Bayswater Exploration & Production, LLC

Well Name: **Thornton A-29-30HN**

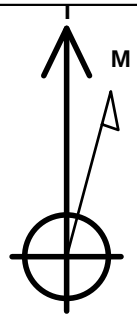
Surface Location: Thornton 28-H Pad Sec.28-T7N-R66W
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone
Ground Elevation: 4909.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1443581.09	3196884.17	40.548871	-104.791518	

RKB - 23' WELL @ 4932.0ft (RKB - 23')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1554'FNL, 355'FWL, SEC.28	1.0	0.0	0.0	Point
BHL 160'FNL, 470'FWL, SEC.30	7297.0	1178.8	-10768.4	Point
LPL 160'FNL, 470'FEL, SEC.29	7347.0	1385.5	-775.9	Point



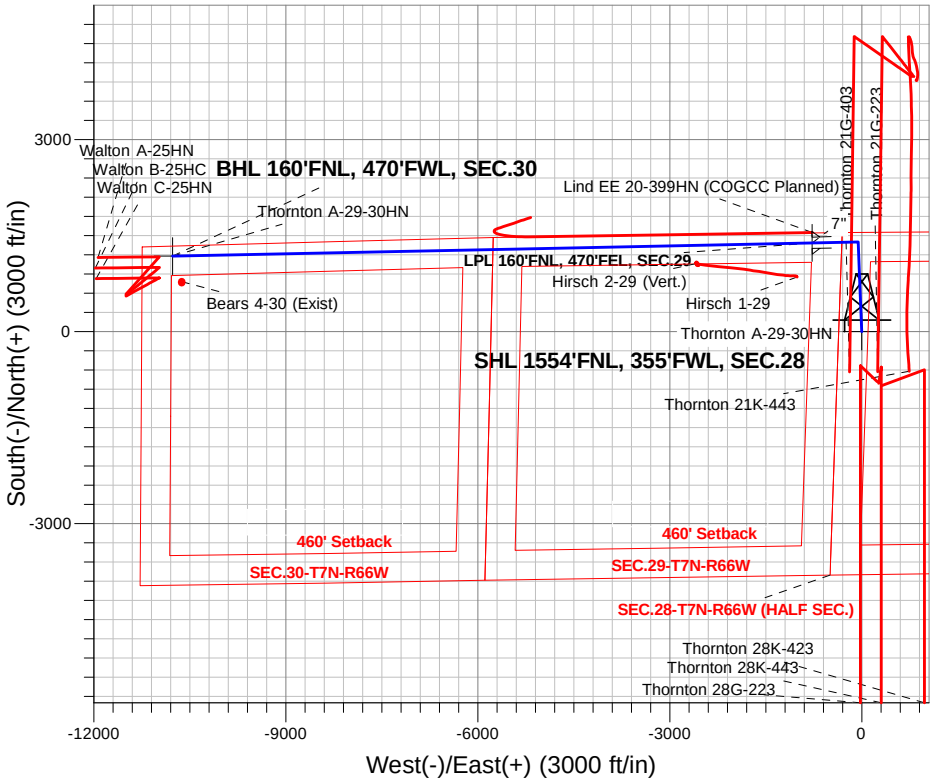
Azimuths to True North
Magnetic North: 8.27°

Magnetic Field
Strength: 52718.9snT
Dip Angle: 67.00°
Date: 1/27/2016
Model: IGRF2010

Thornton 28-H Pad Sec.28-T7N-R66W
Thornton A-29-30HN
Plan #1 (1-28-16)
6:53, February 22 2016

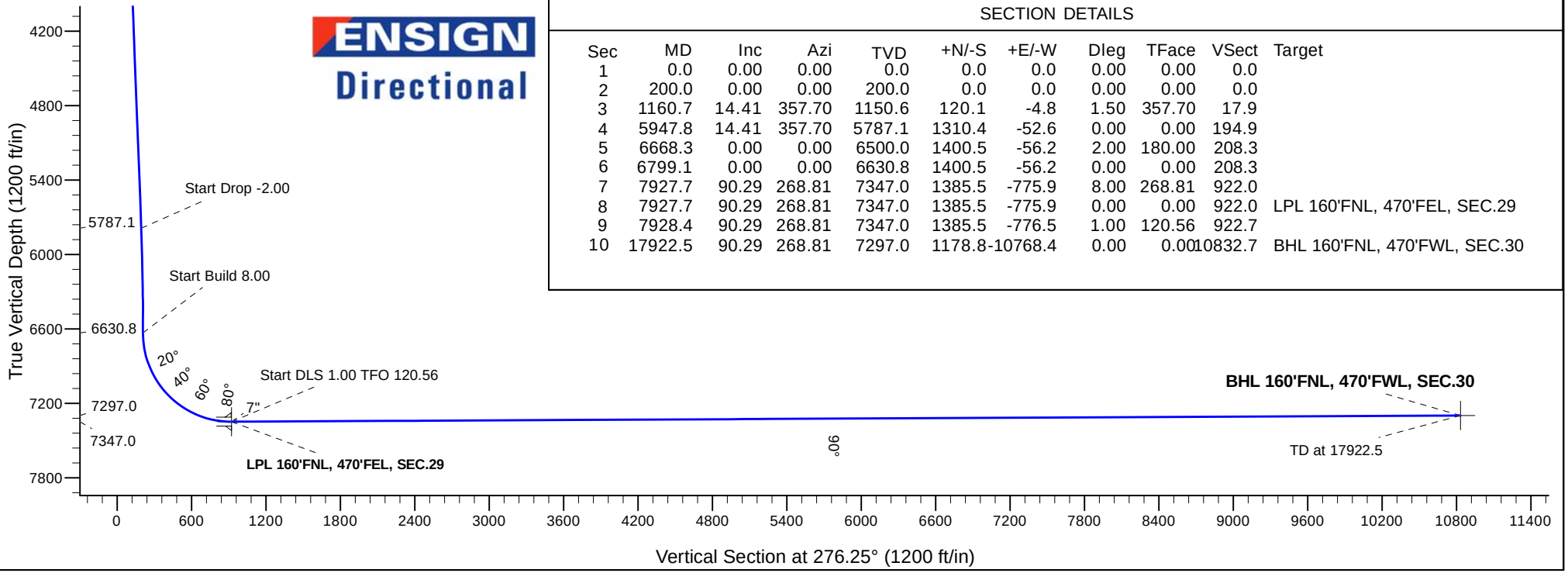
ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP - Start Build 1.50
5787.1	5947.8	Start Drop -2.00
6630.8	6799.1	Start Build 8.00
7347.0	7927.7	Start DLS 1.00 TFO 120.56
7347.0	7928.4	Start 9994.1 hold at 7928.4 MD
7297.0	17922.5	TD at 17922.5



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	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	1160.7	14.41	357.70	1150.6	120.1	-4.8	1.50	357.70	17.9	
4	5947.8	14.41	357.70	5787.1	1310.4	-52.6	0.00	0.00	194.9	
5	6668.3	0.00	0.00	6500.0	1400.5	-56.2	2.00	180.00	208.3	
6	6799.1	0.00	0.00	6630.8	1400.5	-56.2	0.00	0.00	208.3	
7	7927.7	90.29	268.81	7347.0	1385.5	-775.9	8.00	268.81	922.0	
8	7927.7	90.29	268.81	7347.0	1385.5	-775.9	0.00	0.00	922.0	LPL 160'FNL, 470'FEL, SEC.29
9	7928.4	90.29	268.81	7347.0	1385.5	-776.5	1.00	120.56	922.7	
10	17922.5	90.29	268.81	7297.0	1178.8	-10768.4	0.00	0.00	10832.7	BHL 160'FNL, 470'FWL, SEC.30



ENSIGN
Directional

Bayswater Exploration & Production, LLC

SEC.28-T7N-R66W
Thornton 28-H Pad Sec.28-T7N-R66W
Thornton A-29-30HN

Wellbore #1

Plan: Plan #1 (1-28-16)

Standard Planning Report

22 February, 2016

BAYSWATER
EXPLORATION & PRODUCTION, LLC

Database:	US_EDM	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Company:	Bayswater Exploration & Production, LLC	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**North Reference:**	True
Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-28-16)		

Project SEC.28-T7N-R66W, Weld County, Colorado

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site Thornton 28-H Pad Sec.28-T7N-R66W

Site Position:		**Northing:**	1,443,581.10 usft	**Latitude:**	40.548871
From:	Lat/Long	**Easting:**	3,196,884.17 usft	**Longitude:**	-104.791518
Position Uncertainty:	0.0 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.46 °

Well Thornton A-29-30HN

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,443,581.10 usft	**Latitude:**	40.548871
	+E/-W	0.0 ft	**Easting:**	3,196,884.17 usft	**Longitude:**	-104.791518
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	0.0 ft	**Ground Level:**	4,909.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/27/2016	8.27	67.00	52,719

Design Plan #1 (1-28-16)

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	276.25

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	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	
1,160.7	14.41	357.70	1,150.6	120.1	-4.8	1.50	1.50	0.00	357.70	
5,947.8	14.41	357.70	5,787.1	1,310.4	-52.6	0.00	0.00	0.00	0.00	
6,668.3	0.00	0.00	6,500.0	1,400.5	-56.2	2.00	-2.00	0.00	180.00	
6,799.1	0.00	0.00	6,630.8	1,400.5	-56.2	0.00	0.00	0.00	0.00	
7,927.7	90.29	268.81	7,347.0	1,385.5	-775.9	8.00	8.00	0.00	268.81	
7,927.7	90.29	268.81	7,347.0	1,385.5	-775.9	0.00	0.00	0.00	0.00	LPL 160'FNL, 470'FEI
7,928.4	90.29	268.81	7,347.0	1,385.5	-776.5	1.00	-0.51	0.86	120.56	
17,922.5	90.29	268.81	7,297.0	1,178.8	-10,768.4	0.00	0.00	0.00	0.00	BHL 160'FNL, 470'FW

Database:	US_EDM	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Company:	Bayswater Exploration & Production, LLC	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**North Reference:**	True
Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-28-16)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 1554'FNL, 355'FWL, SEC.28									
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
KOP - Start Build 1.50									
300.0	1.50	357.70	300.0	1.3	-0.1	0.2	1.50	1.50	0.00
400.0	3.00	357.70	399.9	5.2	-0.2	0.8	1.50	1.50	0.00
500.0	4.50	357.70	499.7	11.8	-0.5	1.7	1.50	1.50	0.00
600.0	6.00	357.70	599.3	20.9	-0.8	3.1	1.50	1.50	0.00
700.0	7.50	357.70	698.6	32.7	-1.3	4.9	1.50	1.50	0.00
800.0	9.00	357.70	797.5	47.0	-1.9	7.0	1.50	1.50	0.00
900.0	10.50	357.70	896.1	63.9	-2.6	9.5	1.50	1.50	0.00
1,000.0	12.00	357.70	994.2	83.4	-3.3	12.4	1.50	1.50	0.00
1,100.0	13.50	357.70	1,091.7	105.5	-4.2	15.7	1.50	1.50	0.00
1,160.7	14.41	357.70	1,150.6	120.1	-4.8	17.9	1.50	1.50	0.00
1,200.0	14.41	357.70	1,188.7	129.9	-5.2	19.3	0.00	0.00	0.00
1,300.0	14.41	357.70	1,285.5	154.7	-6.2	23.0	0.00	0.00	0.00
1,400.0	14.41	357.70	1,382.4	179.6	-7.2	26.7	0.00	0.00	0.00
1,500.0	14.41	357.70	1,479.2	204.5	-8.2	30.4	0.00	0.00	0.00
1,600.0	14.41	357.70	1,576.1	229.3	-9.2	34.1	0.00	0.00	0.00
1,700.0	14.41	357.70	1,672.9	254.2	-10.2	37.8	0.00	0.00	0.00
1,800.0	14.41	357.70	1,769.8	279.1	-11.2	41.5	0.00	0.00	0.00
1,900.0	14.41	357.70	1,866.6	303.9	-12.2	45.2	0.00	0.00	0.00
2,000.0	14.41	357.70	1,963.5	328.8	-13.2	48.9	0.00	0.00	0.00
2,100.0	14.41	357.70	2,060.4	353.6	-14.2	52.6	0.00	0.00	0.00
2,200.0	14.41	357.70	2,157.2	378.5	-15.2	56.3	0.00	0.00	0.00
2,300.0	14.41	357.70	2,254.1	403.4	-16.2	60.0	0.00	0.00	0.00
2,400.0	14.41	357.70	2,350.9	428.2	-17.2	63.7	0.00	0.00	0.00
2,500.0	14.41	357.70	2,447.8	453.1	-18.2	67.4	0.00	0.00	0.00
2,600.0	14.41	357.70	2,544.6	478.0	-19.2	71.1	0.00	0.00	0.00
2,700.0	14.41	357.70	2,641.5	502.8	-20.2	74.8	0.00	0.00	0.00
2,800.0	14.41	357.70	2,738.3	527.7	-21.2	78.5	0.00	0.00	0.00
2,900.0	14.41	357.70	2,835.2	552.6	-22.2	82.2	0.00	0.00	0.00
3,000.0	14.41	357.70	2,932.0	577.4	-23.2	85.9	0.00	0.00	0.00
3,100.0	14.41	357.70	3,028.9	602.3	-24.2	89.6	0.00	0.00	0.00
3,200.0	14.41	357.70	3,125.7	627.2	-25.2	93.3	0.00	0.00	0.00
3,300.0	14.41	357.70	3,222.6	652.0	-26.2	97.0	0.00	0.00	0.00
3,400.0	14.41	357.70	3,319.5	676.9	-27.2	100.7	0.00	0.00	0.00
3,500.0	14.41	357.70	3,416.3	701.8	-28.2	104.4	0.00	0.00	0.00
3,600.0	14.41	357.70	3,513.2	726.6	-29.2	108.1	0.00	0.00	0.00
3,700.0	14.41	357.70	3,610.0	751.5	-30.2	111.8	0.00	0.00	0.00
3,800.0	14.41	357.70	3,706.9	776.4	-31.2	115.5	0.00	0.00	0.00
3,900.0	14.41	357.70	3,803.7	801.2	-32.2	119.1	0.00	0.00	0.00
4,000.0	14.41	357.70	3,900.6	826.1	-33.2	122.8	0.00	0.00	0.00
4,100.0	14.41	357.70	3,997.4	851.0	-34.1	126.5	0.00	0.00	0.00
4,200.0	14.41	357.70	4,094.3	875.8	-35.1	130.2	0.00	0.00	0.00
4,300.0	14.41	357.70	4,191.1	900.7	-36.1	133.9	0.00	0.00	0.00
4,400.0	14.41	357.70	4,288.0	925.6	-37.1	137.6	0.00	0.00	0.00
4,500.0	14.41	357.70	4,384.8	950.4	-38.1	141.3	0.00	0.00	0.00
4,600.0	14.41	357.70	4,481.7	975.3	-39.1	145.0	0.00	0.00	0.00
4,700.0	14.41	357.70	4,578.6	1,000.2	-40.1	148.7	0.00	0.00	0.00
4,800.0	14.41	357.70	4,675.4	1,025.0	-41.1	152.4	0.00	0.00	0.00
4,900.0	14.41	357.70	4,772.3	1,049.9	-42.1	156.1	0.00	0.00	0.00

Database:	US_EDM	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Company:	Bayswater Exploration & Production, LLC	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**North Reference:**	True
Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-28-16)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,000.0	14.41	357.70	4,869.1	1,074.8	-43.1	159.8	0.00	0.00	0.00
5,100.0	14.41	357.70	4,966.0	1,099.6	-44.1	163.5	0.00	0.00	0.00
5,200.0	14.41	357.70	5,062.8	1,124.5	-45.1	167.2	0.00	0.00	0.00
5,300.0	14.41	357.70	5,159.7	1,149.4	-46.1	170.9	0.00	0.00	0.00
5,400.0	14.41	357.70	5,256.5	1,174.2	-47.1	174.6	0.00	0.00	0.00
5,500.0	14.41	357.70	5,353.4	1,199.1	-48.1	178.3	0.00	0.00	0.00
5,600.0	14.41	357.70	5,450.2	1,224.0	-49.1	182.0	0.00	0.00	0.00
5,700.0	14.41	357.70	5,547.1	1,248.8	-50.1	185.7	0.00	0.00	0.00
5,800.0	14.41	357.70	5,643.9	1,273.7	-51.1	189.4	0.00	0.00	0.00
5,900.0	14.41	357.70	5,740.8	1,298.6	-52.1	193.1	0.00	0.00	0.00
5,947.8	14.41	357.70	5,787.1	1,310.5	-52.6	194.9	0.00	0.00	0.00
Start Drop -2.00									
6,000.0	13.37	357.70	5,837.8	1,323.0	-53.1	196.7	2.00	-2.00	0.00
6,100.0	11.37	357.70	5,935.4	1,344.4	-53.9	199.9	2.00	-2.00	0.00
6,200.0	9.37	357.70	6,033.8	1,362.3	-54.7	202.6	2.00	-2.00	0.00
6,300.0	7.37	357.70	6,132.7	1,376.9	-55.3	204.7	2.00	-2.00	0.00
6,400.0	5.37	357.70	6,232.1	1,388.0	-55.7	206.4	2.00	-2.00	0.00
6,500.0	3.37	357.70	6,331.8	1,395.6	-56.0	207.5	2.00	-2.00	0.00
6,600.0	1.37	357.70	6,431.7	1,399.7	-56.2	208.1	2.00	-2.00	0.00
6,668.3	0.00	0.00	6,500.0	1,400.5	-56.2	208.3	2.00	-2.00	0.00
6,700.0	0.00	0.00	6,531.7	1,400.5	-56.2	208.3	0.00	0.00	0.00
6,799.1	0.00	0.00	6,630.8	1,400.5	-56.2	208.3	0.00	0.00	0.00
Start Build 8.00									
6,800.0	0.07	268.81	6,631.7	1,400.5	-56.2	208.3	8.13	8.13	0.00
6,900.0	8.07	268.81	6,731.4	1,400.4	-63.3	215.3	8.00	8.00	0.00
7,000.0	16.07	268.81	6,829.1	1,399.9	-84.2	236.0	8.00	8.00	0.00
7,100.0	24.07	268.81	6,922.9	1,399.2	-118.5	270.0	8.00	8.00	0.00
7,200.0	32.07	268.81	7,011.1	1,398.2	-165.5	316.7	8.00	8.00	0.00
7,300.0	40.07	268.81	7,091.9	1,397.0	-224.3	375.0	8.00	8.00	0.00
7,400.0	48.07	268.81	7,163.7	1,395.6	-293.8	443.9	8.00	8.00	0.00
7,500.0	56.07	268.81	7,225.1	1,393.9	-372.6	522.1	8.00	8.00	0.00
7,600.0	64.07	268.81	7,274.9	1,392.1	-459.2	607.9	8.00	8.00	0.00
7,700.0	72.07	268.81	7,312.2	1,390.2	-551.8	699.8	8.00	8.00	0.00
7,800.0	80.07	268.81	7,336.3	1,388.2	-648.8	796.0	8.00	8.00	0.00
7,900.0	88.07	268.81	7,346.6	1,386.1	-748.2	894.6	8.00	8.00	0.00
7,927.7	90.29	268.81	7,347.0	1,385.5	-775.9	922.0	7.99	7.99	0.00
Start DLS 1.00 TFO 120.56 - LPL 160'FNL, 470'FEL, SEC.29									
7,928.4	90.29	268.81	7,347.0	1,385.5	-776.6	922.7	0.91	-0.34	0.84
Start 9994.1 hold at 7928.4 MD - 7"									
8,000.0	90.29	268.81	7,346.6	1,384.0	-848.1	993.7	0.00	0.00	0.00
8,100.0	90.29	268.81	7,346.1	1,382.0	-948.1	1,092.9	0.00	0.00	0.00
8,200.0	90.29	268.81	7,345.6	1,379.9	-1,048.1	1,192.0	0.00	0.00	0.00
8,300.0	90.29	268.81	7,345.1	1,377.8	-1,148.1	1,291.2	0.00	0.00	0.00
8,400.0	90.29	268.81	7,344.6	1,375.8	-1,248.0	1,390.3	0.00	0.00	0.00
8,500.0	90.29	268.81	7,344.1	1,373.7	-1,348.0	1,489.5	0.00	0.00	0.00
8,600.0	90.29	268.81	7,343.6	1,371.6	-1,448.0	1,588.7	0.00	0.00	0.00
8,700.0	90.29	268.81	7,343.1	1,369.6	-1,548.0	1,687.8	0.00	0.00	0.00
8,800.0	90.29	268.81	7,342.6	1,367.5	-1,648.0	1,787.0	0.00	0.00	0.00
8,900.0	90.29	268.81	7,342.1	1,365.4	-1,747.9	1,886.1	0.00	0.00	0.00
9,000.0	90.29	268.81	7,341.6	1,363.4	-1,847.9	1,985.3	0.00	0.00	0.00
9,100.0	90.29	268.81	7,341.1	1,361.3	-1,947.9	2,084.5	0.00	0.00	0.00
9,200.0	90.29	268.81	7,340.6	1,359.2	-2,047.9	2,183.6	0.00	0.00	0.00
9,300.0	90.29	268.81	7,340.1	1,357.1	-2,147.8	2,282.8	0.00	0.00	0.00

Database:	US_EDM	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Company:	Bayswater Exploration & Production, LLC	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**North Reference:**	True
Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-28-16)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,400.0	90.29	268.81	7,339.6	1,355.1	-2,247.8	2,381.9	0.00	0.00	0.00
9,500.0	90.29	268.81	7,339.1	1,353.0	-2,347.8	2,481.1	0.00	0.00	0.00
9,600.0	90.29	268.81	7,338.6	1,350.9	-2,447.8	2,580.2	0.00	0.00	0.00
9,700.0	90.29	268.81	7,338.1	1,348.9	-2,547.8	2,679.4	0.00	0.00	0.00
9,800.0	90.29	268.81	7,337.6	1,346.8	-2,647.7	2,778.6	0.00	0.00	0.00
9,900.0	90.29	268.81	7,337.1	1,344.7	-2,747.7	2,877.7	0.00	0.00	0.00
10,000.0	90.29	268.81	7,336.6	1,342.7	-2,847.7	2,976.9	0.00	0.00	0.00
10,100.0	90.29	268.81	7,336.1	1,340.6	-2,947.7	3,076.0	0.00	0.00	0.00
10,200.0	90.29	268.81	7,335.6	1,338.5	-3,047.6	3,175.2	0.00	0.00	0.00
10,300.0	90.29	268.81	7,335.1	1,336.5	-3,147.6	3,274.4	0.00	0.00	0.00
10,400.0	90.29	268.81	7,334.6	1,334.4	-3,247.6	3,373.5	0.00	0.00	0.00
10,500.0	90.29	268.81	7,334.1	1,332.3	-3,347.6	3,472.7	0.00	0.00	0.00
10,600.0	90.29	268.81	7,333.6	1,330.2	-3,447.5	3,571.8	0.00	0.00	0.00
10,700.0	90.29	268.81	7,333.1	1,328.2	-3,547.5	3,671.0	0.00	0.00	0.00
10,800.0	90.29	268.81	7,332.6	1,326.1	-3,647.5	3,770.1	0.00	0.00	0.00
10,900.0	90.29	268.81	7,332.1	1,324.0	-3,747.5	3,869.3	0.00	0.00	0.00
11,000.0	90.29	268.81	7,331.6	1,322.0	-3,847.5	3,968.5	0.00	0.00	0.00
11,100.0	90.29	268.81	7,331.1	1,319.9	-3,947.4	4,067.6	0.00	0.00	0.00
11,200.0	90.29	268.81	7,330.6	1,317.8	-4,047.4	4,166.8	0.00	0.00	0.00
11,300.0	90.29	268.81	7,330.1	1,315.8	-4,147.4	4,265.9	0.00	0.00	0.00
11,400.0	90.29	268.81	7,329.6	1,313.7	-4,247.4	4,365.1	0.00	0.00	0.00
11,500.0	90.29	268.81	7,329.1	1,311.6	-4,347.3	4,464.3	0.00	0.00	0.00
11,600.0	90.29	268.81	7,328.6	1,309.6	-4,447.3	4,563.4	0.00	0.00	0.00
11,700.0	90.29	268.81	7,328.1	1,307.5	-4,547.3	4,662.6	0.00	0.00	0.00
11,800.0	90.29	268.81	7,327.6	1,305.4	-4,647.3	4,761.7	0.00	0.00	0.00
11,900.0	90.29	268.81	7,327.1	1,303.4	-4,747.3	4,860.9	0.00	0.00	0.00
12,000.0	90.29	268.81	7,326.6	1,301.3	-4,847.2	4,960.0	0.00	0.00	0.00
12,100.0	90.29	268.81	7,326.1	1,299.2	-4,947.2	5,059.2	0.00	0.00	0.00
12,200.0	90.29	268.81	7,325.6	1,297.1	-5,047.2	5,158.4	0.00	0.00	0.00
12,300.0	90.29	268.81	7,325.1	1,295.1	-5,147.2	5,257.5	0.00	0.00	0.00
12,400.0	90.29	268.81	7,324.6	1,293.0	-5,247.1	5,356.7	0.00	0.00	0.00
12,500.0	90.29	268.81	7,324.1	1,290.9	-5,347.1	5,455.8	0.00	0.00	0.00
12,600.0	90.29	268.81	7,323.6	1,288.9	-5,447.1	5,555.0	0.00	0.00	0.00
12,700.0	90.29	268.81	7,323.1	1,286.8	-5,547.1	5,654.2	0.00	0.00	0.00
12,800.0	90.29	268.81	7,322.6	1,284.7	-5,647.1	5,753.3	0.00	0.00	0.00
12,900.0	90.29	268.81	7,322.1	1,282.7	-5,747.0	5,852.5	0.00	0.00	0.00
13,000.0	90.29	268.81	7,321.6	1,280.6	-5,847.0	5,951.6	0.00	0.00	0.00
13,100.0	90.29	268.81	7,321.1	1,278.5	-5,947.0	6,050.8	0.00	0.00	0.00
13,200.0	90.29	268.81	7,320.6	1,276.5	-6,047.0	6,150.0	0.00	0.00	0.00
13,300.0	90.29	268.81	7,320.1	1,274.4	-6,146.9	6,249.1	0.00	0.00	0.00
13,400.0	90.29	268.81	7,319.6	1,272.3	-6,246.9	6,348.3	0.00	0.00	0.00
13,500.0	90.29	268.81	7,319.1	1,270.3	-6,346.9	6,447.4	0.00	0.00	0.00
13,600.0	90.29	268.81	7,318.6	1,268.2	-6,446.9	6,546.6	0.00	0.00	0.00
13,700.0	90.29	268.81	7,318.1	1,266.1	-6,546.8	6,645.7	0.00	0.00	0.00
13,800.0	90.29	268.81	7,317.6	1,264.0	-6,646.8	6,744.9	0.00	0.00	0.00
13,900.0	90.29	268.81	7,317.1	1,262.0	-6,746.8	6,844.1	0.00	0.00	0.00
14,000.0	90.29	268.81	7,316.6	1,259.9	-6,846.8	6,943.2	0.00	0.00	0.00
14,100.0	90.29	268.81	7,316.1	1,257.8	-6,946.8	7,042.4	0.00	0.00	0.00
14,200.0	90.29	268.81	7,315.6	1,255.8	-7,046.7	7,141.5	0.00	0.00	0.00
14,300.0	90.29	268.81	7,315.1	1,253.7	-7,146.7	7,240.7	0.00	0.00	0.00
14,400.0	90.29	268.81	7,314.6	1,251.6	-7,246.7	7,339.9	0.00	0.00	0.00
14,500.0	90.29	268.81	7,314.1	1,249.6	-7,346.7	7,439.0	0.00	0.00	0.00
14,600.0	90.29	268.81	7,313.6	1,247.5	-7,446.6	7,538.2	0.00	0.00	0.00
14,700.0	90.29	268.81	7,313.1	1,245.4	-7,546.6	7,637.3	0.00	0.00	0.00

