

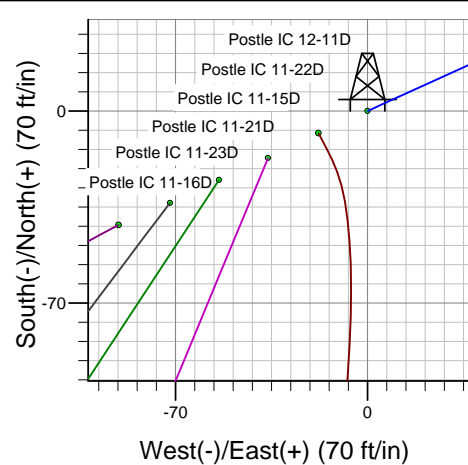
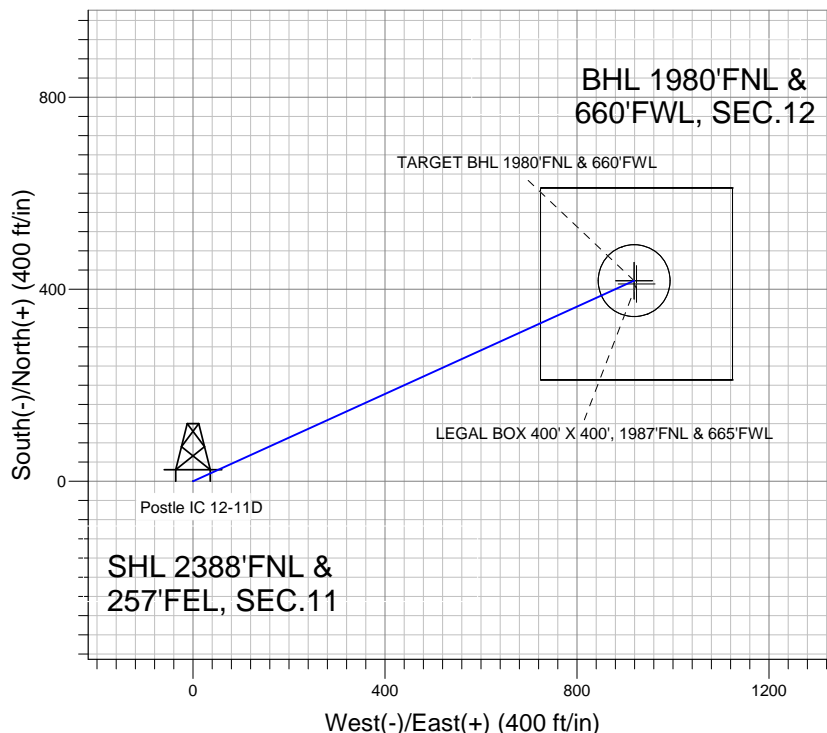
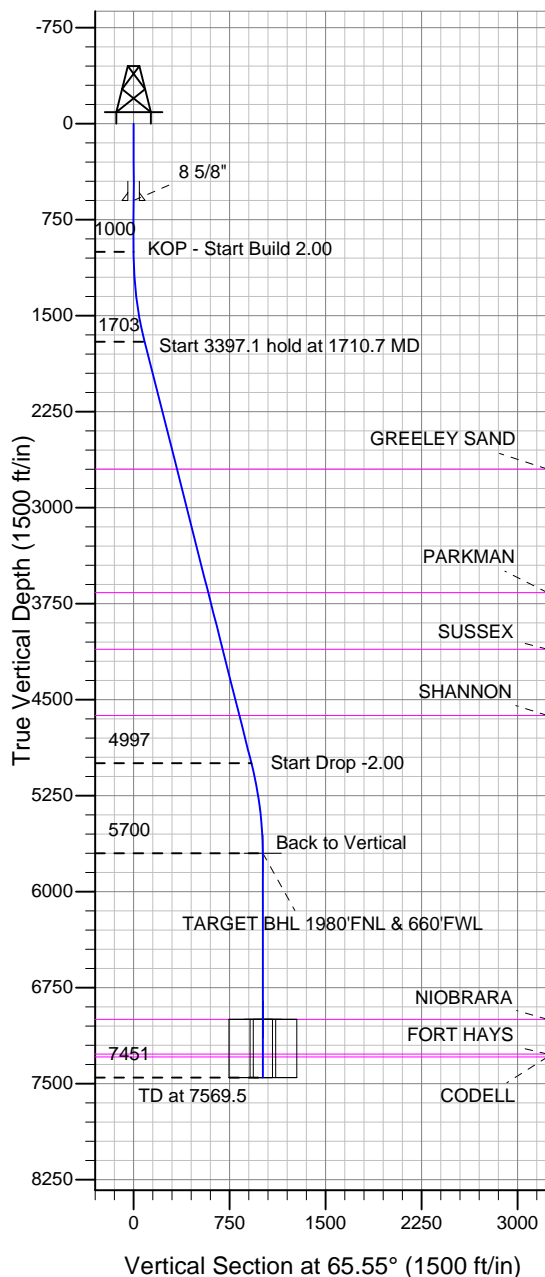
Well Name: Postle IC 12-11D

