

Well Name: Postle IC 11-16D

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
0.0

+E/-W
0.0

Northing

1331225.05

Easting

3150163.43

Latitude

40.241361

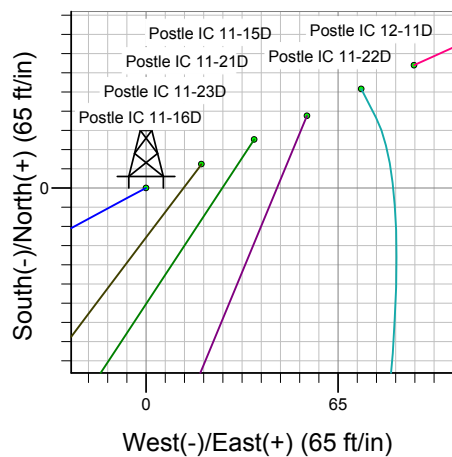
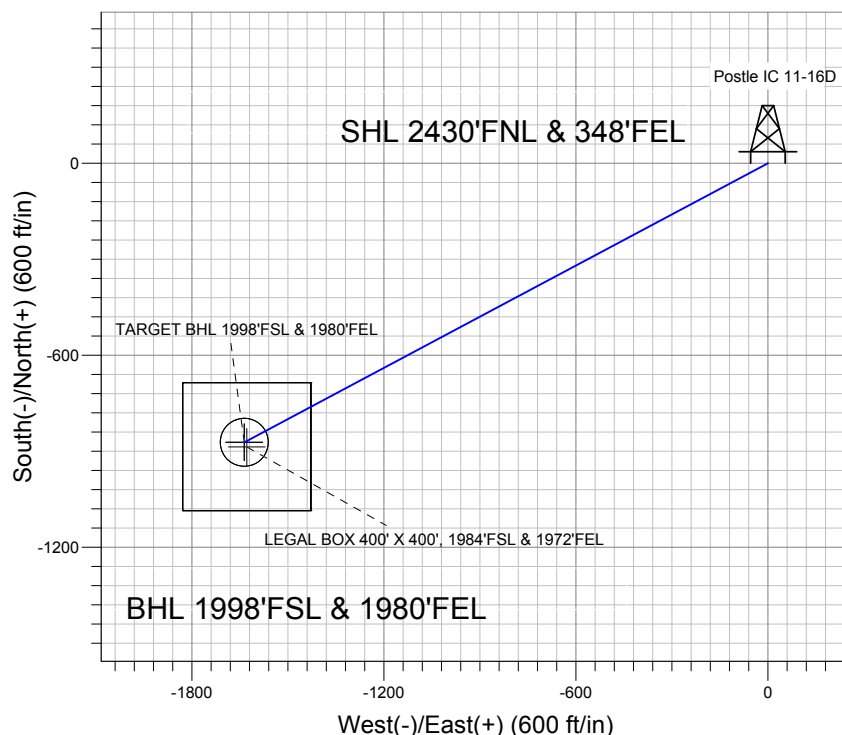
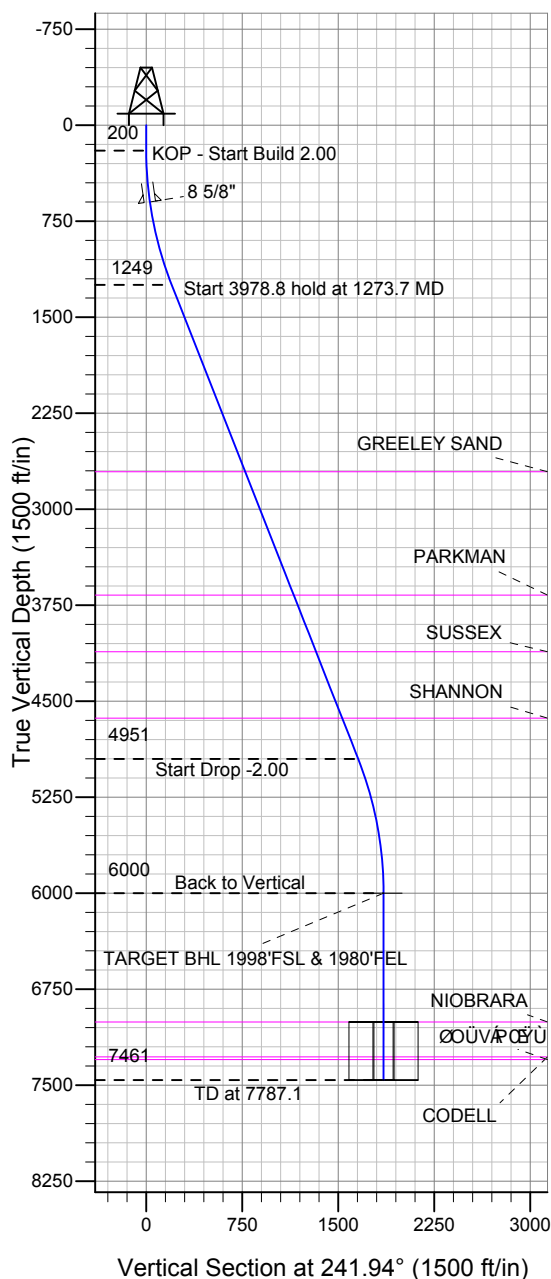
Longitude

-104.962089

Slot

Original Well Elev WELL @ 4964.0ft (Original Well Elev)

Great Western



Postle IC 11-16D Pad Sec.11-T3N-R68W
Postle IC 11-16D
Plan #1 (9-18-12)
10:02, September 20 2012