Database:	US_EDM	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Company:	Bayswater Exploration & Production, LLC	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**North Reference:**	True
Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-28-16)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,800.0	90.29	268.81	7,312.6	1,243.4	-7,646.6	7,736.5	0.00	0.00	0.00
14,900.0	90.29	268.81	7,312.1	1,241.3	-7,746.6	7,835.6	0.00	0.00	0.00
15,000.0	90.29	268.81	7,311.6	1,239.2	-7,846.6	7,934.8	0.00	0.00	0.00
15,100.0	90.29	268.81	7,311.1	1,237.1	-7,946.5	8,034.0	0.00	0.00	0.00
15,200.0	90.29	268.81	7,310.6	1,235.1	-8,046.5	8,133.1	0.00	0.00	0.00
15,300.0	90.29	268.81	7,310.1	1,233.0	-8,146.5	8,232.3	0.00	0.00	0.00
15,400.0	90.29	268.81	7,309.6	1,230.9	-8,246.5	8,331.4	0.00	0.00	0.00
15,500.0	90.29	268.81	7,309.1	1,228.9	-8,346.4	8,430.6	0.00	0.00	0.00
15,600.0	90.29	268.81	7,308.6	1,226.8	-8,446.4	8,529.8	0.00	0.00	0.00
15,700.0	90.29	268.81	7,308.1	1,224.7	-8,546.4	8,628.9	0.00	0.00	0.00
15,800.0	90.29	268.81	7,307.6	1,222.7	-8,646.4	8,728.1	0.00	0.00	0.00
15,900.0	90.29	268.81	7,307.1	1,220.6	-8,746.3	8,827.2	0.00	0.00	0.00
16,000.0	90.29	268.81	7,306.6	1,218.5	-8,846.3	8,926.4	0.00	0.00	0.00
16,100.0	90.29	268.81	7,306.1	1,216.5	-8,946.3	9,025.5	0.00	0.00	0.00
16,200.0	90.29	268.81	7,305.6	1,214.4	-9,046.3	9,124.7	0.00	0.00	0.00
16,300.0	90.29	268.81	7,305.1	1,212.3	-9,146.3	9,223.9	0.00	0.00	0.00
16,400.0	90.29	268.81	7,304.6	1,210.3	-9,246.2	9,323.0	0.00	0.00	0.00
16,500.0	90.29	268.81	7,304.1	1,208.2	-9,346.2	9,422.2	0.00	0.00	0.00
16,600.0	90.29	268.81	7,303.6	1,206.1	-9,446.2	9,521.3	0.00	0.00	0.00
16,700.0	90.29	268.81	7,303.1	1,204.0	-9,546.2	9,620.5	0.00	0.00	0.00
16,800.0	90.29	268.81	7,302.6	1,202.0	-9,646.1	9,719.7	0.00	0.00	0.00
16,900.0	90.29	268.81	7,302.1	1,199.9	-9,746.1	9,818.8	0.00	0.00	0.00
17,000.0	90.29	268.81	7,301.6	1,197.8	-9,846.1	9,918.0	0.00	0.00	0.00
17,100.0	90.29	268.81	7,301.1	1,195.8	-9,946.1	10,017.1	0.00	0.00	0.00
17,200.0	90.29	268.81	7,300.6	1,193.7	-10,046.1	10,116.3	0.00	0.00	0.00
17,300.0	90.29	268.81	7,300.1	1,191.6	-10,146.0	10,215.5	0.00	0.00	0.00
17,400.0	90.29	268.81	7,299.6	1,189.6	-10,246.0	10,314.6	0.00	0.00	0.00
17,500.0	90.29	268.81	7,299.1	1,187.5	-10,346.0	10,413.8	0.00	0.00	0.00
17,600.0	90.29	268.81	7,298.6	1,185.4	-10,446.0	10,512.9	0.00	0.00	0.00
17,700.0	90.29	268.81	7,298.1	1,183.4	-10,545.9	10,612.1	0.00	0.00	0.00
17,800.0	90.29	268.81	7,297.6	1,181.3	-10,645.9	10,711.2	0.00	0.00	0.00
17,900.0	90.29	268.81	7,297.1	1,179.2	-10,745.9	10,810.4	0.00	0.00	0.00
17,922.5	90.29	268.81	7,297.0	1,178.8	-10,768.4	10,832.7	0.00	0.00	0.00
TD at 17922.5 - BHL 160'FNL, 470'FWL, SEC.30									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL 1554'FNL, 355'FWL - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,443,581.10	3,196,884.17	40.548871	-104.791518
BHL 160'FNL, 470'FWL, - plan hits target center - Point	0.00	0.00	7,297.0	1,178.8	-10,768.4	1,444,673.74	3,186,107.03	40.552100	-104.830268
LPL 160'FNL, 470'FEL, S - plan hits target center - Point	0.00	0.00	7,347.0	1,385.5	-775.9	1,444,960.34	3,196,097.27	40.552674	-104.794310

Database:	US_EDM	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Company:	Bayswater Exploration & Production, LLC	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**North Reference:**	True
Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-28-16)		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,928.4	7,347.0	7"	7	8-3/4

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
200.0	200.0	0.0	0.0	KOP - Start Build 1.50
5,947.8	5,787.1	1,310.5	-52.6	Start Drop -2.00
6,799.1	6,630.8	1,400.5	-56.2	Start Build 8.00
7,927.7	7,347.0	1,385.5	-775.9	Start DLS 1.00 TFO 120.56
7,928.4	7,347.0	1,385.5	-776.6	Start 9994.1 hold at 7928.4 MD
17,922.5	7,297.0	1,178.8	-10,768.4	TD at 17922.5

ENSIGN
Directional

Bayswater Exploration & Production, LLC

SEC.28-T7N-R66W
Thornton 28-H Pad Sec.28-T7N-R66W
Thornton A-29-30HN

Wellbore #1
Plan #1 (1-28-16)

Anticollision Report

22 February, 2016

BAYSWATER
EXPLORATION & PRODUCTION, LLC

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Reference	Plan #1 (1-28-16)		
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 800.0 ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 2/22/2016

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	17,922.5	Plan #1 (1-28-16) (Wellbore #1)	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Existing Wells - Sec.28-T7N-R66W						
Bears 4-30 (Exist) - Wellbore #1 - Wellbore #1	17,787.3	7,344.7	399.7	-42.5	0.904	Level 1, CC
Bears 4-30 (Exist) - Wellbore #1 - Wellbore #1	17,800.0	7,344.6	399.9	-42.6	0.904	Level 1, ES, SF
Lind EE 20-399HN (COGCC Planned) - Wellbore #1 - CO	7,916.6	12,146.3	187.3	42.9	1.297	Level 3, CC, ES
Lind EE 20-399HN (COGCC Planned) - Wellbore #1 - CO	12,300.0	7,764.9	199.4	43.7	1.281	Level 3, SF
Hirsch 29-C Pad Sec.29-T7N-R66W						
Hirsch 1-29 - Wellbore #1 - Wellbore #1	8,175.8	7,591.2	525.1	460.4	8.124	CC, ES
Hirsch 1-29 - Wellbore #1 - Wellbore #1	8,300.0	7,589.2	539.6	472.1	8.003	SF
Hirsch 2-29 (Vert.) - Wellbore #1 - Wellbore #1	9,742.8	7,332.0	284.3	197.6	3.278	CC, ES, SF
Thornton 21K-HZ Pad Sec.21-T7N-R66W						
Thornton 21G-223 - Wellbore #1 - Plan #1 (12-04-12)	7,100.0	10,312.6	541.9	462.1	6.796	SF
Thornton 21G-223 - Wellbore #1 - Plan #1 (12-04-12)	7,200.0	10,313.3	525.1	449.7	6.969	ES
Thornton 21G-223 - Wellbore #1 - Plan #1 (12-04-12)	7,201.8	10,313.4	525.1	449.8	6.977	CC
Thornton 21G-403 - Wellbore #1 - Plan #1 (12-04-12)	7,400.0	10,483.9	293.7	229.0	4.544	SF
Thornton 21G-403 - Wellbore #1 - Plan #1 (12-04-12)	7,450.0	10,485.0	286.4	225.1	4.675	ES
Thornton 21G-403 - Wellbore #1 - Plan #1 (12-04-12)	7,455.2	10,485.1	286.3	225.4	4.701	CC
Thornton 21K-443 - Wellbore #1 - Wellbore #1						Out of range
Thornton 28GK-HZ Pad Sec. 28-T7N-R66W						
Thornton 28G-223 - Wellbore #1 - Plan #2 (2-22-16)						Out of range
Thornton 28K-423 - Wellbore #1 - Plan #1 (06-11-13)						Out of range
Thornton 28K-443 - Wellbore #1 - Plan #2 (2-22-16)						Out of range

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Thornton 28-H Pad Sec.28-T7N-R66W						
Thornton B-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	200.0	200.0	14.9	14.3	22.168	CC
Thornton B-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	17,922.5	17,954.6	187.0	-349.0	0.349	Level 1, ES, SF
Thornton C-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	199.0	29.9	29.2	44.470	CC
Thornton C-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	17,922.5	17,757.7	394.2	-189.0	0.676	Level 1, ES, SF
Thornton D-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	199.0	44.8	44.2	66.711	CC, ES
Thornton D-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	17,922.5	17,782.9	659.9	62.6	1.105	Level 2, SF
Thornton E-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	200.0	198.0	60.1	59.5	89.794	CC, ES
Thornton E-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	5,200.0	5,197.1	592.8	566.2	22.314	SF
Thornton F-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	198.0	75.1	74.4	112.110	CC, ES
Thornton F-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	5,000.0	4,980.2	692.8	667.7	27.502	SF
Thornton G-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	198.0	90.0	89.4	134.433	CC, ES
Thornton G-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	3,800.0	3,762.3	710.8	692.2	38.050	SF
Thornton H-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	200.0	197.0	105.0	104.3	157.271	CC, ES
Thornton H-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	1,000.0	991.2	188.3	183.9	42.762	SF
Thornton I-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	197.0	119.9	119.3	179.662	CC, ES
Thornton I-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	1,000.0	991.2	203.3	198.9	46.153	SF
Thornton J-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	200.0	197.0	134.9	134.2	202.053	CC, ES
Thornton J-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	1,100.0	1,088.7	240.3	235.4	49.295	SF
Thornton K-29-30HC - Wellbore #1 - Plan #2 (2-18-16)	200.0	196.0	150.2	149.5	225.750	CC, ES
Thornton K-29-30HC - Wellbore #1 - Plan #2 (2-18-16)	1,160.7	1,146.6	270.2	265.0	52.389	SF
Thornton L-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	200.0	196.0	165.1	164.5	248.223	CC, ES
Thornton L-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	1,300.0	1,281.5	319.8	314.0	55.061	SF
Thornton M-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	200.0	195.0	180.1	179.4	271.602	CC, ES
Thornton M-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	1,200.0	1,183.7	309.8	304.5	58.046	SF
Thornton N-29-30HC - Wellbore #1 - Plan #2 (2-18-16)	200.0	195.0	195.0	194.4	294.151	CC, ES
Thornton N-29-30HC - Wellbore #1 - Plan #2 (2-18-16)	1,200.0	1,177.5	325.6	320.3	61.326	SF
Thornton O-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	200.0	195.0	210.0	209.3	316.688	CC, ES
Thornton O-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	1,160.7	1,134.3	332.4	327.3	65.165	SF
Thornton P-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	200.0	194.0	224.9	224.3	340.391	CC, ES
Thornton P-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	1,160.7	1,124.2	352.0	346.9	69.628	SF
Thornton Q-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	200.0	194.0	239.9	239.2	362.990	CC, ES
Thornton Q-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	1,160.7	1,114.3	373.9	368.9	74.505	SF
Thornton R-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	194.0	255.2	254.5	386.167	CC, ES
Thornton R-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	1,200.0	1,136.7	412.4	407.3	79.939	SF
Thornton S-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	193.0	270.1	269.5	410.176	CC, ES
Thornton S-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	1,160.7	1,090.7	424.9	419.9	85.484	SF
Thornton T-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	200.0	193.0	285.1	284.4	432.873	CC, ES
Thornton T-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	1,160.7	1,077.6	453.6	448.7	91.413	SF
Thornton U-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	200.0	193.0	300.0	299.4	455.570	CC, ES
Thornton U-29-30HN - Wellbore #1 - Plan #2 (2-18-16)	1,200.0	1,100.0	500.9	495.7	97.335	SF
Thornton V-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	200.0	192.0	315.0	314.3	479.912	CC, ES
Thornton V-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	1,300.0	1,156.1	579.3	573.7	103.663	SF
Thornton W-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	200.0	192.0	329.9	329.3	502.686	CC, ES
Thornton W-29-30HC - Wellbore #1 - Plan #1 (1-28-16)	1,400.0	1,212.2	665.5	659.5	109.809	SF
Thornton X-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	100.0	92.0	344.9	344.6	1,598.141	CC, ES
Thornton X-29-30HN - Wellbore #1 - Plan #1 (1-28-16)	1,400.0	1,190.3	707.1	701.0	115.860	SF
Walton 25D Pad Sec.25-T7N-R67W						
Walton A-25HN - Wellbore #1 - Plan #1 (1-14-15)	17,922.5	7,200.0	446.4	358.4	5.075	CC, ES, SF
Walton B-25HC - Wellbore #1 - Plan #1 (1-14-15)	17,922.5	7,218.8	436.6	235.9	2.175	CC, ES, SF
Walton C-25HN - Wellbore #1 - Plan #1 (1-14-15)	17,922.5	7,172.8	563.0	313.2	2.254	CC, ES, SF

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells - Sec.28-T7N-R66W - Bears 4-30 (Exist) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 7622-UNKNOWN

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,100.0	7,301.1	7,348.1	7,348.1	276.5	147.0	-90.49	781.9	-10,624.9	795.0	372.0	423.00	1.879	
17,200.0	7,300.6	7,347.6	7,347.6	279.3	147.0	-90.42	781.9	-10,624.9	710.4	284.6	425.79	1.668	
17,300.0	7,300.1	7,347.1	7,347.1	282.1	146.9	-90.35	781.9	-10,624.9	630.2	201.6	428.58	1.470	Level 3
17,400.0	7,299.6	7,346.6	7,346.6	284.9	146.9	-90.28	781.9	-10,624.9	556.5	125.2	431.37	1.290	Level 3
17,500.0	7,299.1	7,346.1	7,346.1	287.7	146.9	-90.21	781.9	-10,624.9	492.2	58.1	434.16	1.134	Level 2
17,600.0	7,298.6	7,345.6	7,345.6	290.5	146.9	-90.13	781.9	-10,624.9	441.4	4.4	436.94	1.010	Level 2
17,700.0	7,298.1	7,345.1	7,345.1	293.3	146.9	-90.06	781.9	-10,624.9	409.1	-30.6	439.73	0.930	Level 1
17,787.3	7,297.7	7,344.7	7,344.7	295.7	146.9	-90.00	781.9	-10,624.9	399.7	-42.5	442.16	0.904	Level 1, CC
17,800.0	7,297.6	7,344.6	7,344.6	296.1	146.9	-89.99	781.9	-10,624.9	399.9	-42.6	442.52	0.904	Level 1, ES, SF
17,900.0	7,297.1	7,344.1	7,344.1	298.9	146.9	-89.92	781.9	-10,624.9	415.3	-30.0	445.30	0.933	Level 1
17,922.5	7,297.0	7,344.0	7,344.0	299.5	146.9	-89.90	781.9	-10,624.9	422.0	-24.0	445.93	0.946	Level 1

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells - Sec.28-T7N-R66W - Lind EE 20-399HN (COGCC Planned) - Wellbore #1 - COGCC Pla

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,050.0	6,876.6	12,146.3	7,276.0	29.9	136.5	18.07	1,547.8	-769.1	782.2	709.8	72.40	10.803	
7,100.0	6,922.9	12,146.3	7,276.0	29.9	136.5	19.54	1,547.8	-769.1	744.6	669.4	75.15	9.908	
7,150.0	6,967.9	12,146.3	7,276.0	30.0	136.5	21.20	1,547.8	-769.1	706.2	628.1	78.12	9.040	
7,200.0	7,011.1	12,146.3	7,276.0	30.1	136.5	23.08	1,547.8	-769.1	667.3	585.9	81.37	8.201	
7,250.0	7,052.5	12,146.3	7,276.0	30.2	136.5	25.18	1,547.8	-769.1	627.8	542.9	84.91	7.394	
7,300.0	7,091.9	12,146.3	7,276.0	30.3	136.5	27.54	1,547.8	-769.1	587.8	499.0	88.79	6.621	
7,350.0	7,129.0	12,146.3	7,276.0	30.4	136.5	30.17	1,547.8	-769.1	547.5	454.5	93.04	5.885	
7,400.0	7,163.7	12,146.3	7,276.0	30.5	136.5	33.06	1,547.8	-769.1	507.1	409.4	97.70	5.190	
7,450.0	7,195.7	12,146.3	7,276.0	30.6	136.5	36.20	1,547.8	-769.1	466.6	363.8	102.77	4.540	
7,500.0	7,225.1	12,146.3	7,276.0	30.8	136.5	39.54	1,547.8	-769.1	426.3	318.1	108.20	3.940	
7,550.0	7,251.5	12,146.3	7,276.0	31.0	136.5	43.00	1,547.8	-769.1	386.5	272.6	113.90	3.393	
7,600.0	7,274.9	12,146.3	7,276.0	31.2	136.5	46.49	1,547.8	-769.1	347.5	227.9	119.69	2.904	
7,650.0	7,295.2	12,146.3	7,276.0	31.5	136.5	49.87	1,547.8	-769.1	310.1	184.7	125.34	2.474	
7,700.0	7,312.2	12,146.3	7,276.0	31.8	136.5	52.97	1,547.8	-769.1	274.9	144.3	130.58	2.105	
7,750.0	7,326.0	12,146.3	7,276.0	32.1	136.5	55.65	1,547.8	-769.1	243.1	107.9	135.18	1.799	
7,800.0	7,336.3	12,146.3	7,276.0	32.5	136.5	57.76	1,547.8	-769.1	216.5	77.6	138.98	1.558	
7,850.0	7,343.2	12,146.3	7,276.0	33.0	136.5	59.18	1,547.8	-769.1	197.4	55.4	141.91	1.391	Level 3
7,900.0	7,346.6	12,146.3	7,276.0	33.5	136.5	59.84	1,547.8	-769.1	188.0	44.1	143.92	1.306	Level 3
7,916.6	7,347.0	12,146.3	7,276.0	33.7	136.5	59.89	1,547.8	-769.1	187.3	42.9	144.39	1.297	Level 3, CC, ES
7,927.7	7,347.0	12,137.1	7,276.0	33.8	136.2	59.89	1,547.6	-778.3	187.4	42.9	144.44	1.297	Level 3
7,927.7	7,347.0	12,137.1	7,276.0	33.8	136.2	59.89	1,547.6	-778.3	187.4	42.9	144.44	1.297	Level 3
7,928.4	7,347.0	12,136.4	7,276.0	33.8	136.2	59.89	1,547.6	-779.0	187.4	43.0	144.44	1.297	Level 3
8,000.0	7,346.6	12,064.8	7,276.0	34.7	134.2	60.04	1,546.5	-850.6	187.6	43.4	144.12	1.301	Level 3
8,100.0	7,346.1	11,964.8	7,276.0	36.0	131.4	60.26	1,545.0	-950.6	187.8	44.0	143.76	1.306	Level 3
8,200.0	7,345.6	11,864.8	7,276.0	37.6	128.7	60.47	1,543.5	-1,050.6	188.0	44.5	143.49	1.310	Level 3
8,300.0	7,345.1	11,764.8	7,276.0	39.4	125.9	60.69	1,541.9	-1,150.6	188.2	44.9	143.29	1.314	Level 3
8,400.0	7,344.6	11,664.8	7,276.0	41.3	123.1	60.90	1,540.4	-1,250.6	188.5	45.3	143.16	1.316	Level 3
8,500.0	7,344.1	11,564.8	7,276.0	43.3	120.4	61.11	1,538.9	-1,350.5	188.7	45.6	143.07	1.319	Level 3
8,600.0	7,343.6	11,464.8	7,276.0	45.4	117.6	61.33	1,537.4	-1,450.5	188.9	45.9	143.02	1.321	Level 3
8,700.0	7,343.1	11,364.8	7,276.0	47.6	114.8	61.54	1,535.8	-1,550.5	189.2	46.1	143.01	1.323	Level 3
8,800.0	7,342.6	11,264.8	7,276.0	49.9	112.1	61.75	1,534.3	-1,650.5	189.4	46.4	143.03	1.324	Level 3
8,900.0	7,342.1	11,164.8	7,276.0	52.3	109.3	61.96	1,532.8	-1,750.5	189.6	46.6	143.08	1.325	Level 3
9,000.0	7,341.6	11,064.8	7,276.0	54.7	106.5	62.17	1,531.3	-1,850.5	189.9	46.7	143.15	1.327	Level 3
9,100.0	7,341.1	10,964.8	7,276.0	57.1	103.8	62.38	1,529.7	-1,950.5	190.1	46.9	143.24	1.327	Level 3
9,200.0	7,340.6	10,864.9	7,276.0	59.6	101.0	62.59	1,528.2	-2,050.4	190.4	47.0	143.34	1.328	Level 3
9,300.0	7,340.1	10,764.9	7,276.0	62.1	98.3	62.80	1,526.7	-2,150.4	190.6	47.2	143.46	1.329	Level 3
9,400.0	7,339.6	10,664.9	7,276.0	64.7	95.5	63.01	1,525.2	-2,250.4	190.9	47.3	143.59	1.329	Level 3
9,500.0	7,339.1	10,564.9	7,276.0	67.2	92.8	63.21	1,523.6	-2,350.4	191.2	47.4	143.74	1.330	Level 3
9,600.0	7,338.6	10,464.9	7,276.0	69.8	90.0	63.42	1,522.1	-2,450.4	191.4	47.5	143.90	1.330	Level 3
9,700.0	7,338.1	10,364.9	7,276.0	72.4	87.3	63.63	1,520.6	-2,550.4	191.7	47.6	144.06	1.331	Level 3
9,800.0	7,337.6	10,264.9	7,276.0	75.0	84.6	63.83	1,519.1	-2,650.4	191.9	47.7	144.24	1.331	Level 3
9,900.0	7,337.1	10,164.9	7,276.0	77.7	81.8	64.04	1,517.5	-2,750.3	192.2	47.8	144.43	1.331	Level 3
10,000.0	7,336.6	10,064.9	7,276.0	80.3	79.1	64.24	1,516.0	-2,850.3	192.5	47.9	144.63	1.331	Level 3
10,100.0	7,336.1	9,964.9	7,276.0	83.0	76.4	64.45	1,514.5	-2,950.3	192.8	47.9	144.83	1.331	Level 3
10,200.0	7,335.6	9,864.9	7,276.0	85.6	73.7	64.65	1,513.0	-3,050.3	193.0	48.0	145.05	1.331	Level 3
10,300.0	7,335.1	9,764.9	7,276.0	88.3	71.0	64.85	1,511.4	-3,150.3	193.3	48.0	145.28	1.331	Level 3
10,400.0	7,334.6	9,664.9	7,276.0	91.0	68.3	65.05	1,509.9	-3,250.3	193.6	48.1	145.51	1.330	Level 3
10,500.0	7,334.1	9,564.9	7,276.0	93.7	65.6	65.26	1,508.4	-3,350.3	193.9	48.1	145.76	1.330	Level 3
10,600.0	7,333.6	9,464.9	7,276.0	96.4	62.9	65.46	1,506.8	-3,450.2	194.2	48.1	146.02	1.330	Level 3
10,700.0	7,333.1	9,364.9	7,276.0	99.1	60.3	65.66	1,505.3	-3,550.2	194.4	48.2	146.29	1.329	Level 3
10,800.0	7,332.6	9,264.9	7,276.0	101.8	57.6	65.86	1,503.8	-3,650.2	194.7	48.2	146.57	1.329	Level 3
10,900.0	7,332.1	9,164.9	7,276.0	104.5	55.0	66.06	1,502.3	-3,750.2	195.0	48.2	146.87	1.328	Level 3

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells - Sec.28-T7N-R66W - Lind EE 20-399HN (COGCC Planned) - Wellbore #1 - COGCC Pla

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,000.0	7,331.6	9,064.9	7,276.0	107.2	52.4	66.26	1,500.7	-3,852.2	195.3	48.1	147.19	1.327	Level 3
11,100.0	7,331.1	8,964.9	7,276.0	110.0	49.8	66.45	1,499.2	-3,950.2	195.6	48.1	147.53	1.326	Level 3
11,200.0	7,330.6	8,864.9	7,276.0	112.7	47.2	66.65	1,497.7	-4,050.2	195.9	48.0	147.89	1.325	Level 3
11,300.0	7,330.1	8,764.9	7,276.0	115.4	44.7	66.85	1,496.2	-4,150.1	196.2	47.9	148.28	1.323	Level 3
11,400.0	7,329.6	8,664.9	7,276.0	118.2	42.2	67.05	1,494.6	-4,250.1	196.5	47.8	148.70	1.322	Level 3
11,500.0	7,329.1	8,564.9	7,276.0	120.9	39.7	67.24	1,493.1	-4,350.1	196.8	47.7	149.16	1.320	Level 3
11,600.0	7,328.6	8,464.9	7,276.0	123.6	37.3	67.44	1,491.6	-4,450.1	197.1	47.5	149.66	1.317	Level 3
11,700.0	7,328.1	8,364.9	7,276.0	126.4	34.9	67.63	1,490.1	-4,550.1	197.4	47.2	150.22	1.314	Level 3
11,800.0	7,327.6	8,264.9	7,276.0	129.1	32.7	67.82	1,488.5	-4,650.1	197.8	46.9	150.85	1.311	Level 3
11,900.0	7,327.1	8,164.9	7,276.0	131.9	30.5	68.02	1,487.0	-4,750.1	198.1	46.5	151.56	1.307	Level 3
12,000.0	7,326.6	8,064.9	7,276.0	134.6	28.4	68.21	1,485.5	-4,850.0	198.4	46.0	152.37	1.302	Level 3
12,100.0	7,326.1	7,964.9	7,276.0	137.4	26.4	68.40	1,484.0	-4,950.0	198.7	45.4	153.30	1.296	Level 3
12,200.0	7,325.6	7,864.9	7,276.0	140.2	24.6	68.59	1,482.4	-5,050.0	199.0	44.6	154.40	1.289	Level 3
12,300.0	7,325.1	7,764.9	7,276.0	142.9	23.0	68.78	1,480.9	-5,150.0	199.4	43.7	155.67	1.281	Level 3, SF
12,400.0	7,324.6	7,677.2	7,272.1	145.7	21.8	67.99	1,480.2	-5,237.6	202.1	45.7	156.40	1.292	Level 3
12,500.0	7,324.1	7,595.4	7,257.0	148.4	20.9	64.59	1,481.6	-5,317.9	212.9	58.3	154.54	1.377	Level 3
12,600.0	7,323.6	7,519.2	7,233.0	151.2	20.3	59.63	1,484.6	-5,390.1	233.4	83.1	150.31	1.553	
12,700.0	7,323.1	7,450.0	7,203.1	154.0	19.9	54.33	1,488.7	-5,452.3	265.0	120.4	144.56	1.833	
12,800.0	7,322.6	7,389.8	7,171.3	156.7	19.6	49.59	1,493.4	-5,503.2	307.6	168.9	138.67	2.218	
12,900.0	7,322.1	7,337.0	7,139.2	159.5	19.5	45.60	1,498.2	-5,544.8	360.2	226.9	133.30	2.702	
13,000.0	7,321.6	7,300.0	7,114.5	162.3	19.5	42.98	1,502.0	-5,572.1	421.4	291.3	130.06	3.240	
13,100.0	7,321.1	7,250.0	7,078.5	165.1	19.4	39.71	1,507.6	-5,606.3	488.9	363.9	125.09	3.909	
13,200.0	7,320.6	7,218.0	7,054.0	167.8	19.4	37.80	1,511.5	-5,626.5	562.0	439.3	122.73	4.579	
13,300.0	7,320.1	7,200.0	7,039.8	170.6	19.4	36.79	1,513.8	-5,637.3	639.6	517.4	122.22	5.233	
13,400.0	7,319.6	7,150.0	6,998.5	173.4	19.4	34.21	1,520.4	-5,664.6	720.4	602.5	117.92	6.110	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Hirsch 29-C Pad Sec.29-T7N-R66W - Hirsch 1-29 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.0 ft