Surface Location: Postle IC 11-16D Pad Sec.11-T3N-R68W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4950.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1331267.15	3150253.90	40.241475	-104.961764	
Original Well Elev WELL @ 4964.0ft (Original Well Elev)						

Great Western



Postle IC 11-16D Pad Sec.11-T3N-R68W
Postle IC 12-11D
Plan #1 (9-18-12)
12:18, September 20 2012



Azimuths to True North
Magnetic North: 8.79°
Magnetic Field
Strength: 52893.0snT
Dip Angle: 66.85°
Date: 9/18/2012
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1980'FNL & 660'FWL	5700.0	417.9	919.0	40.242622	-104.958472	Point
LEGAL BOX 400' X 400', 1987'FNL & 665'FWL	6997.0	410.9	924.0	40.242603	-104.958454	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 1980'FNL & 660'FWL	6997.0	417.9	919.0	40.242622	-104.958472	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1710.7	14.21	65.55	1703.4	36.3	79.8	2.00	65.55	87.7	
4	5107.8	14.21	65.55	4996.6	381.6	839.2	0.00	0.00	921.9	
5	5818.5	0.00	0.00	5700.0	417.9	919.0	2.00	180.00	1009.6	TARGET BHL 1980'FNL & 660'FWL
6	7569.5	0.00	0.00	7451.0	417.9	919.0	0.00	0.00	1009.6	



Great Western

SEC.11-T3N-R68W

Postle IC 11-16D Pad Sec.11-T3N-R68W

Postle IC 12-11D

Wellbore #1

Plan: Plan #1 (9-18-12)