Azimuths to True North
Magnetic North: 8.79°

Magnetic Field

Strength: 52892.9snT

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 1998'FSL & 1980'FEL	6000.0	-872.1	-1636.3	40.238967	-104.967950	Point
LEGAL BOX 400' X 400', 1984'FSL & 1972'FEL	7007.0	-886.1	-1628.3	40.238928	-104.967921	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 1998'FSL & 1980'FEL	7007.0	-872.1	-1636.3	40.238967	-104.967950	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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1273.7	21.47	241.94	1248.7	-93.5	-175.5	2.00	241.94	198.8	
4	5252.4	21.47	241.94	4951.3	-778.5	-1460.8	0.00	0.00	1655.3	
5	6326.1	0.00	0.00	6000.0	-872.1	-1636.3	2.00	180.00	1854.2	TARGET BHL 1998'FSL & 1980'FEL
6	7787.1	0.00	0.00	7461.0	-872.1	-1636.3	0.00	0.00	1854.2	



Great Western

SEC.11-T3N-R68W

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

Postle IC 11-16D

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,273.7	21.47	241.94	1,248.7	-93.5	-175.5	2.00	2.00	0.00	241.94	
5,252.4	21.47	241.94	4,951.3	-778.5	-1,460.8	0.00	0.00	0.00	0.00	
6,326.1	0.00	0.00	6,000.0	-872.1	-1,636.3	2.00	-2.00	0.00	180.00	TARGET BHL 1998
7,787.1	0.00	0.00	7,461.0	-872.1	-1,636.3	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 11-16D
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 11-16D	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
KOP - Start Build 2.00									
240.0	0.80	241.94	240.0	-0.1	-0.2	0.3	2.00	2.00	0.00
280.0	1.60	241.94	280.0	-0.5	-1.0	1.1	2.00	2.00	0.00
320.0	2.40	241.94	320.0	-1.2	-2.2	2.5	2.00	2.00	0.00
360.0	3.20	241.94	359.9	-2.1	-3.9	4.5	2.00	2.00	0.00
400.0	4.00	241.94	399.8	-3.3	-6.2	7.0	2.00	2.00	0.00
440.0	4.80	241.94	439.7	-4.7	-8.9	10.0	2.00	2.00	0.00
480.0	5.60	241.94	479.6	-6.4	-12.1	13.7	2.00	2.00	0.00
520.0	6.40	241.94	519.3	-8.4	-15.8	17.9	2.00	2.00	0.00
560.0	7.20	241.94	559.1	-10.6	-19.9	22.6	2.00	2.00	0.00
600.0	8.00	241.94	598.7	-13.1	-24.6	27.9	2.00	2.00	0.00
601.3	8.03	241.94	600.0	-13.2	-24.8	28.1	2.00	2.00	0.00
8 5/8"									
640.0	8.80	241.94	638.3	-15.9	-29.8	33.7	2.00	2.00	0.00
680.0	9.60	241.94	677.8	-18.9	-35.4	40.1	2.00	2.00	0.00
720.0	10.40	241.94	717.1	-22.1	-41.5	47.1	2.00	2.00	0.00
760.0	11.20	241.94	756.4	-25.7	-48.1	54.6	2.00	2.00	0.00
800.0	12.00	241.94	795.6	-29.4	-55.2	62.6	2.00	2.00	0.00
840.0	12.80	241.94	834.7	-33.5	-62.8	71.2	2.00	2.00	0.00
880.0	13.60	241.94	873.6	-37.8	-70.9	80.3	2.00	2.00	0.00
920.0	14.40	241.94	912.4	-42.3	-79.4	90.0	2.00	2.00	0.00
960.0	15.20	241.94	951.1	-47.1	-88.4	100.2	2.00	2.00	0.00
1,000.0	16.00	241.94	989.6	-52.2	-97.9	111.0	2.00	2.00	0.00
1,040.0	16.80	241.94	1,028.0	-57.5	-107.9	122.3	2.00	2.00	0.00
1,080.0	17.60	241.94	1,066.2	-63.1	-118.3	134.1	2.00	2.00	0.00
1,120.0	18.40	241.94	1,104.3	-68.9	-129.2	146.5	2.00	2.00	0.00
1,160.0	19.20	241.94	1,142.1	-74.9	-140.6	159.3	2.00	2.00	0.00
1,200.0	20.00	241.94	1,179.8	-81.3	-152.5	172.8	2.00	2.00	0.00
1,240.0	20.80	241.94	1,217.3	-87.8	-164.8	186.7	2.00	2.00	0.00
1,273.7	21.47	241.94	1,248.7	-93.5	-175.5	198.8	2.00	2.00	0.00
Start 3978.8 hold at 1273.7 MD									
1,280.0	21.47	241.94	1,254.6	-94.6	-177.5	201.2	0.00	0.00	0.00
1,320.0	21.47	241.94	1,291.8	-101.5	-190.5	215.8	0.00	0.00	0.00
1,360.0	21.47	241.94	1,329.0	-108.4	-203.4	230.5	0.00	0.00	0.00
1,400.0	21.47	241.94	1,366.3	-115.3	-216.3	245.1	0.00	0.00	0.00
1,440.0	21.47	241.94	1,403.5	-122.2	-229.2	259.7	0.00	0.00	0.00
1,480.0	21.47	241.94	1,440.7	-129.0	-242.1	274.4	0.00	0.00	0.00
1,520.0	21.47	241.94	1,477.9	-135.9	-255.1	289.0	0.00	0.00	0.00
1,560.0	21.47	241.94	1,515.2	-142.8	-268.0	303.7	0.00	0.00	0.00
1,600.0	21.47	241.94	1,552.4	-149.7	-280.9	318.3	0.00	0.00	0.00
1,640.0	21.47	241.94	1,589.6	-156.6	-293.8	333.0	0.00	0.00	0.00
1,680.0	21.47	241.94	1,626.8	-163.5	-306.8	347.6	0.00	0.00	0.00
1,720.0	21.47	241.94	1,664.1	-170.4	-319.7	362.2	0.00	0.00	0.00
1,760.0	21.47	241.94	1,701.3	-177.3	-332.6	376.9	0.00	0.00	0.00
1,800.0	21.47	241.94	1,738.5	-184.1	-345.5	391.5	0.00	0.00	0.00
1,840.0	21.47	241.94	1,775.7	-191.0	-358.4	406.2	0.00	0.00	0.00
1,880.0	21.47	241.94	1,813.0	-197.9	-371.4	420.8	0.00	0.00	0.00