Survey Program: 96-MWD — **Offset Well Error:** 0.0 ft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,600.0	7,274.9	7,523.5	7,268.0	31.2	33.4	-64.43	856.4	-1,013.6	771.0	720.1	50.83	15.169	
7,650.0	7,295.2	7,544.4	7,288.9	31.5	33.4	-69.40	856.1	-1,013.4	738.2	685.9	52.33	14.108	
7,700.0	7,312.2	7,561.8	7,306.3	31.8	33.4	-74.22	855.9	-1,013.3	706.0	652.2	53.83	13.115	
7,750.0	7,326.0	7,575.6	7,320.1	32.1	33.4	-78.70	855.7	-1,013.2	674.8	619.6	55.26	12.212	
7,800.0	7,336.3	7,585.8	7,330.3	32.5	33.4	-82.66	855.6	-1,013.0	645.3	588.7	56.57	11.407	
7,850.0	7,343.2	7,592.3	7,336.8	33.0	33.4	-85.97	855.5	-1,013.0	617.8	560.0	57.77	10.695	
7,900.0	7,346.6	7,595.3	7,339.8	33.5	33.4	-88.57	855.4	-1,012.9	593.1	534.2	58.90	10.070	
7,927.7	7,347.0	7,595.4	7,339.9	33.8	33.4	-89.68	855.4	-1,012.9	580.7	521.2	59.50	9.759	
7,927.7	7,347.0	7,595.4	7,339.9	33.8	33.4	-89.68	855.4	-1,012.9	580.7	521.2	59.50	9.759	
7,928.4	7,347.0	7,595.4	7,339.8	33.8	33.4	-89.68	855.4	-1,012.9	580.4	520.9	59.52	9.752	
8,000.0	7,346.6	7,594.2	7,338.6	34.7	33.4	-89.55	855.5	-1,013.0	553.7	492.8	60.91	9.090	
8,100.0	7,346.1	7,592.5	7,337.0	36.0	33.4	-89.37	855.5	-1,013.0	530.5	467.5	62.98	8.424	
8,175.8	7,345.8	7,591.2	7,335.7	37.2	33.4	-89.23	855.5	-1,013.0	525.1	460.4	64.63	8.124	CC, ES
8,200.0	7,345.6	7,590.9	7,335.3	37.6	33.4	-89.19	855.5	-1,013.0	525.6	460.5	65.15	8.067	
8,300.0	7,345.1	7,589.2	7,333.7	39.4	33.4	-89.01	855.5	-1,013.0	539.6	472.1	67.42	8.003	SF
8,400.0	7,344.6	7,587.6	7,332.1	41.3	33.4	-88.84	855.5	-1,013.0	570.9	501.2	69.76	8.184	
8,500.0	7,344.1	7,586.1	7,330.6	43.3	33.4	-88.67	855.6	-1,013.0	617.1	544.9	72.15	8.552	
8,600.0	7,343.6	7,584.5	7,329.0	45.4	33.4	-88.50	855.6	-1,013.1	675.0	600.4	74.60	9.048	
8,700.0	7,343.1	7,583.0	7,327.5	47.6	33.4	-88.33	855.6	-1,013.1	741.9	664.8	77.09	9.624	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Hirsch 29-C Pad Sec.29-T7N-R66W - Hirsch 2-29 (Vert.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 96-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9,000.0	7,341.6	7,328.4	7,327.4	54.7	15.3	-88.48	1,063.8	-2,584.6	795.3	728.4	66.91	11.888	
9,100.0	7,341.1	7,328.9	7,327.8	57.1	15.3	-88.57	1,063.8	-2,584.6	702.9	633.3	69.53	10.109	
9,200.0	7,340.6	7,329.4	7,328.3	59.6	15.3	-88.67	1,063.8	-2,584.6	612.8	540.6	72.17	8.490	
9,300.0	7,340.1	7,329.8	7,328.8	62.1	15.3	-88.77	1,063.8	-2,584.6	526.2	451.4	74.83	7.032	
9,400.0	7,339.6	7,330.3	7,329.3	64.7	15.3	-88.87	1,063.8	-2,584.6	445.4	367.9	77.50	5.746	
9,500.0	7,339.1	7,330.8	7,329.8	67.2	15.3	-88.97	1,063.8	-2,584.6	373.9	293.7	80.19	4.663	
9,600.0	7,338.6	7,331.3	7,330.3	69.8	15.3	-89.06	1,063.8	-2,584.6	318.2	235.3	82.88	3.839	
9,700.0	7,338.1	7,331.8	7,330.7	72.4	15.3	-89.16	1,063.8	-2,584.6	287.5	201.9	85.58	3.359	
9,742.8	7,337.9	7,332.0	7,330.9	73.5	15.3	-89.20	1,063.8	-2,584.7	284.3	197.6	86.74	3.278	CC, ES, SF
9,800.0	7,337.6	7,332.2	7,331.2	75.0	15.3	-89.25	1,063.8	-2,584.7	290.0	201.7	88.30	3.284	
9,900.0	7,337.1	7,332.7	7,331.7	77.7	15.3	-89.35	1,063.8	-2,584.7	324.9	233.9	91.01	3.569	
10,000.0	7,336.6	7,333.2	7,332.2	80.3	15.3	-89.44	1,063.7	-2,584.7	383.4	289.6	93.74	4.090	
10,100.0	7,336.1	7,333.6	7,332.6	83.0	15.3	-89.54	1,063.7	-2,584.7	456.5	360.1	96.47	4.732	
10,200.0	7,335.6	7,334.1	7,333.1	85.6	15.3	-89.63	1,063.7	-2,584.7	538.4	439.2	99.21	5.427	
10,300.0	7,335.1	7,334.6	7,333.5	88.3	15.3	-89.72	1,063.7	-2,584.7	625.5	523.6	101.95	6.136	
10,400.0	7,334.6	7,335.0	7,334.0	91.0	15.3	-89.81	1,063.7	-2,584.7	716.0	611.4	104.69	6.839	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 21K-HZ Pad Sec.21-T7N-R66W - Thornton 21G-223 - Wellbore #1 - Plan #1 (12-04-12)

Offset Site Error: 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,799.1	6,630.8	10,313.4	7,338.4	29.6	55.9	91.95	1,389.1	277.8	741.2	705.7	35.51	20.876	
6,850.0	6,681.7	10,312.9	7,338.4	29.7	55.9	-177.29	1,389.6	277.8	697.0	611.9	85.11	8.190	
6,900.0	6,731.4	10,312.6	7,338.4	29.7	55.9	-177.59	1,389.9	277.8	656.7	571.9	84.72	7.751	
6,950.0	6,780.6	10,312.4	7,338.4	29.8	55.9	-177.79	1,390.1	277.8	620.0	536.1	83.98	7.383	
7,000.0	6,829.1	10,312.4	7,338.4	29.8	55.9	-177.92	1,390.2	277.8	588.0	505.2	82.89	7.094	
7,050.0	6,876.6	10,312.4	7,338.4	29.9	55.9	-178.00	1,390.1	277.8	561.7	480.2	81.48	6.894	
7,100.0	6,922.9	10,312.6	7,338.4	29.9	55.9	-178.04	1,389.9	277.8	541.9	462.1	79.74	6.796	SF
7,150.0	6,967.9	10,312.9	7,338.4	30.0	55.9	-178.04	1,389.6	277.8	529.5	451.8	77.69	6.815	
7,200.0	7,011.1	10,313.3	7,338.4	30.1	55.9	-178.01	1,389.2	277.8	525.1	449.7	75.34	6.969	ES
7,201.8	7,012.6	10,313.4	7,338.4	30.1	55.9	-178.00	1,389.2	277.8	525.1	449.8	75.25	6.977	CC
7,250.0	7,052.5	10,313.9	7,338.4	30.2	55.9	-177.93	1,388.6	277.8	528.9	456.2	72.73	7.272	
7,300.0	7,091.9	10,314.6	7,338.4	30.3	55.9	-177.82	1,387.9	277.8	540.7	470.9	69.86	7.740	
7,350.0	7,129.0	10,315.4	7,338.4	30.4	55.9	-177.67	1,387.2	277.8	560.0	493.2	66.76	8.388	
7,400.0	7,163.7	10,316.3	7,338.4	30.5	55.9	-177.46	1,386.3	277.7	585.9	522.4	63.48	9.230	
7,450.0	7,195.7	10,317.3	7,338.4	30.6	56.0	-177.18	1,385.2	277.7	617.5	557.5	60.05	10.284	
7,500.0	7,225.1	10,318.4	7,338.4	30.8	56.0	-176.81	1,384.1	277.7	653.9	597.3	56.51	11.571	
7,550.0	7,251.5	10,319.6	7,338.3	31.0	56.0	-176.32	1,382.9	277.7	694.0	641.1	52.93	13.110	
7,600.0	7,274.9	10,320.9	7,338.3	31.2	56.0	-175.63	1,381.6	277.7	737.1	687.7	49.40	14.921	
7,650.0	7,295.2	10,322.3	7,338.3	31.5	56.0	-174.63	1,380.2	277.7	782.6	736.6	46.04	16.999	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 21K-HZ Pad Sec.21-T7N-R66W - Thornton 21G-403 - Wellbore #1 - Plan #1 (12-04-12)

Offset Site Error: 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,850.0	6,681.7	10,479.0	7,472.0	29.7	57.0	-1.76	1,396.8	-161.7	751.5	667.0	84.45	8.899	
6,900.0	6,731.4	10,478.9	7,472.0	29.7	57.0	-92.47	1,396.9	-161.7	701.5	657.8	43.71	16.051	
6,950.0	6,780.6	10,478.8	7,472.0	29.8	57.0	-178.36	1,397.0	-161.7	651.6	567.2	84.34	7.725	
7,000.0	6,829.1	10,478.9	7,472.0	29.8	57.0	-179.09	1,396.9	-161.7	601.9	518.7	83.23	7.232	
7,050.0	6,876.6	10,479.1	7,472.0	29.9	57.0	-179.28	1,396.7	-161.7	552.9	471.0	81.89	6.751	
7,100.0	6,922.9	10,479.5	7,472.0	29.9	57.0	-179.32	1,396.3	-161.7	504.9	424.6	80.26	6.291	
7,150.0	6,967.9	10,479.9	7,472.0	30.0	57.0	-179.29	1,395.9	-161.7	458.6	380.3	78.32	5.856	
7,200.0	7,011.1	10,480.5	7,472.0	30.1	57.0	-179.23	1,395.3	-161.7	414.9	338.8	76.09	5.453	
7,250.0	7,052.5	10,481.2	7,472.0	30.2	57.0	-179.14	1,394.6	-161.7	374.8	301.2	73.58	5.094	
7,300.0	7,091.9	10,482.0	7,472.0	30.3	57.0	-179.03	1,393.8	-161.7	339.9	269.1	70.81	4.800	
7,350.0	7,129.0	10,482.9	7,472.0	30.4	57.0	-178.89	1,392.9	-161.8	312.1	244.3	67.82	4.603	
7,400.0	7,163.7	10,483.9	7,471.9	30.5	57.1	-178.71	1,391.9	-161.8	293.7	229.0	64.62	4.544	SF
7,450.0	7,195.7	10,485.0	7,471.9	30.6	57.1	-178.51	1,390.8	-161.8	286.4	225.1	61.26	4.675	ES
7,455.2	7,198.9	10,485.1	7,471.9	30.7	57.1	-178.48	1,390.7	-161.8	286.3	225.4	60.90	4.701	CC
7,500.0	7,225.1	10,486.2	7,471.9	30.8	57.1	-178.26	1,389.6	-161.8	291.2	233.4	57.77	5.040	
7,550.0	7,251.5	10,487.4	7,471.9	31.0	57.1	-177.95	1,388.4	-161.8	307.5	253.3	54.22	5.671	
7,600.0	7,274.9	10,488.8	7,471.9	31.2	57.1	-177.56	1,387.0	-161.8	333.5	282.8	50.67	6.582	
7,650.0	7,295.2	10,490.2	7,471.9	31.5	57.2	-177.07	1,385.6	-161.9	367.1	319.9	47.21	7.776	
7,700.0	7,312.2	10,491.7	7,471.9	31.8	57.2	-176.43	1,384.1	-161.9	406.2	362.3	43.95	9.242	
7,750.0	7,326.0	10,493.3	7,471.9	32.1	57.2	-175.53	1,382.5	-161.9	449.3	408.2	41.09	10.936	
7,800.0	7,336.3	10,494.9	7,471.9	32.5	57.3	-174.22	1,380.9	-161.9	495.1	456.2	38.85	12.743	
7,850.0	7,343.2	10,496.6	7,471.9	33.0	57.3	-172.10	1,379.2	-162.0	542.7	505.1	37.64	14.419	
7,900.0	7,346.6	10,498.3	7,471.8	33.5	57.3	-168.14	1,377.5	-162.0	591.6	553.5	38.06	15.542	
7,927.7	7,347.0	10,499.2	7,471.8	33.8	57.3	-163.99	1,376.6	-162.0	619.0	579.5	39.47	15.682	
7,927.7	7,347.0	10,499.2	7,471.8	33.8	57.3	-163.99	1,376.6	-162.0	619.0	579.5	39.47	15.682	
7,928.4	7,347.0	10,499.3	7,471.8	33.8	57.3	-164.02	1,376.5	-162.0	619.7	580.2	39.46	15.702	
8,000.0	7,346.6	10,501.7	7,471.8	34.7	57.4	-162.31	1,374.1	-162.0	690.7	650.0	40.75	16.950	
8,100.0	7,346.1	10,505.2	7,471.8	36.0	57.4	-159.98	1,370.6	-162.1	790.2	747.5	42.63	18.533	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton B-29-30HC - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.87	-14.9	-0.6	14.9	14.9	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	-177.87	-14.9	-0.6	14.9	14.7	0.22	66.503	
200.0	200.0	200.0	200.0	0.3	0.3	-177.87	-14.9	-0.6	14.9	14.3	0.67	22.168	CC
300.0	300.0	300.0	300.0	0.6	0.6	-175.93	-14.9	-0.6	16.3	15.1	1.13	14.328	
400.0	399.9	399.9	399.9	0.8	0.8	-176.71	-14.9	-0.6	20.2	18.6	1.60	12.595	
500.0	499.7	500.4	500.4	1.0	1.0	-177.36	-13.6	-0.6	25.4	23.3	2.07	12.288	
600.0	599.3	601.0	600.9	1.3	1.2	-177.74	-9.7	-0.8	30.6	28.1	2.53	12.096	
700.0	698.6	701.7	701.4	1.6	1.5	-177.96	-3.0	-1.2	35.8	32.8	3.00	11.946	
800.0	797.5	802.6	801.8	1.9	1.7	-178.08	6.2	-1.6	41.0	37.5	3.47	11.815	
900.0	896.1	903.6	902.1	2.2	2.0	-178.15	18.2	-2.2	46.1	42.2	3.95	11.691	
1,000.0	994.2	1,004.8	1,002.2	2.6	2.3	-178.17	32.8	-3.0	51.3	46.8	4.43	11.566	
1,100.0	1,091.7	1,106.1	1,102.0	3.0	2.6	-178.16	50.1	-3.8	56.4	51.4	4.93	11.438	
1,160.7	1,150.6	1,167.6	1,162.4	3.3	2.9	-178.14	61.8	-4.4	59.4	54.2	5.23	11.355	
1,200.0	1,188.7	1,207.5	1,201.5	3.5	3.0	-178.11	70.0	-4.8	61.2	55.8	5.43	11.267	
1,300.0	1,285.5	1,308.4	1,299.9	4.0	3.4	-178.00	92.2	-5.9	64.2	58.2	5.95	10.783	
1,400.0	1,382.4	1,408.3	1,397.3	4.5	3.8	-177.88	114.6	-7.1	66.7	60.3	6.48	10.303	
1,500.0	1,479.2	1,508.3	1,494.7	5.0	4.3	-177.77	136.9	-8.2	69.3	62.3	7.01	9.887	
1,600.0	1,576.1	1,608.3	1,592.2	5.5	4.7	-177.67	159.3	-9.3	71.8	64.3	7.54	9.522	
1,700.0	1,672.9	1,708.2	1,689.6	6.0	5.2	-177.58	181.7	-10.4	74.4	66.3	8.08	9.202	
1,800.0	1,769.8	1,808.2	1,787.0	6.5	5.6	-177.49	204.1	-11.6	76.9	68.3	8.63	8.918	
1,900.0	1,866.6	1,908.2	1,884.4	7.0	6.1	-177.41	226.4	-12.7	79.5	70.3	9.17	8.666	
2,000.0	1,963.5	2,008.1	1,981.9	7.5	6.5	-177.33	248.8	-13.8	82.0	72.3	9.72	8.440	
2,100.0	2,060.4	2,108.1	2,079.3	8.0	7.0	-177.26	271.2	-14.9	84.6	74.3	10.27	8.237	
2,200.0	2,157.2	2,208.1	2,176.7	8.5	7.4	-177.19	293.6	-16.1	87.1	76.3	10.82	8.053	
2,300.0	2,254.1	2,308.0	2,274.1	9.0	7.9	-177.12	316.0	-17.2	89.7	78.3	11.37	7.886	
2,400.0	2,350.9	2,408.0	2,371.6	9.5	8.4	-177.06	338.3	-18.3	92.2	80.3	11.93	7.734	
2,500.0	2,447.8	2,508.0	2,469.0	10.0	8.8	-177.01	360.7	-19.4	94.8	82.3	12.48	7.594	
2,600.0	2,544.6	2,607.9	2,566.4	10.5	9.3	-176.95	383.1	-20.6	97.4	84.3	13.04	7.466	
2,700.0	2,641.5	2,707.9	2,663.8	11.0	9.8	-176.90	405.5	-21.7	99.9	86.3	13.60	7.348	
2,800.0	2,738.3	2,807.9	2,761.2	11.5	10.2	-176.85	427.9	-22.8	102.5	88.3	14.15	7.239	
2,900.0	2,835.2	2,907.8	2,858.7	12.0	10.7	-176.80	450.2	-23.9	105.0	90.3	14.71	7.138	
3,000.0	2,932.0	3,007.8	2,956.1	12.6	11.2	-176.76	472.6	-25.1	107.6	92.3	15.27	7.044	
3,100.0	3,028.9	3,107.8	3,053.5	13.1	11.6	-176.71	495.0	-26.2	110.1	94.3	15.83	6.956	
3,200.0	3,125.7	3,207.7	3,150.9	13.6	12.1	-176.67	517.4	-27.3	112.7	96.3	16.39	6.875	
3,300.0	3,222.6	3,307.7	3,248.4	14.1	12.6	-176.64	539.8	-28.4	115.2	98.3	16.95	6.798	
3,400.0	3,319.5	3,407.7	3,345.8	14.6	13.0	-176.60	562.1	-29.6	117.8	100.3	17.51	6.726	
3,500.0	3,416.3	3,507.7	3,443.2	15.1	13.5	-176.56	584.5	-30.7	120.3	102.3	18.07	6.659	
3,600.0	3,513.2	3,607.6	3,540.6	15.6	14.0	-176.53	606.9	-31.8	122.9	104.3	18.63	6.595	
3,700.0	3,610.0	3,707.6	3,638.1	16.1	14.4	-176.50	629.3	-32.9	125.4	106.2	19.19	6.535	
3,800.0	3,706.9	3,807.6	3,735.5	16.6	14.9	-176.46	651.7	-34.0	128.0	108.2	19.76	6.479	
3,900.0	3,803.7	3,907.5	3,832.9	17.2	15.4	-176.43	674.0	-35.2	130.5	110.2	20.32	6.425	
4,000.0	3,900.6	4,007.5	3,930.3	17.7	15.8	-176.40	696.4	-36.3	133.1	112.2	20.88	6.374	
4,100.0	3,997.4	4,107.5	4,027.8	18.2	16.3	-176.38	718.8	-37.4	135.7	114.2	21.44	6.326	
4,200.0	4,094.3	4,207.4	4,125.2	18.7	16.8	-176.35	741.2	-38.5	138.2	116.2	22.01	6.280	
4,300.0	4,191.1	4,307.4	4,222.6	19.2	17.3	-176.32	763.6	-39.7	140.8	118.2	22.57	6.237	
4,400.0	4,288.0	4,407.4	4,320.0	19.7	17.7	-176.30	785.9	-40.8	143.3	120.2	23.13	6.195	
4,500.0	4,384.8	4,507.3	4,417.4	20.2	18.2	-176.27	808.3	-41.9	145.9	122.2	23.70	6.156	
4,600.0	4,481.7	4,607.3	4,514.9	20.7	18.7	-176.25	830.7	-43.0	148.4	124.2	24.26	6.118	
4,700.0	4,578.6	4,707.3	4,612.3	21.3	19.1	-176.23	853.1	-44.2	151.0	126.2	24.82	6.082	
4,800.0	4,675.4	4,807.2	4,709.7	21.8	19.6	-176.21	875.4	-45.3	153.5	128.1	25.39	6.048	
4,900.0	4,772.3	4,907.2	4,807.1	22.3	20.1	-176.19	897.8	-46.4	156.1	130.1	25.95	6.015	
5,000.0	4,869.1	5,007.2	4,904.6	22.8	20.5	-176.17	920.2	-47.5	158.6	132.1	26.51	5.983	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton B-29-30HC - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	4,966.0	5,107.1	5,002.0	23.3	21.0	-176.15	942.6	-48.7	161.2	134.1	27.08	5.953	
5,200.0	5,062.8	5,207.1	5,099.4	23.8	21.5	-176.13	965.0	-49.8	163.7	136.1	27.64	5.924	
5,300.0	5,159.7	5,307.1	5,196.8	24.3	22.0	-176.11	987.3	-50.9	166.3	138.1	28.21	5.896	
5,400.0	5,256.5	5,407.0	5,294.3	24.8	22.4	-176.09	1,009.7	-52.0	168.9	140.1	28.77	5.869	
5,500.0	5,353.4	5,507.0	5,391.7	25.4	22.9	-176.07	1,032.1	-53.2	171.4	142.1	29.34	5.843	
5,600.0	5,450.2	5,607.0	5,489.1	25.9	23.4	-176.06	1,054.5	-54.3	174.0	144.1	29.90	5.818	
5,700.0	5,547.1	5,706.9	5,586.5	26.4	23.8	-176.04	1,076.9	-55.4	176.5	146.1	30.47	5.794	
5,800.0	5,643.9	5,806.9	5,684.0	26.9	24.3	-176.02	1,099.2	-56.5	179.1	148.0	31.03	5.771	
5,900.0	5,740.8	5,906.9	5,781.4	27.4	24.8	-176.01	1,121.6	-57.7	181.6	150.0	31.60	5.748	
5,947.8	5,787.1	5,954.6	5,827.9	27.7	25.0	-176.00	1,132.3	-58.2	182.8	151.0	31.87	5.738	
6,000.0	5,837.8	6,006.8	5,878.8	27.9	25.3	-175.98	1,144.0	-58.8	183.7	151.5	32.16	5.712	
6,100.0	5,935.4	6,105.7	5,975.2	28.2	25.7	-175.89	1,166.1	-59.9	182.8	150.1	32.66	5.595	
6,200.0	6,033.8	6,200.0	6,067.5	28.6	26.0	-175.78	1,185.1	-60.9	180.5	147.5	33.05	5.461	
6,300.0	6,132.7	6,293.8	6,160.0	28.8	26.3	-175.67	1,201.0	-61.7	178.1	144.7	33.38	5.335	
6,400.0	6,232.1	6,388.0	6,253.3	29.1	26.6	-175.56	1,213.9	-62.3	175.4	141.8	33.64	5.215	
6,500.0	6,331.8	6,482.3	6,347.0	29.3	26.8	-175.45	1,223.8	-62.8	172.6	138.7	33.84	5.100	
6,600.0	6,431.7	6,576.6	6,441.1	29.4	27.0	-175.35	1,230.6	-63.1	169.5	135.6	33.97	4.990	
6,668.3	6,500.0	6,641.1	6,505.5	29.5	27.0	-177.57	1,233.4	-63.3	167.3	111.0	56.29	2.973	
6,700.0	6,531.7	6,671.0	6,535.5	29.5	27.1	-177.55	1,234.2	-63.3	166.5	110.1	56.36	2.953	
6,799.1	6,630.8	6,766.4	6,630.8	29.6	27.2	-177.52	1,235.0	-63.4	165.7	109.1	56.57	2.929	
6,850.0	6,681.7	6,817.3	6,681.7	29.7	27.3	-86.97	1,235.0	-63.4	165.6	131.0	34.55	4.793	
6,900.0	6,731.4	6,866.9	6,731.3	29.7	27.3	-88.64	1,235.0	-63.8	165.4	130.8	34.62	4.778	
6,937.6	6,768.5	6,904.1	6,768.5	29.7	27.4	-90.01	1,234.9	-66.1	165.4	130.6	34.71	4.763	
6,950.0	6,780.6	6,916.5	6,780.8	29.8	27.4	-90.46	1,234.9	-67.3	165.4	130.6	34.76	4.757	
7,000.0	6,829.1	6,966.5	6,830.3	29.8	27.4	-92.28	1,234.7	-74.2	165.5	130.5	34.98	4.731	
7,050.0	6,876.6	7,016.9	6,879.5	29.9	27.5	-94.10	1,234.5	-84.7	165.8	130.5	35.26	4.702	
7,100.0	6,922.9	7,067.6	6,928.3	29.9	27.6	-95.89	1,234.2	-98.7	166.2	130.7	35.58	4.672	
7,150.0	6,967.9	7,118.8	6,976.3	30.0	27.6	-97.65	1,233.9	-116.3	166.8	130.9	35.92	4.644	
7,200.0	7,011.1	7,170.3	7,023.3	30.1	27.7	-99.37	1,233.4	-137.5	167.6	131.3	36.28	4.620	
7,250.0	7,052.5	7,222.2	7,068.9	30.2	27.8	-101.03	1,232.9	-162.2	168.5	131.8	36.63	4.600	
7,300.0	7,091.9	7,274.5	7,113.0	30.3	27.9	-102.62	1,232.3	-190.3	169.5	132.5	36.98	4.583	
7,350.0	7,129.0	7,327.2	7,155.2	30.4	28.0	-104.14	1,231.7	-221.8	170.5	133.2	37.34	4.567	
7,400.0	7,163.7	7,380.3	7,195.3	30.5	28.1	-105.58	1,231.0	-256.6	171.7	133.9	37.74	4.548	
7,450.0	7,195.7	7,433.7	7,232.9	30.6	28.3	-106.92	1,230.2	-294.5	172.8	134.6	38.20	4.524	
7,500.0	7,225.1	7,487.5	7,267.8	30.8	28.4	-108.17	1,229.3	-335.4	174.0	135.3	38.76	4.490	
7,550.0	7,251.5	7,541.6	7,299.7	31.0	28.6	-109.32	1,228.4	-379.1	175.2	135.8	39.44	4.442	
7,600.0	7,274.9	7,596.1	7,328.4	31.2	28.9	-110.37	1,227.5	-425.4	176.4	136.1	40.30	4.376	
7,650.0	7,295.2	7,650.8	7,353.6	31.5	29.2	-111.30	1,226.5	-473.9	177.4	136.1	41.35	4.291	
7,700.0	7,312.2	7,705.8	7,375.1	31.8	29.5	-112.13	1,225.4	-524.5	178.5	135.8	42.64	4.185	
7,750.0	7,326.0	7,761.0	7,392.8	32.1	29.9	-112.83	1,224.4	-576.8	179.3	135.2	44.16	4.062	
7,800.0	7,336.3	7,816.4	7,406.4	32.5	30.4	-113.43	1,223.3	-630.5	180.1	134.2	45.91	3.923	
7,850.0	7,343.2	7,872.0	7,415.8	33.0	30.9	-113.90	1,222.1	-685.3	180.8	132.9	47.90	3.774	
7,900.0	7,346.6	7,927.8	7,421.0	33.5	31.5	-114.26	1,221.0	-740.8	181.3	131.2	50.09	3.618	
7,927.7	7,347.0	7,958.7	7,422.0	33.8	31.9	-114.40	1,220.3	-771.7	181.5	130.1	51.38	3.531	
7,927.7	7,347.0	7,958.7	7,422.0	33.8	31.9	-114.40	1,220.3	-771.7	181.5	130.1	51.38	3.531	
7,928.4	7,347.0	7,959.5	7,422.0	33.8	31.9	-114.40	1,220.3	-772.4	181.5	130.0	51.41	3.530	
8,000.0	7,346.6	8,032.1	7,421.8	34.7	32.9	-114.45	1,218.8	-845.0	181.5	127.5	54.01	3.361	
8,100.0	7,346.1	8,132.1	7,421.4	36.0	34.4	-114.49	1,216.8	-945.0	181.6	123.8	57.80	3.141	
8,200.0	7,345.6	8,232.1	7,421.0	37.6	36.1	-114.53	1,214.7	-1,045.0	181.6	119.8	61.79	2.939	
8,300.0	7,345.1	8,332.1	7,420.7	39.4	37.9	-114.56	1,212.6	-1,144.9	181.7	115.7	65.94	2.755	
8,400.0	7,344.6	8,432.1	7,420.3	41.3	39.9	-114.60	1,210.6	-1,244.9	181.7	111.5	70.21	2.588	
8,500.0	7,344.1	8,532.1	7,419.9	43.3	42.1	-114.64	1,208.5	-1,344.9	181.8	107.2	74.59	2.437	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton B-29-30HC - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,600.0	7,343.6	8,632.1	7,419.5	45.4	44.3	-114.68	1,206.4	-1,444.9	181.8	102.8	79.06	2.300	
8,700.0	7,343.1	8,732.1	7,419.2	47.6	46.6	-114.71	1,204.4	-1,544.8	181.9	98.3	83.60	2.176	
8,800.0	7,342.6	8,832.1	7,418.8	49.9	48.9	-114.75	1,202.3	-1,644.8	181.9	93.7	88.20	2.063	
8,900.0	7,342.1	8,932.1	7,418.4	52.3	51.3	-114.79	1,200.2	-1,744.8	182.0	89.1	92.86	1.960	
9,000.0	7,341.6	9,032.1	7,418.1	54.7	53.8	-114.83	1,198.2	-1,844.8	182.0	84.5	97.56	1.866	
9,100.0	7,341.1	9,132.1	7,417.7	57.1	56.3	-114.86	1,196.1	-1,944.8	182.1	79.8	102.29	1.780	
9,200.0	7,340.6	9,232.1	7,417.3	59.6	58.8	-114.90	1,194.0	-2,044.7	182.1	75.1	107.06	1.701	
9,300.0	7,340.1	9,332.1	7,417.0	62.1	61.3	-114.94	1,192.0	-2,144.7	182.2	70.3	111.86	1.629	
9,400.0	7,339.6	9,432.1	7,416.6	64.7	63.9	-114.97	1,189.9	-2,244.7	182.2	65.6	116.67	1.562	
9,500.0	7,339.1	9,532.1	7,416.2	67.2	66.5	-115.01	1,187.8	-2,344.7	182.3	60.8	121.51	1.500	
9,600.0	7,338.6	9,632.1	7,415.8	69.8	69.1	-115.05	1,185.8	-2,444.6	182.3	56.0	126.37	1.443	Level 3
9,700.0	7,338.1	9,732.1	7,415.5	72.4	71.7	-115.09	1,183.7	-2,544.6	182.4	51.2	131.25	1.390	Level 3
9,800.0	7,337.6	9,832.1	7,415.1	75.0	74.4	-115.12	1,181.6	-2,644.6	182.5	46.3	136.13	1.340	Level 3
9,900.0	7,337.1	9,932.1	7,414.7	77.7	77.0	-115.16	1,179.6	-2,744.6	182.5	41.5	141.03	1.294	Level 3
10,000.0	7,336.6	10,032.1	7,414.4	80.3	79.7	-115.20	1,177.5	-2,844.6	182.6	36.6	145.94	1.251	Level 3
10,100.0	7,336.1	10,132.1	7,414.0	83.0	82.4	-115.24	1,175.4	-2,944.5	182.6	31.8	150.86	1.210	Level 2
10,200.0	7,335.6	10,232.1	7,413.6	85.6	85.0	-115.27	1,173.4	-3,044.5	182.7	26.9	155.79	1.173	Level 2
10,300.0	7,335.1	10,332.1	7,413.2	88.3	87.7	-115.31	1,171.3	-3,144.5	182.7	22.0	160.72	1.137	Level 2
10,400.0	7,334.6	10,432.1	7,412.9	91.0	90.4	-115.35	1,169.2	-3,244.5	182.8	17.1	165.66	1.103	Level 2
10,500.0	7,334.1	10,532.1	7,412.5	93.7	93.1	-115.38	1,167.2	-3,344.4	182.8	12.2	170.60	1.072	Level 2
10,600.0	7,333.6	10,632.1	7,412.1	96.4	95.8	-115.42	1,165.1	-3,444.4	182.9	7.3	175.55	1.042	Level 2
10,700.0	7,333.1	10,732.1	7,411.8	99.1	98.6	-115.46	1,163.0	-3,544.4	182.9	2.4	180.50	1.013	Level 2
10,800.0	7,332.6	10,832.1	7,411.4	101.8	101.3	-115.50	1,161.0	-3,644.4	183.0	-2.5	185.46	0.987	Level 1
10,900.0	7,332.1	10,932.1	7,411.0	104.5	104.0	-115.53	1,158.9	-3,744.4	183.0	-7.4	190.42	0.961	Level 1
11,000.0	7,331.6	11,032.1	7,410.7	107.2	106.7	-115.57	1,156.8	-3,844.3	183.1	-12.3	195.38	0.937	Level 1
11,100.0	7,331.1	11,132.1	7,410.3	110.0	109.5	-115.61	1,154.8	-3,944.3	183.1	-17.2	200.34	0.914	Level 1
11,200.0	7,330.6	11,232.1	7,409.9	112.7	112.2	-115.64	1,152.7	-4,044.3	183.2	-22.1	205.31	0.892	Level 1
11,300.0	7,330.1	11,332.1	7,409.5	115.4	114.9	-115.68	1,150.6	-4,144.3	183.3	-27.0	210.27	0.872	Level 1
11,400.0	7,329.6	11,432.1	7,409.2	118.2	117.7	-115.72	1,148.6	-4,244.3	183.3	-31.9	215.24	0.852	Level 1
11,500.0	7,329.1	11,532.1	7,408.8	120.9	120.4	-115.75	1,146.5	-4,344.2	183.4	-36.8	220.21	0.833	Level 1
11,600.0	7,328.6	11,632.1	7,408.4	123.6	123.2	-115.79	1,144.4	-4,444.2	183.4	-41.8	225.18	0.815	Level 1
11,700.0	7,328.1	11,732.1	7,408.1	126.4	125.9	-115.83	1,142.4	-4,544.2	183.5	-46.7	230.14	0.797	Level 1
11,800.0	7,327.6	11,832.1	7,407.7	129.1	128.7	-115.87	1,140.3	-4,644.2	183.5	-51.6	235.11	0.781	Level 1
11,900.0	7,327.1	11,932.1	7,407.3	131.9	131.5	-115.90	1,138.2	-4,744.1	183.6	-56.5	240.08	0.765	Level 1
12,000.0	7,326.6	12,032.1	7,407.0	134.6	134.2	-115.94	1,136.2	-4,844.1	183.6	-61.4	245.05	0.749	Level 1
12,100.0	7,326.1	12,132.1	7,406.6	137.4	137.0	-115.98	1,134.1	-4,944.1	183.7	-66.3	250.02	0.735	Level 1
12,200.0	7,325.6	12,232.1	7,406.2	140.2	139.7	-116.01	1,132.0	-5,044.1	183.7	-71.2	254.98	0.721	Level 1
12,300.0	7,325.1	12,332.1	7,405.8	142.9	142.5	-116.05	1,130.0	-5,144.1	183.8	-76.2	259.95	0.707	Level 1
12,400.0	7,324.6	12,432.1	7,405.5	145.7	145.3	-116.09	1,127.9	-5,244.0	183.9	-81.1	264.92	0.694	Level 1
12,500.0	7,324.1	12,532.1	7,405.1	148.4	148.0	-116.12	1,125.8	-5,344.0	183.9	-86.0	269.88	0.681	Level 1
12,600.0	7,323.6	12,632.1	7,404.7	151.2	150.8	-116.16	1,123.8	-5,444.0	184.0	-90.9	274.84	0.669	Level 1
12,700.0	7,323.1	12,732.1	7,404.4	154.0	153.6	-116.20	1,121.7	-5,544.0	184.0	-95.8	279.81	0.658	Level 1
12,800.0	7,322.6	12,832.1	7,404.0	156.7	156.3	-116.23	1,119.6	-5,643.9	184.1	-100.7	284.77	0.646	Level 1
12,900.0	7,322.1	12,932.1	7,403.6	159.5	159.1	-116.27	1,117.6	-5,743.9	184.1	-105.6	289.73	0.636	Level 1
13,000.0	7,321.6	13,032.1	7,403.2	162.3	161.9	-116.31	1,115.5	-5,843.9	184.2	-110.5	294.68	0.625	Level 1
13,100.0	7,321.1	13,132.1	7,402.9	165.1	164.7	-116.34	1,113.4	-5,943.9	184.2	-115.4	299.64	0.615	Level 1
13,200.0	7,320.6	13,232.1	7,402.5	167.8	167.4	-116.38	1,111.4	-6,043.9	184.3	-120.3	304.59	0.605	Level 1
13,300.0	7,320.1	13,332.1	7,402.1	170.6	170.2	-116.42	1,109.3	-6,143.8	184.3	-125.2	309.55	0.596	Level 1
13,400.0	7,319.6	13,432.1	7,401.8	173.4	173.0	-116.45	1,107.3	-6,243.8	184.4	-130.1	314.50	0.586	Level 1
13,500.0	7,319.1	13,532.1	7,401.4	176.2	175.8	-116.49	1,105.2	-6,343.8	184.5	-135.0	319.45	0.577	Level 1
13,600.0	7,318.6	13,632.1	7,401.0	178.9	178.6	-116.52	1,103.1	-6,443.8	184.5	-139.9	324.40	0.569	Level 1
13,700.0	7,318.1	13,732.1	7,400.7	181.7	181.3	-116.56	1,101.1	-6,543.7	184.6	-144.8	329.34	0.560	Level 1