Standard Planning Report

20 September, 2012

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,710.7	14.21	65.55	1,703.4	36.3	79.8	2.00	2.00	0.00	65.55	
5,107.8	14.21	65.55	4,996.6	381.6	839.2	0.00	0.00	0.00	0.00	
5,818.5	0.00	0.00	5,700.0	417.9	919.0	2.00	-2.00	0.00	180.00	TARGET BHL 1980
7,569.5	0.00	0.00	7,451.0	417.9	919.0	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 12-11D
Company:	Great Western	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Project:	SEC.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	North Reference:	True
Well:	Postle IC 12-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-18-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.00									
1,040.0	0.80	65.55	1,040.0	0.1	0.3	0.3	2.00	2.00	0.00
1,080.0	1.60	65.55	1,080.0	0.5	1.0	1.1	2.00	2.00	0.00
1,120.0	2.40	65.55	1,120.0	1.0	2.3	2.5	2.00	2.00	0.00
1,160.0	3.20	65.55	1,159.9	1.8	4.1	4.5	2.00	2.00	0.00
1,200.0	4.00	65.55	1,199.8	2.9	6.4	7.0	2.00	2.00	0.00
1,240.0	4.80	65.55	1,239.7	4.2	9.1	10.0	2.00	2.00	0.00
1,280.0	5.60	65.55	1,279.6	5.7	12.4	13.7	2.00	2.00	0.00
1,320.0	6.40	65.55	1,319.3	7.4	16.3	17.9	2.00	2.00	0.00
1,360.0	7.20	65.55	1,359.1	9.4	20.6	22.6	2.00	2.00	0.00
1,400.0	8.00	65.55	1,398.7	11.5	25.4	27.9	2.00	2.00	0.00
1,440.0	8.80	65.55	1,438.3	14.0	30.7	33.7	2.00	2.00	0.00
1,480.0	9.60	65.55	1,477.8	16.6	36.5	40.1	2.00	2.00	0.00
1,520.0	10.40	65.55	1,517.1	19.5	42.8	47.1	2.00	2.00	0.00
1,560.0	11.20	65.55	1,556.4	22.6	49.7	54.6	2.00	2.00	0.00
1,600.0	12.00	65.55	1,595.6	25.9	57.0	62.6	2.00	2.00	0.00
1,640.0	12.80	65.55	1,634.7	29.5	64.8	71.2	2.00	2.00	0.00
1,680.0	13.60	65.55	1,673.6	33.2	73.1	80.3	2.00	2.00	0.00
1,710.7	14.21	65.55	1,703.4	36.3	79.8	87.7	2.00	2.00	0.00
Start 3397.1 hold at 1710.7 MD									
1,720.0	14.21	65.55	1,712.4	37.2	81.9	90.0	0.00	0.00	0.00
1,760.0	14.21	65.55	1,751.2	41.3	90.9	99.8	0.00	0.00	0.00
1,800.0	14.21	65.55	1,790.0	45.4	99.8	109.6	0.00	0.00	0.00
1,840.0	14.21	65.55	1,828.8	49.4	108.7	119.5	0.00	0.00	0.00
1,880.0	14.21	65.55	1,867.5	53.5	117.7	129.3	0.00	0.00	0.00
1,920.0	14.21	65.55	1,906.3	57.6	126.6	139.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 12-11D
Company:	Great Western	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Project:	SEC.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	North Reference:	True
Well:	Postle IC 12-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-18-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,960.0	14.21	65.55	1,945.1	61.6	135.6	148.9	0.00	0.00	0.00
2,000.0	14.21	65.55	1,983.9	65.7	144.5	158.7	0.00	0.00	0.00
2,040.0	14.21	65.55	2,022.7	69.8	153.4	168.6	0.00	0.00	0.00
2,080.0	14.21	65.55	2,061.4	73.8	162.4	178.4	0.00	0.00	0.00
2,120.0	14.21	65.55	2,100.2	77.9	171.3	188.2	0.00	0.00	0.00
2,160.0	14.21	65.55	2,139.0	82.0	180.3	198.0	0.00	0.00	0.00
2,200.0	14.21	65.55	2,177.8	86.0	189.2	207.9	0.00	0.00	0.00
2,240.0	14.21	65.55	2,216.5	90.1	198.2	217.7	0.00	0.00	0.00
2,280.0	14.21	65.55	2,255.3	94.2	207.1	227.5	0.00	0.00	0.00
2,320.0	14.21	65.55	2,294.1	98.2	216.0	237.3	0.00	0.00	0.00
2,360.0	14.21	65.55	2,332.9	102.3	225.0	247.1	0.00	0.00	0.00
2,400.0	14.21	65.55	2,371.6	106.4	233.9	257.0	0.00	0.00	0.00
2,440.0	14.21	65.55	2,410.4	110.4	242.9	266.8	0.00	0.00	0.00
2,480.0	14.21	65.55	2,449.2	114.5	251.8	276.6	0.00	0.00	0.00
2,520.0	14.21	65.55	2,488.0	118.6	260.7	286.4	0.00	0.00	0.00
2,560.0	14.21	65.55	2,526.7	122.6	269.7	296.2	0.00	0.00	0.00
2,600.0	14.21	65.55	2,565.5	126.7	278.6	306.1	0.00	0.00	0.00
2,640.0	14.21	65.55	2,604.3	130.8	287.6	315.9	0.00	0.00	0.00
2,680.0	14.21	65.55	2,643.1	134.8	296.5	325.7	0.00	0.00	0.00
2,720.0	14.21	65.55	2,681.8	138.9	305.4	335.5	0.00	0.00	0.00
2,736.7	14.21	65.55	2,698.0	140.6	309.2	339.6	0.00	0.00	0.00
GREELEY SAND									
2,760.0	14.21	65.55	2,720.6	143.0	314.4	345.4	0.00	0.00	0.00
2,800.0	14.21	65.55	2,759.4	147.0	323.3	355.2	0.00	0.00	0.00
2,840.0	14.21	65.55	2,798.2	151.1	332.3	365.0	0.00	0.00	0.00
2,880.0	14.21	65.55	2,836.9	155.1	341.2	374.8	0.00	0.00	0.00
2,920.0	14.21	65.55	2,875.7	159.2	350.1	384.6	0.00	0.00	0.00
2,960.0	14.21	65.55	2,914.5	163.3	359.1	394.5	0.00	0.00	0.00
3,000.0	14.21	65.55	2,953.3	167.3	368.0	404.3	0.00	0.00	0.00
3,040.0	14.21	65.55	2,992.0	171.4	377.0	414.1	0.00	0.00	0.00
3,080.0	14.21	65.55	3,030.8	175.5	385.9	423.9	0.00	0.00	0.00
3,120.0	14.21	65.55	3,069.6	179.5	394.9	433.8	0.00	0.00	0.00