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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 11-16D	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)
1,920.0	21.47	241.94	1,850.2	-204.8	-384.3	435.4	0.00	0.00	0.00
1,960.0	21.47	241.94	1,887.4	-211.7	-397.2	450.1	0.00	0.00	0.00
2,000.0	21.47	241.94	1,924.6	-218.6	-410.1	464.7	0.00	0.00	0.00
2,040.0	21.47	241.94	1,961.9	-225.5	-423.0	479.4	0.00	0.00	0.00
2,080.0	21.47	241.94	1,999.1	-232.3	-436.0	494.0	0.00	0.00	0.00
2,120.0	21.47	241.94	2,036.3	-239.2	-448.9	508.7	0.00	0.00	0.00
2,160.0	21.47	241.94	2,073.5	-246.1	-461.8	523.3	0.00	0.00	0.00
2,200.0	21.47	241.94	2,110.7	-253.0	-474.7	537.9	0.00	0.00	0.00
2,240.0	21.47	241.94	2,148.0	-259.9	-487.7	552.6	0.00	0.00	0.00
2,280.0	21.47	241.94	2,185.2	-266.8	-500.6	567.2	0.00	0.00	0.00
2,320.0	21.47	241.94	2,222.4	-273.7	-513.5	581.9	0.00	0.00	0.00
2,360.0	21.47	241.94	2,259.6	-280.6	-526.4	596.5	0.00	0.00	0.00
2,400.0	21.47	241.94	2,296.9	-287.4	-539.3	611.2	0.00	0.00	0.00
2,440.0	21.47	241.94	2,334.1	-294.3	-552.3	625.8	0.00	0.00	0.00
2,480.0	21.47	241.94	2,371.3	-301.2	-565.2	640.4	0.00	0.00	0.00
2,520.0	21.47	241.94	2,408.5	-308.1	-578.1	655.1	0.00	0.00	0.00
2,560.0	21.47	241.94	2,445.8	-315.0	-591.0	669.7	0.00	0.00	0.00
2,600.0	21.47	241.94	2,483.0	-321.9	-604.0	684.4	0.00	0.00	0.00
2,640.0	21.47	241.94	2,520.2	-328.8	-616.9	699.0	0.00	0.00	0.00
2,680.0	21.47	241.94	2,557.4	-335.6	-629.8	713.7	0.00	0.00	0.00
2,720.0	21.47	241.94	2,594.7	-342.5	-642.7	728.3	0.00	0.00	0.00
2,760.0	21.47	241.94	2,631.9	-349.4	-655.6	742.9	0.00	0.00	0.00
2,800.0	21.47	241.94	2,669.1	-356.3	-668.6	757.6	0.00	0.00	0.00
2,840.0	21.47	241.94	2,706.3	-363.2	-681.5	772.2	0.00	0.00	0.00
2,841.8	21.47	241.94	2,708.0	-363.5	-682.1	772.9	0.00	0.00	0.00
GREELEY SAND									
2,880.0	21.47	241.94	2,743.5	-370.1	-694.4	786.9	0.00	0.00	0.00
2,920.0	21.47	241.94	2,780.8	-377.0	-707.3	801.5	0.00	0.00	0.00
2,960.0	21.47	241.94	2,818.0	-383.9	-720.3	816.2	0.00	0.00	0.00
3,000.0	21.47	241.94	2,855.2	-390.7	-733.2	830.8	0.00	0.00	0.00
3,040.0	21.47	241.94	2,892.4	-397.6	-746.1	845.4	0.00	0.00	0.00
3,080.0	21.47	241.94	2,929.7	-404.5	-759.0	860.1	0.00	0.00	0.00
3,120.0	21.47	241.94	2,966.9	-411.4	-771.9	874.7	0.00	0.00	0.00
3,160.0	21.47	241.94	3,004.1	-418.3	-784.9	889.4	0.00	0.00	0.00
3,200.0	21.47	241.94	3,041.3	-425.2	-797.8	904.0	0.00	0.00	0.00
3,240.0	21.47	241.94	3,078.6	-432.1	-810.7	918.7	0.00	0.00	0.00
3,280.0	21.47	241.94	3,115.8	-438.9	-823.6	933.3	0.00	0.00	0.00
3,320.0	21.47	241.94	3,153.0	-445.8	-836.6	947.9	0.00	0.00	0.00
3,360.0	21.47	241.94	3,190.2	-452.7	-849.5	962.6	0.00	0.00	0.00
3,400.0	21.47	241.94	3,227.5	-459.6	-862.4	977.2	0.00	0.00	0.00
3,440.0	21.47	241.94	3,264.7	-466.5	-875.3	991.9	0.00	0.00	0.00
3,480.0	21.47	241.94	3,301.9	-473.4	-888.2	1,006.5	0.00	0.00	0.00
3,520.0	21.47	241.94	3,339.1	-480.3	-901.2	1,021.2	0.00	0.00	0.00
3,560.0	21.47	241.94	3,376.3	-487.2	-914.1	1,035.8	0.00	0.00	0.00
3,600.0	21.47	241.94	3,413.6	-494.0	-927.0	1,050.4	0.00	0.00	0.00
3,640.0	21.47	241.94	3,450.8	-500.9	-939.9	1,065.1	0.00	0.00	0.00
3,680.0	21.47	241.94	3,488.0	-507.8	-952.8	1,079.7	0.00	0.00	0.00
3,720.0	21.47	241.94	3,525.2	-514.7	-965.8	1,094.4	0.00	0.00	0.00
3,760.0	21.47	241.94	3,562.5	-521.6	-978.7	1,109.0	0.00	0.00	0.00
3,800.0	21.47	241.94	3,599.7	-528.5	-991.6	1,123.6	0.00	0.00	0.00
3,840.0	21.47	241.94	3,636.9	-535.4	-1,004.5	1,138.3	0.00	0.00	0.00
3,877.7	21.47	241.94	3,672.0	-541.9	-1,016.7	1,152.1	0.00	0.00	0.00
PARKMAN									
3,880.0	21.47	241.94	3,674.1	-542.2	-1,017.5	1,152.9	0.00	0.00	0.00