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton B-29-30HC - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
13,800.0	7,317.6	13,832.1	7,400.3	184.5	184.1	-116.60	1,099.0	-6,643.7	184.6	-149.7	334.28	0.552	Level 1
13,900.0	7,317.1	13,932.1	7,399.9	187.3	186.9	-116.63	1,096.9	-6,743.7	184.7	-154.5	339.23	0.544	Level 1
14,000.0	7,316.6	14,032.1	7,399.5	190.0	189.7	-116.67	1,094.9	-6,843.7	184.7	-159.4	344.16	0.537	Level 1
14,100.0	7,316.1	14,132.1	7,399.2	192.8	192.5	-116.71	1,092.8	-6,943.7	184.8	-164.3	349.10	0.529	Level 1
14,200.0	7,315.6	14,232.1	7,398.8	195.6	195.3	-116.74	1,090.7	-7,043.6	184.9	-169.2	354.04	0.522	Level 1
14,300.0	7,315.1	14,332.1	7,398.4	198.4	198.0	-116.78	1,088.7	-7,143.6	184.9	-174.1	358.97	0.515	Level 1
14,400.0	7,314.6	14,432.1	7,398.1	201.2	200.8	-116.82	1,086.6	-7,243.6	185.0	-178.9	363.90	0.508	Level 1
14,500.0	7,314.1	14,532.1	7,397.7	204.0	203.6	-116.85	1,084.5	-7,343.6	185.0	-183.8	368.83	0.502	Level 1
14,600.0	7,313.6	14,632.1	7,397.3	206.7	206.4	-116.89	1,082.5	-7,443.5	185.1	-188.7	373.75	0.495	Level 1
14,700.0	7,313.1	14,732.1	7,397.0	209.5	209.2	-116.92	1,080.4	-7,543.5	185.1	-193.5	378.68	0.489	Level 1
14,800.0	7,312.6	14,832.1	7,396.6	212.3	212.0	-116.96	1,078.3	-7,643.5	185.2	-198.4	383.60	0.483	Level 1
14,900.0	7,312.1	14,932.1	7,396.2	215.1	214.8	-117.00	1,076.3	-7,743.5	185.2	-203.3	388.52	0.477	Level 1
15,000.0	7,311.6	15,032.1	7,395.8	217.9	217.6	-117.03	1,074.2	-7,843.5	185.3	-208.1	393.43	0.471	Level 1
15,100.0	7,311.1	15,132.1	7,395.5	220.7	220.3	-117.07	1,072.1	-7,943.4	185.4	-213.0	398.35	0.465	Level 1
15,200.0	7,310.6	15,232.1	7,395.1	223.5	223.1	-117.10	1,070.1	-8,043.4	185.4	-217.8	403.26	0.460	Level 1
15,300.0	7,310.1	15,332.1	7,394.7	226.3	225.9	-117.14	1,068.0	-8,143.4	185.5	-222.7	408.17	0.454	Level 1
15,400.0	7,309.6	15,432.1	7,394.4	229.0	228.7	-117.18	1,065.9	-8,243.4	185.5	-227.5	413.08	0.449	Level 1
15,500.0	7,309.1	15,532.1	7,394.0	231.8	231.5	-117.21	1,063.9	-8,343.3	185.6	-232.4	417.98	0.444	Level 1
15,600.0	7,308.6	15,632.1	7,393.6	234.6	234.3	-117.25	1,061.8	-8,443.3	185.6	-237.2	422.88	0.439	Level 1
15,700.0	7,308.1	15,732.1	7,393.2	237.4	237.1	-117.28	1,059.7	-8,543.3	185.7	-242.1	427.78	0.434	Level 1
15,800.0	7,307.6	15,832.1	7,392.9	240.2	239.9	-117.32	1,057.7	-8,643.3	185.8	-246.9	432.68	0.429	Level 1
15,900.0	7,307.1	15,932.1	7,392.5	243.0	242.7	-117.36	1,055.6	-8,743.3	185.8	-251.8	437.57	0.425	Level 1
16,000.0	7,306.6	16,032.1	7,392.1	245.8	245.5	-117.39	1,053.5	-8,843.2	185.9	-256.6	442.46	0.420	Level 1
16,100.0	7,306.1	16,132.1	7,391.8	248.6	248.3	-117.43	1,051.5	-8,943.2	185.9	-261.4	447.35	0.416	Level 1
16,200.0	7,305.6	16,232.1	7,391.4	251.4	251.1	-117.46	1,049.4	-9,043.2	186.0	-266.2	452.24	0.411	Level 1
16,300.0	7,305.1	16,332.1	7,391.0	254.2	253.8	-117.50	1,047.3	-9,143.2	186.0	-271.1	457.12	0.407	Level 1
16,400.0	7,304.6	16,432.1	7,390.7	257.0	256.6	-117.54	1,045.3	-9,243.1	186.1	-275.9	462.00	0.403	Level 1
16,500.0	7,304.1	16,532.1	7,390.3	259.7	259.4	-117.57	1,043.2	-9,343.1	186.2	-280.7	466.88	0.399	Level 1
16,600.0	7,303.6	16,632.1	7,389.9	262.5	262.2	-117.61	1,041.1	-9,443.1	186.2	-285.5	471.75	0.395	Level 1
16,700.0	7,303.1	16,732.1	7,389.5	265.3	265.0	-117.64	1,039.1	-9,543.1	186.3	-290.3	476.62	0.391	Level 1
16,800.0	7,302.6	16,832.1	7,389.2	268.1	267.8	-117.68	1,037.0	-9,643.1	186.3	-295.2	481.49	0.387	Level 1
16,900.0	7,302.1	16,932.1	7,388.8	270.9	270.6	-117.72	1,034.9	-9,743.0	186.4	-300.0	486.36	0.383	Level 1
17,000.0	7,301.6	17,032.1	7,388.4	273.7	273.4	-117.75	1,032.9	-9,843.0	186.5	-304.8	491.22	0.380	Level 1
17,100.0	7,301.1	17,132.1	7,388.1	276.5	276.2	-117.79	1,030.8	-9,943.0	186.5	-309.6	496.08	0.376	Level 1
17,200.0	7,300.6	17,232.1	7,387.7	279.3	279.0	-117.82	1,028.7	-10,043.0	186.6	-314.4	500.94	0.372	Level 1
17,300.0	7,300.1	17,332.1	7,387.3	282.1	281.8	-117.86	1,026.7	-10,142.9	186.6	-319.2	505.80	0.369	Level 1
17,400.0	7,299.6	17,432.1	7,386.9	284.9	284.6	-117.89	1,024.6	-10,242.9	186.7	-324.0	510.65	0.366	Level 1
17,500.0	7,299.1	17,532.1	7,386.6	287.7	287.4	-117.93	1,022.5	-10,342.9	186.7	-328.8	515.50	0.362	Level 1
17,600.0	7,298.6	17,632.1	7,386.2	290.5	290.2	-117.96	1,020.5	-10,442.9	186.8	-333.5	520.35	0.359	Level 1
17,700.0	7,298.1	17,732.1	7,385.8	293.3	293.0	-118.00	1,018.4	-10,542.9	186.9	-338.3	525.19	0.356	Level 1
17,800.0	7,297.6	17,832.1	7,385.5	296.1	295.8	-118.04	1,016.3	-10,642.8	186.9	-343.1	530.03	0.353	Level 1
17,900.0	7,297.1	17,932.1	7,385.1	298.9	298.6	-118.07	1,014.3	-10,742.8	187.0	-347.9	534.87	0.350	Level 1
17,922.5	7,297.0	17,954.6	7,385.0	299.5	299.2	-118.08	1,013.8	-10,765.3	187.0	-349.0	535.96	0.349	Level 1, ES, SF

