

Great Western

Well Name: **Tailholt FD 11-379HN**

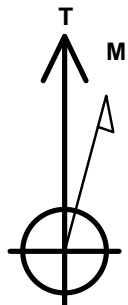
Surface Location: Tailholt FD Horizontal Pad Sec.11-T6N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4874.2

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1428645.30	3175698.01	40.508314	-104.868136	
RKB - 16.5' WELL @ 4890.7ft (RKB - 16.5')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 241'FNL & 547'FWL	-1.3	0.0	0.0	Point
BHL 470'FSL & 470'FWL	7116.7	-4670.5	-85.1	Point
Landing Pt. 460'FNL & 470'FWL	7158.7	-218.6	-77.3	Point



Azimuths to True North
Magnetic North: 8.68°

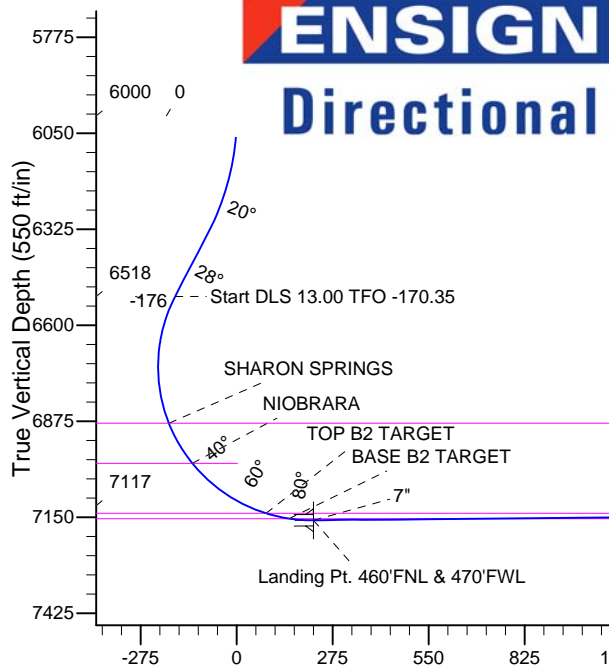
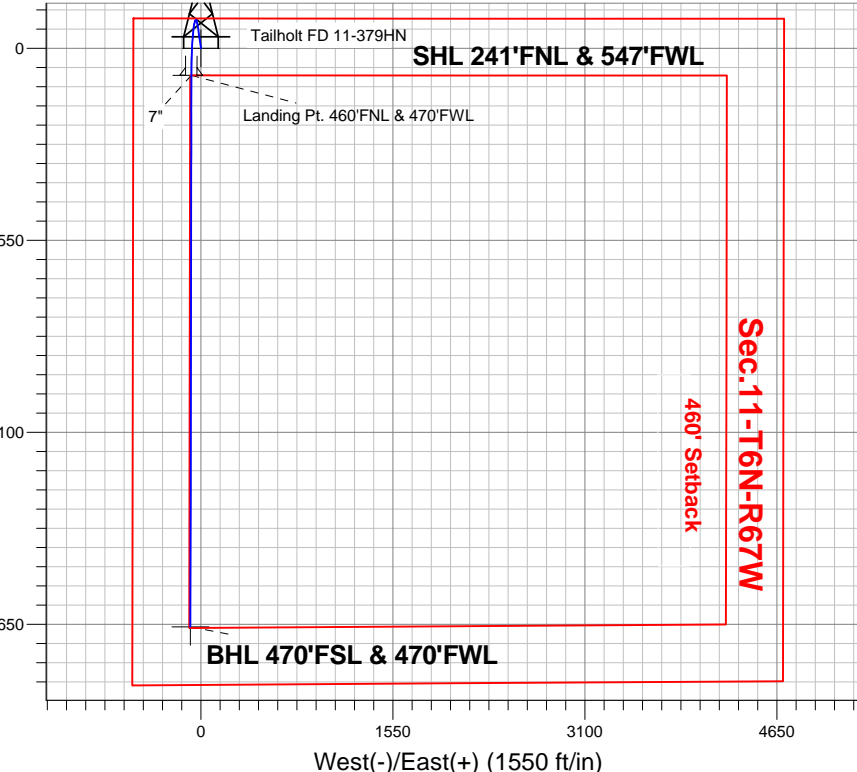
Magnetic Field
Strength: 52982.5snT
Dip Angle: 67.06°
Date: 4/18/2013
Model: IGRF2010

Tailholt FD Horizontal Pad Sec.11-T6N-R67W
Tailholt FD 11-379HN
Plan #4 (10-22-13)
15:16, October 22 2013

ANNOTATIONS

TVD	MD	Annotation
6000.0	6000.0	KOP - Start Build 8.00
6517.5	6554.7	Start DLS 13.00 TFO -170.35
7116.7	11913.7	TD at 11913.7

South(-)/North(+) (1550 ft/in)



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	6000.0	0.00	0.00	6000.0	0.0	0.0	0.00	0.00	0.0	
3	6345.9	27.67	351.59	6332.6	81.0	-12.0	8.00	351.59	-80.8	
4	6554.7	27.67	351.59	6517.5	177.0	-26.2	0.00	0.00	-176.5	
5	7461.5	90.54	180.11	7158.7	-218.6	-77.3	13.00	-170.35	219.9	Landing Pt. 460'FNL & 470'FWL
6	7462.4	90.54	180.10	7158.7	-219.5	-77.3	1.00	-86.94	220.9	
7	11913.7	90.54	180.10	7116.7	-4670.5	-85.1	0.00	0.00	4671.3	BHL 470'FSL & 470'FWL

Vertical Section at 181.04° (550 ft/in)

BHL 470'FSL & 470'FWL

TD at 11913.7



Great Western

SEC.11-T6N-R67W

Tailholt FD Horizontal Pad Sec.11-T6N-R67W

Tailholt FD 11-379HN

Wellbore #1

Plan: Plan #4 (10-22-13)

Standard Planning Report

22 October, 2013

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	
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
6,345.9	27.67	351.59	6,332.6	81.0	-12.0	8.00	8.00	0.00	351.59	
6,554.7	27.67	351.59	6,517.5	177.0	-26.2	0.00	0.00	0.00	0.00	
7,461.5	90.54	180.11	7,158.7	-218.6	-77.3	13.00	6.93	-18.91	-170.35	Landing Pt. 460°FN
7,462.4	90.54	180.10	7,158.7	-219.5	-77.3	1.00	0.05	-1.00	-86.94	
11,913.7	90.54	180.10	7,116.7	-4,670.5	-85.1	0.00	0.00	0.00	0.00	BHL 470°FSL & 470°FN

Database:	Landmark	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Company:	Great Western	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Project:	SEC.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	North Reference:	True
Well:	Tailholt FD 11-379HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (10-22-13)		

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
SHL 241'FNL & 547'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
1,056.7	0.00	0.00	1,056.7	0.0	0.0	0.0	0.00	0.00	0.00
PIERRE									
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
3,653.7	0.00	0.00	3,653.7	0.0	0.0	0.0	0.00	0.00	0.00
PARKMAN									
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,190.7	0.00	0.00	4,190.7	0.0	0.0	0.0	0.00	0.00	0.00
SUSSEX									
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Company:	Great Western	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Project:	SEC.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	North Reference:	True
Well:	Tailholt FD 11-379HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (10-22-13)		

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)
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,758.7	0.00	0.00	4,758.7	0.0	0.0	0.0	0.00	0.00	0.00
SHANNON									
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 8.00									
6,100.0	8.00	351.59	6,099.7	6.9	-1.0	-6.9	8.00	8.00	0.00
6,200.0	16.00	351.59	6,197.4	27.4	-4.1	-27.4	8.00	8.00	0.00
6,300.0	24.00	351.59	6,291.3	61.3	-9.1	-61.1	8.00	8.00	0.00
6,345.9	27.67	351.59	6,332.6	81.0	-12.0	-80.8	8.00	8.00	0.00
6,400.0	27.67	351.59	6,380.5	105.9	-15.7	-105.6	0.00	0.00	0.00
6,500.0	27.67	351.59	6,469.1	151.8	-22.5	-151.4	0.00	0.00	0.00
6,554.7	27.67	351.59	6,517.5	177.0	-26.2	-176.5	0.00	0.00	0.00
Start DLS 13.00 TFO -170.35									
6,600.0	21.89	348.94	6,558.6	195.7	-29.3	-195.1	13.00	-12.77	-5.84
6,700.0	9.55	332.49	6,654.8	221.4	-36.8	-220.7	13.00	-12.34	-16.45
6,800.0	6.37	224.53	6,754.2	224.9	-44.5	-224.0	13.00	-3.18	-107.96
6,900.0	18.09	193.98	6,851.8	205.7	-52.2	-204.8	13.00	11.72	-30.55
6,930.8	21.98	191.31	6,880.7	195.5	-54.5	-194.4	13.00	12.66	-8.70
SHARON SPRINGS									
7,000.0	30.84	187.67	6,942.7	165.1	-59.4	-164.0	13.00	12.79	-5.26
7,064.8	39.19	185.65	6,995.7	128.2	-63.7	-127.0	13.00	12.88	-3.11
NIOBRARA									
7,100.0	43.73	184.84	7,022.1	105.0	-65.8	-103.8	13.00	12.91	-2.32
7,200.0	56.66	183.10	7,085.9	28.5	-71.0	-27.2	13.00	12.93	-1.74
7,300.0	69.61	181.82	7,131.0	-60.4	-74.7	61.8	13.00	12.95	-1.28
7,323.8	72.69	181.55	7,138.7	-82.9	-75.4	84.3	13.00	12.96	-1.13
TOP B2 TARGET									
7,390.6	81.36	180.83	7,153.7	-148.0	-76.7	149.3	13.00	12.96	-1.07
BASE B2 TARGET									
7,400.0	82.57	180.74	7,155.0	-157.3	-76.9	158.6	13.00	12.96	-1.03
7,461.5	90.54	180.11	7,158.7	-218.6	-77.3	219.9	13.00	12.96	-1.02
7" - Landing Pt. 460'FNL & 470'FWL									
7,462.4	90.54	180.10	7,158.7	-219.5	-77.3	220.9	1.09	0.37	-1.02
7,500.0	90.54	180.10	7,158.3	-257.1	-77.4	258.5	0.00	0.00	0.00
7,600.0	90.54	180.10	7,157.4	-357.1	-77.5	358.4	0.00	0.00	0.00
7,700.0	90.54	180.10	7,156.4	-457.1	-77.7	458.4	0.00	0.00	0.00
7,800.0	90.54	180.10	7,155.5	-557.1	-77.9	558.4	0.00	0.00	0.00
7,900.0	90.54	180.10	7,154.6	-657.1	-78.1	658.4	0.00	0.00	0.00
8,000.0	90.54	180.10	7,153.6	-757.1	-78.2	758.4	0.00	0.00	0.00
8,100.0	90.54	180.10	7,152.7	-857.1	-78.4	858.4	0.00	0.00	0.00
8,200.0	90.54	180.10	7,151.7	-957.1	-78.6	958.3	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
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Project:	SEC.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	North Reference:	True
Well:	Tailholt FD 11-379HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (10-22-13)		

