6,910.3	7,322.8	6,966.2	32.2	29.0	-169.55	-1,291.2	-332.3	197.8	163.3	34.51	5.733	
7,400.0	6,997.0	7,390.8	7,014.7	32.9	29.2	-134.23	-1,317.7	-292.6	224.9	186.6	38.31	5.872	
7,500.0	7,080.7	7,455.9	7,055.5	33.6	29.4	-106.29	-1,340.1	-247.2	256.4	214.8	41.51	6.175	
7,600.0	7,157.1	7,518.9	7,089.0	34.1	29.5	-87.30	-1,358.4	-197.2	286.9	245.0	41.82	6.860	
7,700.0	7,222.2	7,580.5	7,115.4	34.5	29.6	-75.09	-1,372.8	-143.4	313.3	273.8	39.48	7.936	
7,800.0	7,272.8	7,641.2	7,134.7	34.8	29.6	-67.52	-1,383.3	-87.0	333.8	298.0	35.80	9.324	
7,900.0	7,306.3	7,700.0	7,146.8	34.9	29.6	-63.24	-1,389.8	-29.8	347.3	314.7	32.59	10.657	
8,000.0	7,320.8	7,761.0	7,152.2	35.0	29.6	-61.50	-1,392.6	30.9	353.2	321.4	31.76	11.118	
8,100.0	7,321.4	7,851.5	7,152.4	35.0	29.6	-61.43	-1,392.5	121.3	353.4	319.9	33.56	10.532	
8,200.0	7,321.4	7,951.5	7,152.4	35.2	29.8	-61.43	-1,392.3	221.3	353.4	317.4	36.03	9.809	
8,300.0	7,321.4	8,051.5	7,152.4	35.5	30.2	-61.43	-1,392.0	321.3	353.4	314.4	38.99	9.065	
8,400.0	7,321.4	8,151.5	7,152.4	36.0	30.8	-61.43	-1,391.8	421.3	353.4	311.1	42.33	8.350	
8,500.0	7,321.4	8,251.5	7,152.4	36.7	31.9	-61.44	-1,391.6	521.3	353.4	307.5	45.96	7.690	
8,600.0	7,321.4	8,351.5	7,152.4	37.7	33.3	-61.44	-1,391.3	621.3	353.5	303.6	49.84	7.092	
8,700.0	7,321.4	8,451.5	7,152.4	38.9	35.1	-61.44	-1,391.1	721.3	353.5	299.6	53.89	6.559	
8,800.0	7,321.4	8,551.5	7,152.4	40.4	37.0	-61.44	-1,390.8	821.3	353.5	295.4	58.09	6.085	
8,900.0	7,321.4	8,651.5	7,152.4	42.2	39.2	-61.44	-1,390.6	921.3	353.5	291.1	62.40	5.664	
9,000.0	7,321.4	8,751.5	7,152.4	44.1	41.4	-61.44	-1,390.3	1,021.3	353.5	286.7	66.81	5.291	
9,100.0	7,321.4	8,851.5	7,152.4	46.1	43.7	-61.44	-1,390.1	1,121.3	353.5	282.2	71.30	4.958	
9,200.0	7,321.4	8,951.5	7,152.4	48.3	46.1	-61.44	-1,389.9	1,221.3	353.5	277.7	75.84	4.661	
9,300.0	7,321.4	9,051.5	7,152.4	50.6	48.6	-61.44	-1,389.6	1,321.3	353.5	273.1	80.44	4.395	
9,400.0	7,321.4	9,151.5	7,152.4	52.9	51.1	-61.44	-1,389.4	1,421.3	353.5	268.4	85.08	4.155	
9,500.0	7,321.4	9,251.5	7,152.4	55.3	53.6	-61.44	-1,389.1	1,521.3	353.5	263.8	89.76	3.938	
9,600.0	7,321.4	9,351.5	7,152.4	57.8	56.2	-61.44	-1,388.9	1,621.3	353.5	259.1	94.47	3.742	
9,700.0	7,321.4	9,451.5	7,152.4	60.2	58.7	-61.44	-1,388.6	1,721.3	353.5	254.3	99.21	3.564	