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton C-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.40	-29.9	-0.8	29.9				
100.0	100.0	99.0	99.0	0.1	0.1	-178.40	-29.9	-0.8	29.9	29.7	0.22	133.632	
200.0	200.0	199.0	199.0	0.3	0.3	-178.40	-29.9	-0.8	29.9	29.2	0.67	44.470	CC
300.0	300.0	299.0	299.0	0.6	0.6	-176.27	-29.9	-0.8	31.2	30.1	1.13	27.551	
400.0	399.9	398.9	398.9	0.8	0.8	-176.68	-29.9	-0.8	35.1	33.5	1.60	21.954	
500.0	499.7	498.7	498.7	1.0	1.0	-177.20	-29.9	-0.8	41.6	39.6	2.07	20.145	
600.0	599.3	598.3	598.3	1.3	1.2	-177.70	-29.9	-0.8	50.8	48.2	2.53	20.033	
700.0	698.6	699.2	699.2	1.6	1.5	-178.06	-28.6	-0.9	61.3	58.3	3.00	20.412	
800.0	797.5	800.4	800.3	1.9	1.7	-178.26	-24.6	-1.2	71.7	68.3	3.47	20.693	
900.0	896.1	901.9	901.6	2.2	1.9	-178.36	-18.0	-1.6	82.1	78.2	3.94	20.875	
1,000.0	994.2	1,003.7	1,002.9	2.6	2.2	-178.39	-8.6	-2.2	92.5	88.1	4.41	20.983	
1,100.0	1,091.7	1,105.7	1,104.3	3.0	2.4	-178.38	3.5	-3.0	102.9	98.0	4.89	21.028	
1,160.7	1,150.6	1,167.8	1,165.7	3.3	2.6	-178.36	12.2	-3.6	109.1	103.9	5.19	21.027	
1,200.0	1,188.7	1,208.1	1,205.5	3.5	2.7	-178.33	18.3	-4.0	113.0	107.6	5.38	20.985	
1,300.0	1,285.5	1,310.9	1,306.8	4.0	3.1	-178.23	36.0	-5.2	120.9	115.0	5.89	20.535	
1,400.0	1,382.4	1,412.7	1,406.6	4.5	3.4	-178.07	55.8	-6.5	126.3	119.9	6.40	19.742	
1,500.0	1,479.2	1,512.6	1,504.5	5.0	3.8	-177.92	75.8	-7.8	131.3	124.4	6.92	18.985	
1,600.0	1,576.1	1,612.4	1,602.3	5.5	4.2	-177.78	95.7	-9.1	136.3	128.9	7.44	18.330	
1,700.0	1,672.9	1,712.3	1,700.2	6.0	4.6	-177.65	115.7	-10.4	141.3	133.4	7.97	17.746	
1,800.0	1,769.8	1,812.2	1,798.0	6.5	4.9	-177.53	135.6	-11.7	146.4	137.9	8.50	17.227	
1,900.0	1,866.6	1,912.1	1,895.9	7.0	5.4	-177.42	155.6	-13.1	151.4	142.3	9.03	16.763	
2,000.0	1,963.5	2,011.9	1,993.7	7.5	5.8	-177.31	175.5	-14.4	156.4	146.8	9.57	16.348	
2,100.0	2,060.4	2,111.8	2,091.6	8.0	6.2	-177.21	195.5	-15.7	161.4	151.3	10.11	15.973	
2,200.0	2,157.2	2,211.7	2,189.4	8.5	6.6	-177.12	215.5	-17.0	166.4	155.8	10.65	15.633	
2,300.0	2,254.1	2,311.5	2,287.3	9.0	7.0	-177.03	235.4	-18.3	171.4	160.3	11.19	15.324	
2,400.0	2,350.9	2,411.4	2,385.1	9.5	7.4	-176.95	255.4	-19.6	176.5	164.7	11.73	15.042	
2,500.0	2,447.8	2,511.3	2,483.0	10.0	7.8	-176.87	275.3	-21.0	181.5	169.2	12.28	14.783	
2,600.0	2,544.6	2,611.2	2,580.8	10.5	8.3	-176.79	295.3	-22.3	186.5	173.7	12.82	14.546	
2,700.0	2,641.5	2,711.0	2,678.7	11.0	8.7	-176.72	315.2	-23.6	191.5	178.1	13.37	14.326	
2,800.0	2,738.3	2,810.9	2,776.5	11.5	9.1	-176.66	335.2	-24.9	196.5	182.6	13.92	14.123	
2,900.0	2,835.2	2,910.8	2,874.4	12.0	9.5	-176.59	355.1	-26.2	201.6	187.1	14.46	13.935	
3,000.0	2,932.0	3,010.7	2,972.2	12.6	10.0	-176.53	375.1	-27.5	206.6	191.6	15.01	13.760	
3,100.0	3,028.9	3,110.5	3,070.1	13.1	10.4	-176.48	395.0	-28.9	211.6	196.0	15.56	13.597	
3,200.0	3,125.7	3,210.4	3,167.9	13.6	10.8	-176.42	415.0	-30.2	216.6	200.5	16.11	13.444	
3,300.0	3,222.6	3,310.3	3,265.8	14.1	11.2	-176.37	434.9	-31.5	221.6	205.0	16.66	13.301	
3,400.0	3,319.5	3,410.2	3,363.6	14.6	11.7	-176.32	454.9	-32.8	226.7	209.4	17.21	13.167	
3,500.0	3,416.3	3,510.0	3,461.5	15.1	12.1	-176.27	474.8	-34.1	231.7	213.9	17.77	13.041	
3,600.0	3,513.2	3,609.9	3,559.4	15.6	12.5	-176.22	494.8	-35.4	236.7	218.4	18.32	12.922	
3,700.0	3,610.0	3,709.8	3,657.2	16.1	12.9	-176.18	514.7	-36.7	241.7	222.8	18.87	12.810	
3,800.0	3,706.9	3,809.7	3,755.1	16.6	13.4	-176.14	534.7	-38.1	246.7	227.3	19.42	12.704	
3,900.0	3,803.7	3,909.5	3,852.9	17.2	13.8	-176.10	554.6	-39.4	251.8	231.8	19.98	12.603	
4,000.0	3,900.6	4,009.4	3,950.8	17.7	14.2	-176.06	574.6	-40.7	256.8	236.3	20.53	12.508	
4,100.0	3,997.4	4,109.3	4,048.6	18.2	14.7	-176.02	594.5	-42.0	261.8	240.7	21.08	12.418	
4,200.0	4,094.3	4,209.2	4,146.5	18.7	15.1	-175.99	614.5	-43.3	266.8	245.2	21.64	12.332	
4,300.0	4,191.1	4,309.0	4,244.3	19.2	15.5	-175.95	634.4	-44.6	271.8	249.7	22.19	12.251	
4,400.0	4,288.0	4,408.9	4,342.2	19.7	15.9	-175.92	654.4	-46.0	276.9	254.1	22.74	12.173	
4,500.0	4,384.8	4,508.8	4,440.0	20.2	16.4	-175.89	674.4	-47.3	281.9	258.6	23.30	12.099	
4,600.0	4,481.7	4,608.6	4,537.9	20.7	16.8	-175.86	694.3	-48.6	286.9	263.1	23.85	12.028	
4,700.0	4,578.6	4,708.5	4,635.7	21.3	17.2	-175.83	714.3	-49.9	291.9	267.5	24.41	11.961	
4,800.0	4,675.4	4,808.4	4,733.6	21.8	17.7	-175.80	734.2	-51.2	297.0	272.0	24.96	11.896	
4,900.0	4,772.3	4,908.3	4,831.4	22.3	18.1	-175.77	754.2	-52.5	302.0	276.5	25.52	11.834	
5,000.0	4,869.1	5,008.1	4,929.3	22.8	18.5	-175.74	774.1	-53.9	307.0	280.9	26.07	11.775	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton C-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	4,966.0	5,108.0	5,027.1	23.3	18.9	-175.71	794.1	-55.2	312.0	285.4	26.63	11.718	
5,200.0	5,062.8	5,207.9	5,125.0	23.8	19.4	-175.69	814.0	-56.5	317.0	289.9	27.18	11.663	
5,300.0	5,159.7	5,307.8	5,222.8	24.3	19.8	-175.66	834.0	-57.8	322.1	294.3	27.74	11.610	
5,400.0	5,256.5	5,407.6	5,320.7	24.8	20.2	-175.64	853.9	-59.1	327.1	298.8	28.30	11.560	
5,500.0	5,353.4	5,507.5	5,418.5	25.4	20.7	-175.62	873.9	-60.4	332.1	303.3	28.85	11.511	
5,600.0	5,450.2	5,607.4	5,516.4	25.9	21.1	-175.60	893.8	-61.7	337.1	307.7	29.41	11.464	
5,700.0	5,547.1	5,707.3	5,614.2	26.4	21.5	-175.57	913.8	-63.1	342.2	312.2	29.96	11.419	
5,800.0	5,643.9	5,807.1	5,712.1	26.9	22.0	-175.55	933.7	-64.4	347.2	316.7	30.52	11.376	
5,900.0	5,740.8	5,907.0	5,809.9	27.4	22.4	-175.53	953.7	-65.7	352.2	321.1	31.08	11.334	
5,947.8	5,787.1	5,951.3	5,853.4	27.7	22.6	-175.53	962.4	-66.3	354.8	323.4	31.32	11.325	
6,000.0	5,837.8	6,000.0	5,901.2	27.9	22.7	-175.53	971.3	-66.9	357.8	326.2	31.60	11.325	
6,100.0	5,935.4	6,086.5	5,986.6	28.2	23.0	-175.54	985.0	-67.8	363.4	331.4	32.01	11.352	
6,200.0	6,033.8	6,175.1	6,074.5	28.6	23.2	-175.56	996.4	-68.5	368.6	336.2	32.37	11.386	
6,300.0	6,132.7	6,263.6	6,162.5	28.8	23.4	-175.58	1,005.1	-69.1	373.3	340.7	32.67	11.428	
6,400.0	6,232.1	6,351.9	6,250.7	29.1	23.6	-175.61	1,011.0	-69.5	377.7	344.8	32.90	11.478	
6,500.0	6,331.8	6,440.2	6,338.9	29.3	23.7	-175.64	1,014.3	-69.7	381.6	348.5	33.08	11.537	
6,600.0	6,431.7	6,532.0	6,430.7	29.4	23.8	-175.68	1,014.9	-69.7	385.0	351.8	33.20	11.595	
6,668.3	6,500.0	6,600.3	6,499.0	29.5	23.9	-177.99	1,014.9	-69.7	385.8	332.6	53.18	7.254	
6,700.0	6,531.7	6,632.0	6,530.7	29.5	24.0	-177.99	1,014.9	-69.7	385.8	332.6	53.25	7.245	
6,799.1	6,630.8	6,728.7	6,627.3	29.6	24.1	-177.45	1,014.9	-73.4	386.0	332.6	53.44	7.224	
6,850.0	6,681.7	6,777.5	6,675.6	29.7	24.1	-85.51	1,014.7	-79.9	386.4	352.4	34.03	11.354	
6,900.0	6,731.4	6,825.1	6,722.2	29.7	24.2	-84.81	1,014.5	-89.5	386.8	352.5	34.26	11.289	
6,950.0	6,780.6	6,872.4	6,767.8	29.8	24.3	-84.12	1,014.3	-102.0	387.3	352.7	34.51	11.221	
7,000.0	6,829.1	6,919.4	6,812.2	29.8	24.4	-83.47	1,013.9	-117.5	387.7	353.0	34.78	11.150	
7,050.0	6,876.6	6,966.2	6,855.3	29.9	24.4	-82.85	1,013.6	-135.7	388.2	353.2	35.06	11.074	
7,100.0	6,922.9	7,012.8	6,896.9	29.9	24.5	-82.27	1,013.1	-156.6	388.7	353.4	35.36	10.994	
7,150.0	6,967.9	7,059.1	6,936.9	30.0	24.6	-81.72	1,012.7	-180.0	389.3	353.6	35.69	10.907	
7,200.0	7,011.1	7,105.3	6,975.1	30.1	24.7	-81.21	1,012.1	-205.8	389.8	353.7	36.05	10.812	
7,250.0	7,052.5	7,150.0	7,010.5	30.2	24.8	-80.75	1,011.6	-233.2	390.3	353.8	36.44	10.711	
7,300.0	7,091.9	7,197.0	7,045.8	30.3	25.0	-80.31	1,010.9	-264.3	390.8	353.9	36.89	10.593	
7,350.0	7,129.0	7,242.7	7,078.0	30.4	25.1	-79.93	1,010.2	-296.6	391.2	353.8	37.38	10.464	
7,400.0	7,163.7	7,288.2	7,108.0	30.5	25.3	-79.59	1,009.5	-330.8	391.6	353.7	37.94	10.321	
7,450.0	7,195.7	7,333.6	7,135.7	30.6	25.5	-79.30	1,008.8	-366.7	392.0	353.4	38.57	10.163	
7,500.0	7,225.1	7,378.9	7,161.1	30.8	25.7	-79.06	1,008.0	-404.3	392.3	353.0	39.28	9.987	
7,550.0	7,251.5	7,424.1	7,183.9	31.0	25.9	-78.86	1,007.2	-443.3	392.5	352.5	40.07	9.796	
7,600.0	7,274.9	7,469.3	7,204.3	31.2	26.2	-78.71	1,006.4	-483.6	392.7	351.8	40.96	9.587	
7,650.0	7,295.2	7,514.4	7,222.0	31.5	26.6	-78.61	1,005.5	-525.1	392.9	350.9	41.95	9.364	
7,700.0	7,312.2	7,559.5	7,237.1	31.8	26.9	-78.56	1,004.7	-567.6	392.9	349.9	43.05	9.128	
7,750.0	7,326.0	7,604.6	7,249.4	32.1	27.4	-78.56	1,003.8	-611.0	392.9	348.7	44.24	8.881	
7,800.0	7,336.3	7,650.0	7,259.1	32.5	27.9	-78.61	1,002.9	-655.3	392.8	347.3	45.55	8.624	
7,850.0	7,343.2	7,694.9	7,265.8	33.0	28.4	-78.71	1,001.9	-699.6	392.7	345.8	46.95	8.365	
7,900.0	7,346.6	7,740.0	7,269.8	33.5	29.0	-78.86	1,001.0	-744.6	392.5	344.1	48.44	8.103	
7,927.7	7,347.0	7,765.1	7,270.8	33.8	29.4	-78.96	1,000.5	-769.6	392.4	343.1	49.30	7.958	
7,927.7	7,347.0	7,765.1	7,270.8	33.8	29.4	-78.96	1,000.5	-769.6	392.4	343.1	49.30	7.958	
7,928.4	7,347.0	7,765.7	7,270.9	33.8	29.4	-78.96	1,000.5	-770.2	392.4	343.0	49.33	7.954	
7,955.0	7,346.9	7,790.3	7,271.0	34.1	29.7	-78.99	1,000.0	-794.8	392.3	342.0	50.33	7.794	
8,000.0	7,346.6	7,835.2	7,270.7	34.7	30.4	-78.99	999.1	-839.7	392.3	340.2	52.12	7.527	
8,100.0	7,346.1	7,935.2	7,270.1	36.0	32.2	-78.97	997.0	-939.7	392.3	336.1	56.26	6.974	
8,200.0	7,345.6	8,035.2	7,269.5	37.6	34.0	-78.96	994.9	-1,039.7	392.3	331.7	60.61	6.473	
8,300.0	7,345.1	8,135.2	7,268.9	39.4	36.1	-78.94	992.8	-1,139.7	392.4	327.2	65.15	6.023	
8,400.0	7,344.6	8,235.2	7,268.3	41.3	38.2	-78.93	990.8	-1,239.6	392.4	322.6	69.82	5.620	
8,500.0	7,344.1	8,335.2	7,267.7	43.3	40.5	-78.92	988.7	-1,339.6	392.4	317.8	74.61	5.260	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton C-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,600.0	7,343.6	8,435.2	7,267.1	45.4	42.8	-78.90	986.6	-1,439.6	392.4	312.9	79.49	4.937	
8,700.0	7,343.1	8,535.2	7,266.5	47.6	45.2	-78.89	984.6	-1,539.6	392.4	308.0	84.44	4.647	
8,800.0	7,342.6	8,635.2	7,265.9	49.9	47.6	-78.87	982.5	-1,639.5	392.5	303.0	89.46	4.387	
8,900.0	7,342.1	8,735.2	7,265.3	52.3	50.1	-78.86	980.4	-1,739.5	392.5	297.9	94.54	4.151	
9,000.0	7,341.6	8,835.2	7,264.7	54.7	52.6	-78.84	978.4	-1,839.5	392.5	292.8	99.66	3.938	
9,100.0	7,341.1	8,935.2	7,264.1	57.1	55.1	-78.83	976.3	-1,939.5	392.5	287.7	104.82	3.745	
9,200.0	7,340.6	9,035.2	7,263.5	59.6	57.7	-78.81	974.2	-2,039.4	392.5	282.5	110.01	3.568	
9,300.0	7,340.1	9,135.2	7,262.9	62.1	60.3	-78.80	972.2	-2,139.4	392.5	277.3	115.23	3.407	
9,400.0	7,339.6	9,235.2	7,262.3	64.7	62.9	-78.78	970.1	-2,239.4	392.6	272.1	120.48	3.258	
9,500.0	7,339.1	9,335.2	7,261.7	67.2	65.5	-78.77	968.0	-2,339.4	392.6	266.8	125.74	3.122	
9,600.0	7,338.6	9,435.2	7,261.1	69.8	68.1	-78.76	966.0	-2,439.4	392.6	261.6	131.03	2.996	
9,700.0	7,338.1	9,535.2	7,260.5	72.4	70.8	-78.74	963.9	-2,539.3	392.6	256.3	136.33	2.880	
9,800.0	7,337.6	9,635.2	7,259.9	75.0	73.5	-78.73	961.8	-2,639.3	392.6	251.0	141.65	2.772	
9,900.0	7,337.1	9,735.2	7,259.3	77.7	76.1	-78.71	959.8	-2,739.3	392.7	245.7	146.98	2.671	
10,000.0	7,336.6	9,835.2	7,258.7	80.3	78.8	-78.70	957.7	-2,839.3	392.7	240.3	152.32	2.578	
10,100.0	7,336.1	9,935.2	7,258.1	83.0	81.5	-78.68	955.6	-2,939.2	392.7	235.0	157.68	2.490	
10,200.0	7,335.6	10,035.2	7,257.5	85.6	84.2	-78.67	953.6	-3,039.2	392.7	229.7	163.04	2.409	
10,300.0	7,335.1	10,135.2	7,256.9	88.3	86.9	-78.65	951.5	-3,139.2	392.7	224.3	168.41	2.332	
10,400.0	7,334.6	10,235.2	7,256.3	91.0	89.7	-78.64	949.4	-3,239.2	392.7	219.0	173.79	2.260	
10,500.0	7,334.1	10,335.2	7,255.7	93.7	92.4	-78.63	947.4	-3,339.1	392.8	213.6	179.17	2.192	
10,600.0	7,333.6	10,435.2	7,255.1	96.4	95.1	-78.61	945.3	-3,439.1	392.8	208.2	184.56	2.128	
10,700.0	7,333.1	10,535.2	7,254.5	99.1	97.8	-78.60	943.2	-3,539.1	392.8	202.8	189.96	2.068	
10,800.0	7,332.6	10,635.2	7,253.9	101.8	100.6	-78.58	941.2	-3,639.1	392.8	197.5	195.36	2.011	
10,900.0	7,332.1	10,735.2	7,253.3	104.5	103.3	-78.57	939.1	-3,739.1	392.8	192.1	200.77	1.957	
11,000.0	7,331.6	10,835.2	7,252.7	107.2	106.1	-78.55	937.0	-3,839.0	392.9	186.7	206.18	1.905	
11,100.0	7,331.1	10,935.2	7,252.1	110.0	108.8	-78.54	935.0	-3,939.0	392.9	181.3	211.59	1.857	
11,200.0	7,330.6	11,035.2	7,251.5	112.7	111.6	-78.52	932.9	-4,039.0	392.9	175.9	217.01	1.810	
11,300.0	7,330.1	11,135.2	7,250.9	115.4	114.3	-78.51	930.8	-4,139.0	392.9	170.5	222.43	1.766	
11,400.0	7,329.6	11,235.2	7,250.3	118.2	117.1	-78.50	928.8	-4,238.9	392.9	165.1	227.86	1.724	
11,500.0	7,329.1	11,335.2	7,249.7	120.9	119.8	-78.48	926.7	-4,338.9	393.0	159.7	233.28	1.684	
11,600.0	7,328.6	11,435.2	7,249.1	123.6	122.6	-78.47	924.6	-4,438.9	393.0	154.3	238.71	1.646	
11,700.0	7,328.1	11,535.2	7,248.5	126.4	125.3	-78.45	922.5	-4,538.9	393.0	148.8	244.15	1.610	
11,800.0	7,327.6	11,635.2	7,247.9	129.1	128.1	-78.44	920.5	-4,638.8	393.0	143.4	249.58	1.575	
11,900.0	7,327.1	11,735.2	7,247.3	131.9	130.9	-78.42	918.4	-4,738.8	393.0	138.0	255.02	1.541	
12,000.0	7,326.6	11,835.2	7,246.7	134.6	133.6	-78.41	916.3	-4,838.8	393.0	132.6	260.45	1.509	
12,100.0	7,326.1	11,935.2	7,246.1	137.4	136.4	-78.39	914.3	-4,938.8	393.1	127.2	265.89	1.478	Level 3
12,200.0	7,325.6	12,035.2	7,245.5	140.2	139.2	-78.38	912.2	-5,038.8	393.1	121.8	271.33	1.449	Level 3
12,300.0	7,325.1	12,135.2	7,244.9	142.9	141.9	-78.37	910.1	-5,138.7	393.1	116.3	276.78	1.420	Level 3
12,400.0	7,324.6	12,235.2	7,244.3	145.7	144.7	-78.35	908.1	-5,238.7	393.1	110.9	282.22	1.393	Level 3
12,500.0	7,324.1	12,335.2	7,243.7	148.4	147.5	-78.34	906.0	-5,338.7	393.1	105.5	287.66	1.367	Level 3
12,600.0	7,323.6	12,435.2	7,243.1	151.2	150.3	-78.32	903.9	-5,438.7	393.2	100.1	293.11	1.341	Level 3
12,700.0	7,323.1	12,535.2	7,242.5	154.0	153.0	-78.31	901.9	-5,538.6	393.2	94.6	298.56	1.317	Level 3
12,800.0	7,322.6	12,635.2	7,241.9	156.7	155.8	-78.29	899.8	-5,638.6	393.2	89.2	304.00	1.293	Level 3
12,900.0	7,322.1	12,735.2	7,241.2	159.5	158.6	-78.28	897.7	-5,738.6	393.2	83.8	309.45	1.271	Level 3
13,000.0	7,321.6	12,835.2	7,240.6	162.3	161.4	-78.27	895.7	-5,838.6	393.2	78.3	314.90	1.249	Level 2
13,100.0	7,321.1	12,935.2	7,240.0	165.1	164.2	-78.25	893.6	-5,938.5	393.3	72.9	320.35	1.228	Level 2
13,200.0	7,320.6	13,035.2	7,239.4	167.8	166.9	-78.24	891.5	-6,038.5	393.3	67.5	325.80	1.207	Level 2
13,300.0	7,320.1	13,135.2	7,238.8	170.6	169.7	-78.22	889.5	-6,138.5	393.3	62.0	331.25	1.187	Level 2
13,400.0	7,319.6	13,235.2	7,238.2	173.4	172.5	-78.21	887.4	-6,238.5	393.3	56.6	336.70	1.168	Level 2
13,500.0	7,319.1	13,335.2	7,237.6	176.2	175.3	-78.19	885.3	-6,338.4	393.3	51.2	342.15	1.150	Level 2
13,600.0	7,318.6	13,435.2	7,237.0	178.9	178.1	-78.18	883.3	-6,438.4	393.4	45.7	347.61	1.132	Level 2
13,700.0	7,318.1	13,535.2	7,236.4	181.7	180.9	-78.16	881.2	-6,538.4	393.4	40.3	353.06	1.114	Level 2

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton C-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
13,800.0	7,317.6	13,635.2	7,235.8	184.5	183.6	-78.15	879.1	-6,638.4	393.4	34.9	358.51	1.097	Level 2
13,900.0	7,317.1	13,735.2	7,235.2	187.3	186.4	-78.14	877.1	-6,738.4	393.4	29.4	363.96	1.081	Level 2
14,000.0	7,316.6	13,835.2	7,234.6	190.0	189.2	-78.12	875.0	-6,838.3	393.4	24.0	369.42	1.065	Level 2
14,100.0	7,316.1	13,935.2	7,234.0	192.8	192.0	-78.11	872.9	-6,938.3	393.5	18.6	374.87	1.050	Level 2
14,200.0	7,315.6	14,035.2	7,233.4	195.6	194.8	-78.09	870.9	-7,038.3	393.5	13.1	380.33	1.035	Level 2
14,300.0	7,315.1	14,135.2	7,232.8	198.4	197.6	-78.08	868.8	-7,138.3	393.5	7.7	385.78	1.020	Level 2
14,400.0	7,314.6	14,235.2	7,232.2	201.2	200.4	-78.06	866.7	-7,238.2	393.5	2.3	391.23	1.006	Level 2
14,500.0	7,314.1	14,335.2	7,231.6	204.0	203.2	-78.05	864.7	-7,338.2	393.5	-3.2	396.69	0.992	Level 1
14,600.0	7,313.6	14,435.2	7,231.0	206.7	206.0	-78.03	862.6	-7,438.2	393.6	-8.6	402.14	0.979	Level 1
14,700.0	7,313.1	14,535.2	7,230.4	209.5	208.7	-78.02	860.5	-7,538.2	393.6	-14.0	407.60	0.966	Level 1
14,800.0	7,312.6	14,635.2	7,229.8	212.3	211.5	-78.01	858.5	-7,638.1	393.6	-19.5	413.05	0.953	Level 1
14,900.0	7,312.1	14,735.2	7,229.2	215.1	214.3	-77.99	856.4	-7,738.1	393.6	-24.9	418.50	0.941	Level 1
15,000.0	7,311.6	14,835.2	7,228.6	217.9	217.1	-77.98	854.3	-7,838.1	393.6	-30.3	423.96	0.928	Level 1
15,100.0	7,311.1	14,935.2	7,228.0	220.7	219.9	-77.96	852.2	-7,938.1	393.7	-35.8	429.41	0.917	Level 1
15,200.0	7,310.6	15,035.2	7,227.4	223.5	222.7	-77.95	850.2	-8,038.1	393.7	-41.2	434.87	0.905	Level 1
15,300.0	7,310.1	15,135.2	7,226.8	226.3	225.5	-77.93	848.1	-8,138.0	393.7	-46.6	440.32	0.894	Level 1
15,400.0	7,309.6	15,235.2	7,226.2	229.0	228.3	-77.92	846.0	-8,238.0	393.7	-52.1	445.77	0.883	Level 1
15,500.0	7,309.1	15,335.2	7,225.6	231.8	231.1	-77.91	844.0	-8,338.0	393.7	-57.5	451.23	0.873	Level 1
15,600.0	7,308.6	15,435.2	7,225.0	234.6	233.9	-77.89	841.9	-8,438.0	393.8	-62.9	456.68	0.862	Level 1
15,700.0	7,308.1	15,535.2	7,224.4	237.4	236.7	-77.88	839.8	-8,537.9	393.8	-68.4	462.13	0.852	Level 1
15,800.0	7,307.6	15,635.2	7,223.8	240.2	239.5	-77.86	837.8	-8,637.9	393.8	-73.8	467.59	0.842	Level 1
15,900.0	7,307.1	15,735.2	7,223.2	243.0	242.3	-77.85	835.7	-8,737.9	393.8	-79.2	473.04	0.833	Level 1
16,000.0	7,306.6	15,835.2	7,222.6	245.8	245.1	-77.83	833.6	-8,837.9	393.8	-84.7	478.49	0.823	Level 1
16,100.0	7,306.1	15,935.2	7,222.0	248.6	247.8	-77.82	831.6	-8,937.8	393.9	-90.1	483.94	0.814	Level 1
16,200.0	7,305.6	16,035.2	7,221.4	251.4	250.6	-77.80	829.5	-9,037.8	393.9	-95.5	489.39	0.805	Level 1
16,300.0	7,305.1	16,135.2	7,220.8	254.2	253.4	-77.79	827.4	-9,137.8	393.9	-101.0	494.85	0.796	Level 1
16,400.0	7,304.6	16,235.2	7,220.2	257.0	256.2	-77.78	825.4	-9,237.8	393.9	-106.4	500.30	0.787	Level 1
16,500.0	7,304.1	16,335.2	7,219.6	259.7	259.0	-77.76	823.3	-9,337.8	393.9	-111.8	505.75	0.779	Level 1
16,600.0	7,303.6	16,435.2	7,219.0	262.5	261.8	-77.75	821.2	-9,437.7	394.0	-117.2	511.20	0.771	Level 1
16,700.0	7,303.1	16,535.2	7,218.4	265.3	264.6	-77.73	819.2	-9,537.7	394.0	-122.7	516.65	0.763	Level 1
16,800.0	7,302.6	16,635.2	7,217.8	268.1	267.4	-77.72	817.1	-9,637.7	394.0	-128.1	522.10	0.755	Level 1
16,900.0	7,302.1	16,735.2	7,217.2	270.9	270.2	-77.70	815.0	-9,737.7	394.0	-133.5	527.55	0.747	Level 1
17,000.0	7,301.6	16,835.2	7,216.6	273.7	273.0	-77.69	813.0	-9,837.6	394.0	-139.0	533.00	0.739	Level 1
17,100.0	7,301.1	16,935.2	7,216.0	276.5	275.8	-77.68	810.9	-9,937.6	394.1	-144.4	538.45	0.732	Level 1
17,200.0	7,300.6	17,035.2	7,215.4	279.3	278.6	-77.66	808.8	-10,037.6	394.1	-149.8	543.90	0.725	Level 1
17,300.0	7,300.1	17,135.2	7,214.8	282.1	281.4	-77.65	806.8	-10,137.6	394.1	-155.3	549.35	0.717	Level 1
17,400.0	7,299.6	17,235.2	7,214.2	284.9	284.2	-77.63	804.7	-10,237.5	394.1	-160.7	554.80	0.710	Level 1
17,500.0	7,299.1	17,335.2	7,213.6	287.7	287.0	-77.62	802.6	-10,337.5	394.1	-166.1	560.24	0.704	Level 1
17,600.0	7,298.6	17,435.2	7,213.0	290.5	289.8	-77.60	800.6	-10,437.5	394.2	-171.5	565.69	0.697	Level 1
17,700.0	7,298.1	17,535.2	7,212.4	293.3	292.6	-77.59	798.5	-10,537.5	394.2	-177.0	571.14	0.690	Level 1
17,800.0	7,297.6	17,635.2	7,211.8	296.1	295.4	-77.58	796.4	-10,637.4	394.2	-182.4	576.59	0.684	Level 1
17,900.0	7,297.1	17,735.2	7,211.2	298.9	298.2	-77.56	794.4	-10,737.4	394.2	-187.8	582.03	0.677	Level 1
17,922.5	7,297.0	17,757.7	7,211.1	299.5	298.8	-77.56	793.9	-10,759.9	394.2	-189.0	583.26	0.676	Level 1, ES, SF