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)
8,300.0	90.54	180.10	7,150.8	-1,057.1	-78.8	1,058.3	0.00	0.00	0.00
8,400.0	90.54	180.10	7,149.8	-1,157.1	-79.0	1,158.3	0.00	0.00	0.00
8,500.0	90.54	180.10	7,148.9	-1,257.1	-79.1	1,258.3	0.00	0.00	0.00
8,600.0	90.54	180.10	7,148.0	-1,357.0	-79.3	1,358.3	0.00	0.00	0.00
8,700.0	90.54	180.10	7,147.0	-1,457.0	-79.5	1,458.2	0.00	0.00	0.00
8,800.0	90.54	180.10	7,146.1	-1,557.0	-79.7	1,558.2	0.00	0.00	0.00
8,900.0	90.54	180.10	7,145.1	-1,657.0	-79.8	1,658.2	0.00	0.00	0.00
9,000.0	90.54	180.10	7,144.2	-1,757.0	-80.0	1,758.2	0.00	0.00	0.00
9,100.0	90.54	180.10	7,143.2	-1,857.0	-80.2	1,858.2	0.00	0.00	0.00
9,200.0	90.54	180.10	7,142.3	-1,957.0	-80.4	1,958.2	0.00	0.00	0.00
9,300.0	90.54	180.10	7,141.4	-2,057.0	-80.5	2,058.1	0.00	0.00	0.00
9,400.0	90.54	180.10	7,140.4	-2,157.0	-80.7	2,158.1	0.00	0.00	0.00
9,500.0	90.54	180.10	7,139.5	-2,257.0	-80.9	2,258.1	0.00	0.00	0.00
9,600.0	90.54	180.10	7,138.5	-2,357.0	-81.1	2,358.1	0.00	0.00	0.00
9,700.0	90.54	180.10	7,137.6	-2,457.0	-81.2	2,458.1	0.00	0.00	0.00
9,800.0	90.54	180.10	7,136.6	-2,557.0	-81.4	2,558.0	0.00	0.00	0.00
9,900.0	90.54	180.10	7,135.7	-2,657.0	-81.6	2,658.0	0.00	0.00	0.00
10,000.0	90.54	180.10	7,134.8	-2,757.0	-81.8	2,758.0	0.00	0.00	0.00
10,100.0	90.54	180.10	7,133.8	-2,857.0	-81.9	2,858.0	0.00	0.00	0.00
10,200.0	90.54	180.10	7,132.9	-2,957.0	-82.1	2,958.0	0.00	0.00	0.00
10,300.0	90.54	180.10	7,131.9	-3,057.0	-82.3	3,058.0	0.00	0.00	0.00
10,400.0	90.54	180.10	7,131.0	-3,157.0	-82.5	3,157.9	0.00	0.00	0.00
10,500.0	90.54	180.10	7,130.0	-3,257.0	-82.6	3,257.9	0.00	0.00	0.00
10,600.0	90.54	180.10	7,129.1	-3,357.0	-82.8	3,357.9	0.00	0.00	0.00
10,700.0	90.54	180.10	7,128.1	-3,456.9	-83.0	3,457.9	0.00	0.00	0.00
10,800.0	90.54	180.10	7,127.2	-3,556.9	-83.2	3,557.9	0.00	0.00	0.00
10,900.0	90.54	180.10	7,126.3	-3,656.9	-83.3	3,657.9	0.00	0.00	0.00
11,000.0	90.54	180.10	7,125.3	-3,756.9	-83.5	3,757.8	0.00	0.00	0.00
11,100.0	90.54	180.10	7,124.4	-3,856.9	-83.7	3,857.8	0.00	0.00	0.00
11,200.0	90.54	180.10	7,123.4	-3,956.9	-83.9	3,957.8	0.00	0.00	0.00
11,300.0	90.54	180.10	7,122.5	-4,056.9	-84.0	4,057.8	0.00	0.00	0.00
11,400.0	90.54	180.10	7,121.5	-4,156.9	-84.2	4,157.8	0.00	0.00	0.00
11,500.0	90.54	180.10	7,120.6	-4,256.9	-84.4	4,257.7	0.00	0.00	0.00
11,600.0	90.54	180.10	7,119.7	-4,356.9	-84.6	4,357.7	0.00	0.00	0.00
11,700.0	90.54	180.10	7,118.7	-4,456.9	-84.7	4,457.7	0.00	0.00	0.00
11,800.0	90.54	180.10	7,117.8	-4,556.9	-84.9	4,557.7	0.00	0.00	0.00
11,900.0	90.54	180.10	7,116.8	-4,656.9	-85.1	4,657.7	0.00	0.00	0.00
11,913.7	90.54	180.10	7,116.7	-4,670.5	-85.1	4,671.3	0.00	0.00	0.00
BHL 470'FSL & 470'FWL									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,461.5	7,158.7	7"	7	7-1/2	

Database:	Landmark	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Company:	Great Western	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Project:	SEC.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	North Reference:	True
Well:	Tailholt FD 11-379HN	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (10-22-13)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,056.7	1,056.7	PIERRE		0.00		
3,653.7	3,653.7	PARKMAN		0.00		
4,190.7	4,190.7	SUSSEX		0.00		
4,758.7	4,758.7	SHANNON		0.00		
6,930.8	6,880.7	SHARON SPRINGS		0.00		
7,064.8	6,995.7	NIOBRARA		0.00		
7,323.8	7,138.7	TOP B2 TARGET		0.00		
7,390.6	7,153.7	BASE B2 TARGET		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
6,000.0	6,000.0	0.0	0.0	KOP - Start Build 8.00	
6,554.7	6,517.5	177.0	-26.2	Start DLS 13.00 TFO -170.35	
11,913.7	7,116.7	-4,670.6	-85.1	TD at 11913.7	



Great Western

SEC.11-T6N-R67W

Tailholt FD Horizontal Pad Sec.11-T6N-R67W

Tailholt FD 11-379HN

Wellbore #1

Plan #4 (10-22-13)

Anticollision Report

22 October, 2013

Company:	Great Western	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS, 7648-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		
1,900.0	1,900.0	1,902.1	1,901.8	4.9	3.9	105.53	-7.1	25.5	26.5	17.6	8.85	2.991		
2,000.0	2,000.0	2,002.2	2,001.9	5.2	4.0	103.37	-6.1	25.5	26.2	17.0	9.20	2.848		
2,100.0	2,100.0	2,102.1	2,101.8	5.4	4.1	100.94	-4.9	25.3	25.7	16.2	9.57	2.689		
2,109.4	2,109.4	2,111.4	2,111.2	5.5	4.1	100.73	-4.8	25.3	25.7	16.1	9.60	2.680		
2,200.0	2,200.0	2,202.0	2,201.8	5.7	4.2	98.88	-4.0	25.5	25.9	15.9	9.92	2.606		
2,300.0	2,300.0	2,301.9	2,301.6	6.0	4.3	97.17	-3.3	25.9	26.1	15.9	10.28	2.544		
2,400.0	2,400.0	2,401.5	2,401.3	6.2	4.4	95.27	-2.5	27.3	27.4	16.7	10.63	2.576		
2,500.0	2,500.0	2,501.5	2,501.2	6.5	4.5	93.55	-1.8	29.4	29.5	18.5	10.99	2.680		
2,600.0	2,600.0	2,601.6	2,601.3	6.8	4.6	92.07	-1.1	31.3	31.3	19.9	11.37	2.751		
2,700.0	2,700.0	2,701.6	2,701.3	7.0	4.7	90.86	-0.5	32.8	32.9	21.1	11.76	2.794		
2,800.0	2,800.0	2,801.8	2,801.5	7.3	4.9	89.96	0.0	34.1	34.1	21.9	12.16	2.804		
2,900.0	2,900.0	2,901.9	2,901.6	7.6	5.0	89.39	0.4	34.9	34.9	22.3	12.57	2.773		
3,000.0	3,000.0	3,002.2	3,001.8	7.8	5.2	89.78	0.1	35.1	35.1	22.1	13.01	2.700		
3,100.0	3,100.0	3,102.2	3,101.9	8.1	5.4	91.38	-0.8	34.9	35.0	21.5	13.46	2.597		
3,200.0	3,200.0	3,202.2	3,201.9	8.4	5.6	92.66	-1.6	34.7	34.7	20.8	13.93	2.494		
3,300.0	3,300.0	3,302.2	3,301.9	8.6	5.8	93.81	-2.3	34.4	34.5	20.1	14.40	2.396		
3,400.0	3,400.0	3,402.2	3,401.8	8.9	6.0	95.19	-3.1	34.3	34.4	19.5	14.87	2.313		
3,500.0	3,500.0	3,502.2	3,501.9	9.2	6.2	96.64	-4.0	34.1	34.3	19.0	15.35	2.236		
3,600.0	3,600.0	3,602.4	3,602.0	9.4	6.4	97.98	-4.7	33.5	33.9	18.0	15.83	2.139		
3,700.0	3,700.0	3,702.6	3,702.2	9.7	6.6	99.42	-5.4	32.5	32.9	16.6	16.31	2.019		
3,800.0	3,800.0	3,802.8	3,802.5	10.0	6.8	100.59	-5.7	30.7	31.3	14.5	16.78	1.864		
3,900.0	3,900.0	3,902.9	3,902.5	10.2	7.0	102.04	-6.0	28.3	28.9	11.7	17.25	1.676		
4,000.0	4,000.0	4,002.5	4,002.1	10.5	7.2	102.84	-6.0	26.4	27.1	9.3	17.73	1.527		
4,100.0	4,100.0	4,102.4	4,102.0	10.8	7.4	103.19	-6.0	25.5	26.2	8.0	18.20	1.442 Level 3		
4,200.0	4,200.0	4,202.5	4,202.0	11.0	7.6	102.96	-5.7	24.8	25.5	6.8	18.66	1.365 Level 3		
4,300.0	4,300.0	4,302.6	4,302.1	11.3	7.9	103.69	-5.7	23.4	24.1	5.0	19.14	1.261 Level 3		
4,400.0	4,400.0	4,402.5	4,402.0	11.5	8.1	105.94	-6.3	22.0	22.9	3.3	19.64	1.167 Level 2		
4,500.0	4,500.0	4,502.3	4,501.9	11.8	8.3	108.00	-6.9	21.2	22.3	2.2	20.13	1.108 Level 2		
4,534.7	4,534.7	4,536.9	4,536.5	11.9	8.4	108.23	-7.0	21.1	22.2	1.9	20.31	1.096 Level 2, CC, ES, SF		
4,600.0	4,600.0	4,602.1	4,601.6	12.1	8.5	108.59	-7.2	21.4	22.6	2.0	20.59	1.096 Level 2		
4,700.0	4,700.0	4,702.0	4,701.5	12.3	8.6	107.67	-7.2	22.5	23.7	2.7	20.97	1.129 Level 2		
4,800.0	4,800.0	4,802.0	4,801.5	12.6	8.7	105.22	-6.5	23.9	24.8	3.4	21.33	1.161 Level 2		
4,900.0	4,900.0	4,902.0	4,901.5	12.9	8.8	102.93	-5.8	25.2	25.9	4.2	21.71	1.192 Level 2		
5,000.0	5,000.0	5,001.9	5,001.4	13.1	9.0	101.46	-5.4	26.7	27.3	5.2	22.09	1.234 Level 2		
5,100.0	5,100.0	5,102.0	5,101.4	13.4	9.1	100.85	-5.4	28.1	28.7	6.2	22.49	1.274 Level 3		
5,200.0	5,200.0	5,202.0	5,201.5	13.7	9.2	100.88	-5.6	29.3	29.9	7.0	22.90	1.304 Level 3		
5,300.0	5,300.0	5,302.0	5,301.5	13.9	9.4	101.28	-6.1	30.4	31.0	7.6	23.33	1.328 Level 3		
5,400.0	5,400.0	5,402.1	5,401.5	14.2	9.6	101.66	-6.5	31.3	31.9	8.2	23.76	1.343 Level 3		
5,500.0	5,500.0	5,502.1	5,501.5	14.5	9.7	101.71	-6.6	32.0	32.7	8.5	24.19	1.351 Level 3		
5,600.0	5,600.0	5,601.3	5,600.8	14.7	9.9	99.94	-5.9	33.8	34.3	9.7	24.60	1.394 Level 3		
5,700.0	5,700.0	5,701.3	5,700.6	15.0	10.0	95.40	-3.5	37.2	37.4	12.4	25.01	1.496 Level 3		
5,800.0	5,800.0	5,801.4	5,800.6	15.3	10.2	89.70	0.2	40.9	40.9	15.5	25.42	1.608		
5,900.0	5,900.0	5,898.9	5,897.6	15.5	10.3	79.06	8.9	45.8	46.8	21.0	25.83	1.813		
6,000.0	6,000.0	5,996.7	5,994.2	15.8	10.4	68.13	21.5	53.6	58.3	32.0	26.24	2.221		
6,100.0	6,099.7	6,094.6	6,090.6	16.1	10.6	72.94	35.7	62.4	70.5	43.9	26.63	2.648		
6,200.0	6,197.4	6,190.5	6,184.6	16.3	10.8	78.45	51.9	73.5	82.6	55.6	27.03	3.055		
6,300.0	6,291.3	6,282.1	6,274.0	16.6	10.9	90.86	65.4	87.8	98.8	71.3	27.49	3.594		
6,400.0	6,380.5	6,371.1	6,359.9	16.9	11.1	103.46	80.1	106.1	126.4	98.7	27.75	4.556		
6,500.0	6,469.1	6,461.2	6,444.6	17.1	11.2	109.77	102.2	127.3	160.0	131.9	28.01	5.710		
6,600.0	6,558.6	6,543.2	6,517.6	17.4	11.4	114.70	130.1	151.8	197.3	168.8	28.45	6.934		
6,700.0	6,654.8	6,617.0	6,580.7	17.7	11.6	131.38	156.7	179.1	237.8	208.7	29.04	8.189		
6,800.0	6,754.2	6,675.0	6,628.3	17.8	11.7	-120.95	178.0	204.5	283.7	254.3	29.43	9.642		