3,160.0	14.21	65.55	3,108.4	183.6	403.8	443.6	0.00	0.00	0.00
3,200.0	14.21	65.55	3,147.1	187.7	412.7	453.4	0.00	0.00	0.00
3,240.0	14.21	65.55	3,185.9	191.7	421.7	463.2	0.00	0.00	0.00
3,280.0	14.21	65.55	3,224.7	195.8	430.6	473.0	0.00	0.00	0.00
3,320.0	14.21	65.55	3,263.5	199.9	439.6	482.9	0.00	0.00	0.00
3,360.0	14.21	65.55	3,302.2	203.9	448.5	492.7	0.00	0.00	0.00
3,400.0	14.21	65.55	3,341.0	208.0	457.4	502.5	0.00	0.00	0.00
3,440.0	14.21	65.55	3,379.8	212.1	466.4	512.3	0.00	0.00	0.00
3,480.0	14.21	65.55	3,418.6	216.1	475.3	522.2	0.00	0.00	0.00
3,520.0	14.21	65.55	3,457.3	220.2	484.3	532.0	0.00	0.00	0.00
3,560.0	14.21	65.55	3,496.1	224.3	493.2	541.8	0.00	0.00	0.00
3,600.0	14.21	65.55	3,534.9	228.3	502.1	551.6	0.00	0.00	0.00
3,640.0	14.21	65.55	3,573.7	232.4	511.1	561.4	0.00	0.00	0.00
3,680.0	14.21	65.55	3,612.4	236.5	520.0	571.3	0.00	0.00	0.00
3,720.0	14.21	65.55	3,651.2	240.5	529.0	581.1	0.00	0.00	0.00
3,731.1	14.21	65.55	3,662.0	241.7	531.5	583.8	0.00	0.00	0.00
PARKMAN									
3,760.0	14.21	65.55	3,690.0	244.6	537.9	590.9	0.00	0.00	0.00
3,800.0	14.21	65.55	3,728.8	248.7	546.9	600.7	0.00	0.00	0.00
3,840.0	14.21	65.55	3,767.5	252.7	555.8	610.6	0.00	0.00	0.00
3,880.0	14.21	65.55	3,806.3	256.8	564.7	620.4	0.00	0.00	0.00
3,920.0	14.21	65.55	3,845.1	260.8	573.7	630.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 12-11D
Company:	Great Western	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Project:	SEC.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	North Reference:	True
Well:	Postle IC 12-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-18-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,960.0	14.21	65.55	3,883.9	264.9	582.6	640.0	0.00	0.00	0.00
4,000.0	14.21	65.55	3,922.6	269.0	591.6	649.8	0.00	0.00	0.00
4,040.0	14.21	65.55	3,961.4	273.0	600.5	659.7	0.00	0.00	0.00
4,080.0	14.21	65.55	4,000.2	277.1	609.4	669.5	0.00	0.00	0.00
4,120.0	14.21	65.55	4,039.0	281.2	618.4	679.3	0.00	0.00	0.00
4,160.0	14.21	65.55	4,077.7	285.2	627.3	689.1	0.00	0.00	0.00
4,188.1	14.21	65.55	4,105.0	288.1	633.6	696.0	0.00	0.00	0.00
SUSSEX									
4,200.0	14.21	65.55	4,116.5	289.3	636.3	698.9	0.00	0.00	0.00
4,240.0	14.21	65.55	4,155.3	293.4	645.2	708.8	0.00	0.00	0.00
4,280.0	14.21	65.55	4,194.1	297.4	654.1	718.6	0.00	0.00	0.00
4,320.0	14.21	65.55	4,232.8	301.5	663.1	728.4	0.00	0.00	0.00
4,360.0	14.21	65.55	4,271.6	305.6	672.0	738.2	0.00	0.00	0.00
4,400.0	14.21	65.55	4,310.4	309.6	681.0	748.1	0.00	0.00	0.00
4,440.0	14.21	65.55	4,349.2	313.7	689.9	757.9	0.00	0.00	0.00
4,480.0	14.21	65.55	4,387.9	317.8	698.8	767.7	0.00	0.00	0.00
4,520.0	14.21	65.55	4,426.7	321.8	707.8	777.5	0.00	0.00	0.00
4,560.0	14.21	65.55	4,465.5	325.9	716.7	787.3	0.00	0.00	0.00
4,600.0	14.21	65.55	4,504.3	330.0	725.7	797.2	0.00	0.00	0.00
4,640.0	14.21	65.55	4,543.1	334.0	734.6	807.0	0.00	0.00	0.00
4,680.0	14.21	65.55	4,581.8	338.1	743.6	816.8	0.00	0.00	0.00
4,720.0	14.21	65.55	4,620.6	342.2	752.5	826.6	0.00	0.00	0.00
4,722.5	14.21	65.55	4,623.0	342.4	753.0	827.2	0.00	0.00	0.00
SHANNON									
4,760.0	14.21	65.55	4,659.4	346.2	761.4	836.5	0.00	0.00	0.00
4,800.0	14.21	65.55	4,698.2	350.3	770.4	846.3	0.00	0.00	0.00
4,840.0	14.21	65.55	4,736.9	354.4	779.3	856.1	0.00	0.00	0.00
4,880.0	14.21	65.55	4,775.7	358.4	788.3	865.9	0.00	0.00	0.00
4,920.0	14.21	65.55	4,814.5	362.5	797.2	875.7	0.00	0.00	0.00
4,960.0	14.21	65.55	4,853.3	366.6	806.1	885.6	0.00	0.00	0.00
5,000.0	14.21	65.55	4,892.0	370.6	815.1	895.4	0.00	0.00	0.00
5,040.0	14.21	65.55	4,930.8	374.7	824.0	905.2	0.00	0.00	0.00
5,080.0	14.21	65.55	4,969.6	378.7	833.0	915.0	0.00	0.00	0.00
5,107.8	14.21	65.55	4,996.6	381.6	839.2	921.9	0.00	0.00	0.00
Start Drop -2.00									
5,120.0	13.97	65.55	5,008.4	382.8	841.9	924.8	2.00	-2.00	0.00
5,160.0	13.17	65.55	5,047.2	386.7	850.4	934.2	2.00	-2.00	0.00
5,200.0	12.37	65.55	5,086.3	390.3	858.5	943.1	2.00	-2.00	0.00
5,240.0	11.57	65.55	5,125.4	393.8	866.0	951.4	2.00	-2.00	0.00
5,280.0	10.77	65.55	5,164.6	397.0	873.1	959.1	2.00	-2.00	0.00
5,320.0	9.97	65.55	5,204.0	400.0	879.6	966.3	2.00	-2.00	0.00
5,360.0	9.17	65.55	5,243.4	402.7	885.7	973.0	2.00	-2.00	0.00
5,400.0	8.37	65.55	5,282.9	405.2	891.2	979.1	2.00	-2.00	0.00
5,440.0	7.57	65.55	5,322.6	407.5	896.3	984.6	2.00	-2.00	0.00
5,480.0	6.77	65.55	5,362.2	409.6	900.8	989.6	2.00	-2.00	0.00
5,520.0	5.97	65.55	5,402.0	411.4	904.9	994.0	2.00	-2.00	0.00
5,560.0	5.17	65.55	5,441.8	413.1	908.4	997.9	2.00	-2.00	0.00