9,800.0	7,321.4	9,551.5	7,152.4	62.8	61.3	-61.44	-1,388.4	1,821.3	353.5	249.6	103.97	3.401	
9,900.0	7,321.4	9,651.5	7,152.4	65.3	63.9	-61.44	-1,388.2	1,921.3	353.5	244.8	108.75	3.251	
10,000.0	7,321.4	9,751.5	7,152.4	67.9	66.6	-61.44	-1,387.9	2,021.3	353.6	240.0	113.54	3.114	
10,100.0	7,321.4	9,851.5	7,152.4	70.4	69.2	-61.45	-1,387.7	2,121.3	353.6	235.2	118.36	2.987	
10,200.0	7,321.4	9,951.5	7,152.4	73.0	71.9	-61.45	-1,387.4	2,221.3	353.6	230.4	123.18	2.870	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-239HN - Wellbore #1 - Plan #1 (12-10-13) — **Offset Site Error:** 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,321.4	10,051.5	7,152.4	75.7	74.5	-61.45	-1,387.2	2,321.3	353.6	225.6	128.02	2.762	
10,400.0	7,321.4	10,151.5	7,152.4	78.3	77.2	-61.45	-1,386.9	2,421.3	353.6	220.7	132.87	2.661	
10,500.0	7,321.4	10,251.5	7,152.4	80.9	79.9	-61.45	-1,386.7	2,521.3	353.6	215.9	137.73	2.567	
10,600.0	7,321.4	10,351.5	7,152.4	83.6	82.6	-61.45	-1,386.4	2,621.3	353.6	211.0	142.60	2.480	
10,700.0	7,321.4	10,451.5	7,152.4	86.3	85.3	-61.45	-1,386.2	2,721.3	353.6	206.1	147.47	2.398	
10,800.0	7,321.4	10,551.5	7,152.4	88.9	88.0	-61.45	-1,386.0	2,821.3	353.6	201.3	152.35	2.321	
10,900.0	7,321.4	10,651.5	7,152.4	91.6	90.7	-61.45	-1,385.7	2,921.3	353.6	196.4	157.24	2.249	
11,000.0	7,321.4	10,751.5	7,152.4	94.3	93.4	-61.45	-1,385.5	3,021.3	353.6	191.5	162.14	2.181	
11,100.0	7,321.4	10,851.5	7,152.4	97.0	96.2	-61.45	-1,385.2	3,121.3	353.6	186.6	167.04	2.117	
11,200.0	7,321.4	10,951.5	7,152.4	99.7	98.9	-61.45	-1,385.0	3,221.3	353.6	181.7	171.94	2.057	
11,300.0	7,321.4	11,051.5	7,152.4	102.4	101.6	-61.45	-1,384.7	3,321.3	353.6	176.8	176.85	2.000	
11,400.0	7,321.4	11,151.5	7,152.4	105.1	104.4	-61.45	-1,384.5	3,421.3	353.7	171.9	181.77	1.946	
11,500.0	7,321.4	11,251.5	7,152.4	107.9	107.1	-61.45	-1,384.3	3,521.3	353.7	167.0	186.68	1.894	
11,600.0	7,321.4	11,351.5	7,152.4	110.6	109.8	-61.46	-1,384.0	3,621.3	353.7	162.1	191.60	1.846	
11,700.0	7,321.4	11,451.5	7,152.4	113.3	112.6	-61.46	-1,383.8	3,721.3	353.7	157.1	196.53	1.800	
11,800.0	7,321.4	11,551.5	7,152.4	116.0	115.3	-61.46	-1,383.5	3,821.3	353.7	152.2	201.46	1.756	
11,900.0	7,321.4	11,651.5	7,152.4	118.8	118.1	-61.46	-1,383.3	3,921.3	353.7	147.3	206.38	1.714	