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 Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS, 7648-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	
6,900.0	6,851.8	6,729.4	6,671.3	17.8	11.8	-90.18	197.4	231.6	337.4	307.9	29.55	11.419	
7,000.0	6,942.7	6,775.0	6,707.3	17.7	12.0	-81.30	210.3	256.4	397.5	368.0	29.50	13.475	
7,100.0	7,022.1	6,860.6	6,776.8	17.7	12.2	-79.82	221.2	304.9	460.4	430.9	29.46	15.628	
7,200.0	7,085.9	7,101.9	6,976.2	17.6	12.7	-89.02	156.8	417.3	517.0	487.2	29.81	17.341	
7,300.0	7,131.0	7,228.1	7,070.1	17.5	12.9	-89.60	81.2	453.3	550.3	520.4	29.85	18.433	
7,400.0	7,155.0	7,321.4	7,123.2	17.5	13.0	-88.87	9.1	479.1	581.3	551.4	29.89	19.448	
7,500.0	7,158.3	7,554.4	7,200.0	17.5	14.5	-93.78	-204.0	518.5	599.6	569.5	30.06	19.946	
7,600.0	7,157.4	7,690.9	7,200.2	17.5	16.1	-93.88	-340.1	524.7	603.9	573.5	30.35	19.899	
7,700.0	7,156.4	7,803.4	7,193.7	17.6	16.1	-93.35	-452.4	526.8	605.6	574.7	30.96	19.563	
7,800.0	7,155.5	7,903.1	7,186.6	17.7	16.2	-92.76	-551.9	529.0	607.6	575.8	31.79	19.110	
7,900.0	7,154.6	8,028.3	7,181.9	17.8	16.3	-92.42	-677.0	528.4	607.3	574.3	33.04	18.379	
8,000.0	7,153.6	8,136.7	7,181.3	18.0	16.6	-92.49	-785.3	523.6	603.1	568.7	34.41	17.525	
8,100.0	7,152.7	8,231.7	7,179.9	18.3	17.6	-92.45	-880.2	520.5	599.9	564.1	35.77	16.769	
8,200.0	7,151.7	8,328.8	7,176.3	18.5	18.8	-92.21	-977.1	516.4	595.8	558.5	37.32	15.966	
8,300.0	7,150.8	8,421.3	7,171.6	18.9	20.1	-91.85	-1,069.4	513.9	593.2	554.3	38.89	15.253	
8,400.0	7,149.8	8,523.6	7,167.0	19.2	21.5	-91.50	-1,171.6	511.7	591.0	550.3	40.73	14.510	
8,500.0	7,148.9	8,611.0	7,161.4	19.7	22.8	-91.04	-1,258.8	510.5	589.8	547.3	42.43	13.901	
8,600.0	7,148.0	8,714.6	7,154.3	20.1	24.4	-90.44	-1,362.2	509.8	589.1	544.7	44.45	13.254	
8,637.7	7,147.6	8,749.9	7,151.5	20.3	24.9	-90.21	-1,397.4	509.5	588.9	543.7	45.17	13.036	
8,700.0	7,147.0	8,803.7	7,147.9	20.6	25.7	-89.90	-1,451.1	509.9	589.4	543.1	46.28	12.736	
8,800.0	7,146.1	8,918.3	7,143.9	21.1	27.5	-89.62	-1,565.5	508.3	588.0	539.5	48.54	12.113	
8,900.0	7,145.1	9,022.7	7,141.4	21.6	29.1	-89.47	-1,669.9	506.1	586.1	535.4	50.72	11.555	
9,000.0	7,144.2	9,112.6	7,140.4	22.2	30.6	-89.45	-1,759.8	505.0	585.1	532.4	52.69	11.104	
9,100.0	7,143.2	9,230.1	7,141.2	22.7	32.5	-89.64	-1,877.3	502.3	582.8	527.6	55.19	10.560	
9,200.0	7,142.3	9,331.2	7,139.8	23.3	34.2	-89.59	-1,978.3	498.2	579.0	521.5	57.49	10.071	
9,300.0	7,141.4	9,431.5	7,139.3	24.0	35.8	-89.64	-2,078.5	494.8	575.8	516.0	59.75	9.636	
9,400.0	7,140.4	9,517.7	7,140.5	24.6	37.2	-89.84	-2,164.7	492.5	573.3	511.5	61.81	9.275	
9,430.3	7,140.1	9,541.6	7,140.7	24.8	37.6	-89.88	-2,188.6	492.3	573.1	510.7	62.41	9.183	
9,500.0	7,139.5	9,601.0	7,141.3	25.2	38.6	-90.00	-2,247.9	493.0	574.0	510.1	63.86	8.987	
9,600.0	7,138.5	9,695.2	7,142.7	25.9	40.2	-90.22	-2,342.1	495.5	576.7	510.6	66.14	8.719	
9,700.0	7,137.6	9,800.1	7,138.1	26.6	42.1	-89.86	-2,446.8	497.8	579.1	510.5	68.65	8.436	
9,800.0	7,136.6	9,900.0	7,132.3	27.3	43.7	-89.39	-2,546.6	499.7	581.2	510.2	71.04	8.181	
9,900.0	7,135.7	10,008.5	7,128.4	28.0	45.6	-89.10	-2,655.0	500.6	582.3	508.7	73.59	7.912	
10,000.0	7,134.8	10,120.0	7,127.7	28.8	47.5	-89.14	-2,766.5	499.8	581.7	505.4	76.23	7.630	
10,100.0	7,133.8	10,220.1	7,129.0	29.5	49.2	-89.35	-2,866.5	497.7	579.8	501.1	78.69	7.368	
10,200.0	7,132.9	10,315.5	7,131.0	30.2	50.9	-89.65	-2,961.9	497.0	579.1	498.0	81.09	7.142	
10,261.5	7,132.3	10,372.0	7,131.4	30.7	51.9	-89.73	-3,018.4	496.3	578.5	496.0	82.54	7.009	
10,300.0	7,131.9	10,402.7	7,131.8	31.0	52.4	-89.80	-3,049.1	496.6	578.9	495.5	83.37	6.944	
10,400.0	7,131.0	10,518.3	7,133.6	31.8	54.4	-90.09	-3,164.7	497.3	579.8	493.6	86.17	6.729	
10,500.0	7,130.0	10,614.2	7,133.4	32.5	56.1	-90.16	-3,260.6	495.7	578.3	489.7	88.63	6.525	
10,600.0	7,129.1	10,722.5	7,133.4	33.3	58.0	-90.26	-3,368.8	495.0	577.9	486.6	91.32	6.329	
10,700.0	7,128.1	10,821.7	7,130.6	34.1	59.7	-90.08	-3,468.0	493.2	576.3	482.5	93.82	6.142	
10,800.0	7,127.2	10,923.1	7,128.2	34.9	61.5	-89.93	-3,569.3	491.2	574.5	478.1	96.38	5.961	
10,900.0	7,126.3	11,018.1	7,125.3	35.7	63.2	-89.73	-3,664.3	489.2	572.6	473.7	98.86	5.792	
10,940.0	7,125.9	11,051.7	7,124.7	36.0	63.8	-89.70	-3,697.9	489.0	572.4	472.6	99.77	5.737	
11,000.0	7,125.3	11,104.0	7,124.7	36.5	64.7	-89.75	-3,750.2	489.3	572.8	471.6	101.17	5.662	
11,100.0	7,124.4	11,213.6	7,124.2	37.3	66.6	-89.80	-3,859.7	488.8	572.5	468.6	103.94	5.508	
11,200.0	7,123.4	11,323.6	7,123.3	38.1	68.6	-89.82	-3,969.7	488.4	572.4	465.7	106.72	5.364	
11,300.0	7,122.5	11,420.6	7,118.2	38.9	70.3	-89.39	-4,066.5	486.3	570.5	461.2	109.24	5.222	
11,389.2	7,121.6	11,501.2	7,112.6	39.7	71.7	-88.91	-4,147.0	485.4	569.7	458.4	111.37	5.116	
11,400.0	7,121.5	11,510.7	7,112.1	39.8	71.9	-88.86	-4,156.4	485.4	569.7	458.1	111.62	5.104	
11,500.0	7,120.6	11,602.8	7,108.3	40.6	73.5	-88.57	-4,248.4	486.2	570.8	456.8	114.07	5.004	

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 Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-35HN - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS, 7648-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		
11,600.0	7,119.7	11,697.2	7,104.2	41.4	75.2	-88.26	-4,342.8	487.8	572.8	456.2	116.55	4.914		
11,700.0	7,118.7	11,796.6	7,104.9	42.3	76.9	-88.43	-4,442.1	490.5	575.6	456.5	119.14	4.831		
11,800.0	7,117.8	11,893.7	7,107.5	43.1	78.6	-88.78	-4,539.1	493.4	578.7	457.0	121.72	4.754		
11,900.0	7,116.8	11,990.0	7,111.0	44.0	80.4	-89.23	-4,635.3	496.4	581.9	457.6	124.29	4.682		
11,913.7	7,116.7	11,990.0	7,111.0	44.1	80.4	-89.23	-4,635.3	496.4	582.6	458.2	124.41	4.683		

Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-372HN - Wellbore #1 - Plan #5 (10-22-13)													Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	90.63	-1.1	99.6	99.6					
100.0	100.0	100.0	100.0	0.1	0.1	90.63	-1.1	99.6	99.6	99.3	0.27	375.055		
200.0	200.0	200.0	200.0	0.4	0.4	90.63	-1.1	99.6	99.6	98.8	0.80	125.018		
300.0	300.0	300.0	300.0	0.7	0.7	90.63	-1.1	99.6	99.6	98.2	1.33	75.011		
400.0	400.0	400.0	400.0	0.9	0.9	90.63	-1.1	99.6	99.6	97.7	1.86	53.579		
500.0	500.0	500.0	500.0	1.2	1.2	90.63	-1.1	99.6	99.6	97.2	2.39	41.673		
600.0	600.0	600.0	600.0	1.5	1.5	90.63	-1.1	99.6	99.6	96.6	2.92	34.096		
700.0	700.0	700.0	700.0	1.7	1.7	90.63	-1.1	99.6	99.6	96.1	3.45	28.850		
800.0	800.0	800.0	800.0	2.0	2.0	90.63	-1.1	99.6	99.6	95.6	3.98	25.004		
900.0	900.0	900.0	900.0	2.3	2.3	90.63	-1.1	99.6	99.6	95.0	4.51	22.062		
1,000.0	1,000.0	1,000.0	1,000.0	2.5	2.5	90.63	-1.1	99.6	99.6	94.5	5.04	19.740		
1,100.0	1,100.0	1,100.0	1,100.0	2.8	2.8	90.63	-1.1	99.6	99.6	94.0	5.57	17.860		
1,200.0	1,200.0	1,200.0	1,200.0	3.1	3.1	90.63	-1.1	99.6	99.6	93.5	6.11	16.307		
1,300.0	1,300.0	1,300.0	1,300.0	3.3	3.3	90.63	-1.1	99.6	99.6	92.9	6.64	15.002		
1,400.0	1,400.0	1,400.0	1,400.0	3.6	3.6	90.63	-1.1	99.6	99.6	92.4	7.17	13.891		
1,500.0	1,500.0	1,500.0	1,500.0	3.8	3.8	90.63	-1.1	99.6	99.6	91.9	7.70	12.933		
1,600.0	1,600.0	1,600.0	1,600.0	4.1	4.1	90.63	-1.1	99.6	99.6	91.3	8.23	12.099		
1,700.0	1,700.0	1,700.0	1,700.0	4.4	4.4	90.63	-1.1	99.6	99.6	90.8	8.76	11.365		
1,800.0	1,800.0	1,800.0	1,800.0	4.6	4.6	90.63	-1.1	99.6	99.6	90.3	9.29	10.716		
1,900.0	1,900.0	1,900.0	1,900.0	4.9	4.9	90.63	-1.1	99.6	99.6	89.7	9.82	10.137		
2,000.0	2,000.0	2,000.0	2,000.0	5.2	5.2	90.63	-1.1	99.6	99.6	89.2	10.35	9.617		
2,100.0	2,100.0	2,100.0	2,100.0	5.4	5.4	90.63	-1.1	99.6	99.6	88.7	10.88	9.148		
2,200.0	2,200.0	2,200.0	2,200.0	5.7	5.7	90.63	-1.1	99.6	99.6	88.1	11.41	8.722		
2,300.0	2,300.0	2,300.0	2,300.0	6.0	6.0	90.63	-1.1	99.6	99.6	87.6	11.95	8.335		
2,400.0	2,400.0	2,400.0	2,400.0	6.2	6.2	90.63	-1.1	99.6	99.6	87.1	12.48	7.980		
2,500.0	2,500.0	2,500.0	2,500.0	6.5	6.5	90.63	-1.1	99.6	99.6	86.6	13.01	7.654		
2,600.0	2,600.0	2,600.0	2,600.0	6.8	6.8	90.63	-1.1	99.6	99.6	86.0	13.54	7.354		
2,700.0	2,700.0	2,700.0	2,700.0	7.0	7.0	90.63	-1.1	99.6	99.6	85.5	14.07	7.077		
2,800.0	2,800.0	2,800.0	2,800.0	7.3	7.3	90.63	-1.1	99.6	99.6	85.0	14.60	6.819		
2,900.0	2,900.0	2,900.0	2,900.0	7.6	7.6	90.63	-1.1	99.6	99.6	84.4	15.13	6.580		
3,000.0	3,000.0	3,000.0	3,000.0	7.8	7.8	90.63	-1.1	99.6	99.6	83.9	15.66	6.357		
3,100.0	3,100.0	3,100.0	3,100.0	8.1	8.1	90.63	-1.1	99.6	99.6	83.4	16.19	6.148		
3,200.0	3,200.0	3,200.0	3,200.0	8.4	8.4	90.63	-1.1	99.6	99.6	82.8	16.72	5.953		
3,300.0	3,300.0	3,300.0	3,300.0	8.6	8.6	90.63	-1.1	99.6	99.6	82.3	17.25	5.770		
3,400.0	3,400.0	3,400.0	3,400.0	8.9	8.9	90.63	-1.1	99.6	99.6	81.8	17.78	5.598		
3,500.0	3,500.0	3,500.0	3,500.0	9.2	9.2	90.63	-1.1	99.6	99.6	81.2	18.32	5.436		
3,600.0	3,600.0	3,600.0	3,600.0	9.4	9.4	90.63	-1.1	99.6	99.6	80.7	18.85	5.282		
3,700.0	3,700.0	3,700.0	3,700.0	9.7	9.7	90.63	-1.1	99.6	99.6	80.2	19.38	5.138		
3,800.0	3,800.0	3,800.0	3,800.0	10.0	10.0	90.63	-1.1	99.6	99.6	79.6	19.91	5.001		
3,900.0	3,900.0	3,900.0	3,900.0	10.2	10.2	90.63	-1.1	99.6	99.6	79.1	20.44	4.871		
4,000.0	4,000.0	4,000.0	4,000.0	10.5	10.5	90.63	-1.1	99.6	99.6	78.6	20.97	4.748 CC, ES, SF		
4,100.0	4,100.0	4,095.0	4,095.0	10.8	10.7	90.39	-0.7	101.9	102.0	80.6	21.43	4.760		
4,200.0	4,200.0	4,189.6	4,189.3	11.0	10.8	89.72	0.5	108.8	109.3	87.5	21.84	5.008		
4,300.0	4,300.0	4,283.3	4,282.2	11.3	11.0	88.80	2.5	120.2	121.5	99.3	22.24	5.465		
4,400.0	4,400.0	4,375.6	4,373.2	11.5	11.1	87.79	5.2	135.8	138.5	115.9	22.65	6.118		
4,500.0	4,500.0	4,466.1	4,461.5	11.8	11.2	86.82	8.6	155.3	160.2	137.2	23.05	6.952		
4,600.0	4,600.0	4,554.6	4,546.9	12.1	11.4	85.94	12.7	178.3	186.5	163.1	23.45	7.952		
4,700.0	4,700.0	4,640.7	4,628.8	12.3	11.5	85.19	17.2	204.4	217.2	193.3	23.86	9.103		
4,800.0	4,800.0	4,724.2	4,706.9	12.6	11.7	84.55	22.2	233.2	252.1	227.8	24.25	10.392		
4,900.0	4,900.0	4,800.0	4,776.8	12.9	11.9	84.06	27.3	262.2	291.0	266.3	24.64	11.809		
5,000.0	5,000.0	4,882.6	4,851.5	13.1	12.0	83.59	33.4	296.9	333.6	308.6	25.04	13.325		
5,100.0	5,100.0	4,957.2	4,917.7	13.4	12.2	83.23	39.3	331.0	379.9	354.5	25.42	14.943		