5,600.0	4.37	65.55	5,481.7	414.4	911.4	1,001.2	2.00	-2.00	0.00
5,640.0	3.57	65.55	5,521.6	415.6	914.0	1,004.0	2.00	-2.00	0.00
5,680.0	2.77	65.55	5,561.5	416.5	916.0	1,006.2	2.00	-2.00	0.00
5,720.0	1.97	65.55	5,601.5	417.2	917.5	1,007.9	2.00	-2.00	0.00
5,760.0	1.17	65.55	5,641.5	417.6	918.5	1,009.0	2.00	-2.00	0.00
5,800.0	0.37	65.55	5,681.5	417.9	919.0	1,009.5	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 12-11D
Company:	Great Western	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Project:	SEC.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	North Reference:	True
Well:	Postle IC 12-11D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-18-12)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,818.5	0.00	0.00	5,700.0	417.9	919.0	1,009.6	2.00	-2.00	0.00
Back to Vertical - TARGET BHL 1980'FNL & 660'FWL									
5,840.0	0.00	0.00	5,721.5	417.9	919.0	1,009.6	0.00	0.00	0.00
5,880.0	0.00	0.00	5,761.5	417.9	919.0	1,009.6	0.00	0.00	0.00
5,920.0	0.00	0.00	5,801.5	417.9	919.0	1,009.6	0.00	0.00	0.00
5,960.0	0.00	0.00	5,841.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,881.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,040.0	0.00	0.00	5,921.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,080.0	0.00	0.00	5,961.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,120.0	0.00	0.00	6,001.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,160.0	0.00	0.00	6,041.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,081.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,240.0	0.00	0.00	6,121.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,280.0	0.00	0.00	6,161.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,320.0	0.00	0.00	6,201.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,360.0	0.00	0.00	6,241.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,281.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,440.0	0.00	0.00	6,321.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,480.0	0.00	0.00	6,361.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,520.0	0.00	0.00	6,401.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,560.0	0.00	0.00	6,441.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,481.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,640.0	0.00	0.00	6,521.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,680.0	0.00	0.00	6,561.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,720.0	0.00	0.00	6,601.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,760.0	0.00	0.00	6,641.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,681.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,840.0	0.00	0.00	6,721.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,880.0	0.00	0.00	6,761.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,920.0	0.00	0.00	6,801.5	417.9	919.0	1,009.6	0.00	0.00	0.00
6,960.0	0.00	0.00	6,841.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,881.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,040.0	0.00	0.00	6,921.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,080.0	0.00	0.00	6,961.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,115.5	0.00	0.00	6,997.0	417.9	919.0	1,009.6	0.00	0.00	0.00
NIORARA - LEGAL BOX 400' X 400', 1987'FNL & 665'FWL - TARGET CIRCLE 1980'FNL & 660'FWL									
7,120.0	0.00	0.00	7,001.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,160.0	0.00	0.00	7,041.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,081.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,240.0	0.00	0.00	7,121.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,280.0	0.00	0.00	7,161.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,320.0	0.00	0.00	7,201.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,360.0	0.00	0.00	7,241.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,387.5	0.00	0.00	7,269.0	417.9	919.0	1,009.6	0.00	0.00	0.00
FORT HAYS									
7,400.0	0.00	0.00	7,281.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,409.5	0.00	0.00	7,291.0	417.9	919.0	1,009.6	0.00	0.00	0.00
CODELL									
7,440.0	0.00	0.00	7,321.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,480.0	0.00	0.00	7,361.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,520.0	0.00	0.00	7,401.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,560.0	0.00	0.00	7,441.5	417.9	919.0	1,009.6	0.00	0.00	0.00
7,569.5	0.00	0.00	7,451.0	417.9	919.0	1,009.6	0.00	0.00	0.00