12,000.0	7,321.4	11,751.5	7,152.4	121.5	120.8	-61.46	-1,383.0	4,021.3	353.7	142.4	211.32	1.674	
12,100.0	7,321.4	11,851.5	7,152.4	124.2	123.6	-61.46	-1,382.8	4,121.3	353.7	137.5	216.25	1.636	
12,200.0	7,321.4	11,951.5	7,152.4	127.0	126.4	-61.46	-1,382.6	4,221.3	353.7	132.5	221.19	1.599	
12,300.0	7,321.4	12,051.5	7,152.4	129.7	129.1	-61.46	-1,382.3	4,321.3	353.7	127.6	226.13	1.564	
12,369.5	7,321.4	12,121.0	7,152.4	131.0	130.9	-61.46	-1,382.1	4,390.8	353.7	125.0	228.75	1.546 SF	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-279HN - Wellbore #1 - Plan #1 (12-10-13) — Offset Site Error: 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-92.12	-1.1	-29.6	29.6				
100.0	100.0	100.0	100.0	0.1	0.1	-92.12	-1.1	-29.6	29.6	29.4	0.22	131.744	
200.0	200.0	200.0	200.0	0.3	0.3	-92.12	-1.1	-29.6	29.6	28.9	0.67	43.915	
300.0	300.0	300.0	300.0	0.6	0.6	-92.12	-1.1	-29.6	29.6	28.5	1.12	26.349	
400.0	400.0	400.0	400.0	0.8	0.8	-92.12	-1.1	-29.6	29.6	28.0	1.57	18.821	
500.0	500.0	500.0	500.0	1.0	1.0	-92.12	-1.1	-29.6	29.6	27.6	2.02	14.638	
600.0	600.0	600.0	600.0	1.2	1.2	-92.12	-1.1	-29.6	29.6	27.1	2.47	11.977	
700.0	700.0	700.0	700.0	1.5	1.5	-92.12	-1.1	-29.6	29.6	26.7	2.92	10.134	
800.0	800.0	800.0	800.0	1.7	1.7	-92.12	-1.1	-29.6	29.6	26.2	3.37	8.783	
900.0	900.0	900.0	900.0	1.9	1.9	-92.12	-1.1	-29.6	29.6	25.8	3.82	7.750	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-92.12	-1.1	-29.6	29.6	25.3	4.27	6.934	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-92.12	-1.1	-29.6	29.6	24.9	4.72	6.274	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-92.12	-1.1	-29.6	29.6	24.4	5.17	5.728	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-92.12	-1.1	-29.6	29.6	24.0	5.62	5.270	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-92.12	-1.1	-29.6	29.6	23.5	6.07	4.879	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-92.12	-1.1	-29.6	29.6	23.1	6.52	4.543	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-92.12	-1.1	-29.6	29.6	22.6	6.97	4.250	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-92.12	-1.1	-29.6	29.6	22.2	7.42	3.992	
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-92.12	-1.1	-29.6	29.6	21.7	7.87	3.764	
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	-92.12	-1.1	-29.6	29.6	21.3	8.32	3.561	