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Company:	Great Western	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-372HN - Wellbore #1 - Plan #5 (10-22-13)												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,200.0	5,032.5	4,983.0	13.7	12.4	82.91	45.7	367.8	429.5	403.7	25.81	16.639	
5,300.0	5,300.0	5,118.8	5,057.4	13.9	12.6	82.62	53.2	410.8	480.0	453.8	26.21	18.310	
5,400.0	5,400.0	5,205.1	5,131.9	14.2	12.8	82.38	60.7	453.7	530.5	503.9	26.62	19.929	
5,500.0	5,500.0	5,291.3	5,206.3	14.5	13.0	82.18	68.2	496.7	581.1	554.0	27.03	21.497	
5,600.0	5,600.0	5,377.6	5,280.7	14.7	13.3	82.01	75.7	539.7	631.6	604.2	27.44	23.016	
5,700.0	5,700.0	5,463.9	5,355.2	15.0	13.6	81.87	83.2	582.7	682.2	654.3	27.86	24.487	
5,800.0	5,800.0	5,550.2	5,429.6	15.3	13.8	81.75	90.7	625.6	732.7	704.4	28.28	25.913	
5,900.0	5,900.0	5,636.4	5,504.0	15.5	14.1	81.64	98.2	668.6	783.3	754.6	28.70	27.294	
6,000.0	6,000.0	5,722.7	5,578.4	15.8	14.4	81.55	105.7	711.6	833.8	804.7	29.12	28.633	
6,100.0	6,099.7	5,808.8	5,652.7	16.1	14.7	85.73	113.2	754.5	884.2	854.8	29.48	29.991	
6,200.0	6,197.4	5,893.4	5,725.7	16.3	14.9	82.51	120.6	796.6	934.0	904.0	29.92	31.212	
6,300.0	6,291.3	5,974.8	5,795.9	16.6	15.2	80.06	127.7	837.2	982.8	952.5	30.35	32.382	

Company:	Great Western	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS												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
0.0	0.0	0.0	0.0	0.0	0.0	90.78	-1.1	80.4	80.4				
100.0	100.0	100.0	100.0	0.1	0.1	90.78	-1.1	80.4	80.4	80.1	0.27	302.777	
200.0	200.0	200.0	200.0	0.4	0.4	90.78	-1.1	80.4	80.4	79.6	0.80	100.926	
300.0	300.0	300.0	300.0	0.7	0.7	90.78	-1.1	80.4	80.4	79.0	1.33	60.555	
400.0	400.0	400.0	400.0	0.9	0.9	90.78	-1.1	80.4	80.4	78.5	1.86	43.254	
500.0	500.0	500.0	500.0	1.2	1.2	90.78	-1.1	80.4	80.4	78.0	2.39	33.642	
600.0	600.0	600.0	600.0	1.5	1.5	90.78	-1.1	80.4	80.4	77.5	2.92	27.525	
700.0	700.0	700.0	700.0	1.7	1.7	90.78	-1.1	80.4	80.4	76.9	3.45	23.291	
800.0	800.0	800.0	800.0	2.0	2.0	90.78	-1.1	80.4	80.4	76.4	3.98	20.185	
900.0	900.0	900.0	900.0	2.3	2.3	90.78	-1.1	80.4	80.4	75.9	4.51	17.810	
1,000.0	1,000.0	1,000.0	1,000.0	2.5	2.5	90.78	-1.1	80.4	80.4	75.3	5.04	15.936	
1,100.0	1,100.0	1,100.0	1,100.0	2.8	2.8	90.78	-1.1	80.4	80.4	74.8	5.57	14.418	
1,200.0	1,200.0	1,200.0	1,200.0	3.1	3.1	90.78	-1.1	80.4	80.4	74.3	6.11	13.164	
1,300.0	1,300.0	1,300.0	1,300.0	3.3	3.3	90.78	-1.1	80.4	80.4	73.7	6.64	12.111	
1,400.0	1,400.0	1,400.0	1,400.0	3.6	3.6	90.78	-1.1	80.4	80.4	73.2	7.17	11.214	
1,500.0	1,500.0	1,500.0	1,500.0	3.8	3.8	90.78	-1.1	80.4	80.4	72.7	7.70	10.441	
1,600.0	1,600.0	1,600.0	1,600.0	4.1	4.1	90.78	-1.1	80.4	80.4	72.1	8.23	9.767	
1,700.0	1,700.0	1,700.0	1,700.0	4.4	4.4	90.78	-1.1	80.4	80.4	71.6	8.76	9.175	
1,800.0	1,800.0	1,800.0	1,800.0	4.6	4.6	90.78	-1.1	80.4	80.4	71.1	9.29	8.651	
1,900.0	1,900.0	1,900.0	1,900.0	4.9	4.9	90.78	-1.1	80.4	80.4	70.5	9.82	8.183	
2,000.0	2,000.0	2,000.0	2,000.0	5.2	5.2	90.78	-1.1	80.4	80.4	70.0	10.35	7.764	
2,100.0	2,100.0	2,100.0	2,100.0	5.4	5.4	90.78	-1.1	80.4	80.4	69.5	10.88	7.385	
2,200.0	2,200.0	2,200.0	2,200.0	5.7	5.7	90.78	-1.1	80.4	80.4	69.0	11.41	7.041	
2,300.0	2,300.0	2,300.0	2,300.0	6.0	6.0	90.78	-1.1	80.4	80.4	68.4	11.95	6.728	
2,400.0	2,400.0	2,400.0	2,400.0	6.2	6.2	90.78	-1.1	80.4	80.4	67.9	12.48	6.442	
2,500.0	2,500.0	2,500.0	2,500.0	6.5	6.5	90.78	-1.1	80.4	80.4	67.4	13.01	6.179	
2,600.0	2,600.0	2,600.0	2,600.0	6.8	6.8	90.78	-1.1	80.4	80.4	66.8	13.54	5.937	
2,700.0	2,700.0	2,700.0	2,700.0	7.0	7.0	90.78	-1.1	80.4	80.4	66.3	14.07	5.713	
2,800.0	2,800.0	2,800.0	2,800.0	7.3	7.3	90.78	-1.1	80.4	80.4	65.8	14.60	5.505	
2,900.0	2,900.0	2,900.0	2,900.0	7.6	7.6	90.78	-1.1	80.4	80.4	65.2	15.13	5.312	
3,000.0	3,000.0	3,000.0	3,000.0	7.8	7.8	90.78	-1.1	80.4	80.4	64.7	15.66	5.132	
3,100.0	3,100.0	3,100.0	3,100.0	8.1	8.1	90.78	-1.1	80.4	80.4	64.2	16.19	4.964	
3,200.0	3,200.0	3,200.0	3,200.0	8.4	8.4	90.78	-1.1	80.4	80.4	63.6	16.72	4.806	
3,300.0	3,300.0	3,300.0	3,300.0	8.6	8.6	90.78	-1.1	80.4	80.4	63.1	17.25	4.658	
3,400.0	3,400.0	3,400.0	3,400.0	8.9	8.9	90.78	-1.1	80.4	80.4	62.6	17.78	4.519	
3,500.0	3,500.0	3,500.0	3,500.0	9.2	9.2	90.78	-1.1	80.4	80.4	62.1	18.32	4.388	
3,600.0	3,600.0	3,600.0	3,600.0	9.4	9.4	90.78	-1.1	80.4	80.4	61.5	18.85	4.264	
3,700.0	3,700.0	3,700.0	3,700.0	9.7	9.7	90.78	-1.1	80.4	80.4	61.0	19.38	4.148	
3,800.0	3,800.0	3,800.0	3,800.0	10.0	10.0	90.78	-1.1	80.4	80.4	60.5	19.91	4.037	
3,900.0	3,900.0	3,900.0	3,900.0	10.2	10.2	90.78	-1.1	80.4	80.4	59.9	20.44	3.932	
4,000.0	4,000.0	4,000.0	4,000.0	10.5	10.5	90.78	-1.1	80.4	80.4	59.4	20.97	3.833	
4,100.0	4,100.0	4,100.0	4,100.0	10.8	10.8	90.78	-1.1	80.4	80.4	58.9	21.50	3.738	
4,200.0	4,200.0	4,200.0	4,200.0	11.0	11.0	90.78	-1.1	80.4	80.4	58.3	22.03	3.648	
4,300.0	4,300.0	4,300.0	4,300.0	11.3	11.3	90.78	-1.1	80.4	80.4	57.8	22.56	3.562	
4,400.0	4,400.0	4,400.0	4,400.0	11.5	11.5	90.78	-1.1	80.4	80.4	57.3	23.09	3.480	
4,500.0	4,500.0	4,500.0	4,500.0	11.8	11.8	90.78	-1.1	80.4	80.4	56.7	23.62	3.402	
4,600.0	4,600.0	4,600.0	4,600.0	12.1	12.1	90.78	-1.1	80.4	80.4	56.2	24.16	3.327 CC, ES, SF	
4,700.0	4,700.0	4,696.0	4,695.9	12.3	12.3	90.41	-0.6	82.7	82.8	58.2	24.62	3.364	
4,800.0	4,800.0	4,791.5	4,791.1	12.6	12.4	89.44	0.9	89.7	90.2	65.2	25.03	3.603	
4,900.0	4,900.0	4,886.0	4,884.9	12.9	12.6	88.14	3.3	101.3	102.5	77.0	25.44	4.027	
5,000.0	5,000.0	4,979.2	4,976.7	13.1	12.7	86.77	6.6	117.1	119.6	93.7	25.85	4.625	
5,100.0	5,100.0	5,070.5	5,065.8	13.4	12.9	85.51	10.7	136.8	141.4	115.2	26.26	5.386	