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Site:	Postle IC 11-16D Pad Sec.11-T3N-R68W	North Reference:	True
Well:	Postle IC 11-16D	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)
3,920.0	21.47	241.94	3,711.4	-549.1	-1,030.4	1,167.6	0.00	0.00	0.00
3,960.0	21.47	241.94	3,748.6	-556.0	-1,043.3	1,182.2	0.00	0.00	0.00
4,000.0	21.47	241.94	3,785.8	-562.9	-1,056.2	1,196.9	0.00	0.00	0.00
4,040.0	21.47	241.94	3,823.0	-569.8	-1,069.1	1,211.5	0.00	0.00	0.00
4,080.0	21.47	241.94	3,860.3	-576.7	-1,082.1	1,226.1	0.00	0.00	0.00
4,120.0	21.47	241.94	3,897.5	-583.6	-1,095.0	1,240.8	0.00	0.00	0.00
4,160.0	21.47	241.94	3,934.7	-590.5	-1,107.9	1,255.4	0.00	0.00	0.00
4,200.0	21.47	241.94	3,971.9	-597.3	-1,120.8	1,270.1	0.00	0.00	0.00
4,240.0	21.47	241.94	4,009.1	-604.2	-1,133.8	1,284.7	0.00	0.00	0.00
4,280.0	21.47	241.94	4,046.4	-611.1	-1,146.7	1,299.4	0.00	0.00	0.00
4,320.0	21.47	241.94	4,083.6	-618.0	-1,159.6	1,314.0	0.00	0.00	0.00
4,353.7	21.47	241.94	4,115.0	-623.8	-1,170.5	1,326.4	0.00	0.00	0.00
SUSSEX									
4,360.0	21.47	241.94	4,120.8	-624.9	-1,172.5	1,328.6	0.00	0.00	0.00
4,400.0	21.47	241.94	4,158.0	-631.8	-1,185.4	1,343.3	0.00	0.00	0.00
4,440.0	21.47	241.94	4,195.3	-638.7	-1,198.4	1,357.9	0.00	0.00	0.00
4,480.0	21.47	241.94	4,232.5	-645.5	-1,211.3	1,372.6	0.00	0.00	0.00
4,520.0	21.47	241.94	4,269.7	-652.4	-1,224.2	1,387.2	0.00	0.00	0.00
4,560.0	21.47	241.94	4,306.9	-659.3	-1,237.1	1,401.9	0.00	0.00	0.00
4,600.0	21.47	241.94	4,344.2	-666.2	-1,250.1	1,416.5	0.00	0.00	0.00
4,640.0	21.47	241.94	4,381.4	-673.1	-1,263.0	1,431.1	0.00	0.00	0.00
4,680.0	21.47	241.94	4,418.6	-680.0	-1,275.9	1,445.8	0.00	0.00	0.00
4,720.0	21.47	241.94	4,455.8	-686.9	-1,288.8	1,460.4	0.00	0.00	0.00
4,760.0	21.47	241.94	4,493.1	-693.8	-1,301.7	1,475.1	0.00	0.00	0.00
4,800.0	21.47	241.94	4,530.3	-700.6	-1,314.7	1,489.7	0.00	0.00	0.00
4,840.0	21.47	241.94	4,567.5	-707.5	-1,327.6	1,504.4	0.00	0.00	0.00
4,880.0	21.47	241.94	4,604.7	-714.4	-1,340.5	1,519.0	0.00	0.00	0.00
4,910.4	21.47	241.94	4,633.0	-719.6	-1,350.3	1,530.1	0.00	0.00	0.00
SHANNON									
4,920.0	21.47	241.94	4,641.9	-721.3	-1,353.4	1,533.6	0.00	0.00	0.00
4,960.0	21.47	241.94	4,679.2	-728.2	-1,366.4	1,548.3	0.00	0.00	0.00
5,000.0	21.47	241.94	4,716.4	-735.1	-1,379.3	1,562.9	0.00	0.00	0.00
5,040.0	21.47	241.94	4,753.6	-742.0	-1,392.2	1,577.6	0.00	0.00	0.00
5,080.0	21.47	241.94	4,790.8	-748.8	-1,405.1	1,592.2	0.00	0.00	0.00
5,120.0	21.47	241.94	4,828.1	-755.7	-1,418.0	1,606.9	0.00	0.00	0.00
5,160.0	21.47	241.94	4,865.3	-762.6	-1,431.0	1,621.5	0.00	0.00	0.00
5,200.0	21.47	241.94	4,902.5	-769.5	-1,443.9	1,636.1	0.00	0.00	0.00
5,240.0	21.47	241.94	4,939.7	-776.4	-1,456.8	1,650.8	0.00	0.00	0.00
5,252.4	21.47	241.94	4,951.3	-778.5	-1,460.8	1,655.3	0.00	0.00	0.00
Start Drop -2.00									
5,280.0	20.92	241.94	4,977.0	-783.2	-1,469.6	1,665.3	2.00	-2.00	0.00
5,320.0	20.12	241.94	5,014.5	-789.8	-1,482.0	1,679.3	2.00	-2.00	0.00
5,360.0	19.32	241.94	5,052.1	-796.2	-1,493.9	1,692.8	2.00	-2.00	0.00
5,400.0	18.52	241.94	5,090.0	-802.3	-1,505.4	1,705.8	2.00	-2.00	0.00
5,440.0	17.72	241.94	5,128.0	-808.1	-1,516.3	1,718.2	2.00	-2.00	0.00
5,480.0	16.92	241.94	5,166.2	-813.7	-1,526.8	1,730.1	2.00	-2.00	0.00
5,520.0	16.12	241.94	5,204.5	-819.1	-1,536.9	1,741.5	2.00	-2.00	0.00
5,560.0	15.32	241.94	5,243.0	-824.2	-1,546.4	1,752.4	2.00	-2.00	0.00
5,600.0	14.52	241.94	5,281.7	-829.0	-1,555.5	1,762.7	2.00	-2.00	0.00
5,640.0	13.72	241.94	5,320.5	-833.6	-1,564.1	1,772.4	2.00	-2.00	0.00
5,680.0	12.92	241.94	5,359.4	-837.9	-1,572.3	1,781.6	2.00	-2.00	0.00
5,720.0	12.12	241.94	5,398.4	-842.0	-1,579.9	1,790.3	2.00	-2.00	0.00
5,760.0	11.32	241.94	5,437.6	-845.8	-1,587.1	1,798.4	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 11-16D
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 11-16D	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)	
5,800.0	10.52	241.94	5,476.9	-849.4	-1,593.8	1,806.0	2.00	-2.00	0.00	
5,840.0	9.72	241.94	5,516.2	-852.7	-1,600.0	1,813.0	2.00	-2.00	0.00	
5,880.0	8.92	241.94	5,555.7	-855.8	-1,605.7	1,819.5	2.00	-2.00	0.00	
5,920.0	8.12	241.94	5,595.3	-858.5	-1,610.9	1,825.4	2.00	-2.00	0.00	
5,960.0	7.32	241.94	5,634.9	-861.1	-1,615.7	1,830.8	2.00	-2.00	0.00	
6,000.0	6.52	241.94	5,674.6	-863.3	-1,619.9	1,835.6	2.00	-2.00	0.00	
6,040.0	5.72	241.94	5,714.4	-865.3	-1,623.7	1,839.9	2.00	-2.00	0.00	
6,080.0	4.92	241.94	5,754.2	-867.1	-1,627.0	1,843.6	2.00	-2.00	0.00	
6,120.0	4.12	241.94	5,794.1	-868.6	-1,629.8	1,846.8	2.00	-2.00	0.00	
6,160.0	3.32	241.94	5,834.0	-869.8	-1,632.1	1,849.4	2.00	-2.00	0.00	
6,200.0	2.52	241.94	5,874.0	-870.8	-1,633.9	1,851.4	2.00	-2.00	0.00	
6,240.0	1.72	241.94	5,913.9	-871.4	-1,635.2	1,852.9	2.00	-2.00	0.00	
6,280.0	0.92	241.94	5,953.9	-871.9	-1,636.0	1,853.8	2.00	-2.00	0.00	
6,320.0	0.12	241.94	5,993.9	-872.1	-1,636.3	1,854.2	2.00	-2.00	0.00	
6,326.1	0.00	0.00	6,000.0	-872.1	-1,636.3	1,854.2	2.00	-2.00	0.00	
Back to Vertical - TARGET BHL 1998'FSL & 1980'FEL										
6,360.0	0.00	0.00	6,033.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,073.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,440.0	0.00	0.00	6,113.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,480.0	0.00	0.00	6,153.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,520.0	0.00	0.00	6,193.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,560.0	0.00	0.00	6,233.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,273.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,640.0	0.00	0.00	6,313.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,680.0	0.00	0.00	6,353.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,720.0	0.00	0.00	6,393.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,760.0	0.00	0.00	6,433.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,473.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,840.0	0.00	0.00	6,513.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,880.0	0.00	0.00	6,553.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,920.0	0.00	0.00	6,593.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
6,960.0	0.00	0.00	6,633.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,673.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,040.0	0.00	0.00	6,713.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,080.0	0.00	0.00	6,753.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,120.0	0.00	0.00	6,793.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,160.0	0.00	0.00	6,833.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,200.0	0.00	0.00	6,873.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,240.0	0.00	0.00	6,913.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,280.0	0.00	0.00	6,953.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,320.0	0.00	0.00	6,993.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,333.1	0.00	0.00	7,007.0	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
NIOBRARA - TARGET CIRCLE 1998'FSL & 1980'FEL - LEGAL BOX 400' X 400', 1984'FSL & 1972'FEL										
7,360.0	0.00	0.00	7,033.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,073.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,440.0	0.00	0.00	7,113.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,480.0	0.00	0.00	7,153.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,520.0	0.00	0.00	7,193.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,560.0	0.00	0.00	7,233.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,273.9	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
7,605.1	0.00	0.00	7,279.0	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	
FORT HAYS										
7,627.1	0.00	0.00	7,301.0	-872.1	-1,636.3	1,854.2	0.00	0.00	0.00	