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton D-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.22	-44.8	-1.4	44.8				
100.0	100.0	99.0	99.0	0.1	0.1	-178.22	-44.8	-1.4	44.8	44.6	0.22	200.466	
200.0	200.0	199.0	199.0	0.3	0.3	-178.22	-44.8	-1.4	44.8	44.2	0.67	66.711	CC, ES
300.0	300.0	299.0	299.0	0.6	0.6	-176.04	-44.8	-1.4	46.1	45.0	1.13	40.754	
400.0	399.9	398.9	398.9	0.8	0.8	-176.35	-44.8	-1.4	50.1	48.5	1.60	31.300	
500.0	499.7	498.7	498.7	1.0	1.0	-176.76	-44.8	-1.4	56.6	54.5	2.07	27.374	
600.0	599.3	598.3	598.3	1.3	1.2	-177.21	-44.8	-1.4	65.7	63.2	2.53	25.926	
700.0	698.6	697.6	697.6	1.6	1.5	-177.62	-44.8	-1.4	77.5	74.5	3.00	25.797	
800.0	797.5	796.5	796.5	1.9	1.7	-177.99	-44.8	-1.4	91.8	88.3	3.47	26.450	
900.0	896.1	897.8	897.8	2.2	1.9	-178.24	-43.6	-1.5	107.5	103.6	3.94	27.290	
1,000.0	994.2	999.7	999.6	2.6	2.1	-178.35	-39.6	-1.9	123.2	118.8	4.41	27.953	
1,100.0	1,091.7	1,101.9	1,101.6	3.0	2.4	-178.37	-32.9	-2.6	138.8	134.0	4.88	28.447	
1,160.7	1,150.6	1,164.2	1,163.7	3.3	2.5	-178.35	-27.5	-3.1	148.3	143.1	5.17	28.677	
1,200.0	1,188.7	1,204.7	1,203.9	3.5	2.6	-178.32	-23.5	-3.5	154.2	148.9	5.36	28.776	
1,300.0	1,285.5	1,308.1	1,306.6	4.0	2.9	-178.21	-11.2	-4.7	167.4	161.6	5.85	28.627	
1,400.0	1,382.4	1,412.3	1,409.7	4.5	3.2	-178.03	3.9	-6.3	177.9	171.6	6.35	28.021	
1,500.0	1,479.2	1,515.0	1,510.8	5.0	3.5	-177.79	21.4	-8.0	185.9	179.1	6.86	27.108	
1,600.0	1,576.1	1,614.7	1,609.0	5.5	3.8	-177.57	38.9	-9.8	193.4	186.1	7.37	26.233	
1,700.0	1,672.9	1,714.4	1,707.1	6.0	4.1	-177.36	56.3	-11.5	200.9	193.1	7.89	25.476	
1,800.0	1,769.8	1,814.1	1,805.3	6.5	4.5	-177.16	73.8	-13.3	208.5	200.0	8.41	24.788	
1,900.0	1,866.6	1,913.8	1,903.5	7.0	4.8	-176.98	91.3	-15.0	216.0	207.0	8.93	24.173	
2,000.0	1,963.5	2,013.5	2,001.6	7.5	5.2	-176.82	108.8	-16.8	223.5	214.0	9.46	23.619	
2,100.0	2,060.4	2,113.3	2,099.8	8.0	5.6	-176.66	126.3	-18.5	231.0	221.0	9.99	23.118	
2,200.0	2,157.2	2,213.0	2,197.9	8.5	5.9	-176.51	143.8	-20.3	238.5	228.0	10.52	22.663	
2,300.0	2,254.1	2,312.7	2,296.1	9.0	6.3	-176.37	161.2	-22.0	246.0	234.9	11.06	22.249	
2,400.0	2,350.9	2,412.4	2,394.2	9.5	6.7	-176.24	178.7	-23.7	253.5	241.9	11.59	21.869	
2,500.0	2,447.8	2,512.1	2,492.4	10.0	7.0	-176.12	196.2	-25.5	261.0	248.9	12.13	21.521	
2,600.0	2,544.6	2,611.8	2,590.5	10.5	7.4	-176.01	213.7	-27.2	268.6	255.9	12.67	21.200	
2,700.0	2,641.5	2,711.6	2,688.7	11.0	7.8	-175.90	231.2	-29.0	276.1	262.9	13.21	20.903	
2,800.0	2,738.3	2,811.3	2,786.9	11.5	8.2	-175.79	248.6	-30.7	283.6	269.8	13.75	20.629	
2,900.0	2,835.2	2,911.0	2,885.0	12.0	8.6	-175.69	266.1	-32.5	291.1	276.8	14.29	20.374	
3,000.0	2,932.0	3,010.7	2,983.2	12.6	8.9	-175.60	283.6	-34.2	298.6	283.8	14.83	20.136	
3,100.0	3,028.9	3,110.4	3,081.3	13.1	9.3	-175.51	301.1	-36.0	306.2	290.8	15.37	19.914	
3,200.0	3,125.7	3,210.1	3,179.5	13.6	9.7	-175.43	318.6	-37.7	313.7	297.8	15.92	19.706	
3,300.0	3,222.6	3,309.9	3,277.6	14.1	10.1	-175.35	336.1	-39.5	321.2	304.7	16.46	19.512	
3,400.0	3,319.5	3,409.6	3,375.8	14.6	10.5	-175.27	353.5	-41.2	328.7	311.7	17.01	19.329	
3,500.0	3,416.3	3,509.3	3,474.0	15.1	10.9	-175.20	371.0	-43.0	336.2	318.7	17.55	19.157	
3,600.0	3,513.2	3,609.0	3,572.1	15.6	11.3	-175.13	388.5	-44.7	343.8	325.7	18.10	18.995	
3,700.0	3,610.0	3,708.7	3,670.3	16.1	11.6	-175.06	406.0	-46.5	351.3	332.6	18.64	18.842	
3,800.0	3,706.9	3,808.4	3,768.4	16.6	12.0	-175.00	423.5	-48.2	358.8	339.6	19.19	18.697	
3,900.0	3,803.7	3,908.1	3,866.6	17.2	12.4	-174.93	440.9	-50.0	366.3	346.6	19.74	18.560	
4,000.0	3,900.6	4,007.9	3,964.7	17.7	12.8	-174.87	458.4	-51.7	373.9	353.6	20.29	18.430	
4,100.0	3,997.4	4,107.6	4,062.9	18.2	13.2	-174.82	475.9	-53.5	381.4	360.6	20.83	18.307	
4,200.0	4,094.3	4,207.3	4,161.0	18.7	13.6	-174.76	493.4	-55.2	388.9	367.5	21.38	18.189	
4,300.0	4,191.1	4,307.0	4,259.2	19.2	14.0	-174.71	510.9	-57.0	396.5	374.5	21.93	18.077	
4,400.0	4,288.0	4,406.7	4,357.4	19.7	14.4	-174.66	528.4	-58.7	404.0	381.5	22.48	17.971	
4,500.0	4,384.8	4,506.4	4,455.5	20.2	14.8	-174.61	545.8	-60.5	411.5	388.5	23.03	17.869	
4,600.0	4,481.7	4,606.2	4,553.7	20.7	15.1	-174.56	563.3	-62.2	419.0	395.5	23.58	17.772	
4,700.0	4,578.6	4,705.9	4,651.8	21.3	15.5	-174.52	580.8	-64.0	426.6	402.4	24.13	17.679	
4,800.0	4,675.4	4,805.6	4,750.0	21.8	15.9	-174.48	598.3	-65.7	434.1	409.4	24.68	17.590	
4,900.0	4,772.3	4,905.3	4,848.1	22.3	16.3	-174.43	615.8	-67.5	441.6	416.4	25.23	17.505	
5,000.0	4,869.1	5,005.0	4,946.3	22.8	16.7	-174.39	633.2	-69.2	449.2	423.4	25.78	17.424	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton D-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	4,966.0	5,104.7	5,044.4	23.3	17.1	-174.35	650.7	-71.0	456.7	430.4	26.33	17.345	
5,200.0	5,062.8	5,204.4	5,142.6	23.8	17.5	-174.31	668.2	-72.7	464.2	437.3	26.88	17.270	
5,300.0	5,159.7	5,304.2	5,240.8	24.3	17.9	-174.28	685.7	-74.5	471.7	444.3	27.43	17.198	
5,400.0	5,256.5	5,400.0	5,335.1	24.8	18.2	-174.25	702.2	-76.1	479.6	451.6	27.96	17.153	
5,500.0	5,353.4	5,482.8	5,417.0	25.4	18.5	-174.26	714.4	-77.3	489.9	461.5	28.41	17.243	
5,600.0	5,450.2	5,567.5	5,501.1	25.9	18.7	-174.32	724.4	-78.3	503.1	474.2	28.85	17.436	
5,700.0	5,547.1	5,651.4	5,584.6	26.4	18.9	-174.42	731.9	-79.1	519.2	489.9	29.28	17.728	
5,800.0	5,643.9	5,734.4	5,667.5	26.9	19.0	-174.56	736.9	-79.6	538.1	508.4	29.71	18.114	
5,900.0	5,740.8	5,816.5	5,749.5	27.4	19.1	-174.72	739.5	-79.8	559.8	529.7	30.11	18.589	
5,947.8	5,787.1	5,855.3	5,788.4	27.7	19.2	-174.80	740.0	-79.9	571.1	540.8	30.31	18.845	
6,000.0	5,837.8	5,903.7	5,836.8	27.9	19.3	-174.93	740.0	-79.9	583.6	553.1	30.54	19.107	
6,100.0	5,935.4	6,001.4	5,934.4	28.2	19.4	-175.15	740.0	-79.9	604.9	574.0	30.97	19.531	
6,200.0	6,033.8	6,099.7	6,032.8	28.6	19.5	-175.32	740.0	-79.9	622.9	591.5	31.36	19.861	
6,300.0	6,132.7	6,198.7	6,131.7	28.8	19.7	-175.45	740.0	-79.9	637.4	605.7	31.71	20.102	
6,400.0	6,232.1	6,298.0	6,231.1	29.1	19.8	-175.54	740.0	-79.9	648.4	616.4	32.01	20.259	
6,500.0	6,331.8	6,397.7	6,330.8	29.3	20.0	-175.61	740.0	-79.9	656.0	623.7	32.26	20.335	
6,600.0	6,431.7	6,497.7	6,430.7	29.4	20.1	-175.64	740.0	-79.9	660.1	627.7	32.47	20.333	
6,668.3	6,500.0	6,565.9	6,499.0	29.5	20.2	-177.95	740.0	-79.9	660.9	611.4	49.49	13.356	
6,700.0	6,531.7	6,597.6	6,530.7	29.5	20.3	-177.95	740.0	-79.9	660.9	611.4	49.57	13.334	
6,799.1	6,630.8	6,696.7	6,629.8	29.6	20.4	-177.95	740.0	-79.9	660.9	611.1	49.82	13.266	
6,850.0	6,681.7	6,745.1	6,678.2	29.7	20.5	-86.76	740.0	-81.5	660.9	627.7	33.24	19.885	
6,900.0	6,731.4	6,792.7	6,725.5	29.7	20.6	-86.79	739.9	-86.3	660.9	627.5	33.40	19.786	
6,950.0	6,780.6	6,840.2	6,772.3	29.8	20.7	-86.83	739.7	-94.2	660.9	627.3	33.58	19.678	
7,000.0	6,829.1	6,887.8	6,818.6	29.8	20.7	-86.88	739.5	-105.2	660.9	627.1	33.78	19.562	
7,050.0	6,876.6	6,935.4	6,864.1	29.9	20.8	-86.95	739.2	-119.2	660.8	626.8	34.00	19.433	
7,100.0	6,922.9	6,983.1	6,908.6	29.9	20.9	-87.03	738.8	-136.3	660.8	626.5	34.25	19.291	
7,150.0	6,967.9	7,030.8	6,951.9	30.0	21.0	-87.12	738.4	-156.3	660.7	626.2	34.54	19.131	
7,200.0	7,011.1	7,078.6	6,993.9	30.1	21.1	-87.23	737.9	-179.3	660.6	625.8	34.86	18.949	
7,250.0	7,052.5	7,126.5	7,034.3	30.2	21.3	-87.35	737.4	-204.9	660.6	625.3	35.25	18.742	
7,300.0	7,091.9	7,174.5	7,073.0	30.3	21.4	-87.49	736.8	-233.3	660.5	624.8	35.70	18.503	
7,350.0	7,129.0	7,222.6	7,109.7	30.4	21.6	-87.63	736.2	-264.3	660.4	624.2	36.23	18.230	
7,400.0	7,163.7	7,270.8	7,144.4	30.5	21.8	-87.79	735.5	-297.8	660.4	623.5	36.85	17.919	
7,450.0	7,195.7	7,319.1	7,176.8	30.6	22.0	-87.96	734.7	-333.6	660.3	622.7	37.58	17.568	
7,500.0	7,225.1	7,367.5	7,206.8	30.8	22.2	-88.14	733.9	-371.6	660.2	621.8	38.44	17.177	
7,550.0	7,251.5	7,416.1	7,234.2	31.0	22.5	-88.32	733.1	-411.7	660.2	620.7	39.42	16.747	
7,600.0	7,274.9	7,464.8	7,258.9	31.2	22.9	-88.52	732.2	-453.6	660.1	619.6	40.54	16.284	
7,650.0	7,295.2	7,513.7	7,280.8	31.5	23.3	-88.72	731.3	-497.3	660.0	618.2	41.80	15.792	
7,700.0	7,312.2	7,562.7	7,299.7	31.8	23.8	-88.93	730.4	-542.5	660.0	616.8	43.19	15.280	
7,750.0	7,326.0	7,611.9	7,315.5	32.1	24.4	-89.14	729.4	-589.0	660.0	615.2	44.73	14.755	
7,800.0	7,336.3	7,661.2	7,328.1	32.5	25.0	-89.36	728.4	-636.7	659.9	613.5	46.39	14.227	
7,850.0	7,343.2	7,710.7	7,337.4	33.0	25.7	-89.58	727.4	-685.3	659.9	611.7	48.16	13.702	
7,900.0	7,346.6	7,760.4	7,343.4	33.5	26.5	-89.81	726.4	-734.6	659.9	609.8	50.03	13.189	
7,927.7	7,347.0	7,788.0	7,345.2	33.8	27.0	-89.93	725.8	-762.2	659.9	608.8	51.11	12.911	
7,927.7	7,347.0	7,788.0	7,345.2	33.8	27.0	-89.93	725.8	-762.2	659.9	608.8	51.11	12.911	
7,928.1	7,347.0	7,788.4	7,345.2	33.8	27.0	-89.93	725.8	-762.5	659.9	608.8	51.13	12.907	
7,928.4	7,347.0	7,788.7	7,345.3	33.8	27.0	-89.94	725.8	-762.8	659.9	608.7	51.14	12.904	
8,000.0	7,346.6	7,860.4	7,345.8	34.7	28.3	-90.02	724.3	-834.5	659.9	605.9	54.01	12.218	
8,100.0	7,346.1	7,960.4	7,345.3	36.0	30.2	-90.02	722.2	-934.5	659.9	601.7	58.23	11.333	
8,200.0	7,345.6	8,060.4	7,344.8	37.6	32.2	-90.02	720.2	-1,034.4	659.9	597.2	62.65	10.532	
8,300.0	7,345.1	8,160.4	7,344.3	39.4	34.4	-90.02	718.1	-1,134.4	659.9	592.6	67.26	9.811	
8,400.0	7,344.6	8,260.4	7,343.8	41.3	36.7	-90.02	716.0	-1,234.4	659.9	587.9	72.01	9.164	
8,500.0	7,344.1	8,360.4	7,343.3	43.3	39.0	-90.02	714.0	-1,334.4	659.9	583.0	76.87	8.584	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton D-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,600.0	7,343.6	8,460.4	7,342.8	45.4	41.4	-90.02	711.9	-1,434.3	659.9	578.1	81.83	8.064	
8,700.0	7,343.1	8,560.4	7,342.3	47.6	43.9	-90.02	709.8	-1,534.3	659.9	573.0	86.87	7.596	
8,800.0	7,342.6	8,660.4	7,341.8	49.9	46.4	-90.02	707.7	-1,634.3	659.9	567.9	91.98	7.174	
8,900.0	7,342.1	8,760.4	7,341.3	52.3	48.9	-90.02	705.7	-1,734.3	659.9	562.7	97.14	6.793	
9,000.0	7,341.6	8,860.4	7,340.8	54.7	51.5	-90.02	703.6	-1,834.3	659.9	557.5	102.35	6.447	
9,100.0	7,341.1	8,960.4	7,340.3	57.1	54.1	-90.02	701.5	-1,934.2	659.9	552.3	107.60	6.133	
9,200.0	7,340.6	9,060.4	7,339.8	59.6	56.7	-90.02	699.5	-2,034.2	659.9	547.0	112.89	5.845	
9,300.0	7,340.1	9,160.4	7,339.3	62.1	59.3	-90.02	697.4	-2,134.2	659.9	541.7	118.21	5.583	
9,400.0	7,339.6	9,260.4	7,338.8	64.7	61.9	-90.01	695.3	-2,234.2	659.9	536.3	123.55	5.341	
9,500.0	7,339.1	9,360.4	7,338.3	67.2	64.6	-90.01	693.3	-2,334.1	659.9	531.0	128.91	5.119	
9,600.0	7,338.6	9,460.4	7,337.8	69.8	67.3	-90.01	691.2	-2,434.1	659.9	525.6	134.30	4.914	
9,700.0	7,338.1	9,560.4	7,337.3	72.4	69.9	-90.01	689.1	-2,534.1	659.9	520.2	139.70	4.724	
9,800.0	7,337.6	9,660.4	7,336.8	75.0	72.6	-90.01	687.0	-2,634.1	659.9	514.8	145.12	4.547	
9,900.0	7,337.1	9,760.4	7,336.3	77.7	75.3	-90.01	685.0	-2,734.1	659.9	509.3	150.55	4.383	
10,000.0	7,336.6	9,860.4	7,335.8	80.3	78.0	-90.01	682.9	-2,834.0	659.9	503.9	156.00	4.230	
10,100.0	7,336.1	9,960.4	7,335.3	83.0	80.8	-90.01	680.8	-2,934.0	659.9	498.4	161.46	4.087	
10,200.0	7,335.6	10,060.4	7,334.8	85.6	83.5	-90.01	678.8	-3,034.0	659.9	493.0	166.92	3.953	
10,300.0	7,335.1	10,160.4	7,334.3	88.3	86.2	-90.01	676.7	-3,134.0	659.9	487.5	172.40	3.828	
10,400.0	7,334.6	10,260.4	7,333.8	91.0	88.9	-90.01	674.6	-3,233.9	659.9	482.0	177.89	3.710	
10,500.0	7,334.1	10,360.4	7,333.3	93.7	91.7	-90.01	672.6	-3,333.9	659.9	476.5	183.38	3.599	
10,600.0	7,333.6	10,460.4	7,332.8	96.4	94.4	-90.01	670.5	-3,433.9	659.9	471.0	188.88	3.494	
10,700.0	7,333.1	10,560.4	7,332.3	99.1	97.2	-90.01	668.4	-3,533.9	659.9	465.5	194.39	3.395	
10,800.0	7,332.6	10,660.4	7,331.8	101.8	99.9	-90.01	666.4	-3,633.8	659.9	460.0	199.90	3.301	
10,900.0	7,332.1	10,760.4	7,331.3	104.5	102.7	-90.01	664.3	-3,733.8	659.9	454.5	205.42	3.212	
11,000.0	7,331.6	10,860.4	7,330.8	107.2	105.4	-90.01	662.2	-3,833.8	659.9	449.0	210.94	3.128	
11,100.0	7,331.1	10,960.4	7,330.3	110.0	108.2	-90.01	660.1	-3,933.8	659.9	443.4	216.47	3.049	
11,200.0	7,330.6	11,060.4	7,329.8	112.7	110.9	-90.01	658.1	-4,033.8	659.9	437.9	222.00	2.973	
11,300.0	7,330.1	11,160.4	7,329.3	115.4	113.7	-90.01	656.0	-4,133.7	659.9	432.4	227.53	2.900	
11,400.0	7,329.6	11,260.4	7,328.8	118.2	116.4	-90.01	653.9	-4,233.7	659.9	426.8	233.07	2.831	
11,500.0	7,329.1	11,360.4	7,328.3	120.9	119.2	-90.01	651.9	-4,333.7	659.9	421.3	238.62	2.766	
11,600.0	7,328.6	11,460.4	7,327.8	123.6	122.0	-90.01	649.8	-4,433.7	659.9	415.7	244.16	2.703	
11,700.0	7,328.1	11,560.4	7,327.3	126.4	124.7	-90.01	647.7	-4,533.6	659.9	410.2	249.71	2.643	
11,800.0	7,327.6	11,660.4	7,326.8	129.1	127.5	-90.01	645.7	-4,633.6	659.9	404.6	255.26	2.585	
11,900.0	7,327.1	11,760.4	7,326.3	131.9	130.3	-90.01	643.6	-4,733.6	659.9	399.1	260.82	2.530	
12,000.0	7,326.6	11,860.4	7,325.8	134.6	133.1	-90.01	641.5	-4,833.6	659.9	393.5	266.37	2.477	
12,100.0	7,326.1	11,960.4	7,325.3	137.4	135.8	-90.01	639.5	-4,933.6	659.9	388.0	271.93	2.427	
12,200.0	7,325.6	12,060.4	7,324.8	140.2	138.6	-90.01	637.4	-5,033.5	659.9	382.4	277.49	2.378	
12,300.0	7,325.1	12,160.4	7,324.3	142.9	141.4	-90.01	635.3	-5,133.5	659.9	376.8	283.06	2.331	
12,400.0	7,324.6	12,260.4	7,323.8	145.7	144.2	-90.01	633.2	-5,233.5	659.9	371.3	288.62	2.286	
12,500.0	7,324.1	12,360.4	7,323.3	148.4	146.9	-90.01	631.2	-5,333.5	659.9	365.7	294.19	2.243	
12,600.0	7,323.6	12,460.4	7,322.8	151.2	149.7	-90.01	629.1	-5,433.4	659.9	360.1	299.76	2.201	
12,700.0	7,323.1	12,560.4	7,322.3	154.0	152.5	-90.01	627.0	-5,533.4	659.9	354.6	305.33	2.161	
12,800.0	7,322.6	12,660.4	7,321.8	156.7	155.3	-90.01	625.0	-5,633.4	659.9	349.0	310.90	2.123	
12,900.0	7,322.1	12,760.4	7,321.3	159.5	158.1	-90.01	622.9	-5,733.4	659.9	343.4	316.47	2.085	
13,000.0	7,321.6	12,860.4	7,320.8	162.3	160.9	-90.01	620.8	-5,833.4	659.9	337.9	322.05	2.049	
13,100.0	7,321.1	12,960.4	7,320.3	165.1	163.6	-90.01	618.8	-5,933.3	659.9	332.3	327.62	2.014	
13,200.0	7,320.6	13,060.4	7,319.8	167.8	166.4	-90.01	616.7	-6,033.3	659.9	326.7	333.20	1.981	
13,300.0	7,320.1	13,160.4	7,319.3	170.6	169.2	-90.01	614.6	-6,133.3	659.9	321.1	338.78	1.948	
13,400.0	7,319.6	13,260.4	7,318.8	173.4	172.0	-90.01	612.6	-6,233.3	659.9	315.6	344.36	1.916	
13,500.0	7,319.1	13,360.4	7,318.3	176.2	174.8	-90.01	610.5	-6,333.2	659.9	310.0	349.94	1.886	
13,600.0	7,318.6	13,460.4	7,317.8	178.9	177.6	-90.01	608.4	-6,433.2	659.9	304.4	355.52	1.856	
13,700.0	7,318.1	13,560.4	7,317.3	181.7	180.4	-90.01	606.3	-6,533.2	659.9	298.8	361.10	1.827	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton D-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
13,800.0	7,317.6	13,660.4	7,316.8	184.5	183.2	-90.01	604.3	-6,633.2	659.9	293.2	366.69	1.800	
13,900.0	7,317.1	13,760.4	7,316.2	187.3	185.9	-90.01	602.2	-6,733.1	659.9	287.6	372.27	1.773	
14,000.0	7,316.6	13,860.4	7,315.7	190.0	188.7	-90.01	600.1	-6,833.1	659.9	282.1	377.86	1.746	
14,100.0	7,316.1	13,960.4	7,315.2	192.8	191.5	-90.01	598.1	-6,933.1	659.9	276.5	383.44	1.721	
14,200.0	7,315.6	14,060.4	7,314.7	195.6	194.3	-90.01	596.0	-7,033.1	659.9	270.9	389.03	1.696	
14,300.0	7,315.1	14,160.4	7,314.2	198.4	197.1	-90.01	593.9	-7,133.1	659.9	265.3	394.62	1.672	
14,400.0	7,314.6	14,260.4	7,313.7	201.2	199.9	-90.01	591.9	-7,233.0	659.9	259.7	400.21	1.649	
14,500.0	7,314.1	14,360.4	7,313.2	204.0	202.7	-90.01	589.8	-7,333.0	659.9	254.1	405.79	1.626	
14,600.0	7,313.6	14,460.4	7,312.7	206.7	205.5	-90.01	587.7	-7,433.0	659.9	248.5	411.38	1.604	
14,700.0	7,313.1	14,560.4	7,312.2	209.5	208.3	-90.01	585.6	-7,533.0	659.9	242.9	416.97	1.583	
14,800.0	7,312.6	14,660.4	7,311.7	212.3	211.1	-90.01	583.6	-7,632.9	659.9	237.4	422.56	1.562	
14,900.0	7,312.1	14,760.4	7,311.2	215.1	213.9	-90.01	581.5	-7,732.9	659.9	231.8	428.16	1.541	
15,000.0	7,311.6	14,860.4	7,310.7	217.9	216.7	-90.01	579.4	-7,832.9	659.9	226.2	433.75	1.521	
15,100.0	7,311.1	14,960.4	7,310.2	220.7	219.5	-90.01	577.4	-7,932.9	659.9	220.6	439.34	1.502	
15,200.0	7,310.6	15,060.4	7,309.7	223.5	222.3	-90.01	575.3	-8,032.9	659.9	215.0	444.93	1.483	Level 3
15,300.0	7,310.1	15,160.4	7,309.2	226.3	225.0	-90.01	573.2	-8,132.8	659.9	209.4	450.53	1.465	Level 3
15,400.0	7,309.6	15,260.4	7,308.7	229.0	227.8	-90.01	571.2	-8,232.8	659.9	203.8	456.12	1.447	Level 3
15,500.0	7,309.1	15,360.4	7,308.2	231.8	230.6	-90.01	569.1	-8,332.8	659.9	198.2	461.71	1.429	Level 3
15,600.0	7,308.6	15,460.4	7,307.7	234.6	233.4	-90.01	567.0	-8,432.8	659.9	192.6	467.31	1.412	Level 3
15,700.0	7,308.1	15,560.4	7,307.2	237.4	236.2	-90.01	565.0	-8,532.7	659.9	187.0	472.90	1.395	Level 3
15,800.0	7,307.6	15,660.4	7,306.7	240.2	239.0	-90.01	562.9	-8,632.7	659.9	181.4	478.50	1.379	Level 3
15,900.0	7,307.1	15,760.4	7,306.2	243.0	241.8	-90.01	560.8	-8,732.7	659.9	175.8	484.10	1.363	Level 3
16,000.0	7,306.6	15,860.4	7,305.7	245.8	244.6	-90.01	558.7	-8,832.7	659.9	170.2	489.69	1.348	Level 3
16,100.0	7,306.1	15,960.4	7,305.2	248.6	247.4	-90.01	556.7	-8,932.6	659.9	164.6	495.29	1.332	Level 3
16,200.0	7,305.6	16,060.4	7,304.7	251.4	250.2	-90.01	554.6	-9,032.6	659.9	159.0	500.89	1.318	Level 3
16,300.0	7,305.1	16,160.4	7,304.2	254.2	253.0	-90.01	552.5	-9,132.6	659.9	153.4	506.48	1.303	Level 3
16,400.0	7,304.6	16,260.4	7,303.7	257.0	255.8	-90.01	550.5	-9,232.6	659.9	147.8	512.08	1.289	Level 3
16,500.0	7,304.1	16,360.4	7,303.2	259.7	258.6	-90.01	548.4	-9,332.6	659.9	142.2	517.68	1.275	Level 3
16,600.0	7,303.6	16,460.4	7,302.7	262.5	261.4	-90.01	546.3	-9,432.5	659.9	136.6	523.28	1.261	Level 3
16,700.0	7,303.1	16,560.4	7,302.2	265.3	264.2	-90.01	544.3	-9,532.5	659.9	131.1	528.88	1.248	Level 2
16,800.0	7,302.6	16,660.4	7,301.7	268.1	267.0	-90.01	542.2	-9,632.5	659.9	125.5	534.47	1.235	Level 2
16,900.0	7,302.1	16,760.4	7,301.2	270.9	269.8	-90.01	540.1	-9,732.5	659.9	119.9	540.07	1.222	Level 2
17,000.0	7,301.6	16,860.4	7,300.7	273.7	272.6	-90.01	538.1	-9,832.4	659.9	114.3	545.67	1.209	Level 2
17,100.0	7,301.1	16,960.4	7,300.2	276.5	275.4	-90.01	536.0	-9,932.4	659.9	108.7	551.27	1.197	Level 2
17,200.0	7,300.6	17,060.4	7,299.7	279.3	278.2	-90.01	533.9	-10,032.4	659.9	103.1	556.87	1.185	Level 2
17,300.0	7,300.1	17,160.4	7,299.2	282.1	281.0	-90.01	531.8	-10,132.4	659.9	97.5	562.47	1.173	Level 2
17,400.0	7,299.6	17,260.4	7,298.7	284.9	283.8	-90.01	529.8	-10,232.4	659.9	91.9	568.07	1.162	Level 2
17,500.0	7,299.1	17,360.4	7,298.2	287.7	286.6	-90.01	527.7	-10,332.3	659.9	86.3	573.68	1.150	Level 2
17,600.0	7,298.6	17,460.4	7,297.7	290.5	289.4	-90.01	525.6	-10,432.3	659.9	80.7	579.28	1.139	Level 2
17,700.0	7,298.1	17,560.4	7,297.2	293.3	292.2	-90.01	523.6	-10,532.3	659.9	75.1	584.88	1.128	Level 2
17,800.0	7,297.6	17,660.4	7,296.7	296.1	295.0	-90.01	521.5	-10,632.3	659.9	69.5	590.48	1.118	Level 2
17,900.0	7,297.1	17,760.4	7,296.2	298.9	297.8	-90.01	519.4	-10,732.2	659.9	63.9	596.08	1.107	Level 2
17,922.5	7,297.0	17,782.9	7,296.1	299.5	298.4	-90.01	519.0	-10,754.7	659.9	62.6	597.34	1.105	Level 2, SF