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

Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-373HC - Wellbore #1 - Plan #4 (10-22-13)										Offset Site Error:		0.0 ft	
Survey Program: 0-NS-GYRO-MS										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation		Separation Factor
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
5,200.0	5,200.0	5,159.7	5,151.8	13.7	13.0	84.42	15.6	160.1	167.9	141.2	26.66	6.297	
5,300.0	5,300.0	5,246.5	5,234.2	13.9	13.2	83.53	21.2	186.4	198.8	171.8	27.07	7.346	
5,400.0	5,400.0	5,330.6	5,312.9	14.2	13.3	82.79	27.2	215.5	234.0	206.5	27.47	8.519	
5,500.0	5,500.0	5,411.8	5,387.6	14.5	13.5	82.20	33.8	246.7	273.2	245.3	27.86	9.806	
5,600.0	5,600.0	5,490.0	5,458.1	14.7	13.6	81.72	40.7	279.7	316.2	288.0	28.25	11.193	
5,700.0	5,700.0	5,565.1	5,524.6	15.0	13.8	81.32	47.9	314.0	362.9	334.2	28.64	12.671	
5,800.0	5,800.0	5,637.6	5,587.3	15.3	14.0	81.00	55.4	349.5	412.9	383.8	29.02	14.228	
5,900.0	5,900.0	5,723.3	5,660.8	15.5	14.2	80.68	64.4	392.8	464.4	435.0	29.42	15.785	
6,000.0	6,000.0	5,809.0	5,734.2	15.8	14.4	80.43	73.5	436.0	515.9	486.1	29.82	17.300	
6,100.0	6,099.7	5,894.6	5,807.6	16.1	14.6	84.69	82.6	479.2	567.2	537.0	30.19	18.785	
6,200.0	6,197.4	5,979.0	5,879.9	16.3	14.9	81.99	91.5	521.8	617.6	587.0	30.59	20.190	
6,300.0	6,291.3	6,060.5	5,949.7	16.6	15.1	80.31	100.1	562.9	667.3	636.4	30.97	21.548	
6,400.0	6,380.5	6,138.4	6,016.4	16.9	15.3	81.52	108.4	602.2	717.2	685.8	31.37	22.859	
6,500.0	6,469.1	6,215.7	6,082.6	17.1	15.6	84.51	116.5	641.2	768.8	737.0	31.80	24.173	
6,600.0	6,558.6	6,293.6	6,149.4	17.4	15.8	93.21	124.8	680.5	822.4	790.2	32.19	25.545	
6,700.0	6,654.8	6,374.9	6,219.1	17.7	16.1	118.99	133.4	721.5	879.0	846.4	32.55	27.008	
6,800.0	6,754.2	6,456.6	6,289.0	17.8	16.3	-125.52	142.0	762.7	935.3	902.3	33.03	28.322	
6,900.0	6,851.8	6,534.3	6,355.7	17.8	16.6	-89.39	150.3	802.0	989.4	956.0	33.36	29.655	

Company:	Great Western	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS												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
0.0	0.0	0.0	0.0	0.0	0.0	90.04	0.0	60.3	60.3				
100.0	100.0	100.0	100.0	0.1	0.1	90.04	0.0	60.3	60.3	60.1	0.27	227.324	
200.0	200.0	200.0	200.0	0.4	0.4	90.04	0.0	60.3	60.3	59.5	0.80	75.775	
300.0	300.0	300.0	300.0	0.7	0.7	90.04	0.0	60.3	60.3	59.0	1.33	45.465	
400.0	400.0	400.0	400.0	0.9	0.9	90.04	0.0	60.3	60.3	58.5	1.86	32.475	
500.0	500.0	500.0	500.0	1.2	1.2	90.04	0.0	60.3	60.3	58.0	2.39	25.258	
600.0	600.0	600.0	600.0	1.5	1.5	90.04	0.0	60.3	60.3	57.4	2.92	20.666	
700.0	700.0	700.0	700.0	1.7	1.7	90.04	0.0	60.3	60.3	56.9	3.45	17.486	
800.0	800.0	800.0	800.0	2.0	2.0	90.04	0.0	60.3	60.3	56.4	3.98	15.155	
900.0	900.0	900.0	900.0	2.3	2.3	90.04	0.0	60.3	60.3	55.8	4.51	13.372	
1,000.0	1,000.0	1,000.0	1,000.0	2.5	2.5	90.04	0.0	60.3	60.3	55.3	5.04	11.964	
1,100.0	1,100.0	1,100.0	1,100.0	2.8	2.8	90.04	0.0	60.3	60.3	54.8	5.57	10.825	
1,200.0	1,200.0	1,200.0	1,200.0	3.1	3.1	90.04	0.0	60.3	60.3	54.2	6.11	9.884	
1,300.0	1,300.0	1,300.0	1,300.0	3.3	3.3	90.04	0.0	60.3	60.3	53.7	6.64	9.093	
1,400.0	1,400.0	1,400.0	1,400.0	3.6	3.6	90.04	0.0	60.3	60.3	53.2	7.17	8.419	
1,500.0	1,500.0	1,500.0	1,500.0	3.8	3.8	90.04	0.0	60.3	60.3	52.6	7.70	7.839	
1,600.0	1,600.0	1,600.0	1,600.0	4.1	4.1	90.04	0.0	60.3	60.3	52.1	8.23	7.333	
1,700.0	1,700.0	1,700.0	1,700.0	4.4	4.4	90.04	0.0	60.3	60.3	51.6	8.76	6.889	
1,800.0	1,800.0	1,800.0	1,800.0	4.6	4.6	90.04	0.0	60.3	60.3	51.1	9.29	6.495	
1,900.0	1,900.0	1,900.0	1,900.0	4.9	4.9	90.04	0.0	60.3	60.3	50.5	9.82	6.144	
2,000.0	2,000.0	2,000.0	2,000.0	5.2	5.2	90.04	0.0	60.3	60.3	50.0	10.35	5.829	
2,100.0	2,100.0	2,100.0	2,100.0	5.4	5.4	90.04	0.0	60.3	60.3	49.5	10.88	5.544	
2,200.0	2,200.0	2,200.0	2,200.0	5.7	5.7	90.04	0.0	60.3	60.3	48.9	11.41	5.287	
2,300.0	2,300.0	2,300.0	2,300.0	6.0	6.0	90.04	0.0	60.3	60.3	48.4	11.95	5.052	
2,400.0	2,400.0	2,400.0	2,400.0	6.2	6.2	90.04	0.0	60.3	60.3	47.9	12.48	4.837	
2,500.0	2,500.0	2,500.0	2,500.0	6.5	6.5	90.04	0.0	60.3	60.3	47.3	13.01	4.639	
2,600.0	2,600.0	2,600.0	2,600.0	6.8	6.8	90.04	0.0	60.3	60.3	46.8	13.54	4.457	
2,700.0	2,700.0	2,700.0	2,700.0	7.0	7.0	90.04	0.0	60.3	60.3	46.3	14.07	4.289	
2,800.0	2,800.0	2,800.0	2,800.0	7.3	7.3	90.04	0.0	60.3	60.3	45.7	14.60	4.133	
2,900.0	2,900.0	2,900.0	2,900.0	7.6	7.6	90.04	0.0	60.3	60.3	45.2	15.13	3.988	
3,000.0	3,000.0	3,000.0	3,000.0	7.8	7.8	90.04	0.0	60.3	60.3	44.7	15.66	3.853	
3,100.0	3,100.0	3,100.0	3,100.0	8.1	8.1	90.04	0.0	60.3	60.3	44.2	16.19	3.727	
3,200.0	3,200.0	3,200.0	3,200.0	8.4	8.4	90.04	0.0	60.3	60.3	43.6	16.72	3.608	
3,300.0	3,300.0	3,300.0	3,300.0	8.6	8.6	90.04	0.0	60.3	60.3	43.1	17.25	3.497	
3,400.0	3,400.0	3,400.0	3,400.0	8.9	8.9	90.04	0.0	60.3	60.3	42.6	17.78	3.393	
3,500.0	3,500.0	3,500.0	3,500.0	9.2	9.2	90.04	0.0	60.3	60.3	42.0	18.32	3.295	
3,600.0	3,600.0	3,600.0	3,600.0	9.4	9.4	90.04	0.0	60.3	60.3	41.5	18.85	3.202	
3,700.0	3,700.0	3,700.0	3,700.0	9.7	9.7	90.04	0.0	60.3	60.3	41.0	19.38	3.114	
3,800.0	3,800.0	3,800.0	3,800.0	10.0	10.0	90.04	0.0	60.3	60.3	40.4	19.91	3.031	
3,900.0	3,900.0	3,900.0	3,900.0	10.2	10.2	90.04	0.0	60.3	60.3	39.9	20.44	2.952	
4,000.0	4,000.0	4,000.0	4,000.0	10.5	10.5	90.04	0.0	60.3	60.3	39.4	20.97	2.878	
4,100.0	4,100.0	4,100.0	4,100.0	10.8	10.8	90.04	0.0	60.3	60.3	38.8	21.50	2.806	
4,200.0	4,200.0	4,200.0	4,200.0	11.0	11.0	90.04	0.0	60.3	60.3	38.3	22.03	2.739	
4,300.0	4,300.0	4,300.0	4,300.0	11.3	11.3	90.04	0.0	60.3	60.3	37.8	22.56	2.674	
4,400.0	4,400.0	4,400.0	4,400.0	11.5	11.5	90.04	0.0	60.3	60.3	37.2	23.09	2.613	
4,500.0	4,500.0	4,500.0	4,500.0	11.8	11.8	90.04	0.0	60.3	60.3	36.7	23.62	2.554	
4,600.0	4,600.0	4,600.0	4,600.0	12.1	12.1	90.04	0.0	60.3	60.3	36.2	24.16	2.498	
4,700.0	4,700.0	4,700.0	4,700.0	12.3	12.3	90.04	0.0	60.3	60.3	35.7	24.69	2.444	
4,800.0	4,800.0	4,800.0	4,800.0	12.6	12.6	90.04	0.0	60.3	60.3	35.1	25.22	2.393	
4,900.0	4,900.0	4,900.0	4,900.0	12.9	12.9	90.04	0.0	60.3	60.3	34.6	25.75	2.344 CC, ES, SF	
5,000.0	5,000.0	4,997.0	4,996.9	13.1	13.1	89.39	0.7	62.7	62.8	36.6	26.22	2.394	
5,100.0	5,100.0	5,093.5	5,093.1	13.4	13.2	87.73	2.8	69.7	70.1	43.5	26.64	2.632	

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 Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-374HN - Wellbore #1 - Plan #4 (10-22-13)												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	5,200.0	5,189.0	5,187.9	13.7	13.4	85.63	6.2	81.2	82.4	55.3	27.06	3.044	
5,300.0	5,300.0	5,283.0	5,280.5	13.9	13.6	83.57	10.9	97.0	99.6	72.1	27.48	3.623	
5,400.0	5,400.0	5,375.3	5,370.4	14.2	13.7	81.80	16.8	116.7	121.6	93.7	27.90	4.357	
5,500.0	5,500.0	5,465.3	5,457.1	14.5	13.9	80.37	23.7	139.9	148.3	119.9	28.32	5.235	
5,600.0	5,600.0	5,552.8	5,540.1	14.7	14.0	79.23	31.6	166.2	179.4	150.7	28.73	6.245	
5,700.0	5,700.0	5,637.5	5,619.3	15.0	14.2	78.34	40.2	195.1	214.9	185.8	29.14	7.375	
5,800.0	5,800.0	5,719.3	5,694.4	15.3	14.4	77.65	49.5	226.1	254.5	224.9	29.54	8.613	
5,900.0	5,900.0	5,800.0	5,767.1	15.5	14.5	77.08	59.6	259.8	297.8	267.9	29.94	9.947	
6,000.0	6,000.0	5,873.6	5,831.9	15.8	14.7	76.65	69.5	293.0	344.8	314.5	30.33	11.370	
6,100.0	6,099.7	5,949.7	5,897.7	16.1	14.9	81.20	80.5	329.7	394.5	363.8	30.70	12.850	
6,200.0	6,197.4	6,035.1	5,971.0	16.3	15.1	79.32	93.1	371.7	443.6	412.5	31.08	14.272	
6,300.0	6,291.3	6,118.2	6,042.3	16.6	15.3	78.69	105.3	412.6	491.6	460.2	31.44	15.634	
6,400.0	6,380.5	6,198.1	6,110.9	16.9	15.5	80.90	117.0	451.8	539.8	507.9	31.86	16.941	
6,500.0	6,469.1	6,277.5	6,179.1	17.1	15.7	84.58	128.7	490.9	590.0	557.7	32.31	18.259	
6,600.0	6,558.6	6,357.5	6,247.7	17.4	16.0	93.61	140.4	530.2	642.5	609.7	32.73	19.629	
6,700.0	6,654.8	6,440.1	6,318.6	17.7	16.2	119.01	152.6	570.8	697.7	664.6	33.09	21.083	
6,800.0	6,754.2	6,522.1	6,389.1	17.8	16.5	-126.26	164.6	611.1	752.9	719.3	33.54	22.448	
6,900.0	6,851.8	6,599.4	6,455.3	17.8	16.7	-90.88	176.0	649.1	806.1	772.3	33.83	23.832	
7,000.0	6,942.7	6,667.8	6,514.1	17.7	16.9	-80.94	186.0	682.7	857.2	823.4	33.87	25.306	
7,100.0	7,022.1	6,724.0	6,562.3	17.7	17.1	-74.93	194.3	710.3	906.5	872.9	33.55	27.017	
7,200.0	7,085.9	6,765.1	6,597.6	17.6	17.2	-69.87	200.3	730.5	954.1	921.4	32.77	29.119	