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	-92.12	-1.1	-29.6	29.6	20.8	8.77	3.378	
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	-92.12	-1.1	-29.6	29.6	20.4	9.22	3.213	
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	-92.12	-1.1	-29.6	29.6	19.9	9.66	3.064	
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	-92.12	-1.1	-29.6	29.6	19.5	10.11	2.928	
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-92.12	-1.1	-29.6	29.6	19.0	10.56	2.803	
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	-92.12	-1.1	-29.6	29.6	18.6	11.01	2.689	
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-92.12	-1.1	-29.6	29.6	18.1	11.46	2.583	
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	-92.12	-1.1	-29.6	29.6	17.7	11.91	2.486	
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-92.12	-1.1	-29.6	29.6	17.2	12.36	2.395	
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-92.12	-1.1	-29.6	29.6	16.8	12.81	2.311	
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-92.12	-1.1	-29.6	29.6	16.4	13.26	2.233	
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	-92.12	-1.1	-29.6	29.6	15.9	13.71	2.160	CC, ES
3,200.0	3,200.0	3,199.5	3,199.5	7.1	7.1	-96.88	-3.6	-30.1	30.3	16.2	14.13	2.147	
3,300.0	3,300.0	3,298.6	3,298.2	7.3	7.2	-109.48	-11.2	-31.7	33.6	19.1	14.52	2.315	
3,400.0	3,400.0	3,396.5	3,395.3	7.5	7.4	-124.62	-23.6	-34.2	41.8	26.9	14.92	2.802	
3,500.0	3,500.0	3,492.9	3,490.1	7.8	7.6	-137.14	-40.6	-37.6	56.2	40.9	15.32	3.669	
3,600.0	3,600.0	3,587.3	3,582.0	8.0	7.8	-145.79	-61.7	-41.9	76.7	61.0	15.72	4.881	
3,700.0	3,700.0	3,679.4	3,670.5	8.2	8.0	-151.49	-86.5	-47.0	102.8	86.7	16.12	6.379	
3,800.0	3,800.0	3,768.7	3,755.1	8.4	8.3	-155.30	-114.6	-52.7	133.9	117.4	16.51	8.110	
3,900.0	3,900.0	3,856.0	3,836.4	8.6	8.6	7.02	-145.8	-59.1	167.3	150.4	16.87	9.913	
4,000.0	3,999.6	3,942.1	3,915.1	8.8	8.9	5.21	-180.1	-66.1	200.1	183.0	17.17	11.659	
4,100.0	4,098.8	4,027.1	3,991.1	9.0	9.4	3.87	-217.3	-73.7	232.4	215.0	17.43	13.334	
4,200.0	4,197.1	4,111.9	4,065.2	9.2	9.8	2.82	-257.6	-81.9	264.0	246.3	17.67	14.942	
4,300.0	4,294.3	4,207.7	4,148.0	9.4	10.4	1.91	-304.8	-91.5	292.4	274.5	17.91	16.329	
4,400.0	4,390.2	4,304.8	4,232.1	9.6	11.1	1.19	-352.6	-101.2	315.8	297.7	18.13	17.421	
4,500.0	4,484.4	4,403.0	4,317.0	9.9	11.8	0.60	-400.9	-111.1	334.1	315.8	18.34	18.221	