Plan Annotations					
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S (ft)	+E/-W (ft)	
	1,000.0	1,000.0	0.0	0.0	KOP - Start Build 2.00
	1,710.7	1,703.4	36.3	79.8	Start 3397.1 hold at 1710.7 MD
	5,107.8	4,996.6	381.6	839.2	Start Drop -2.00
	5,818.5	5,700.0	417.9	919.0	Back to Vertical
	7,569.5	7,451.0	417.9	919.0	TD at 7569.5



Great Western

SEC.11-T3N-R68W

Postle IC 11-16D Pad Sec.11-T3N-R68W

Postle IC 12-11D

Wellbore #1

Plan #1 (9-18-12)

Anticollision Report

20 September, 2012

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 12-11D
Project:	SEC.11-T3N-R68W	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Reference Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 12-11D	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 (9-18-12)	Offset TVD Reference:	Offset Datum

Offset Design Postle IC 11-16D Pad Sec.11-T3N-R68W - Postle IC 11-22D - Wellbore #1 - Plan #1 (9-18-12)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,200.0	2,177.8	1,976.4	1,891.3	6.2	9.9	133.70	-477.7	-72.5	684.3	673.5	10.86	63.007		
2,300.0	2,274.7	2,057.9	1,964.9	6.7	10.6	134.42	-511.9	-79.2	741.9	730.3	11.51	64.446		
2,400.0	2,371.6	2,139.4	2,038.5	7.1	11.3	135.03	-546.2	-85.9	799.5	787.3	12.17	65.706		
2,500.0	2,468.6	2,220.8	2,112.1	7.6	11.9	135.57	-580.5	-92.5	857.1	844.3	12.83	66.816		
2,600.0	2,565.5	2,302.3	2,185.7	8.1	12.6	136.03	-614.8	-99.2	914.8	901.3	13.49	67.801		
2,700.0	2,662.4	2,383.7	2,259.2	8.6	13.3	136.45	-649.1	-105.9	972.6	958.4	14.16	68.676		
2,800.0	2,759.4	2,465.2	2,332.8	9.1	14.0	136.81	-683.4	-112.6	1,030.3	1,015.5	14.83	69.461		
2,900.0	2,856.3	2,546.6	2,406.4	9.6	14.7	137.14	-717.7	-119.3	1,088.1	1,072.6	15.51	70.167		
3,000.0	2,953.3	2,628.1	2,480.0	10.1	15.3	137.43	-752.0	-125.9	1,145.9	1,129.7	16.18	70.807		
3,100.0	3,050.2	2,709.6	2,553.6	10.6	16.0	137.70	-786.3	-132.6	1,203.8	1,186.9	16.86	71.388		
3,200.0	3,147.1	2,791.0	2,627.2	11.1	16.7	137.94	-820.6	-139.3	1,261.6	1,244.1	17.54	71.917		
3,300.0	3,244.1	2,872.5	2,700.8	11.6	17.4	138.16	-854.9	-146.0	1,319.5	1,301.2	18.22	72.400		
3,400.0	3,341.0	2,953.9	2,774.4	12.1	18.1	138.36	-889.2	-152.7	1,377.3	1,358.4	18.91	72.844		
3,500.0	3,438.0	3,035.4	2,847.9	12.7	18.8	138.55	-923.5	-159.3	1,435.2	1,415.6	19.59	73.253		
3,600.0	3,534.9	3,116.9	2,921.5	13.2	19.4	138.72	-957.7	-166.0	1,493.1	1,472.8	20.28	73.631		
3,700.0	3,631.8	3,198.3	2,995.1	13.7	20.1	138.88	-992.0	-172.7	1,551.0	1,530.1	20.97	73.981		
3,800.0	3,728.8	3,279.8	3,068.7	14.2	20.8	139.03	-1,026.3	-179.4	1,608.9	1,587.3	21.65	74.305		
3,900.0	3,825.7	3,361.2	3,142.3	14.7	21.5	139.17	-1,060.6	-186.0	1,666.9	1,644.5	22.34	74.606		
4,000.0	3,922.6	3,442.7	3,215.9	15.2	22.2	139.29	-1,094.9	-192.7	1,724.8	1,701.7	23.03	74.887		
4,100.0	4,019.6	3,524.2	3,289.5	15.7	22.9	139.41	-1,129.2	-199.4	1,782.7	1,759.0	23.72	75.150		
4,200.0	4,116.5	3,605.6	3,363.0	16.3	23.5	139.53	-1,163.5	-206.1	1,840.6	1,816.2	24.41	75.396		
4,300.0	4,213.5	3,687.1	3,436.6	16.8	24.2	139.63	-1,197.8	-212.8	1,898.6	1,873.5	25.10	75.627		
4,400.0	4,310.4	3,768.5	3,510.2	17.3	24.9	139.73	-1,232.1	-219.4	1,956.5	1,930.7	25.80	75.843		
4,500.0	4,407.3	3,850.0	3,583.8	17.8	25.6	139.82	-1,266.4	-226.1	2,014.5	1,988.0	26.49	76.047		
4,600.0	4,504.3	3,931.4	3,657.4	18.3	26.3	139.91	-1,300.7	-232.8	2,072.4	2,045.2	27.18	76.239		
4,700.0	4,601.2	4,012.9	3,731.0	18.8	27.0	139.99	-1,335.0	-239.5	2,130.3	2,102.5	27.88	76.420		
4,800.0	4,698.2	4,094.4	3,804.6	19.4	27.7	140.07	-1,369.3	-246.2	2,188.3	2,159.7	28.57	76.591		
4,900.0	4,795.1	4,175.8	3,878.1	19.9	28.3	140.15	-1,403.5	-252.8	2,246.3	2,217.0	29.27	76.753		
5,000.0	4,892.0	4,257.3	3,951.7	20.4	29.0	140.22	-1,437.8	-259.5	2,304.2	2,274.3	29.96	76.906		
5,107.8	4,996.6	4,345.1	4,031.1	21.0	29.8	140.29	-1,474.8	-266.7	2,366.7	2,336.0	30.71	77.062		
5,200.0	5,086.3	4,420.9	4,099.5	21.4	30.4	141.13	-1,506.7	-272.9	2,419.2	2,387.6	31.58	76.610		
5,300.0	5,184.3	4,504.5	4,175.1	21.7	31.1	141.92	-1,541.9	-279.8	2,474.0	2,441.5	32.45	76.247		
5,400.0	5,282.9	4,589.6	4,251.9	22.0	31.8	142.59	-1,577.7	-286.8	2,526.4	2,493.2	33.28	75.906		
5,500.0	5,382.1	4,676.0	4,330.0	22.3	32.6	143.16	-1,614.1	-293.8	2,576.5	2,542.4	34.08	75.597		
5,600.0	5,481.7	4,763.6	4,409.1	22.5	33.3	143.62	-1,651.0	-301.0	2,624.2	2,589.4	34.84	75.325		
5,700.0	5,581.5	4,852.3	4,489.3	22.6	34.0	144.00	-1,688.3	-308.3	2,669.4	2,633.8	35.55	75.094		
5,800.0	5,681.5	4,942.0	4,570.3	22.8	34.8	144.29	-1,726.1	-315.7	2,712.1	2,675.9	36.21	74.908		
5,818.5	5,700.0	4,958.7	4,585.4	22.8	34.9	-150.12	-1,733.1	-317.0	2,719.7	2,683.4	36.32	74.878		
5,900.0	5,781.5	5,032.3	4,651.9	22.9	35.6	-150.35	-1,764.1	-323.1	2,753.1	2,716.4	36.71	74.993		
6,000.0	5,881.5	5,122.7	4,733.5	23.0	36.3	-150.63	-1,802.1	-330.5	2,794.2	2,757.0	37.20	75.108		
6,100.0	5,981.5	5,213.0	4,815.1	23.1	37.1	-150.90	-1,840.2	-337.9	2,835.3	2,797.6	37.69	75.223		
6,200.0	6,081.5	5,303.3	4,896.7	23.2	37.8	-151.16	-1,878.2	-345.3	2,876.5	2,838.3	38.18	75.337		
6,300.0	6,181.5	5,393.7	4,978.3	23.4	38.6	-151.42	-1,916.2	-352.7	2,917.7	2,879.0	38.67	75.451		
6,400.0	6,281.5	5,484.0	5,059.9	23.5	39.4	-151.67	-1,954.3	-360.1	2,959.0	2,919.8	39.16	75.565		
6,500.0	6,381.5	5,574.0	5,141.5	23.6	40.2	-151.92	-1,992.4	-367.5	2,999.9	2,959.9	39.65	75.679		
6,600.0	6,481.5	5,664.0	5,223.1	23.8	41.0	-152.17	-2,030.5	-374.9	3,039.9	2,999.9	40.14	75.793		
6,700.0	6,581.5	5,754.0	5,304.7	23.9	41.8	-152.42	-2,068.6	-382.3	3,079.9	3,039.9	40.63	75.907		
6,800.0	6,681.5	5,844.0	5,386.3	24.0	42.6	-152.67	-2,106.7	-389.7	3,119.9	3,079.9	41.12	76.021		
6,900.0	6,781.5	5,934.0	5,467.9	24.1	43.4	-152.92	-2,144.8	-397.1	3,159.9	3,119.9	41.61	76.135		
7,000.0	6,881.5	6,024.0	5,549.5	24.2	44.2	-153.17	-2,182.9	-404.5	3,199.9	3,159.9	42.10	76.249		
7,100.0	6,981.5	6,114.0	5,631.1	24.3	45.0	-153.42	-2,221.0	-411.9	3,239.9	3,199.9	42.59	76.363		
7,200.0	7,081.5	6,204.0	5,712.7	24.4	45.8	-153.67	-2,259.1	-419.3	3,279.9	3,239.9	43.08	76.477		