Company:	Great Western	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.20	-0.1	20.0	20.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.20	-0.1	20.0	20.0	19.8	0.25	81.685		
200.0	200.0	200.0	200.0	0.4	0.3	90.20	-0.1	20.0	20.0	19.3	0.74	27.228		
300.0	300.0	300.0	300.0	0.7	0.6	90.20	-0.1	20.0	20.0	18.8	1.23	16.337		
400.0	400.0	400.0	400.0	0.9	0.8	90.20	-0.1	20.0	20.0	18.3	1.72	11.669		
500.0	500.0	500.0	500.0	1.2	1.0	90.20	-0.1	20.0	20.0	17.8	2.21	9.076		
600.0	600.0	600.0	600.0	1.5	1.2	90.20	-0.1	20.0	20.0	17.3	2.70	7.426		
700.0	700.0	700.0	700.0	1.7	1.5	90.20	-0.1	20.0	20.0	16.8	3.19	6.283		
800.0	800.0	800.0	800.0	2.0	1.7	90.20	-0.1	20.0	20.0	16.3	3.68	5.446		
833.0	833.0	833.0	833.0	2.1	1.8	89.92	0.0	20.0	20.0	16.2	3.84	5.216 CC		
900.0	900.0	900.0	900.0	2.3	1.9	87.70	0.8	20.0	20.0	15.9	4.17	4.810		
1,000.0	1,000.0	999.9	999.9	2.5	2.1	80.31	3.4	20.0	20.3	15.7	4.66	4.363 ES		
1,100.0	1,100.0	1,099.7	1,099.6	2.8	2.4	68.79	7.8	20.0	21.5	16.3	5.15	4.174		
1,200.0	1,200.0	1,199.3	1,199.0	3.1	2.6	61.44	11.9	21.8	24.8	19.2	5.62	4.418		
1,300.0	1,300.0	1,299.2	1,298.8	3.3	2.8	57.39	15.5	24.2	28.8	22.7	6.10	4.717		
1,400.0	1,400.0	1,399.1	1,398.6	3.6	3.0	54.33	19.2	26.7	32.9	26.3	6.59	4.988		
1,500.0	1,500.0	1,499.0	1,498.4	3.8	3.2	51.95	22.8	29.1	37.0	30.0	7.08	5.232		
1,600.0	1,600.0	1,598.9	1,598.3	4.1	3.5	50.06	26.5	31.6	41.3	33.7	7.57	5.450		
1,700.0	1,700.0	1,698.8	1,698.1	4.4	3.7	48.51	30.1	34.1	45.5	37.4	8.06	5.646		
1,800.0	1,800.0	1,798.7	1,797.9	4.6	3.9	47.24	33.8	36.5	49.8	41.2	8.55	5.823		
1,900.0	1,900.0	1,898.6	1,897.7	4.9	4.2	46.16	37.4	39.0	54.1	45.0	9.04	5.983		
2,000.0	2,000.0	1,998.5	1,997.5	5.2	4.4	45.25	41.1	41.4	58.4	48.9	9.53	6.128		
2,100.0	2,100.0	2,098.4	2,097.3	5.4	4.6	44.46	44.7	43.9	62.7	52.7	10.02	6.260		
2,200.0	2,200.0	2,198.3	2,197.1	5.7	4.9	43.77	48.4	46.3	67.1	56.6	10.51	6.381		
2,300.0	2,300.0	2,298.2	2,296.9	6.0	5.1	43.16	52.0	48.8	71.4	60.4	11.00	6.491		
2,400.0	2,400.0	2,398.1	2,396.7	6.2	5.3	42.63	55.7	51.3	75.8	64.3	11.49	6.593		
2,500.0	2,500.0	2,498.0	2,496.5	6.5	5.6	42.15	59.3	53.7	80.1	68.1	11.98	6.687		
2,600.0	2,600.0	2,597.9	2,596.3	6.8	5.8	41.72	63.0	56.2	84.5	72.0	12.47	6.773		
2,700.0	2,700.0	2,697.8	2,696.1	7.0	6.0	41.34	66.7	58.6	88.9	75.9	12.96	6.854		
2,800.0	2,800.0	2,797.7	2,795.9	7.3	6.3	40.99	70.3	61.1	93.2	79.8	13.46	6.929		
2,900.0	2,900.0	2,897.6	2,895.7	7.6	6.5	40.67	74.0	63.5	97.6	83.7	13.95	6.998		
3,000.0	3,000.0	2,997.5	2,995.5	7.8	6.7	40.38	77.6	66.0	102.0	87.5	14.44	7.063		
3,100.0	3,100.0	3,097.4	3,095.3	8.1	7.0	40.11	81.3	68.5	106.4	91.4	14.93	7.124		
3,200.0	3,200.0	3,197.3	3,195.1	8.4	7.2	39.87	84.9	70.9	110.7	95.3	15.42	7.182		
3,300.0	3,300.0	3,297.2	3,295.0	8.6	7.4	39.64	88.6	73.4	115.1	99.2	15.91	7.235		
3,400.0	3,400.0	3,397.1	3,394.8	8.9	7.7	39.43	92.2	75.8	119.5	103.1	16.40	7.286		
3,500.0	3,500.0	3,497.0	3,494.6	9.2	7.9	39.23	95.9	78.3	123.9	107.0	16.89	7.334		
3,600.0	3,600.0	3,596.9	3,594.4	9.4	8.2	39.05	99.5	80.7	128.3	110.9	17.39	7.379		
3,700.0	3,700.0	3,696.8	3,694.2	9.7	8.4	38.88	103.2	83.2	132.7	114.8	17.88	7.422		
3,800.0	3,800.0	3,796.7	3,794.0	10.0	8.6	38.72	106.8	85.7	137.1	118.7	18.37	7.462		
3,900.0	3,900.0	3,896.6	3,893.8	10.2	8.9	38.57	110.5	88.1	141.5	122.6	18.86	7.500		
4,000.0	4,000.0	3,996.6	3,993.6	10.5	9.1	38.43	114.1	90.6	145.9	126.5	19.35	7.537		
4,100.0	4,100.0	4,096.5	4,093.4	10.8	9.3	38.30	117.8	93.0	150.2	130.4	19.84	7.572		
4,200.0	4,200.0	4,196.4	4,193.2	11.0	9.6	38.18	121.4	95.5	154.6	134.3	20.33	7.605		
4,300.0	4,300.0	4,296.3	4,293.0	11.3	9.8	38.06	125.1	97.9	159.0	138.2	20.83	7.636		
4,400.0	4,400.0	4,396.2	4,392.8	11.5	10.0	37.95	128.8	100.4	163.4	142.1	21.32	7.666		
4,500.0	4,500.0	4,496.1	4,492.6	11.8	10.3	37.84	132.4	102.9	167.8	146.0	21.81	7.695		
4,600.0	4,600.0	4,596.0	4,592.4	12.1	10.5	37.74	136.1	105.3	172.2	149.9	22.30	7.723		
4,700.0	4,700.0	4,695.9	4,692.2	12.3	10.8	37.65	139.7	107.8	176.6	153.8	22.79	7.749		
4,800.0	4,800.0	4,795.8	4,792.0	12.6	11.0	37.55	143.4	110.2	181.0	157.7	23.28	7.774		
4,900.0	4,900.0	4,895.7	4,891.8	12.9	11.2	37.47	147.0	112.7	185.4	161.6	23.78	7.798		
5,000.0	5,000.0	4,995.6	4,991.7	13.1	11.5	37.39	150.7	115.1	189.8	165.5	24.27	7.822		

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 Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0ft
Survey Program: 0-MWD												Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.0	5,100.0	5,095.5	5,091.5	13.4	11.7	37.31	154.3	117.6	194.2	169.5	24.76	7.844	
5,200.0	5,200.0	5,195.4	5,191.3	13.7	11.9	37.23	158.0	120.1	198.6	173.4	25.25	7.865	
5,300.0	5,300.0	5,295.3	5,291.1	13.9	12.2	37.16	161.6	122.5	203.0	177.3	25.74	7.886	
5,400.0	5,400.0	5,395.2	5,390.9	14.2	12.4	37.09	165.3	125.0	207.4	181.2	26.24	7.906	
5,500.0	5,500.0	5,495.1	5,490.7	14.5	12.6	37.03	168.9	127.4	211.8	185.1	26.73	7.925	
5,600.0	5,600.0	5,595.0	5,590.5	14.7	12.9	36.96	172.6	129.9	216.2	189.0	27.22	7.943	
5,700.0	5,700.0	5,694.9	5,690.3	15.0	13.1	36.90	176.2	132.3	220.6	192.9	27.71	7.961	
5,800.0	5,800.0	5,794.8	5,790.1	15.3	13.3	36.84	179.9	134.8	225.0	196.8	28.20	7.979	
5,900.0	5,900.0	5,894.7	5,889.9	15.5	13.6	36.79	183.6	137.3	229.4	200.7	28.69	7.995	
6,000.0	6,000.0	5,994.6	5,989.7	15.8	13.8	36.73	187.2	139.7	233.8	204.6	29.19	8.011	
6,100.0	6,099.7	6,094.4	6,089.4	16.1	14.1	46.33	190.9	142.2	233.3	203.8	29.59	7.887	
6,200.0	6,197.4	6,192.7	6,187.6	16.3	14.3	50.65	194.5	144.6	223.8	194.0	29.82	7.504	
6,300.0	6,291.3	6,287.6	6,282.5	16.6	14.5	58.63	197.9	146.9	207.6	177.4	30.14	6.886	
6,400.0	6,380.5	6,378.2	6,373.0	16.9	14.7	69.64	201.2	149.1	190.5	159.6	30.90	6.166	
6,500.0	6,469.1	6,468.2	6,462.9	17.1	14.9	81.60	204.5	151.4	181.7	150.0	31.72	5.729	
6,529.9	6,495.8	6,495.3	6,489.9	17.2	15.0	85.79	205.5	152.0	181.2	149.2	31.93	5.674	
6,600.0	6,558.6	6,559.1	6,553.7	17.4	15.2	96.16	207.8	153.6	183.4	151.1	32.31	5.676	
6,700.0	6,654.8	6,655.9	6,650.4	17.7	15.4	119.96	211.4	156.0	193.1	160.3	32.80	5.887	
6,800.0	6,754.2	6,755.2	6,749.5	17.8	15.6	-131.47	215.0	158.4	203.2	170.0	33.21	6.119	
6,900.0	6,851.8	6,851.8	6,846.1	17.8	15.9	-106.15	218.6	160.8	213.5	180.1	33.33	6.404	
7,000.0	6,942.7	6,948.7	6,942.8	17.7	16.0	-108.21	217.6	163.2	228.7	195.6	33.09	6.911	
7,100.0	7,022.1	7,058.0	7,049.0	17.7	16.1	-113.23	192.7	165.7	249.0	216.7	32.30	7.710	
7,200.0	7,085.9	7,182.6	7,158.2	17.6	16.2	-118.21	133.6	168.3	271.2	240.2	30.98	8.754	
7,300.0	7,131.0	7,325.7	7,257.4	17.5	16.2	-122.31	31.6	170.6	290.9	261.4	29.50	9.859	
7,400.0	7,155.0	7,486.6	7,323.6	17.5	16.5	-124.90	-114.2	172.0	303.7	275.0	28.67	10.591	
7,500.0	7,158.3	7,630.6	7,336.8	17.5	17.3	-125.58	-257.1	172.1	306.7	277.7	29.02	10.569	
7,600.0	7,157.4	7,730.6	7,337.0	17.5	18.0	-125.75	-357.1	171.9	307.4	277.8	29.62	10.380	
7,700.0	7,156.4	7,830.6	7,337.2	17.6	18.9	-125.93	-457.1	171.8	308.1	277.7	30.39	10.139	
7,800.0	7,155.5	7,930.6	7,337.5	17.7	19.9	-126.10	-557.1	171.6	308.8	277.5	31.32	9.859	
7,900.0	7,154.6	8,030.6	7,337.7	17.8	21.1	-126.27	-657.1	171.4	309.5	277.1	32.40	9.552	
8,000.0	7,153.6	8,130.6	7,337.9	18.0	22.4	-126.45	-757.0	171.3	310.2	276.6	33.60	9.231	
8,100.0	7,152.7	8,230.6	7,338.1	18.3	23.7	-126.62	-857.0	171.1	310.9	276.0	34.92	8.905	
8,200.0	7,151.7	8,330.5	7,338.4	18.5	25.1	-126.79	-957.0	171.0	311.6	275.3	36.33	8.579	
8,300.0	7,150.8	8,430.5	7,338.6	18.9	26.6	-126.96	-1,057.0	170.8	312.4	274.5	37.81	8.260	
8,400.0	7,149.8	8,530.5	7,338.8	19.2	28.2	-127.13	-1,157.0	170.7	313.1	273.7	39.38	7.951	
8,500.0	7,148.9	8,630.5	7,339.1	19.7	29.8	-127.30	-1,257.0	170.5	313.8	272.8	41.00	7.654	
8,600.0	7,148.0	8,730.5	7,339.3	20.1	31.4	-127.46	-1,357.0	170.3	314.5	271.9	42.67	7.370	
8,700.0	7,147.0	8,830.5	7,339.5	20.6	33.0	-127.63	-1,457.0	170.2	315.3	270.9	44.40	7.101	
8,800.0	7,146.1	8,930.5	7,339.7	21.1	34.7	-127.80	-1,557.0	170.0	316.0	269.8	46.16	6.845	
8,900.0	7,145.1	9,030.5	7,340.0	21.6	36.4	-127.96	-1,657.0	169.9	316.7	268.8	47.96	6.603	
9,000.0	7,144.2	9,130.5	7,340.2	22.2	38.2	-128.13	-1,757.0	169.7	317.5	267.7	49.79	6.375	
9,100.0	7,143.2	9,230.5	7,340.4	22.7	39.9	-128.29	-1,857.0	169.6	318.2	266.5	51.65	6.160	
9,200.0	7,142.3	9,330.5	7,340.6	23.3	41.7	-128.45	-1,957.0	169.4	318.9	265.4	53.54	5.957	
9,300.0	7,141.4	9,430.5	7,340.9	24.0	43.4	-128.62	-2,057.0	169.2	319.7	264.2	55.44	5.766	
9,400.0	7,140.4	9,530.5	7,341.1	24.6	45.2	-128.78	-2,156.9	169.1	320.4	263.1	57.36	5.586	
9,500.0	7,139.5	9,630.5	7,341.3	25.2	47.0	-128.94	-2,256.9	168.9	321.2	261.9	59.30	5.416	
9,600.0	7,138.5	9,730.5	7,341.5	25.9	48.8	-129.10	-2,356.9	168.8	321.9	260.7	61.25	5.256	
9,700.0	7,137.6	9,830.4	7,341.8	26.6	50.7	-129.26	-2,456.9	168.6	322.7	259.5	63.21	5.105	
9,800.0	7,136.6	9,930.4	7,342.0	27.3	52.5	-129.42	-2,556.9	168.5	323.4	258.2	65.18	4.962	
9,900.0	7,135.7	10,030.4	7,342.2	28.0	54.3	-129.57	-2,656.9	168.3	324.2	257.0	67.17	4.827	
10,000.0	7,134.8	10,130.4	7,342.5	28.8	56.1	-129.73	-2,756.9	168.1	324.9	255.8	69.15	4.699	
10,100.0	7,133.8	10,230.4	7,342.7	29.5	58.0	-129.89	-2,856.9	168.0	325.7	254.6	71.15	4.578	