4,600.0	4,576.8	4,502.1	4,402.7	10.2	12.6	0.07	-449.6	-121.0	347.3	326.8	18.54	18.737	
4,700.0	4,667.1	4,601.7	4,488.8	10.6	13.4	-0.43	-498.6	-131.0	355.3	336.6	18.72	18.977	
4,800.0	4,754.9	4,701.6	4,575.2	11.1	14.2	-0.91	-547.8	-141.0	358.1	339.2	18.90	18.948	
4,900.0	4,841.2	4,801.6	4,661.7	11.7	15.0	-1.40	-597.0	-151.1	357.6	338.2	19.40	18.435	
5,000.0	4,927.4	4,901.5	4,748.1	12.4	15.8	-1.90	-646.1	-161.1	357.1	337.1	19.98	17.877	
5,100.0	5,013.6	5,001.5	4,834.6	13.0	16.7	-2.39	-695.3	-171.1	356.6	336.0	20.57	17.335	

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

ENSIGN Directional

Anticollision Report

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-279HN - Wellbore #1 - Plan #1 (12-10-13) — Offset Site Error: 0.0ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,099.8	5,101.4	4,921.0	13.7	17.6	-2.89	-744.5	-181.1	356.1	334.9	21.19	16.809	
5,300.0	5,186.0	5,201.4	5,007.4	14.5	18.5	-3.38	-793.6	-191.2	355.7	333.8	21.82	16.300	
5,400.0	5,272.2	5,301.3	5,093.9	15.3	19.3	-3.88	-842.8	-201.2	355.2	332.8	22.47	15.808	
5,500.0	5,358.4	5,401.3	5,180.3	16.0	20.2	-4.38	-892.0	-211.2	354.8	331.7	23.14	15.333	
5,600.0	5,444.6	5,501.2	5,266.8	16.9	21.1	-4.88	-941.2	-221.2	354.5	330.6	23.83	14.876	
5,700.0	5,530.8	5,601.2	5,353.2	17.7	22.1	-5.38	-990.3	-231.2	354.1	329.6	24.53	14.434	
5,800.0	5,617.1	5,701.1	5,439.6	18.5	23.0	-5.89	-1,039.5	-241.3	353.8	328.5	25.25	14.010	
5,900.0	5,703.3	5,801.1	5,526.1	19.4	23.9	-6.39	-1,088.7	-251.3	353.5	327.5	25.99	13.600	
6,000.0	5,789.5	5,901.1	5,612.5	20.3	24.8	-6.90	-1,137.8	-261.3	353.2	326.5	26.75	13.206	
6,100.0	5,875.7	6,001.0	5,699.0	21.2	25.8	-7.40	-1,187.0	-271.3	353.0	325.5	27.52	12.827	
6,200.0	5,961.9	6,101.0	5,785.4	22.1	26.7	-7.91	-1,236.2	-281.4	352.8	324.5	28.31	12.461	
6,300.0	6,048.1	6,200.9	5,871.9	23.0	27.6	-8.41	-1,285.3	-291.4	352.6	323.5	29.12	12.109	
6,400.0	6,134.3	6,300.9	5,958.3	23.9	28.6	-8.92	-1,334.5	-301.4	352.5	322.5	29.95	11.769	
6,500.0	6,220.5	6,400.8	6,044.7	24.8	29.5	-9.43	-1,383.7	-311.4	352.3	321.5	30.79	11.442	
6,600.0	6,306.7	6,500.8	6,131.2	25.7	30.5	-9.93	-1,432.9	-321.5	352.2	320.6	31.66	11.127	
6,700.0	6,392.9	6,600.7	6,217.6	26.6	31.4	-10.44	-1,482.0	-331.5	352.2	319.6	32.54	10.823	