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	2,841.8	2,708.0	GREELEY SAND		0.00	
	3,877.7	3,672.0	PARKMAN		0.00	
	4,353.7	4,115.0	SUSSEX		0.00	
	4,910.4	4,633.0	SHANNON		0.00	
	7,333.1	7,007.0	NIOBRARA		0.00	
	7,605.1	7,279.0	FORT HAYS		0.00	
	7,627.1	7,301.0	CODELL		0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Postle IC 11-16D
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 11-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-18-12)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP - Start Build 2.00
1,273.7	1,248.7	-93.5	-175.5	Start 3978.8 hold at 1273.7 MD
5,252.4	4,951.3	-778.5	-1,460.8	Start Drop -2.00
6,326.1	6,000.0	-872.1	-1,636.3	Back to Vertical
7,787.1	7,461.0	-872.1	-1,636.3	TD at 7787.1



Great Western

SEC.11-T3N-R68W

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

Postle IC 11-16D

Wellbore #1

Plan #1 (9-18-12)

Anticollision Report

20 September, 2012

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-16D
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 11-16D	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	Plan #1 (9-18-12)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	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 9/20/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	7,787.1	Plan #1 (9-18-12) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Postle IC 11-16D Pad Sec.11-T3N-R68W						
Postle IC 11-23D - Wellbore #1 - Plan #1 (9-18-12)	200.0	200.0	20.4	19.7	30.184	CC, ES
Postle IC 11-23D - Wellbore #1 - Plan #1 (9-18-12)	1,900.0	1,897.7	192.1	173.7	10.443	SF