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

Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-378HC - Wellbore #1 - Plan #3 (10-14-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,200.0	7,132.9	10,330.4	7,342.9	30.2	59.8	-130.04	-2,956.9	167.8	326.5	253.3	73.15	4.463		
10,300.0	7,131.9	10,430.4	7,343.1	31.0	61.7	-130.20	-3,056.9	167.7	327.2	252.1	75.15	4.355		
10,400.0	7,131.0	10,530.4	7,343.4	31.8	63.5	-130.35	-3,156.9	167.5	328.0	250.9	77.16	4.251		
10,500.0	7,130.0	10,630.4	7,343.6	32.5	65.4	-130.50	-3,256.9	167.4	328.8	249.6	79.16	4.153		
10,600.0	7,129.1	10,730.4	7,343.8	33.3	67.3	-130.66	-3,356.9	167.2	329.6	248.4	81.17	4.060		
10,700.0	7,128.1	10,830.4	7,344.0	34.1	69.1	-130.81	-3,456.9	167.0	330.3	247.2	83.18	3.971		
10,800.0	7,127.2	10,930.4	7,344.3	34.9	71.0	-130.96	-3,556.8	166.9	331.1	245.9	85.20	3.887		
10,900.0	7,126.3	11,030.4	7,344.5	35.7	72.9	-131.11	-3,656.8	166.7	331.9	244.7	87.21	3.806		
11,000.0	7,125.3	11,130.4	7,344.7	36.5	74.8	-131.26	-3,756.8	166.6	332.7	243.5	89.22	3.729		
11,100.0	7,124.4	11,230.3	7,345.0	37.3	76.6	-131.41	-3,856.8	166.4	333.5	242.2	91.23	3.655		
11,200.0	7,123.4	11,330.3	7,345.2	38.1	78.5	-131.56	-3,956.8	166.3	334.3	241.0	93.23	3.585		
11,300.0	7,122.5	11,430.3	7,345.4	38.9	80.4	-131.71	-4,056.8	166.1	335.1	239.8	95.24	3.518		
11,400.0	7,121.5	11,530.3	7,345.6	39.8	82.3	-131.85	-4,156.8	165.9	335.8	238.6	97.24	3.454		
11,500.0	7,120.6	11,630.3	7,345.9	40.6	84.2	-132.00	-4,256.8	165.8	336.6	237.4	99.25	3.392		
11,600.0	7,119.7	11,730.3	7,346.1	41.4	86.1	-132.14	-4,356.8	165.6	337.4	236.2	101.24	3.333		
11,700.0	7,118.7	11,830.3	7,346.3	42.3	87.9	-132.29	-4,456.8	165.5	338.2	235.0	103.24	3.276		
11,800.0	7,117.8	11,930.3	7,346.5	43.1	89.8	-132.43	-4,556.8	165.3	339.0	233.8	105.23	3.222		
11,900.0	7,116.8	12,030.4	7,346.7	44.0	91.7	-132.56	-4,656.9	165.2	339.8	232.6	107.24	3.169		
11,913.7	7,116.7	12,041.9	7,346.7	44.1	91.9	-132.57	-4,668.4	165.2	339.9	232.5	107.49	3.163 SF		

Company:	Great Western	Local Co-ordinate Reference:	Well Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.99	0.0	-20.0	20.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.99	0.0	-20.0	20.0	19.8	0.27	75.425		
200.0	200.0	200.0	200.0	0.4	0.4	-89.99	0.0	-20.0	20.0	19.2	0.80	25.142		
300.0	300.0	300.0	300.0	0.7	0.7	-89.99	0.0	-20.0	20.0	18.7	1.33	15.085		
400.0	400.0	400.0	400.0	0.9	0.9	-89.99	0.0	-20.0	20.0	18.2	1.86	10.775		
500.0	500.0	500.0	500.0	1.2	1.2	-89.99	0.0	-20.0	20.0	17.6	2.39	8.381		
600.0	600.0	600.0	600.0	1.5	1.5	-89.99	0.0	-20.0	20.0	17.1	2.92	6.857		
700.0	700.0	700.0	700.0	1.7	1.7	-89.99	0.0	-20.0	20.0	16.6	3.45	5.802		
800.0	800.0	800.0	800.0	2.0	2.0	-89.99	0.0	-20.0	20.0	16.0	3.98	5.028		
900.0	900.0	900.0	900.0	2.3	2.3	-89.99	0.0	-20.0	20.0	15.5	4.51	4.437		
1,000.0	1,000.0	1,000.0	1,000.0	2.5	2.5	-89.99	0.0	-20.0	20.0	15.0	5.04	3.970		
1,100.0	1,100.0	1,100.0	1,100.0	2.8	2.8	-89.99	0.0	-20.0	20.0	14.4	5.57	3.592		
1,200.0	1,200.0	1,200.0	1,200.0	3.1	3.1	-89.99	0.0	-20.0	20.0	13.9	6.11	3.279		
1,300.0	1,300.0	1,300.0	1,300.0	3.3	3.3	-89.99	0.0	-20.0	20.0	13.4	6.64	3.017		
1,400.0	1,400.0	1,400.0	1,400.0	3.6	3.6	-89.99	0.0	-20.0	20.0	12.9	7.17	2.794		
1,500.0	1,500.0	1,500.0	1,500.0	3.8	3.8	-89.99	0.0	-20.0	20.0	12.3	7.70	2.601		
1,600.0	1,600.0	1,600.0	1,600.0	4.1	4.1	-89.99	0.0	-20.0	20.0	11.8	8.23	2.433		
1,700.0	1,700.0	1,700.0	1,700.0	4.4	4.4	-89.99	0.0	-20.0	20.0	11.3	8.76	2.286		
1,800.0	1,800.0	1,800.0	1,800.0	4.6	4.6	-89.99	0.0	-20.0	20.0	10.7	9.29	2.155		
1,900.0	1,900.0	1,900.0	1,900.0	4.9	4.9	-89.99	0.0	-20.0	20.0	10.2	9.82	2.039		
2,000.0	2,000.0	2,000.0	2,000.0	5.2	5.2	-89.99	0.0	-20.0	20.0	9.7	10.35	1.934		
2,100.0	2,100.0	2,100.0	2,100.0	5.4	5.4	-89.99	0.0	-20.0	20.0	9.1	10.88	1.840		
2,200.0	2,200.0	2,200.0	2,200.0	5.7	5.7	-89.99	0.0	-20.0	20.0	8.6	11.41	1.754		
2,300.0	2,300.0	2,300.0	2,300.0	6.0	6.0	-89.99	0.0	-20.0	20.0	8.1	11.95	1.676		
2,400.0	2,400.0	2,400.0	2,400.0	6.2	6.2	-89.99	0.0	-20.0	20.0	7.5	12.48	1.605		
2,500.0	2,500.0	2,500.0	2,500.0	6.5	6.5	-89.99	0.0	-20.0	20.0	7.0	13.01	1.539		
2,600.0	2,600.0	2,600.0	2,600.0	6.8	6.8	-89.99	0.0	-20.0	20.0	6.5	13.54	1.479 Level 3		
2,700.0	2,700.0	2,700.0	2,700.0	7.0	7.0	-89.99	0.0	-20.0	20.0	6.0	14.07	1.423 Level 3		
2,800.0	2,800.0	2,800.0	2,800.0	7.3	7.3	-89.99	0.0	-20.0	20.0	5.4	14.60	1.371 Level 3		
2,900.0	2,900.0	2,900.0	2,900.0	7.6	7.6	-89.99	0.0	-20.0	20.0	4.9	15.13	1.323 Level 3		
3,000.0	3,000.0	3,000.0	3,000.0	7.8	7.8	-89.99	0.0	-20.0	20.0	4.4	15.66	1.278 Level 3		
3,100.0	3,100.0	3,100.0	3,100.0	8.1	8.1	-89.99	0.0	-20.0	20.0	3.8	16.19	1.236 Level 2		
3,200.0	3,200.0	3,200.0	3,200.0	8.4	8.4	-89.99	0.0	-20.0	20.0	3.3	16.72	1.197 Level 2		
3,300.0	3,300.0	3,300.0	3,300.0	8.6	8.6	-89.99	0.0	-20.0	20.0	2.8	17.25	1.160 Level 2		
3,400.0	3,400.0	3,400.0	3,400.0	8.9	8.9	-89.99	0.0	-20.0	20.0	2.2	17.78	1.126 Level 2		
3,500.0	3,500.0	3,500.0	3,500.0	9.2	9.2	-89.99	0.0	-20.0	20.0	1.7	18.32	1.093 Level 2		
3,600.0	3,600.0	3,600.0	3,600.0	9.4	9.4	-89.99	0.0	-20.0	20.0	1.2	18.85	1.062 Level 2		
3,700.0	3,700.0	3,700.0	3,700.0	9.7	9.7	-89.99	0.0	-20.0	20.0	0.6	19.38	1.033 Level 2		
3,800.0	3,800.0	3,800.0	3,800.0	10.0	10.0	-89.99	0.0	-20.0	20.0	0.1	19.91	1.006 Level 2		
3,900.0	3,900.0	3,900.0	3,900.0	10.2	10.2	-89.99	0.0	-20.0	20.0	-0.4	20.44	0.980 Level 1		
4,000.0	4,000.0	4,000.0	4,000.0	10.5	10.5	-89.99	0.0	-20.0	20.0	-0.9	20.97	0.955 Level 1		
4,100.0	4,100.0	4,100.0	4,100.0	10.8	10.8	-89.99	0.0	-20.0	20.0	-1.5	21.50	0.931 Level 1		
4,200.0	4,200.0	4,200.0	4,200.0	11.0	11.0	-89.99	0.0	-20.0	20.0	-2.0	22.03	0.909 Level 1		
4,300.0	4,300.0	4,300.0	4,300.0	11.3	11.3	-89.99	0.0	-20.0	20.0	-2.5	22.56	0.887 Level 1		
4,400.0	4,400.0	4,400.0	4,400.0	11.5	11.5	-89.99	0.0	-20.0	20.0	-3.1	23.09	0.867 Level 1		
4,500.0	4,500.0	4,500.0	4,500.0	11.8	11.8	-89.99	0.0	-20.0	20.0	-3.6	23.62	0.847 Level 1		
4,600.0	4,600.0	4,600.0	4,600.0	12.1	12.1	-89.99	0.0	-20.0	20.0	-4.1	24.16	0.829 Level 1		
4,700.0	4,700.0	4,700.0	4,700.0	12.3	12.3	-89.99	0.0	-20.0	20.0	-4.7	24.69	0.811 Level 1		
4,800.0	4,800.0	4,800.0	4,800.0	12.6	12.6	-89.99	0.0	-20.0	20.0	-5.2	25.22	0.794 Level 1		
4,900.0	4,900.0	4,900.0	4,900.0	12.9	12.9	-89.99	0.0	-20.0	20.0	-5.7	25.75	0.778 Level 1		
5,000.0	5,000.0	5,000.0	5,000.0	13.1	13.1	-89.99	0.0	-20.0	20.0	-6.3	26.28	0.762 Level 1		
5,100.0	5,100.0	5,100.0	5,100.0	13.4	13.4	-89.99	0.0	-20.0	20.0	-6.8	26.81	0.747 Level 1		