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton E-29-30HC - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.15	-60.1	-1.9	60.2				
100.0	100.0	98.0	98.0	0.1	0.1	-178.15	-60.1	-1.9	60.1	59.9	0.22	270.285	
200.0	200.0	198.0	198.0	0.3	0.3	-178.15	-60.1	-1.9	60.1	59.5	0.67	89.794	CC, ES
300.0	300.0	298.0	298.0	0.6	0.6	-175.94	-60.1	-1.9	61.5	60.3	1.13	54.385	
400.0	399.9	397.9	397.9	0.8	0.8	-176.18	-60.1	-1.9	65.4	63.8	1.60	40.930	
500.0	499.7	497.7	497.7	1.0	1.0	-176.52	-60.1	-1.9	71.9	69.8	2.06	34.817	
600.0	599.3	597.3	597.3	1.3	1.2	-176.90	-60.1	-1.9	81.0	78.5	2.53	31.992	
700.0	698.6	696.6	696.6	1.6	1.5	-177.29	-60.1	-1.9	92.8	89.8	3.00	30.915	
800.0	797.5	795.5	795.5	1.9	1.7	-177.64	-60.1	-1.9	107.1	103.6	3.47	30.876	
900.0	896.1	894.1	894.1	2.2	1.9	-177.95	-60.1	-1.9	124.0	120.1	3.94	31.502	
1,000.0	994.2	992.2	992.2	2.6	2.1	-178.22	-60.1	-1.9	143.5	139.1	4.41	32.576	
1,100.0	1,091.7	1,093.7	1,093.7	3.0	2.3	-178.41	-59.0	-2.1	164.5	159.6	4.88	33.717	
1,160.7	1,150.6	1,155.8	1,155.8	3.3	2.5	-178.46	-57.0	-2.4	177.2	172.0	5.17	34.307	
1,200.0	1,188.7	1,196.2	1,196.1	3.5	2.6	-178.48	-55.1	-2.6	185.2	179.9	5.35	34.632	
1,300.0	1,285.5	1,299.7	1,299.4	4.0	2.8	-178.45	-48.5	-3.5	203.8	198.0	5.83	34.982	
1,400.0	1,382.4	1,404.2	1,403.4	4.5	3.1	-178.33	-38.9	-4.8	219.7	213.4	6.32	34.789	
1,500.0	1,479.2	1,509.5	1,508.0	5.0	3.3	-178.14	-26.5	-6.5	233.0	226.2	6.82	34.172	
1,600.0	1,576.1	1,614.2	1,611.6	5.5	3.6	-177.89	-11.3	-8.5	243.5	236.2	7.33	33.243	
1,700.0	1,672.9	1,713.7	1,709.9	6.0	3.9	-177.64	4.0	-10.5	253.2	245.4	7.83	32.320	
1,800.0	1,769.8	1,813.3	1,808.2	6.5	4.2	-177.41	19.3	-12.6	262.9	254.5	8.35	31.499	
1,900.0	1,866.6	1,912.8	1,906.5	7.0	4.5	-177.20	34.6	-14.6	272.6	263.7	8.86	30.759	
2,000.0	1,963.5	2,012.3	2,004.8	7.5	4.8	-177.01	49.9	-16.7	282.2	272.9	9.38	30.090	
2,100.0	2,060.4	2,111.8	2,103.2	8.0	5.1	-176.82	65.2	-18.7	291.9	282.0	9.90	29.484	
2,200.0	2,157.2	2,211.4	2,201.5	8.5	5.5	-176.65	80.5	-20.8	301.6	291.2	10.42	28.932	
2,300.0	2,254.1	2,310.9	2,299.8	9.0	5.8	-176.49	95.8	-22.8	311.3	300.3	10.95	28.429	
2,400.0	2,350.9	2,410.4	2,398.1	9.5	6.1	-176.34	111.2	-24.9	321.0	309.5	11.48	27.967	
2,500.0	2,447.8	2,509.9	2,496.4	10.0	6.5	-176.19	126.5	-26.9	330.7	318.7	12.01	27.542	
2,600.0	2,544.6	2,609.5	2,594.8	10.5	6.8	-176.06	141.8	-29.0	340.4	327.8	12.54	27.150	
2,700.0	2,641.5	2,709.0	2,693.1	11.0	7.1	-175.93	157.1	-31.1	350.1	337.0	13.07	26.788	
2,800.0	2,738.3	2,808.5	2,791.4	11.5	7.5	-175.81	172.4	-33.1	359.8	346.2	13.60	26.452	
2,900.0	2,835.2	2,908.0	2,889.7	12.0	7.8	-175.70	187.7	-35.2	369.5	355.3	14.13	26.139	
3,000.0	2,932.0	3,007.6	2,988.0	12.6	8.2	-175.59	203.0	-37.2	379.2	364.5	14.67	25.848	
3,100.0	3,028.9	3,107.1	3,086.4	13.1	8.5	-175.48	218.3	-39.3	388.9	373.7	15.20	25.576	
3,200.0	3,125.7	3,206.6	3,184.7	13.6	8.9	-175.39	233.6	-41.3	398.6	382.8	15.74	25.321	
3,300.0	3,222.6	3,306.1	3,283.0	14.1	9.2	-175.29	248.9	-43.4	408.3	392.0	16.28	25.082	
3,400.0	3,319.5	3,405.7	3,381.3	14.6	9.6	-175.20	264.2	-45.4	418.0	401.2	16.82	24.857	
3,500.0	3,416.3	3,505.2	3,479.6	15.1	9.9	-175.12	279.6	-47.5	427.7	410.3	17.35	24.645	
3,600.0	3,513.2	3,604.7	3,578.0	15.6	10.3	-175.04	294.9	-49.5	437.4	419.5	17.89	24.446	
3,700.0	3,610.0	3,704.2	3,676.3	16.1	10.6	-174.96	310.2	-51.6	447.1	428.7	18.43	24.257	
3,800.0	3,706.9	3,803.8	3,774.6	16.6	11.0	-174.89	325.5	-53.6	456.8	437.8	18.97	24.079	
3,900.0	3,803.7	3,903.3	3,872.9	17.2	11.3	-174.81	340.8	-55.7	466.5	447.0	19.51	23.910	
4,000.0	3,900.6	4,002.8	3,971.2	17.7	11.7	-174.75	356.1	-57.7	476.2	456.2	20.05	23.749	
4,100.0	3,997.4	4,102.4	4,069.6	18.2	12.0	-174.68	371.4	-59.8	485.9	465.3	20.59	23.597	
4,200.0	4,094.3	4,201.9	4,167.9	18.7	12.4	-174.62	386.7	-61.8	495.6	474.5	21.13	23.452	
4,300.0	4,191.1	4,301.4	4,266.2	19.2	12.8	-174.56	402.0	-63.9	505.4	483.7	21.68	23.314	
4,400.0	4,288.0	4,400.9	4,364.5	19.7	13.1	-174.50	417.3	-65.9	515.1	492.9	22.22	23.182	
4,500.0	4,384.8	4,500.5	4,462.8	20.2	13.5	-174.44	432.6	-68.0	524.8	502.0	22.76	23.056	
4,600.0	4,481.7	4,600.0	4,561.2	20.7	13.8	-174.39	448.0	-70.0	534.5	511.2	23.30	22.936	
4,700.0	4,578.6	4,699.5	4,659.5	21.3	14.2	-174.34	463.3	-72.1	544.2	520.4	23.85	22.821	
4,800.0	4,675.4	4,799.0	4,757.8	21.8	14.5	-174.29	478.6	-74.1	553.9	529.5	24.39	22.711	
4,900.0	4,772.3	4,898.6	4,856.1	22.3	14.9	-174.24	493.9	-76.2	563.6	538.7	24.93	22.606	
5,000.0	4,869.1	4,998.1	4,954.4	22.8	15.2	-174.19	509.2	-78.2	573.4	547.9	25.48	22.505	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton E-29-30HC - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	4,966.0	5,097.6	5,052.8	23.3	15.6	-174.15	524.5	-80.3	583.1	557.0	26.02	22.408	
5,200.0	5,062.8	5,197.1	5,151.1	23.8	16.0	-174.10	539.8	-82.3	592.8	566.2	26.57	22.314	SF
5,300.0	5,159.7	5,280.4	5,233.5	24.3	16.2	-174.09	551.6	-83.9	603.8	576.7	27.04	22.329	
5,400.0	5,256.5	5,362.3	5,314.8	24.8	16.4	-174.11	560.8	-85.2	617.6	590.1	27.49	22.470	
5,500.0	5,353.4	5,443.5	5,395.8	25.4	16.6	-174.18	567.7	-86.1	634.1	606.2	27.91	22.717	
5,600.0	5,450.2	5,523.9	5,476.0	25.9	16.8	-174.28	572.2	-86.7	653.4	625.1	28.33	23.062	
5,700.0	5,547.1	5,600.0	5,552.1	26.4	16.9	-174.41	574.5	-87.0	675.4	646.6	28.74	23.501	
5,800.0	5,643.9	5,689.9	5,641.9	26.9	17.0	-174.59	574.9	-87.0	699.7	670.6	29.16	23.993	
5,900.0	5,740.8	5,786.7	5,738.8	27.4	17.2	-174.77	574.9	-87.0	724.5	694.9	29.63	24.453	
5,947.8	5,787.1	5,833.0	5,785.1	27.7	17.2	-174.86	574.9	-87.0	736.4	706.5	29.85	24.666	
6,000.0	5,837.8	5,883.7	5,835.8	27.9	17.3	-174.97	574.9	-87.0	748.9	718.7	30.12	24.865	
6,100.0	5,935.4	5,981.4	5,933.4	28.2	17.5	-175.14	574.9	-87.0	770.2	739.6	30.57	25.196	
6,200.0	6,033.8	6,079.7	6,031.8	28.6	17.6	-175.29	574.9	-87.0	788.1	757.1	30.98	25.442	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton F-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.09	-75.1	-2.5	75.1				
100.0	100.0	98.0	98.0	0.1	0.1	-178.09	-75.1	-2.5	75.1	74.9	0.22	337.458	
200.0	200.0	198.0	198.0	0.3	0.3	-178.09	-75.1	-2.5	75.1	74.4	0.67	112.110	CC, ES
300.0	300.0	298.0	298.0	0.6	0.6	-175.86	-75.1	-2.5	76.4	75.3	1.13	67.614	
400.0	399.9	397.9	397.9	0.8	0.8	-176.06	-75.1	-2.5	80.3	78.7	1.60	50.290	
500.0	499.7	497.7	497.7	1.0	1.0	-176.35	-75.1	-2.5	86.8	84.8	2.06	42.055	
600.0	599.3	597.3	597.3	1.3	1.2	-176.69	-75.1	-2.5	96.0	93.4	2.53	37.892	
700.0	698.6	696.6	696.6	1.6	1.5	-177.04	-75.1	-2.5	107.7	104.7	3.00	35.894	
800.0	797.5	795.5	795.5	1.9	1.7	-177.38	-75.1	-2.5	122.0	118.6	3.47	35.183	
900.0	896.1	894.1	894.1	2.2	1.9	-177.69	-75.1	-2.5	139.0	135.0	3.94	35.295	
1,000.0	994.2	992.2	992.2	2.6	2.1	-177.96	-75.1	-2.5	158.5	154.0	4.41	35.964	
1,100.0	1,091.7	1,089.7	1,089.7	3.0	2.3	-178.20	-75.1	-2.5	180.5	175.6	4.88	37.026	
1,160.7	1,150.6	1,148.6	1,148.6	3.3	2.5	-178.33	-75.1	-2.5	195.1	190.0	5.16	37.815	
1,200.0	1,188.7	1,186.7	1,186.7	3.5	2.6	-178.41	-75.1	-2.5	204.9	199.6	5.34	38.356	
1,300.0	1,285.5	1,288.8	1,288.8	4.0	2.8	-178.55	-74.0	-2.7	228.8	223.0	5.82	39.338	
1,400.0	1,382.4	1,392.9	1,392.8	4.5	3.0	-178.55	-70.3	-3.4	250.2	243.9	6.30	39.726	
1,500.0	1,479.2	1,498.2	1,497.9	5.0	3.3	-178.45	-63.6	-4.6	268.9	262.1	6.79	39.608	
1,600.0	1,576.1	1,604.5	1,603.8	5.5	3.5	-178.27	-54.0	-6.4	284.9	277.6	7.29	39.081	
1,700.0	1,672.9	1,711.7	1,710.2	6.0	3.8	-178.00	-41.4	-8.7	298.2	290.4	7.80	38.233	
1,800.0	1,769.8	1,811.0	1,808.6	6.5	4.0	-177.73	-28.3	-11.1	310.1	301.8	8.30	37.344	
1,900.0	1,866.6	1,910.3	1,907.0	7.0	4.3	-177.48	-15.3	-13.5	322.0	313.2	8.81	36.541	
2,000.0	1,963.5	2,009.6	2,005.4	7.5	4.6	-177.24	-2.2	-15.9	333.9	324.6	9.32	35.821	
2,100.0	2,060.4	2,108.8	2,103.7	8.0	4.9	-177.02	10.8	-18.3	345.8	336.0	9.84	35.162	
2,200.0	2,157.2	2,208.1	2,202.1	8.5	5.1	-176.82	23.9	-20.7	357.8	347.4	10.35	34.561	
2,300.0	2,254.1	2,307.4	2,300.5	9.0	5.4	-176.63	36.9	-23.1	369.7	358.8	10.87	34.011	
2,400.0	2,350.9	2,406.7	2,398.9	9.5	5.7	-176.45	50.0	-25.5	381.6	370.2	11.39	33.506	
2,500.0	2,447.8	2,506.0	2,497.3	10.0	6.0	-176.28	63.1	-27.9	393.6	381.6	11.91	33.041	
2,600.0	2,544.6	2,605.2	2,595.7	10.5	6.3	-176.13	76.1	-30.3	405.5	393.1	12.43	32.611	
2,700.0	2,641.5	2,704.5	2,694.1	11.0	6.6	-175.98	89.2	-32.7	417.4	404.5	12.96	32.212	
2,800.0	2,738.3	2,803.8	2,792.5	11.5	7.0	-175.84	102.2	-35.1	429.4	415.9	13.48	31.843	
2,900.0	2,835.2	2,903.1	2,890.8	12.0	7.3	-175.71	115.3	-37.5	441.3	427.3	14.01	31.498	
3,000.0	2,932.0	3,002.3	2,989.2	12.6	7.6	-175.58	128.3	-39.9	453.3	438.8	14.54	31.177	
3,100.0	3,028.9	3,101.6	3,087.6	13.1	7.9	-175.46	141.4	-42.3	465.2	450.2	15.07	30.876	
3,200.0	3,125.7	3,200.9	3,186.0	13.6	8.2	-175.35	154.5	-44.7	477.2	461.6	15.60	30.594	
3,300.0	3,222.6	3,300.2	3,284.4	14.1	8.5	-175.24	167.5	-47.1	489.2	473.0	16.13	30.329	
3,400.0	3,319.5	3,399.5	3,382.8	14.6	8.8	-175.14	180.6	-49.5	501.1	484.5	16.66	30.080	
3,500.0	3,416.3	3,498.7	3,481.2	15.1	9.2	-175.04	193.6	-51.9	513.1	495.9	17.19	29.846	
3,600.0	3,513.2	3,598.0	3,579.5	15.6	9.5	-174.95	206.7	-54.3	525.0	507.3	17.72	29.624	
3,700.0	3,610.0	3,697.3	3,677.9	16.1	9.8	-174.86	219.7	-56.7	537.0	518.8	18.26	29.415	
3,800.0	3,706.9	3,796.6	3,776.3	16.6	10.1	-174.77	232.8	-59.0	549.0	530.2	18.79	29.216	
3,900.0	3,803.7	3,895.9	3,874.7	17.2	10.4	-174.69	245.8	-61.4	560.9	541.6	19.32	29.028	
4,000.0	3,900.6	3,995.1	3,973.1	17.7	10.8	-174.61	258.9	-63.8	572.9	553.0	19.86	28.850	
4,100.0	3,997.4	4,094.4	4,071.5	18.2	11.1	-174.54	272.0	-66.2	584.9	564.5	20.39	28.680	
4,200.0	4,094.3	4,193.7	4,169.9	18.7	11.4	-174.46	285.0	-68.6	596.8	575.9	20.93	28.519	
4,300.0	4,191.1	4,293.0	4,268.3	19.2	11.7	-174.40	298.1	-71.0	608.8	587.3	21.46	28.365	
4,400.0	4,288.0	4,392.2	4,366.6	19.7	12.0	-174.33	311.1	-73.4	620.8	598.8	22.00	28.218	
4,500.0	4,384.8	4,491.5	4,465.0	20.2	12.4	-174.26	324.2	-75.8	632.8	610.2	22.54	28.078	
4,600.0	4,481.7	4,590.8	4,563.4	20.7	12.7	-174.20	337.2	-78.2	644.7	621.7	23.07	27.943	
4,700.0	4,578.6	4,690.1	4,661.8	21.3	13.0	-174.14	350.3	-80.6	656.7	633.1	23.61	27.815	
4,800.0	4,675.4	4,789.4	4,760.2	21.8	13.3	-174.09	363.3	-83.0	668.7	644.5	24.15	27.692	
4,900.0	4,772.3	4,888.6	4,858.6	22.3	13.7	-174.03	376.4	-85.4	680.6	656.0	24.68	27.574	
5,000.0	4,869.1	4,980.2	4,949.4	22.8	13.9	-173.99	388.3	-87.6	692.8	667.7	25.19	27.502	SF