6,800.0	6,479.1	6,700.7	6,304.1	27.5	32.3	-10.95	-1,531.2	-341.5	352.1	318.7	33.44	10.530	
6,900.0	6,565.4	6,800.6	6,390.5	28.5	33.3	-11.46	-1,580.4	-351.5	352.1	317.7	34.36	10.247	
6,908.0	6,572.3	6,808.6	6,397.4	28.5	33.4	-11.50	-1,584.3	-352.3	352.1	317.7	34.44	10.224	
7,000.0	6,651.6	6,900.6	6,476.9	29.4	34.2	-11.96	-1,629.5	-361.6	352.1	316.8	35.30	9.974	
7,100.0	6,737.8	7,000.5	6,563.4	30.3	35.2	-12.47	-1,678.7	-371.6	352.1	315.9	36.27	9.710	
7,200.0	6,824.0	7,100.5	6,649.8	31.3	36.2	-12.98	-1,727.9	-381.6	352.2	315.0	37.25	9.456	
7,300.0	6,910.3	7,200.4	6,736.2	32.2	37.1	-7.53	-1,777.1	-391.6	352.3	314.1	38.20	9.222	
7,400.0	6,997.0	7,300.2	6,822.8	32.9	37.9	15.13	-1,826.3	-388.8	352.4	313.6	38.81	9.080	
7,500.0	7,080.7	7,400.3	6,906.9	33.6	38.6	33.44	-1,874.0	-363.6	352.5	313.2	39.25	8.981	
7,600.0	7,157.1	7,500.8	6,984.1	34.1	39.1	45.59	-1,917.8	-317.1	352.6	313.0	39.59	8.904	
7,700.0	7,222.2	7,601.5	7,050.4	34.5	39.6	53.15	-1,955.4	-251.6	352.6	312.6	40.00	8.817	
7,800.0	7,272.8	7,702.5	7,102.2	34.8	40.0	57.73	-1,984.7	-170.2	352.7	312.1	40.64	8.678	
7,900.0	7,306.3	7,803.7	7,136.6	34.9	40.2	60.29	-2,004.0	-77.3	352.8	311.0	41.70	8.459	
8,000.0	7,320.8	7,905.1	7,151.7	35.0	40.3	61.33	-2,012.4	22.3	352.8	309.5	43.24	8.158	
8,100.0	7,321.4	8,005.4	7,152.4	35.0	40.4	61.38	-2,012.6	122.7	352.8	307.6	45.22	7.801	
8,200.0	7,321.4	8,105.4	7,152.4	35.2	40.6	61.38	-2,012.4	222.7	352.8	305.2	47.64	7.405	
8,300.0	7,321.4	8,205.4	7,152.4	35.5	40.8	61.38	-2,012.2	322.7	352.8	302.4	50.44	6.995	
8,400.0	7,321.4	8,305.4	7,152.4	36.0	41.3	61.38	-2,011.9	422.7	352.8	299.3	53.55	6.589	
8,500.0	7,321.4	8,405.4	7,152.4	36.7	41.8	61.38	-2,011.7	522.7	352.8	295.9	56.92	6.199	
8,600.0	7,321.4	8,505.4	7,152.4	37.7	42.6	61.38	-2,011.5	622.7	352.9	292.3	60.52	5.831	
8,700.0	7,321.4	8,605.4	7,152.4	38.9	43.5	61.38	-2,011.3	722.7	352.9	288.6	64.30	5.488	
8,800.0	7,321.4	8,705.4	7,152.4	40.4	44.7	61.39	-2,011.1	822.7	352.9	284.7	68.23	5.172	
8,900.0	7,321.4	8,805.4	7,152.4	42.2	46.0	61.39	-2,010.8	922.7	352.9	280.6	72.29	4.882	
9,000.0	7,321.4	8,905.4	7,152.4	44.1	47.6	61.39	-2,010.6	1,022.7	352.9	276.5	76.46	4.616	
9,100.0	7,321.4	9,005.4	7,152.4	46.1	49.3	61.39	-2,010.4	1,122.7	352.9	272.2	80.72	4.372	