Offset Design Postle IC 11-16D Pad Sec.11-T3N-R68W - Postle IC 11-23D - Wellbore #1 - Plan #1 (9-18-12)												
Survey Program: 0-MWD												
Reference												
Offset												
Semi Major Axis												
Distance												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
0.0	0.0	0.0	0.0	0.0	0.0	66.78	8.0	18.7	20.4			
100.0	100.0	100.0	100.0	0.1	0.1	66.78	8.0	18.7	20.4	20.1	0.22	90.551
200.0	200.0	200.0	200.0	0.3	0.3	66.78	8.0	18.7	20.4	19.7	0.67	30.184 CC, ES
300.0	300.0	300.0	300.0	0.5	0.6	-175.54	8.0	18.7	22.1	21.0	1.11	19.829
400.0	399.8	400.6	400.6	0.8	0.8	-174.52	6.6	17.6	25.8	24.3	1.53	16.864
500.0	499.5	501.4	501.2	1.0	1.0	-170.98	2.4	14.4	30.0	28.0	1.95	15.411
600.0	598.7	602.1	601.6	1.3	1.2	-166.02	-4.7	9.1	34.9	32.5	2.40	14.558
700.0	697.5	702.9	701.6	1.6	1.5	-160.42	-14.5	1.7	40.7	37.8	2.90	14.048
800.0	795.6	803.6	801.0	2.0	1.8	-154.75	-27.2	-7.9	47.7	44.2	3.48	13.703
900.0	893.1	904.2	899.8	2.5	2.2	-149.36	-42.6	-19.6	56.0	51.8	4.17	13.416
1,000.0	989.6	1,004.8	997.7	3.0	2.6	-144.45	-60.8	-33.3	65.7	60.7	5.00	13.144
1,100.0	1,085.3	1,105.2	1,094.6	3.6	3.1	-140.07	-81.7	-49.1	76.9	70.9	5.97	12.883
1,200.0	1,179.8	1,205.4	1,190.4	4.2	3.7	-136.22	-105.2	-66.8	89.5	82.5	7.08	12.640
1,273.7	1,248.7	1,279.2	1,260.2	4.8	4.2	-133.69	-124.2	-81.2	99.8	91.8	8.00	12.472
1,300.0	1,273.2	1,305.5	1,285.0	4.9	4.3	-132.85	-131.3	-86.6	103.6	95.3	8.35	12.407
1,400.0	1,366.3	1,405.4	1,378.2	5.7	5.0	-129.13	-160.0	-108.3	117.5	107.8	9.78	12.014
1,500.0	1,459.3	1,505.1	1,469.8	6.4	5.8	-124.74	-191.2	-131.8	131.1	119.8	11.37	11.533
1,600.0	1,552.4	1,604.2	1,559.6	7.2	6.6	-119.84	-224.8	-157.2	144.9	131.8	13.08	11.079
1,700.0	1,645.4	1,702.5	1,647.1	8.0	7.5	-114.63	-260.5	-184.1	159.4	144.5	14.87	10.724
1,800.0	1,738.5	1,800.1	1,732.8	8.7	8.4	-109.47	-297.7	-212.3	175.2	158.5	16.66	10.512
1,900.0	1,831.6	1,897.7	1,818.4	9.5	9.3	-105.12	-335.1	-240.6	192.1	173.7	18.40	10.443 SF
2,000.0	1,924.6	1,995.2	1,904.0	10.3	10.2	-101.48	-372.6	-268.8	210.0	189.9	20.07	10.462
2,100.0	2,017.7	2,092.8	1,989.6	11.0	11.1	-98.41	-410.0	-297.1	228.6	206.9	21.70	10.534
2,200.0	2,110.7	2,190.4	2,075.1	11.8	12.1	-95.81	-447.4	-325.3	247.7	224.4	23.29	10.636
2,300.0	2,203.8	2,288.0	2,160.7	12.6	13.0	-93.58	-484.8	-353.6	267.3	242.4	24.85	10.756