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 Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design		Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-380HN - Wellbore #1 - Plan #2 (10-22-13)										Offset Site Error:		0.0 ft
Survey Program: 0-NS-GYRO-MS												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		
5,200.0	5,200.0	5,200.0	5,200.0	13.7	13.7	-89.99	0.0	-20.0	20.0	-7.3	27.34	0.732 Level 1	0.688 Level 1, CC, ES, SF	
5,300.0	5,300.0	5,300.0	5,300.0	13.9	13.9	-89.99	0.0	-20.0	20.0	-7.9	27.87	0.718 Level 1		
5,400.0	5,400.0	5,400.0	5,400.0	14.2	14.2	-89.99	0.0	-20.0	20.0	-8.4	28.40	0.705 Level 1		
5,500.0	5,500.0	5,500.0	5,500.0	14.5	14.5	-89.99	0.0	-20.0	20.0	-8.9	28.93	0.692 Level 1		
5,533.8	5,533.8	5,533.8	5,533.8	14.6	14.6	-89.99	0.0	-20.0	20.0	-9.1	29.11	0.688 Level 1, CC, ES, SF		
5,600.0	5,600.0	5,599.6	5,599.6	14.7	14.7	-88.92	0.4	-20.5	20.5	-8.9	29.45	0.698 Level 1		
5,700.0	5,700.0	5,698.4	5,698.3	15.0	14.9	-82.05	3.4	-24.6	24.9	-5.0	29.92	0.834 Level 1	1.131 Level 2	
5,800.0	5,800.0	5,796.5	5,795.9	15.3	15.1	-73.87	9.5	-32.8	34.4	4.0	30.39	1.131 Level 2		
5,900.0	5,900.0	5,893.3	5,891.5	15.5	15.3	-67.68	18.4	-44.7	49.1	18.2	30.85	1.591	2.203	
6,000.0	6,000.0	5,988.4	5,984.5	15.8	15.5	-63.61	29.9	-60.2	69.0	37.7	31.31	2.203		
6,100.0	6,099.7	6,082.3	6,075.4	16.1	15.7	-54.64	44.0	-79.2	89.8	58.2	31.68	2.836	3.384	
6,200.0	6,197.4	6,175.3	6,164.2	16.3	15.9	-59.31	60.5	-101.4	108.1	76.1	31.94	3.384		
6,300.0	6,291.3	6,266.6	6,249.9	16.6	16.1	-66.76	79.3	-126.7	126.0	93.7	32.30	3.900		
6,400.0	6,380.5	6,355.8	6,332.1	16.9	16.4	-75.70	99.9	-154.5	147.1	114.2	32.96	4.463		
6,500.0	6,469.1	6,444.2	6,411.9	17.1	16.6	-82.41	122.6	-185.0	174.8	141.2	33.58	5.205		
6,600.0	6,558.6	6,532.0	6,489.3	17.4	16.8	-85.47	147.3	-218.2	207.0	172.8	34.12	6.066		
6,700.0	6,654.8	6,623.3	6,568.2	17.7	17.0	-71.27	174.7	-255.2	239.5	204.9	34.58	6.926	7.769	
6,800.0	6,754.2	6,713.2	6,645.7	17.8	17.3	38.60	201.9	-291.7	270.9	236.0	34.87	7.769		
6,900.0	6,851.8	6,797.3	6,719.4	17.8	17.5	71.74	222.0	-326.5	305.0	270.0	34.98	8.720	9.768	
7,000.0	6,942.7	6,888.2	6,801.4	17.7	17.7	79.89	226.2	-365.3	342.5	307.4	35.06	9.768		
7,100.0	7,022.1	6,991.3	6,892.9	17.7	17.8	84.18	208.4	-408.8	380.9	345.8	35.07	10.859	11.919	
7,200.0	7,085.9	7,113.2	6,992.5	17.6	17.9	87.30	157.9	-456.5	417.2	382.2	35.00	11.919		
7,300.0	7,131.0	7,261.6	7,091.2	17.5	17.9	89.93	58.8	-504.0	447.3	412.4	34.84	12.838		
7,400.0	7,155.0	7,439.8	7,162.4	17.5	17.9	91.74	-99.4	-538.9	465.8	431.1	34.63	13.448		
7,500.0	7,158.3	7,598.3	7,175.2	17.5	18.0	92.06	-256.6	-546.2	469.1	434.6	34.54	13.581		
7,600.0	7,157.4	7,698.3	7,173.9	17.5	18.1	92.02	-356.6	-546.4	469.1	434.5	34.58	13.566		
7,700.0	7,156.4	7,798.3	7,172.7	17.6	18.2	91.98	-456.6	-546.5	469.1	434.4	34.72	13.512	13.422	
7,800.0	7,155.5	7,898.3	7,171.4	17.7	18.3	91.94	-556.5	-546.7	469.0	434.1	34.95	13.422		
7,900.0	7,154.6	7,998.3	7,170.1	17.8	18.5	91.90	-656.5	-546.8	469.0	433.7	35.27	13.297	13.140	
8,000.0	7,153.6	8,098.3	7,168.8	18.0	18.7	91.86	-756.5	-547.0	469.0	433.3	35.69	13.140		
8,100.0	7,152.7	8,198.3	7,167.5	18.3	18.9	91.82	-856.5	-547.2	469.0	432.8	36.20	12.955	12.746	
8,200.0	7,151.7	8,298.3	7,166.3	18.5	19.2	91.77	-956.5	-547.3	468.9	432.1	36.79	12.746		
8,300.0	7,150.8	8,398.3	7,165.0	18.9	19.5	91.73	-1,056.5	-547.5	468.9	431.4	37.46	12.516		
8,400.0	7,149.8	8,498.3	7,163.7	19.2	19.9	91.69	-1,156.5	-547.6	468.9	430.7	38.21	12.270		
8,500.0	7,148.9	8,598.3	7,162.4	19.7	20.2	91.65	-1,256.5	-547.8	468.9	429.8	39.04	12.011		
8,600.0	7,148.0	8,698.3	7,161.1	20.1	20.7	91.61	-1,356.5	-547.9	468.8	428.9	39.93	11.742		
8,700.0	7,147.0	8,798.3	7,159.9	20.6	21.1	91.57	-1,456.5	-548.1	468.8	427.9	40.88	11.468	11.190	
8,800.0	7,146.1	8,898.3	7,158.6	21.1	21.6	91.53	-1,556.5	-548.3	468.8	426.9	41.89	11.190		
8,900.0	7,145.1	8,998.3	7,157.3	21.6	22.1	91.49	-1,656.4	-548.4	468.8	425.8	42.96	10.911	10.633	
9,000.0	7,144.2	9,098.3	7,156.0	22.2	22.6	91.45	-1,756.4	-548.6	468.7	424.6	44.08	10.633		
9,100.0	7,143.2	9,198.3	7,154.7	22.7	23.2	91.41	-1,856.4	-548.7	468.7	423.5	45.25	10.358	10.088	
9,200.0	7,142.3	9,298.3	7,153.5	23.3	23.8	91.36	-1,956.4	-548.9	468.7	422.2	46.46	10.088		
9,300.0	7,141.4	9,398.3	7,152.2	24.0	24.4	91.32	-2,056.4	-549.1	468.7	420.9	47.71	9.823		
9,400.0	7,140.4	9,498.3	7,150.9	24.6	25.0	91.28	-2,156.4	-549.2	468.6	419.6	49.00	9.564		
9,500.0	7,139.5	9,598.3	7,149.6	25.2	25.7	91.24	-2,256.4	-549.4	468.6	418.3	50.32	9.313		
9,600.0	7,138.5	9,698.3	7,148.3	25.9	26.3	91.20	-2,356.4	-549.5	468.6	416.9	51.67	9.068		
9,700.0	7,137.6	9,798.3	7,147.1	26.6	27.0	91.16	-2,456.4	-549.7	468.6	415.5	53.06	8.831	8.602	
9,800.0	7,136.6	9,898.3	7,145.8	27.3	27.7	91.12	-2,556.4	-549.8	468.5	414.1	54.47	8.602		
9,900.0	7,135.7	9,998.3	7,144.5	28.0	28.4	91.08	-2,656.4	-550.0	468.5	412.6	55.90	8.381	8.167	
10,000.0	7,134.8	10,098.3	7,143.2	28.8	29.1	91.04	-2,756.3	-550.2	468.5	411.1	57.36	8.167		
10,100.0	7,133.8	10,198.3	7,141.9	29.5	29.8	90.99	-2,856.3	-550.3	468.5	409.6	58.84	7.961	7.763	
10,200.0	7,132.9	10,298.3	7,140.7	30.2	30.6	90.95	-2,956.3	-550.5	468.4	408.1	60.34	7.763		

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 Tailholt FD 11-379HN
Project:	SEC.11-T6N-R67W	TVD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Reference Site:	Tailholt FD Horizontal Pad Sec.11-T6N-R67W	MD Reference:	WELL @ 4890.7ft (RKB - 16.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Tailholt FD 11-379HN	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 #4 (10-22-13)	Offset TVD Reference:	Offset Datum

Offset Design Tailholt FD Horizontal Pad Sec.11-T6N-R67W - Tailholt FD 11-380HN - Wellbore #1 - Plan #2 (10-22-13)												Offset Site Error:	0.0 ft
Survey Program: 0-NS-GYRO-MS												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,300.0	7,131.9	10,398.3	7,139.4	31.0	31.3	90.91	-3,056.3	-550.6	468.4	406.6	61.86	7.572	
10,400.0	7,131.0	10,498.3	7,138.1	31.8	32.1	90.87	-3,156.3	-550.8	468.4	405.0	63.40	7.388	
10,500.0	7,130.0	10,598.3	7,136.8	32.5	32.9	90.83	-3,256.3	-551.0	468.4	403.4	64.95	7.212	
10,600.0	7,129.1	10,698.3	7,135.5	33.3	33.6	90.79	-3,356.3	-551.1	468.3	401.8	66.51	7.041	
10,700.0	7,128.1	10,798.3	7,134.3	34.1	34.4	90.75	-3,456.3	-551.3	468.3	400.2	68.09	6.878	
10,800.0	7,127.2	10,898.3	7,133.0	34.9	35.2	90.71	-3,556.3	-551.4	468.3	398.6	69.69	6.720	
10,900.0	7,126.3	10,998.3	7,131.7	35.7	36.0	90.67	-3,656.3	-551.6	468.3	397.0	71.29	6.569	
11,000.0	7,125.3	11,098.3	7,130.4	36.5	36.8	90.62	-3,756.3	-551.7	468.3	395.4	72.91	6.423	
11,100.0	7,124.4	11,198.3	7,129.1	37.3	37.6	90.58	-3,856.3	-551.9	468.2	393.7	74.53	6.282	
11,200.0	7,123.4	11,298.3	7,127.9	38.1	38.4	90.54	-3,956.2	-552.1	468.2	392.1	76.17	6.147	
11,300.0	7,122.5	11,398.3	7,126.6	38.9	39.2	90.50	-4,056.2	-552.2	468.2	390.4	77.82	6.017	
11,400.0	7,121.5	11,498.3	7,125.3	39.8	40.0	90.46	-4,156.2	-552.4	468.2	388.7	79.47	5.891	
11,500.0	7,120.6	11,598.3	7,124.0	40.6	40.9	90.42	-4,256.2	-552.5	468.2	387.0	81.13	5.770	
11,600.0	7,119.7	11,698.3	7,122.7	41.4	41.7	90.38	-4,356.2	-552.7	468.1	385.3	82.80	5.654	
11,700.0	7,118.7	11,798.3	7,121.5	42.3	42.5	90.34	-4,456.2	-552.9	468.1	383.6	84.48	5.541	
11,800.0	7,117.8	11,898.3	7,120.2	43.1	43.4	90.30	-4,556.2	-553.0	468.1	381.9	86.16	5.433	
11,900.0	7,116.8	11,998.3	7,118.9	44.0	44.2	90.25	-4,656.2	-553.2	468.1	380.2	87.85	5.328	
11,913.7	7,116.7	12,011.9	7,118.7	44.1	44.3	90.25	-4,669.8	-553.2	468.1	380.0	88.08	5.314	

Reference Depths are relative to WELL @ 4890.7ft (RKB - 16.5')	Coordinates are relative to: Tailholt FD 11-379HN
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: 0.41°



Reference Depths are relative to WELL @ 4890.7ft (RKB - 16.5')	Coordinates are relative to: Tailholt FD 11-379HN
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: 0.41°