9,200.0	7,321.4	9,105.4	7,152.4	48.3	51.2	61.39	-2,010.2	1,222.7	352.9	267.9	85.06	4.150	
9,300.0	7,321.4	9,205.4	7,152.4	50.6	53.3	61.39	-2,010.0	1,322.7	353.0	263.5	89.46	3.946	
9,400.0	7,321.4	9,305.4	7,152.4	52.9	55.4	61.39	-2,009.8	1,422.7	353.0	259.1	93.92	3.758	
9,500.0	7,321.4	9,405.4	7,152.4	55.3	57.6	61.39	-2,009.5	1,522.7	353.0	254.6	98.43	3.586	
9,600.0	7,321.4	9,505.4	7,152.4	57.8	59.9	61.40	-2,009.3	1,622.7	353.0	250.0	102.98	3.428	
9,700.0	7,321.4	9,605.4	7,152.4	60.2	62.2	61.40	-2,009.1	1,722.7	353.0	245.5	107.57	3.282	
9,800.0	7,321.4	9,705.4	7,152.4	62.8	64.6	61.40	-2,008.9	1,822.7	353.0	240.8	112.19	3.147	
9,900.0	7,321.4	9,805.4	7,152.4	65.3	67.1	61.40	-2,008.7	1,922.7	353.0	236.2	116.84	3.022	
10,000.0	7,321.4	9,905.4	7,152.4	67.9	69.5	61.40	-2,008.4	2,022.7	353.1	231.5	121.51	2.906	
10,100.0	7,321.4	10,005.4	7,152.4	70.4	72.0	61.40	-2,008.2	2,122.7	353.1	226.9	126.21	2.798	
10,200.0	7,321.4	10,105.4	7,152.4	73.0	74.6	61.40	-2,008.0	2,222.7	353.1	222.2	130.93	2.697	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Offset Design Postle West Pad Sec.11-T3N-R68W - Postle LC 11-279HN - Wellbore #1 - Plan #1 (12-10-13)

Offset Site Error: 0.0ft

Survey Program: 0-MWD

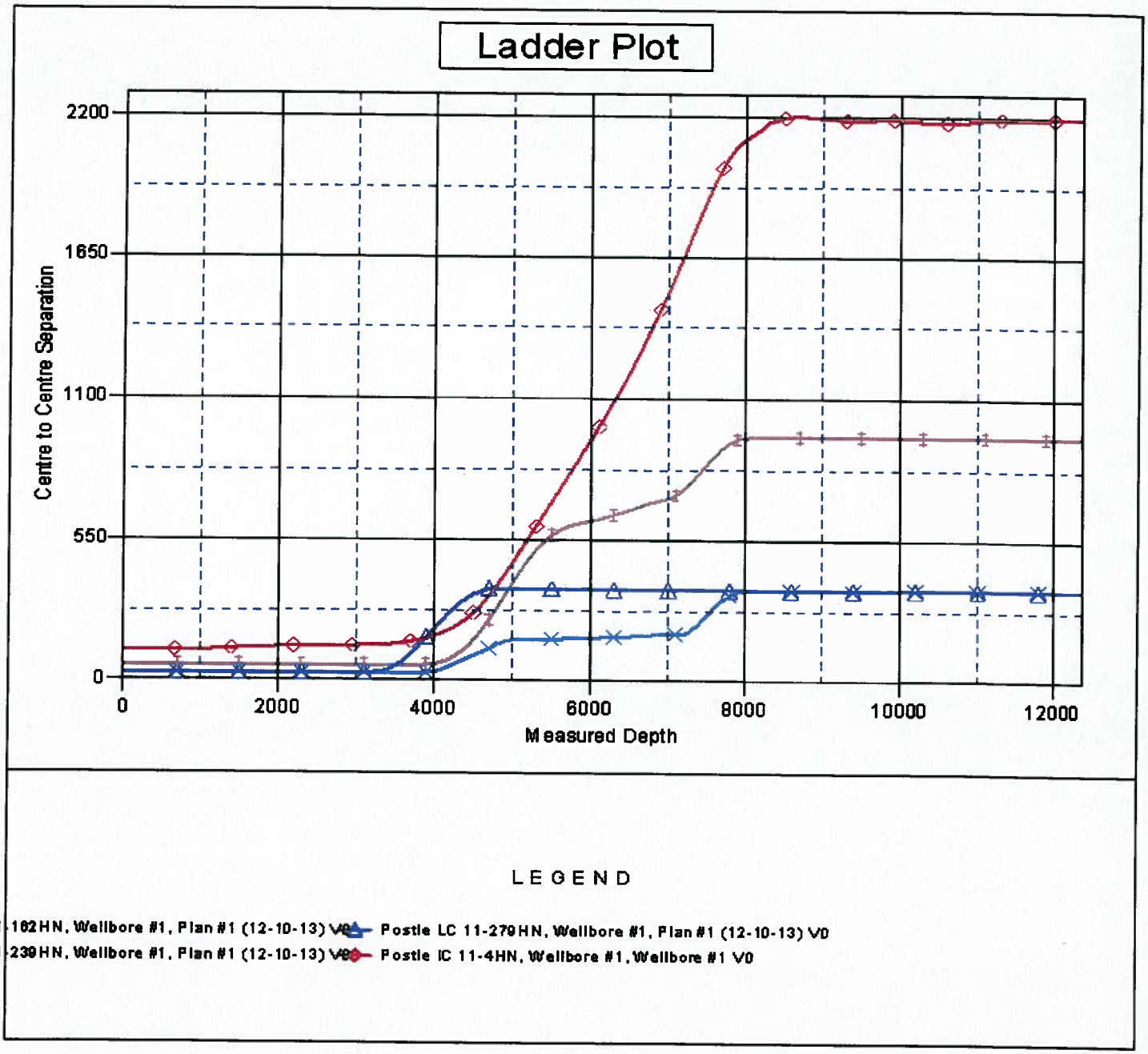
Offset Well Error: 0.0ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,321.4	10,205.4	7,152.4	75.7	77.1	61.41	-2,007.8	2,322.7	353.1	217.4	135.67	2.603	
10,400.0	7,321.4	10,305.4	7,152.4	78.3	79.7	61.41	-2,007.6	2,422.7	353.1	212.7	140.42	2.515	
10,500.0	7,321.4	10,405.4	7,152.4	80.9	82.3	61.41	-2,007.3	2,522.7	353.1	207.9	145.19	2.432	
10,600.0	7,321.4	10,505.4	7,152.4	83.6	84.9	61.41	-2,007.1	2,622.7	353.1	203.2	149.97	2.355	
10,700.0	7,321.4	10,605.4	7,152.4	86.3	87.5	61.41	-2,006.9	2,722.7	353.2	198.4	154.76	2.282	
10,800.0	7,321.4	10,705.4	7,152.4	88.9	90.1	61.41	-2,006.7	2,822.7	353.2	193.6	159.57	2.213	
10,900.0	7,321.4	10,805.4	7,152.4	91.6	92.8	61.41	-2,006.5	2,922.7	353.2	188.8	164.38	2.149	
11,000.0	7,321.4	10,905.4	7,152.4	94.3	95.4	61.41	-2,006.3	3,022.7	353.2	184.0	169.20	2.087	
11,100.0	7,321.4	11,005.4	7,152.4	97.0	98.1	61.42	-2,006.0	3,122.7	353.2	179.2	174.04	2.030	
11,200.0	7,321.4	11,105.4	7,152.4	99.7	100.8	61.42	-2,005.8	3,222.7	353.2	174.4	178.88	1.975	
11,300.0	7,321.4	11,205.4	7,152.4	102.4	103.5	61.42	-2,005.6	3,322.7	353.2	169.5	183.72	1.923	