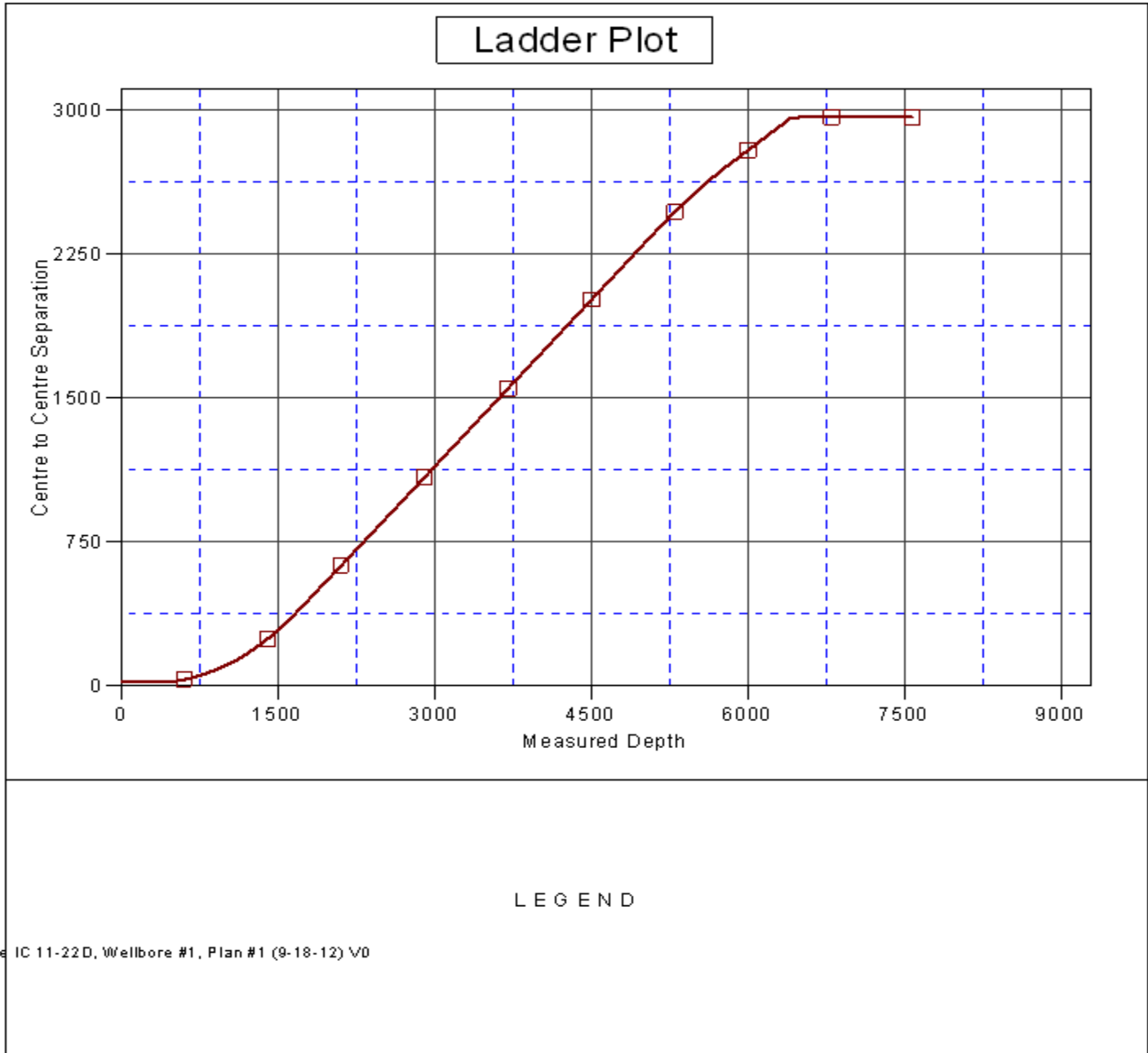
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 12-11D
Project:	SEC.11-T3N-R68W	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Reference Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 12-11D	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 (9-18-12)	Offset TVD Reference:	Offset Datum