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

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-16D
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 11-16D	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 11-23D - 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						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,400.0	2,296.9	2,385.5	2,246.3	13.3	14.0	-91.65	-522.2	-381.8	287.1	260.8	26.38	10.883	
2,500.0	2,389.9	2,483.1	2,331.9	14.1	14.9	-89.97	-559.6	-410.1	307.3	279.4	27.90	11.014	
2,600.0	2,483.0	2,580.7	2,417.4	14.9	15.8	-88.50	-597.0	-438.4	327.7	298.3	29.41	11.144	
2,700.0	2,576.0	2,678.2	2,503.0	15.7	16.8	-87.20	-634.4	-466.6	348.3	317.4	30.90	11.272	
2,800.0	2,669.1	2,775.8	2,588.6	16.4	17.7	-86.04	-671.8	-494.9	369.0	336.6	32.38	11.396	
2,900.0	2,762.2	2,873.4	2,674.2	17.2	18.7	-85.01	-709.2	-523.1	389.9	356.0	33.86	11.515	
3,000.0	2,855.2	2,971.0	2,759.7	18.0	19.6	-84.08	-746.6	-551.4	410.8	375.5	35.32	11.630	
3,100.0	2,948.3	3,068.5	2,845.3	18.8	20.6	-83.25	-784.0	-579.6	431.9	395.1	36.79	11.740	
3,200.0	3,041.3	3,166.1	2,930.9	19.5	21.5	-82.49	-821.4	-607.9	453.0	414.8	38.25	11.844	
3,300.0	3,134.4	3,263.7	3,016.5	20.3	22.5	-81.79	-858.8	-636.2	474.2	434.5	39.70	11.944	
3,400.0	3,227.5	3,361.3	3,102.0	21.1	23.4	-81.16	-896.2	-664.4	495.5	454.3	41.16	12.039	
3,500.0	3,320.5	3,458.8	3,187.6	21.9	24.4	-80.58	-933.6	-692.7	516.8	474.2	42.61	12.130	
3,600.0	3,413.6	3,556.4	3,273.2	22.6	25.3	-80.04	-971.0	-720.9	538.2	494.1	44.05	12.216	
3,700.0	3,506.6	3,654.0	3,358.8	23.4	26.3	-79.55	-1,008.4	-749.2	559.6	514.1	45.50	12.298	
3,800.0	3,599.7	3,751.5	3,444.3	24.2	27.2	-79.09	-1,045.8	-777.4	581.0	534.1	46.95	12.376	
3,900.0	3,692.7	3,849.1	3,529.9	25.0	28.2	-78.67	-1,083.2	-805.7	602.5	554.1	48.39	12.451	
4,000.0	3,785.8	3,946.7	3,615.5	25.7	29.1	-78.27	-1,120.6	-834.0	624.0	574.2	49.83	12.522	
4,100.0	3,878.9	4,044.3	3,701.0	26.5	30.1	-77.90	-1,158.0	-862.2	645.6	594.3	51.27	12.590	
4,200.0	3,971.9	4,141.8	3,786.6	27.3	31.0	-77.55	-1,195.4	-890.5	667.1	614.4	52.71	12.655	
4,300.0	4,065.0	4,239.4	3,872.2	28.1	32.0	-77.23	-1,232.8	-918.7	688.7	634.5	54.15	12.717	
4,400.0	4,158.0	4,337.0	3,957.8	28.8	32.9	-76.93	-1,270.2	-947.0	710.3	654.7	55.59	12.777	
4,500.0	4,251.1	4,434.5	4,043.3	29.6	33.9	-76.64	-1,307.6	-975.2	731.9	674.9	57.03	12.833	
4,600.0	4,344.2	4,532.1	4,128.9	30.4	34.8	-76.37	-1,345.0	-1,003.5	753.6	695.1	58.47	12.888	
4,700.0	4,437.2	4,629.7	4,214.5	31.2	35.8	-76.11	-1,382.4	-1,031.7	775.2	715.3	59.91	12.940	
4,800.0	4,530.3	4,727.3	4,300.1	31.9	36.7	-75.87	-1,419.8	-1,060.0	796.9	735.5	61.34	12.990	
4,900.0	4,623.3	4,824.8	4,385.6	32.7	37.7	-75.64	-1,457.2	-1,088.3	818.5	755.8	62.78	13.038	
5,000.0	4,716.4	4,922.4	4,471.2	33.5	38.6	-75.43	-1,494.6	-1,116.5	840.2	776.0	64.22	13.084	
5,100.0	4,809.5	5,020.0	4,556.8	34.3	39.6	-75.22	-1,532.0	-1,144.8	861.9	796.3	65.65	13.129	
5,200.0	4,902.5	5,117.5	4,642.4	35.0	40.5	-75.03	-1,569.4	-1,173.0	883.6	816.6	67.09	13.171	
5,252.4	4,951.3	5,168.7	4,687.2	35.5	41.0	-74.93	-1,589.0	-1,187.8	895.0	827.2	67.84	13.193	
5,300.0	4,995.7	5,215.1	4,727.9	35.8	41.5	-75.02	-1,606.8	-1,201.3	905.5	836.9	68.54	13.212	
5,400.0	5,090.0	5,312.3	4,813.2	36.3	42.4	-75.09	-1,644.0	-1,229.4	928.1	858.3	69.81	13.295	
5,500.0	5,185.3	5,409.0	4,898.0	36.8	43.3	-74.98	-1,681.1	-1,257.5	951.6	880.7	70.94	13.414	
5,600.0	5,281.7	5,505.2	4,982.4	37.2	44.3	-74.73	-1,718.0	-1,285.3	976.1	904.2	71.95	13.568	
5,700.0	5,378.9	5,600.7	5,066.1	37.6	45.2	-74.34	-1,754.6	-1,312.9	1,001.8	929.0	72.82	13.757	
5,800.0	5,476.9	5,695.3	5,149.1	38.0	46.1	-73.84	-1,790.8	-1,340.4	1,028.6	955.0	73.56	13.983	
5,900.0	5,575.5	5,789.0	5,231.3	38.3	47.0	-73.24	-1,826.8	-1,367.5	1,056.7	982.5	74.17	14.246	
6,000.0	5,674.6	5,881.7	5,312.5	38.5	47.9	-72.57	-1,862.3	-1,394.3	1,086.2	1,011.6	74.67	14.548	
6,100.0	5,774.2	5,973.1	5,392.8	38.7	48.8	-71.84	-1,897.3	-1,420.8	1,117.3	1,042.3	75.04	14.889	
6,200.0	5,874.0	6,066.0	5,492.2	38.8	49.8	-70.73	-1,939.9	-1,452.9	1,149.5	1,074.4	75.19	15.289	
6,300.0	5,973.9	6,215.9	5,609.1	38.9	50.7	-69.42	-1,985.1	-1,487.1	1,180.8	1,105.7	75.04	15.735	
6,326.1	6,000.0	6,250.3	5,640.5	38.9	50.9	172.87	-1,996.3	-1,495.6	1,188.7	1,113.7	74.98	15.854	
6,400.0	6,073.9	6,349.7	5,732.1	39.0	51.5	174.20	-2,027.2	-1,518.9	1,210.3	1,135.8	74.56	16.233	
6,500.0	6,173.9	6,488.8	5,862.3	39.0	52.3	175.78	-2,066.0	-1,548.2	1,237.1	1,163.0	74.06	16.703	
6,600.0	6,273.9	6,632.6	5,999.4	39.1	52.9	177.12	-2,100.8	-1,574.6	1,260.6	1,186.9	73.66	17.114	
6,700.0	6,373.9	6,780.8	6,142.7	39.2	53.5	178.23	-2,130.9	-1,597.3	1,280.5	1,207.2	73.36	17.456	
6,800.0	6,473.9	6,932.7	6,291.4	39.3	54.0	179.09	-2,155.6	-1,615.9	1,296.6	1,223.5	73.16	17.724	
6,900.0	6,573.9	7,087.6	6,444.4	39.3	54.4	179.72	-2,174.2	-1,630.0	1,308.6	1,235.6	73.07	17.910	
7,000.0	6,673.9	7,244.5	6,600.6	39.4	54.7	-179.87	-2,186.4	-1,639.2	1,316.4	1,243.3	73.08	18.014	
7,100.0	6,773.9	7,402.7	6,758.7	39.5	54.9	-179.70	-2,191.7	-1,643.2	1,319.7	1,246.5	73.19	18.031	
7,200.0	6,873.9	7,518.0	6,873.9	39.6	54.9	-179.69	-2,191.9	-1,643.4	1,319.9	1,246.5	73.36	17.992	
7,300.0	6,973.9	7,618.0	6,973.9	39.6	55.0	-179.69	-2,191.9	-1,643.4	1,319.9	1,246.4	73.52	17.953	