11,400.0	7,321.4	11,305.4	7,152.4	105.1	106.1	61.42	-2,005.4	3,422.7	353.3	164.7	188.58	1.873	
11,500.0	7,321.4	11,405.4	7,152.4	107.9	108.8	61.42	-2,005.2	3,522.7	353.3	159.8	193.44	1.826	
11,600.0	7,321.4	11,505.4	7,152.4	110.6	111.5	61.42	-2,004.9	3,622.7	353.3	155.0	198.30	1.782	
11,700.0	7,321.4	11,605.4	7,152.4	113.3	114.2	61.42	-2,004.7	3,722.7	353.3	150.1	203.17	1.739	
11,800.0	7,321.4	11,705.4	7,152.4	116.0	116.9	61.42	-2,004.5	3,822.7	353.3	145.3	208.05	1.698	
11,900.0	7,321.4	11,805.4	7,152.4	118.8	119.7	61.43	-2,004.3	3,922.7	353.3	140.4	212.93	1.659	
12,000.0	7,321.4	11,905.4	7,152.4	121.5	122.4	61.43	-2,004.1	4,022.7	353.4	135.5	217.82	1.622	
12,100.0	7,321.4	12,005.4	7,152.4	124.2	125.1	61.43	-2,003.8	4,122.7	353.4	130.7	222.71	1.587	
12,200.0	7,321.4	12,105.4	7,152.4	127.0	127.8	61.43	-2,003.6	4,222.7	353.4	125.8	227.60	1.553	
12,300.0	7,321.4	12,205.4	7,152.4	129.7	130.5	61.43	-2,003.4	4,322.7	353.4	120.9	232.45	1.520	
12,339.2	7,321.4	12,244.6	7,152.4	130.5	131.2	61.43	-2,003.3	4,361.9	353.4	119.7	233.67	1.512	
12,369.5	7,321.4	12,273.0	7,152.4	131.0	131.8	61.43	-2,003.3	4,390.2	353.4	118.8	234.58	1.507 SF	

Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4993.4ft (RKB - 16.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

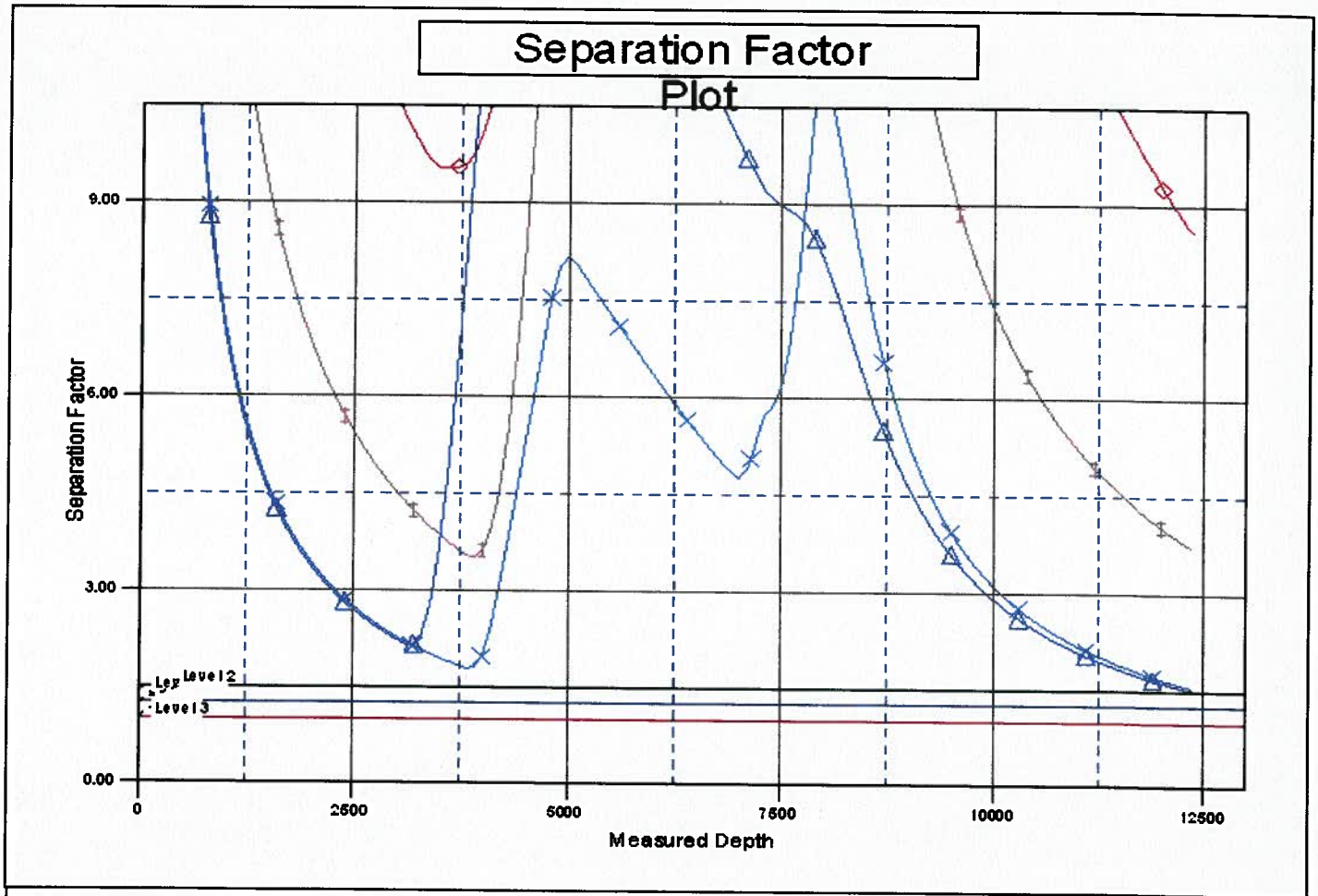
Coordinates are relative to: Postle LC 11-259HC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.34°



Company:	Great Western	**Local Co-ordinate Reference:**	Well Postle LC 11-259HC
Project:	SEC.11-T3N-R68W	**TVD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Reference Site:	Postle West Pad Sec.11-T3N-R68W	**MD Reference:**	WELL @ 4993.4ft (RKB - 16.5')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Postle LC 11-259HC	**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 (12-10-13)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4993.4ft (RKB - 16.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Postle LC 11-259HC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.34°



LEGEND

11-162HN, Wellbore #1, Plan #1 (12-10-13) V0
11-239HN, Wellbore #1, Plan #1 (12-10-13) V0
Postle LC 11-279HN, Wellbore #1, Plan #1 (12-10-13) V0
Postle IC 11-4HN, Wellbore #1, Wellbore #1 V0