Offset Design Postle IC 11-16D Pad Sec.11-T3N-R68W - Postle IC 11-22D - Wellbore #1 - Plan #1 (9-18-12)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis			Distance									Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,300.0	7,181.5	7,648.0	7,181.5	24.7	44.3	-153.29	-2,231.3	-414.1	2,965.7	2,921.4	44.31	66.938		
7,400.0	7,281.5	7,748.0	7,281.5	24.8	44.3	-153.29	-2,231.3	-414.1	2,965.7	2,921.1	44.59	66.510		
7,500.0	7,381.5	7,848.0	7,381.5	25.0	44.4	-153.29	-2,231.3	-414.1	2,965.7	2,920.8	44.88	66.084		
7,569.5	7,451.0	7,917.5	7,451.0	25.1	44.4	-153.29	-2,231.3	-414.1	2,965.7	2,920.6	45.08	65.789		

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 12-11D
Project:	SEC.11-T3N-R68W	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Reference Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 12-11D	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 (9-18-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4964.0ft (Original Well Elev) Coordinates are relative to: Postle IC 12-11D
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
 Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.35°



Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 12-11D
Project:	SEC.11-T3N-R68W	TVD Reference:	WELL @ 4964.0ft (Original Well Elev)
Reference Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	MD Reference:	WELL @ 4964.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Postle IC 12-11D	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 (9-18-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4964.0ft (Original Well Elev) Coordinates are relative to: Postle IC 12-11D
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
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