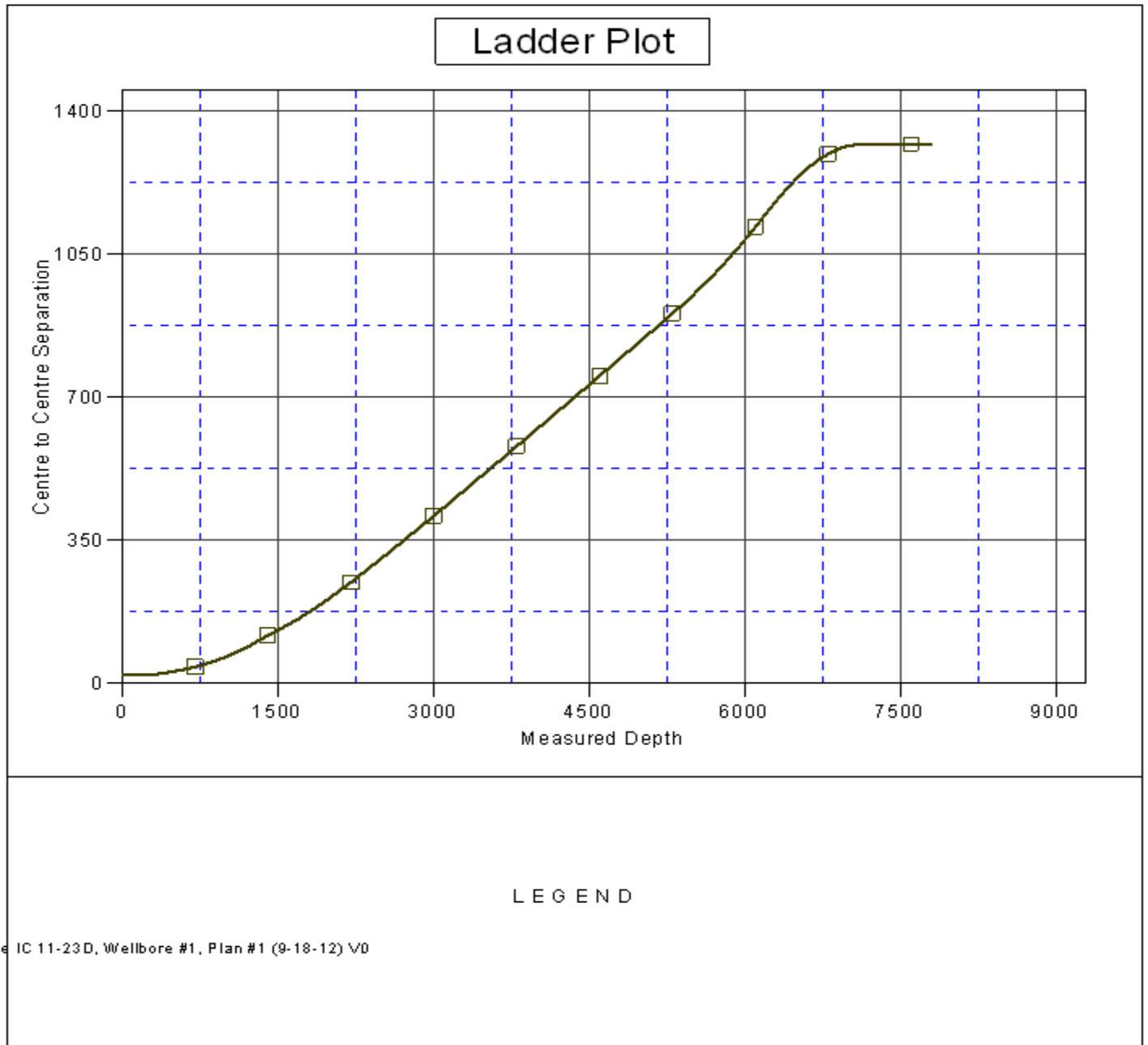
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-16D
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 11-16D	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 11-23D - 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,400.0	7,073.9	7,718.0	7,073.9	39.7	55.0	-179.69	-2,191.9	-1,643.4	1,319.9	1,246.2	73.68	17.913	
7,500.0	7,173.9	7,818.0	7,173.9	39.8	55.1	-179.69	-2,191.9	-1,643.4	1,319.9	1,246.0	73.85	17.873	
7,600.0	7,273.9	7,918.0	7,273.9	39.9	55.1	-179.69	-2,191.9	-1,643.4	1,319.9	1,245.9	74.02	17.832	
7,700.0	7,373.9	8,018.0	7,373.9	40.0	55.2	-179.69	-2,191.9	-1,643.4	1,319.9	1,245.7	74.19	17.792	
7,787.1	7,461.0	8,105.1	7,461.0	40.0	55.2	-179.69	-2,191.9	-1,643.4	1,319.9	1,245.6	74.34	17.756	

Company:	Great Western	Local Co-ordinate Reference:	Well Postle IC 11-16D
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 11-16D	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 11-16D
 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 11-16D
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 11-16D	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 11-16D
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°