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton F-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	4,966.0	5,060.2	5,028.9	23.3	14.1	-173.98	396.8	-89.2	707.3	681.6	25.63	27.591	
5,200.0	5,062.8	5,139.5	5,107.9	23.8	14.3	-174.03	403.1	-90.3	724.3	698.3	26.06	27.794	
5,300.0	5,159.7	5,218.0	5,186.3	24.3	14.5	-174.11	407.2	-91.1	744.1	717.6	26.48	28.099	
5,400.0	5,256.5	5,300.0	5,268.3	24.8	14.6	-174.23	409.3	-91.5	766.4	739.5	26.90	28.493	
5,500.0	5,353.4	5,383.1	5,351.4	25.4	14.7	-174.38	409.4	-91.5	790.8	763.5	27.32	28.948	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton G-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.05	-90.0	-3.1	90.1				
100.0	100.0	98.0	98.0	0.1	0.1	-178.05	-90.0	-3.1	90.0	89.8	0.22	404.649	
200.0	200.0	198.0	198.0	0.3	0.3	-178.05	-90.0	-3.1	90.0	89.4	0.67	134.433	CC, ES
300.0	300.0	298.0	298.0	0.6	0.6	-175.82	-90.0	-3.1	91.3	90.2	1.13	80.846	
400.0	399.9	397.9	397.9	0.8	0.8	-175.98	-90.0	-3.1	95.3	93.7	1.60	59.652	
500.0	499.7	497.7	497.7	1.0	1.0	-176.24	-90.0	-3.1	101.8	99.7	2.06	49.296	
600.0	599.3	597.3	597.3	1.3	1.2	-176.54	-90.0	-3.1	110.9	108.4	2.53	43.794	
700.0	698.6	696.6	696.6	1.6	1.5	-176.86	-90.0	-3.1	122.7	119.7	3.00	40.875	
800.0	797.5	795.5	795.5	1.9	1.7	-177.18	-90.0	-3.1	137.0	133.5	3.47	39.490	
900.0	896.1	894.1	894.1	2.2	1.9	-177.48	-90.0	-3.1	153.9	150.0	3.94	39.089	
1,000.0	994.2	992.2	992.2	2.6	2.1	-177.75	-90.0	-3.1	173.4	169.0	4.41	39.354	
1,100.0	1,091.7	1,089.7	1,089.7	3.0	2.3	-177.99	-90.0	-3.1	195.4	190.6	4.88	40.088	
1,160.7	1,150.6	1,148.6	1,148.6	3.3	2.5	-178.12	-90.0	-3.1	210.1	204.9	5.16	40.708	
1,200.0	1,188.7	1,186.7	1,186.7	3.5	2.6	-178.21	-90.0	-3.1	219.9	214.5	5.34	41.149	
1,300.0	1,285.5	1,283.5	1,283.5	4.0	2.8	-178.39	-90.0	-3.1	244.7	238.9	5.81	42.119	
1,400.0	1,382.4	1,380.4	1,380.4	4.5	3.0	-178.54	-90.0	-3.1	269.6	263.3	6.28	42.912	
1,500.0	1,479.2	1,477.2	1,477.2	5.0	3.2	-178.66	-90.0	-3.1	294.5	287.7	6.76	43.572	
1,600.0	1,576.1	1,579.9	1,579.9	5.5	3.4	-178.70	-89.3	-3.5	318.7	311.4	7.25	43.979	
1,700.0	1,672.9	1,685.3	1,685.3	6.0	3.7	-178.49	-86.1	-5.3	340.6	332.9	7.74	44.015	
1,800.0	1,769.8	1,791.8	1,791.6	6.5	3.9	-178.07	-80.4	-8.7	360.2	352.0	8.24	43.715	
1,900.0	1,866.6	1,894.3	1,893.6	7.0	4.1	-177.51	-72.8	-13.2	377.8	369.1	8.74	43.220	
2,000.0	1,963.5	1,992.7	1,991.6	7.5	4.4	-177.01	-65.3	-17.7	395.2	386.0	9.25	42.750	
2,100.0	2,060.4	2,091.1	2,089.7	8.0	4.6	-176.55	-57.7	-22.2	412.6	402.9	9.75	42.315	
2,200.0	2,157.2	2,189.5	2,187.7	8.5	4.9	-176.12	-50.2	-26.6	430.1	419.8	10.26	41.915	
2,300.0	2,254.1	2,288.0	2,285.7	9.0	5.1	-175.73	-42.6	-31.1	447.5	436.8	10.77	41.538	
2,400.0	2,350.9	2,386.4	2,383.7	9.5	5.3	-175.37	-35.1	-35.6	465.0	453.7	11.29	41.189	
2,500.0	2,447.8	2,484.8	2,481.8	10.0	5.6	-175.03	-27.5	-40.1	482.5	470.7	11.81	40.863	
2,600.0	2,544.6	2,583.2	2,579.8	10.5	5.8	-174.72	-20.0	-44.5	500.0	487.7	12.33	40.558	
2,700.0	2,641.5	2,681.6	2,677.8	11.0	6.1	-174.43	-12.4	-49.0	517.5	504.7	12.85	40.273	
2,800.0	2,738.3	2,780.1	2,775.9	11.5	6.4	-174.16	-4.9	-53.5	535.0	521.7	13.37	40.005	
2,900.0	2,835.2	2,878.5	2,873.9	12.0	6.6	-173.90	2.7	-57.9	552.6	538.7	13.90	39.754	
3,000.0	2,932.0	2,976.9	2,971.9	12.6	6.9	-173.66	10.2	-62.4	570.1	555.7	14.43	39.517	
3,100.0	3,028.9	3,075.3	3,069.9	13.1	7.1	-173.44	17.8	-66.9	587.7	572.7	14.96	39.294	
3,200.0	3,125.7	3,173.7	3,168.0	13.6	7.4	-173.23	25.3	-71.3	605.3	589.8	15.49	39.084	
3,300.0	3,222.6	3,272.2	3,266.0	14.1	7.6	-173.03	32.8	-75.8	622.8	606.8	16.02	38.885	
3,400.0	3,319.5	3,370.6	3,364.0	14.6	7.9	-172.84	40.4	-80.3	640.4	623.9	16.55	38.696	
3,500.0	3,416.3	3,469.0	3,462.1	15.1	8.2	-172.66	47.9	-84.8	658.0	640.9	17.08	38.518	
3,600.0	3,513.2	3,567.4	3,560.1	15.6	8.4	-172.49	55.5	-89.2	675.6	658.0	17.62	38.348	
3,700.0	3,610.0	3,665.8	3,658.1	16.1	8.7	-172.33	63.0	-93.7	693.2	675.1	18.15	38.187	
3,800.0	3,706.9	3,762.3	3,754.2	16.6	9.0	-172.18	70.4	-98.1	710.8	692.2	18.68	38.050	SF
3,900.0	3,803.7	3,843.9	3,835.6	17.2	9.1	-172.13	75.4	-101.1	729.8	710.7	19.13	38.149	
4,000.0	3,900.6	3,924.7	3,916.3	17.7	9.3	-172.18	78.5	-102.8	751.1	731.5	19.56	38.401	
4,100.0	3,997.4	4,008.4	4,000.0	18.2	9.4	-172.34	79.5	-103.5	774.6	754.6	19.98	38.763	
4,200.0	4,094.3	4,100.7	4,092.3	18.7	9.6	-172.57	79.5	-103.5	799.3	778.8	20.43	39.116	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton H-29-30HC - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.03	-104.9	-3.6	105.0				
100.0	100.0	97.0	97.0	0.1	0.1	-178.03	-104.9	-3.6	105.0	104.8	0.22	474.194	
200.0	200.0	197.0	197.0	0.3	0.3	-178.03	-104.9	-3.6	105.0	104.3	0.67	157.271	CC, ES
300.0	300.0	297.0	297.0	0.6	0.6	-175.78	-104.9	-3.6	106.3	105.2	1.13	94.257	
400.0	399.9	396.9	396.9	0.8	0.8	-175.93	-104.9	-3.6	110.2	108.6	1.59	69.104	
500.0	499.7	496.7	496.7	1.0	1.0	-176.15	-104.9	-3.6	116.7	114.7	2.06	56.592	
600.0	599.3	596.3	596.3	1.3	1.2	-176.42	-104.9	-3.6	125.9	123.3	2.53	49.735	
700.0	698.6	695.6	695.6	1.6	1.5	-176.72	-104.9	-3.6	137.6	134.6	3.00	45.886	
800.0	797.5	794.5	794.5	1.9	1.7	-177.01	-104.9	-3.6	151.9	148.5	3.47	43.823	
900.0	896.1	893.1	893.1	2.2	1.9	-177.30	-104.9	-3.6	168.8	164.9	3.94	42.905	
1,000.0	994.2	991.2	991.2	2.6	2.1	-177.57	-104.9	-3.6	188.3	183.9	4.40	42.762	SF
1,100.0	1,091.7	1,088.7	1,088.7	3.0	2.3	-177.81	-104.9	-3.6	210.4	205.5	4.87	43.168	
1,160.7	1,150.6	1,147.6	1,147.6	3.3	2.5	-177.94	-104.9	-3.6	225.0	219.8	5.16	43.617	
1,200.0	1,188.7	1,185.7	1,185.7	3.5	2.6	-178.03	-104.9	-3.6	234.8	229.4	5.34	43.959	
1,300.0	1,285.5	1,282.5	1,282.5	4.0	2.8	-178.22	-104.9	-3.6	259.7	253.8	5.81	44.702	
1,400.0	1,382.4	1,379.4	1,379.4	4.5	3.0	-178.37	-104.9	-3.6	284.5	278.3	6.28	45.301	
1,500.0	1,479.2	1,476.2	1,476.2	5.0	3.2	-178.51	-104.9	-3.6	309.4	302.7	6.76	45.792	
1,600.0	1,576.1	1,573.1	1,573.1	5.5	3.4	-178.62	-104.9	-3.6	334.3	327.1	7.24	46.200	
1,700.0	1,672.9	1,669.9	1,669.9	6.0	3.6	-178.71	-104.9	-3.6	359.2	351.5	7.72	46.543	
1,800.0	1,769.8	1,766.8	1,766.8	6.5	3.9	-178.80	-104.9	-3.6	384.1	375.9	8.20	46.835	
1,900.0	1,866.6	1,863.6	1,863.6	7.0	4.1	-178.87	-104.9	-3.6	408.9	400.2	8.68	47.086	
2,000.0	1,963.5	1,960.5	1,960.5	7.5	4.3	-178.93	-104.9	-3.6	433.8	424.6	9.17	47.304	
2,100.0	2,060.4	2,057.4	2,057.4	8.0	4.5	-178.99	-104.9	-3.6	458.7	449.0	9.66	47.494	
2,200.0	2,157.2	2,154.2	2,154.2	8.5	4.7	-179.04	-104.9	-3.6	483.6	473.4	10.15	47.662	
2,300.0	2,254.1	2,251.1	2,251.1	9.0	4.9	-179.09	-104.9	-3.6	508.5	497.8	10.63	47.810	
2,400.0	2,350.9	2,347.9	2,347.9	9.5	5.2	-179.13	-104.9	-3.6	533.3	522.2	11.12	47.943	
2,500.0	2,447.8	2,444.8	2,444.8	10.0	5.4	-179.17	-104.9	-3.6	558.2	546.6	11.61	48.061	
2,600.0	2,544.6	2,543.0	2,543.0	10.5	5.6	-179.18	-104.9	-3.9	583.1	571.0	12.10	48.171	
2,700.0	2,641.5	2,643.1	2,643.0	11.0	5.8	-178.99	-104.4	-6.2	607.5	594.9	12.59	48.255	
2,800.0	2,738.3	2,743.3	2,743.1	11.5	6.0	-178.56	-103.5	-11.2	631.4	618.3	13.07	48.296	
2,900.0	2,835.2	2,843.4	2,843.0	12.0	6.2	-177.94	-102.2	-18.8	654.9	641.3	13.57	48.272	
3,000.0	2,932.0	2,940.4	2,939.6	12.6	6.4	-177.27	-100.6	-27.4	678.2	664.1	14.06	48.223	
3,100.0	3,028.9	3,037.4	3,036.1	13.1	6.7	-176.64	-99.1	-36.0	701.6	687.0	14.57	48.160	
3,200.0	3,125.7	3,134.3	3,132.7	13.6	6.9	-176.05	-97.5	-44.7	725.0	709.9	15.08	48.090	
3,300.0	3,222.6	3,231.3	3,229.2	14.1	7.1	-175.50	-96.0	-53.3	748.6	733.0	15.59	48.012	
3,400.0	3,319.5	3,328.2	3,325.8	14.6	7.3	-174.98	-94.4	-61.9	772.1	756.0	16.11	47.928	
3,500.0	3,416.3	3,425.2	3,422.3	15.1	7.6	-174.49	-92.8	-70.5	795.8	779.2	16.63	47.841	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton I-29-30HN - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.01	-119.9	-4.2	120.0				
100.0	100.0	97.0	97.0	0.1	0.1	-178.01	-119.9	-4.2	119.9	119.7	0.22	541.707	
200.0	200.0	197.0	197.0	0.3	0.3	-178.01	-119.9	-4.2	119.9	119.3	0.67	179.662	CC, ES
300.0	300.0	297.0	297.0	0.6	0.6	-175.75	-119.9	-4.2	121.2	120.1	1.13	107.512	
400.0	399.9	396.9	396.9	0.8	0.8	-175.88	-119.9	-4.2	125.2	123.6	1.59	78.476	
500.0	499.7	496.7	496.7	1.0	1.0	-176.08	-119.9	-4.2	131.7	129.6	2.06	63.838	
600.0	599.3	596.3	596.3	1.3	1.2	-176.33	-119.9	-4.2	140.8	138.3	2.53	55.641	
700.0	698.6	695.6	695.6	1.6	1.5	-176.60	-119.9	-4.2	152.5	149.5	3.00	50.870	
800.0	797.5	794.5	794.5	1.9	1.7	-176.88	-119.9	-4.2	166.9	163.4	3.47	48.133	
900.0	896.1	893.1	893.1	2.2	1.9	-177.15	-119.9	-4.2	183.8	179.8	3.94	46.701	
1,000.0	994.2	991.2	991.2	2.6	2.1	-177.41	-119.9	-4.2	203.3	198.9	4.40	46.153	SF
1,100.0	1,091.7	1,088.7	1,088.7	3.0	2.3	-177.65	-119.9	-4.2	225.3	220.4	4.87	46.231	
1,160.7	1,150.6	1,147.6	1,147.6	3.3	2.5	-177.79	-119.9	-4.2	239.9	234.8	5.16	46.510	
1,200.0	1,188.7	1,185.7	1,185.7	3.5	2.6	-177.87	-119.9	-4.2	249.7	244.4	5.34	46.753	
1,300.0	1,285.5	1,282.5	1,282.5	4.0	2.8	-178.07	-119.9	-4.2	274.6	268.8	5.81	47.270	
1,400.0	1,382.4	1,379.4	1,379.4	4.5	3.0	-178.23	-119.9	-4.2	299.5	293.2	6.28	47.676	
1,500.0	1,479.2	1,476.2	1,476.2	5.0	3.2	-178.36	-119.9	-4.2	324.3	317.6	6.76	47.999	
1,600.0	1,576.1	1,573.1	1,573.1	5.5	3.4	-178.48	-119.9	-4.2	349.2	342.0	7.24	48.261	
1,700.0	1,672.9	1,665.1	1,665.1	6.0	3.6	-178.52	-120.3	-4.5	374.5	366.9	7.69	48.686	
1,800.0	1,769.8	1,754.6	1,754.5	6.5	3.8	-178.35	-122.2	-6.2	401.5	393.4	8.13	49.364	
1,900.0	1,866.6	1,843.0	1,842.9	7.0	3.9	-178.02	-125.8	-9.2	430.2	421.6	8.57	50.190	
2,000.0	1,963.5	1,930.5	1,930.0	7.5	4.1	-177.56	-130.8	-13.4	460.6	451.5	9.01	51.098	
2,100.0	2,060.4	2,019.1	2,018.3	8.0	4.3	-176.99	-137.3	-18.9	492.6	483.1	9.47	52.031	
2,200.0	2,157.2	2,113.6	2,112.2	8.5	4.5	-176.42	-144.8	-25.2	525.0	515.1	9.93	52.877	
2,300.0	2,254.1	2,208.0	2,206.2	9.0	4.7	-175.91	-152.2	-31.5	557.6	547.2	10.40	53.619	
2,400.0	2,350.9	2,302.5	2,300.1	9.5	4.9	-175.46	-159.6	-37.8	590.1	579.3	10.87	54.273	
2,500.0	2,447.8	2,396.9	2,394.1	10.0	5.1	-175.06	-167.0	-44.0	622.7	611.4	11.35	54.850	
2,600.0	2,544.6	2,491.4	2,488.0	10.5	5.4	-174.70	-174.4	-50.3	655.3	643.5	11.84	55.364	
2,700.0	2,641.5	2,585.8	2,582.0	11.0	5.6	-174.37	-181.8	-56.6	688.0	675.7	12.32	55.823	
2,800.0	2,738.3	2,680.3	2,675.9	11.5	5.8	-174.07	-189.3	-62.8	720.6	707.8	12.82	56.234	
2,900.0	2,835.2	2,774.7	2,769.9	12.0	6.1	-173.80	-196.7	-69.1	753.3	740.0	13.31	56.603	
3,000.0	2,932.0	2,869.2	2,863.8	12.6	6.3	-173.54	-204.1	-75.4	786.0	772.2	13.80	56.937	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton J-29-30HN - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.99	-134.8	-4.7	134.9				
100.0	100.0	97.0	97.0	0.1	0.1	-177.99	-134.8	-4.7	134.9	134.7	0.22	609.220	
200.0	200.0	197.0	197.0	0.3	0.3	-177.99	-134.8	-4.7	134.9	134.2	0.67	202.053	CC, ES
300.0	300.0	297.0	297.0	0.6	0.6	-175.73	-134.8	-4.7	136.2	135.1	1.13	120.767	
400.0	399.9	396.9	396.9	0.8	0.8	-175.85	-134.8	-4.7	140.1	138.5	1.59	87.849	
500.0	499.7	496.7	496.7	1.0	1.0	-176.03	-134.8	-4.7	146.6	144.6	2.06	71.085	
600.0	599.3	596.3	596.3	1.3	1.2	-176.25	-134.8	-4.7	155.8	153.2	2.53	61.547	
700.0	698.6	695.6	695.6	1.6	1.5	-176.50	-134.8	-4.7	167.5	164.5	3.00	55.854	
800.0	797.5	794.5	794.5	1.9	1.7	-176.77	-134.8	-4.7	181.8	178.3	3.47	52.443	
900.0	896.1	893.1	893.1	2.2	1.9	-177.03	-134.8	-4.7	198.7	194.8	3.94	50.497	
1,000.0	994.2	991.2	991.2	2.6	2.1	-177.28	-134.8	-4.7	218.2	213.8	4.40	49.544	
1,100.0	1,091.7	1,088.7	1,088.7	3.0	2.3	-177.52	-134.8	-4.7	240.3	235.4	4.87	49.295	SF
1,160.7	1,150.6	1,147.6	1,147.6	3.3	2.5	-177.65	-134.8	-4.7	254.9	249.7	5.16	49.404	
1,200.0	1,188.7	1,185.7	1,185.7	3.5	2.6	-177.74	-134.8	-4.7	264.7	259.3	5.34	49.547	
1,300.0	1,285.5	1,282.5	1,282.5	4.0	2.8	-177.93	-134.8	-4.7	289.5	283.7	5.81	49.839	
1,400.0	1,382.4	1,379.4	1,379.4	4.5	3.0	-178.09	-134.8	-4.7	314.4	308.1	6.28	50.051	
1,500.0	1,479.2	1,476.2	1,476.2	5.0	3.2	-178.23	-134.8	-4.7	339.3	332.5	6.76	50.206	
1,600.0	1,576.1	1,568.5	1,568.5	5.5	3.4	-178.28	-135.2	-5.2	364.6	357.4	7.21	50.549	
1,700.0	1,672.9	1,658.6	1,658.6	6.0	3.6	-178.09	-137.1	-7.1	391.5	383.8	7.65	51.148	
1,800.0	1,769.8	1,747.8	1,747.6	6.5	3.7	-177.71	-140.5	-10.4	419.9	411.9	8.09	51.885	
1,900.0	1,866.6	1,836.0	1,835.6	7.0	3.9	-177.19	-145.2	-15.2	450.0	441.5	8.54	52.697	
2,000.0	1,963.5	1,923.1	1,922.3	7.5	4.1	-176.55	-151.3	-21.3	481.7	472.7	8.99	53.566	
2,100.0	2,060.4	2,009.1	2,007.6	8.0	4.3	-175.84	-158.7	-28.8	514.9	505.5	9.45	54.480	
2,200.0	2,157.2	2,093.9	2,091.5	8.5	4.5	-175.07	-167.2	-37.4	549.8	539.9	9.92	55.422	
2,300.0	2,254.1	2,179.2	2,175.7	9.0	4.7	-174.25	-177.2	-47.5	586.3	575.9	10.40	56.352	
2,400.0	2,350.9	2,271.8	2,266.8	9.5	5.0	-173.42	-188.4	-58.8	623.4	612.4	10.91	57.145	
2,500.0	2,447.8	2,364.3	2,357.9	10.0	5.2	-172.69	-199.6	-70.1	660.5	649.1	11.42	57.835	
2,600.0	2,544.6	2,456.8	2,449.1	10.5	5.5	-172.03	-210.8	-81.4	697.8	685.9	11.94	58.451	
2,700.0	2,641.5	2,549.3	2,540.2	11.0	5.8	-171.43	-222.1	-92.7	735.1	722.7	12.46	58.992	
2,800.0	2,738.3	2,641.8	2,631.3	11.5	6.1	-170.90	-233.3	-104.1	772.5	759.6	12.99	59.471	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton K-29-30HC - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.99	-150.1	-5.3	150.2				
100.0	100.0	96.0	96.0	0.1	0.1	-177.99	-150.1	-5.3	150.2	150.0	0.22	681.833	
200.0	200.0	196.0	196.0	0.3	0.3	-177.99	-150.1	-5.3	150.2	149.5	0.67	225.750	CC, ES
300.0	300.0	296.0	296.0	0.6	0.6	-175.72	-150.1	-5.3	151.5	150.4	1.13	134.610	
400.0	399.9	395.9	395.9	0.8	0.8	-175.83	-150.1	-5.3	155.4	153.8	1.59	97.584	
500.0	499.7	495.7	495.7	1.0	1.0	-175.99	-150.1	-5.3	161.9	159.9	2.06	78.591	
600.0	599.3	595.3	595.3	1.3	1.2	-176.19	-150.1	-5.3	171.1	168.5	2.53	67.655	
700.0	698.6	694.6	694.6	1.6	1.4	-176.43	-150.1	-5.3	182.8	179.8	3.00	61.003	
800.0	797.5	793.5	793.5	1.9	1.7	-176.67	-150.1	-5.3	197.1	193.7	3.46	56.893	
900.0	896.1	892.1	892.1	2.2	1.9	-176.92	-150.1	-5.3	214.0	210.1	3.93	54.415	
1,000.0	994.2	990.2	990.2	2.6	2.1	-177.17	-150.1	-5.3	233.5	229.1	4.40	53.044	
1,100.0	1,091.7	1,087.7	1,087.7	3.0	2.3	-177.40	-150.1	-5.3	255.6	250.7	4.87	52.456	
1,160.7	1,150.6	1,146.6	1,146.6	3.3	2.5	-177.53	-150.1	-5.3	270.2	265.0	5.16	52.389	SF
1,200.0	1,188.7	1,184.7	1,184.7	3.5	2.6	-177.61	-150.1	-5.3	280.0	274.6	5.34	52.431	
1,300.0	1,285.5	1,281.5	1,281.5	4.0	2.8	-177.81	-150.1	-5.3	304.8	299.0	5.81	52.490	
1,400.0	1,382.4	1,378.4	1,378.4	4.5	3.0	-177.97	-150.1	-5.3	329.7	323.4	6.28	52.502	
1,500.0	1,479.2	1,470.1	1,470.1	5.0	3.2	-178.04	-150.6	-5.7	355.1	348.4	6.73	52.765	
1,600.0	1,576.1	1,559.5	1,559.4	5.5	3.3	-177.90	-152.7	-7.3	382.3	375.1	7.17	53.342	
1,700.0	1,672.9	1,647.9	1,647.7	6.0	3.5	-177.60	-156.5	-10.2	411.2	403.6	7.60	54.094	
1,800.0	1,769.8	1,735.2	1,734.8	6.5	3.7	-177.17	-161.8	-14.2	441.9	433.9	8.04	54.950	
1,900.0	1,866.6	1,821.4	1,820.6	7.0	3.8	-176.65	-168.6	-19.4	474.4	465.9	8.49	55.888	
2,000.0	1,963.5	1,906.4	1,904.9	7.5	4.0	-176.06	-176.7	-25.6	508.6	499.7	8.94	56.892	
2,100.0	2,060.4	1,990.1	1,987.8	8.0	4.2	-175.43	-186.2	-32.9	544.6	535.2	9.40	57.941	
2,200.0	2,157.2	2,072.5	2,069.0	8.5	4.5	-174.77	-197.0	-41.1	582.2	572.4	9.86	59.023	
2,300.0	2,254.1	2,161.9	2,157.0	9.0	4.7	-174.05	-209.8	-50.9	621.1	610.8	10.35	59.998	
2,400.0	2,350.9	2,253.8	2,247.3	9.5	5.0	-173.40	-222.9	-60.9	660.2	649.3	10.85	60.854	
2,500.0	2,447.8	2,345.6	2,337.7	10.0	5.3	-172.83	-236.1	-71.0	699.3	687.9	11.35	61.602	
2,600.0	2,544.6	2,437.4	2,428.0	10.5	5.6	-172.31	-249.2	-81.0	738.4	726.6	11.86	62.270	
2,700.0	2,641.5	2,529.2	2,518.3	11.0	5.9	-171.84	-262.3	-91.0	777.6	765.3	12.37	62.862	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton L-29-30HN - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.97	-165.0	-5.8	165.2				
100.0	100.0	96.0	96.0	0.1	0.1	-177.97	-165.0	-5.8	165.1	164.9	0.22	749.709	
200.0	200.0	196.0	196.0	0.3	0.3	-177.97	-165.0	-5.8	165.1	164.5	0.67	248.223	CC, ES
300.0	300.0	296.0	296.0	0.6	0.6	-175.71	-165.0	-5.8	166.5	165.3	1.13	147.895	
400.0	399.9	395.9	395.9	0.8	0.8	-175.80	-165.0	-5.8	170.4	168.8	1.59	106.972	
500.0	499.7	495.7	495.7	1.0	1.0	-175.95	-165.0	-5.8	176.9	174.8	2.06	85.847	
600.0	599.3	595.3	595.3	1.3	1.2	-176.14	-165.0	-5.8	186.0	183.5	2.53	73.568	
700.0	698.6	694.6	694.6	1.6	1.4	-176.36	-165.0	-5.8	197.7	194.7	3.00	65.992	
800.0	797.5	793.5	793.5	1.9	1.7	-176.59	-165.0	-5.8	212.1	208.6	3.46	61.208	
900.0	896.1	892.1	892.1	2.2	1.9	-176.83	-165.0	-5.8	229.0	225.0	3.93	58.215	
1,000.0	994.2	990.2	990.2	2.6	2.1	-177.06	-165.0	-5.8	248.5	244.1	4.40	56.438	
1,100.0	1,091.7	1,087.7	1,087.7	3.0	2.3	-177.29	-165.0	-5.8	270.5	265.6	4.87	55.522	
1,160.7	1,150.6	1,146.6	1,146.6	3.3	2.5	-177.42	-165.0	-5.8	285.1	280.0	5.16	55.285	
1,200.0	1,188.7	1,184.7	1,184.7	3.5	2.6	-177.50	-165.0	-5.8	294.9	289.6	5.34	55.228	
1,300.0	1,285.5	1,281.5	1,281.5	4.0	2.8	-177.70	-165.0	-5.8	319.8	314.0	5.81	55.061	SF
1,400.0	1,382.4	1,372.8	1,372.7	4.5	3.0	-177.79	-165.6	-6.2	345.3	339.0	6.25	55.220	
1,500.0	1,479.2	1,461.8	1,461.7	5.0	3.1	-177.70	-168.0	-7.6	372.7	366.0	6.68	55.748	
1,600.0	1,576.1	1,549.7	1,549.5	5.5	3.3	-177.47	-172.0	-10.0	402.0	394.9	7.12	56.484	
1,700.0	1,672.9	1,636.5	1,636.1	6.0	3.4	-177.13	-177.7	-13.5	433.2	425.6	7.55	57.349	
1,800.0	1,769.8	1,722.1	1,721.3	6.5	3.6	-176.70	-185.0	-17.8	466.3	458.3	7.99	58.319	
1,900.0	1,866.6	1,806.5	1,805.0	7.0	3.8	-176.22	-193.8	-23.1	501.2	492.7	8.44	59.372	
2,000.0	1,963.5	1,889.5	1,887.1	7.5	4.0	-175.70	-204.0	-29.2	537.9	529.0	8.89	60.487	
2,100.0	2,060.4	1,971.2	1,967.7	8.0	4.2	-175.16	-215.5	-36.1	576.4	567.1	9.35	61.649	
2,200.0	2,157.2	2,053.6	2,048.7	8.5	4.5	-174.59	-228.5	-43.9	616.7	606.8	9.82	62.813	
2,300.0	2,254.1	2,144.6	2,138.1	9.0	4.7	-174.01	-243.5	-52.9	657.5	647.2	10.30	63.839	
2,400.0	2,350.9	2,235.7	2,227.5	9.5	5.0	-173.49	-258.5	-61.9	698.5	687.7	10.79	64.707	
2,500.0	2,447.8	2,326.8	2,316.8	10.0	5.4	-173.04	-273.4	-70.9	739.4	728.1	11.29	65.503	
2,600.0	2,544.6	2,417.8	2,406.2	10.5	5.7	-172.63	-288.4	-79.8	780.4	768.6	11.79	66.204	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton M-29-30HN - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.97	-180.0	-6.4	180.2				
100.0	100.0	95.0	95.0	0.1	0.1	-177.97	-180.0	-6.4	180.1	179.9	0.22	821.732	
200.0	200.0	195.0	195.0	0.3	0.3	-177.97	-180.0	-6.4	180.1	179.4	0.66	271.602	CC, ES
300.0	300.0	295.0	295.0	0.6	0.6	-175.70	-180.0	-6.4	181.4	180.3	1.12	161.491	
400.0	399.9	394.9	394.9	0.8	0.8	-175.78	-180.0	-6.4	185.3	183.7	1.59	116.516	
500.0	499.7	494.7	494.7	1.0	1.0	-175.92	-180.0	-6.4	191.8	189.8	2.06	93.198	
600.0	599.3	594.3	594.3	1.3	1.2	-176.10	-180.0	-6.4	201.0	198.4	2.53	79.546	
700.0	698.6	693.6	693.6	1.6	1.4	-176.30	-180.0	-6.4	212.7	209.7	2.99	71.029	
800.0	797.5	792.5	792.5	1.9	1.7	-176.52	-180.0	-6.4	227.0	223.5	3.46	65.560	
900.0	896.1	891.1	891.1	2.2	1.9	-176.75	-180.0	-6.4	243.9	240.0	3.93	62.046	
1,000.0	994.2	989.2	989.2	2.6	2.1	-176.97	-180.0	-6.4	263.4	259.0	4.40	59.859	
1,100.0	1,091.7	1,086.7	1,086.7	3.0	2.3	-177.19	-180.0	-6.4	285.4	280.6	4.87	58.611	
1,160.7	1,150.6	1,145.6	1,145.6	3.3	2.5	-177.32	-180.0	-6.4	300.1	294.9	5.16	58.203	
1,200.0	1,188.7	1,183.7	1,183.7	3.5	2.5	-177.40	-180.0	-6.4	309.8	304.5	5.34	58.046	SF
1,300.0	1,285.5	1,274.6	1,274.6	4.0	2.7	-177.53	-180.6	-6.7	335.4	329.6	5.78	58.054	
1,400.0	1,382.4	1,363.4	1,363.4	4.5	2.9	-177.49	-183.1	-7.9	363.0	356.8	6.21	58.490	
1,500.0	1,479.2	1,451.1	1,450.9	5.0	3.1	-177.32	-187.4	-10.0	392.6	385.9	6.63	59.167	
1,600.0	1,576.1	1,537.6	1,537.2	5.5	3.2	-177.06	-193.4	-12.8	424.1	417.0	7.07	60.001	
1,700.0	1,672.9	1,622.9	1,622.0	6.0	3.4	-176.72	-201.1	-16.5	457.6	450.1	7.51	60.960	
1,800.0	1,769.8	1,706.8	1,705.4	6.5	3.6	-176.34	-210.2	-20.9	493.0	485.0	7.95	62.022	
1,900.0	1,866.6	1,789.5	1,787.1	7.0	3.8	-175.92	-220.9	-26.0	530.3	521.9	8.40	63.161	
2,000.0	1,963.5	1,870.7	1,867.2	7.5	4.0	-175.48	-232.9	-31.8	569.4	560.5	8.85	64.362	
2,100.0	2,060.4	1,950.5	1,945.6	8.0	4.2	-175.03	-246.2	-38.2	610.3	601.0	9.30	65.613	
2,200.0	2,157.2	2,037.1	2,030.5	8.5	4.5	-174.54	-261.9	-45.7	652.6	642.8	9.77	66.770	
2,300.0	2,254.1	2,127.5	2,119.1	9.0	4.8	-174.09	-278.4	-53.6	695.0	684.8	10.26	67.753	
2,400.0	2,350.9	2,217.9	2,207.6	9.5	5.2	-173.70	-294.8	-61.5	737.5	726.8	10.74	68.659	
2,500.0	2,447.8	2,308.4	2,296.2	10.0	5.5	-173.34	-311.3	-69.4	780.0	768.8	11.23	69.448	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton N-29-30HC - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.96	-194.9	-6.9	195.1				
100.0	100.0	95.0	95.0	0.1	0.1	-177.96	-194.9	-6.9	195.0	194.8	0.22	889.955	
200.0	200.0	195.0	195.0	0.3	0.3	-177.96	-194.9	-6.9	195.0	194.4	0.66	294.151	CC, ES
300.0	300.0	295.0	295.0	0.6	0.6	-175.69	-194.9	-6.9	196.3	195.2	1.12	174.802	
400.0	399.9	394.9	394.9	0.8	0.8	-175.77	-194.9	-6.9	200.3	198.7	1.59	125.917	
500.0	499.7	494.7	494.7	1.0	1.0	-175.89	-194.9	-6.9	206.8	204.7	2.06	100.461	
600.0	599.3	594.3	594.3	1.3	1.2	-176.06	-194.9	-6.9	215.9	213.4	2.53	85.464	
700.0	698.6	693.6	693.6	1.6	1.4	-176.25	-194.9	-6.9	227.6	224.6	2.99	76.021	
800.0	797.5	792.5	792.5	1.9	1.7	-176.46	-194.9	-6.9	242.0	238.5	3.46	69.877	
900.0	896.1	891.1	891.1	2.2	1.9	-176.68	-194.9	-6.9	258.9	254.9	3.93	65.848	
1,000.0	994.2	989.2	989.2	2.6	2.1	-176.89	-194.9	-6.9	278.3	273.9	4.40	63.255	
1,100.0	1,091.7	1,086.7	1,086.7	3.0	2.3	-177.10	-194.9	-6.9	300.4	295.5	4.87	61.679	
1,160.7	1,150.6	1,142.3	1,142.3	3.3	2.4	-177.21	-195.1	-7.0	315.2	310.1	5.14	61.341	
1,200.0	1,188.7	1,177.5	1,177.5	3.5	2.5	-177.25	-195.7	-7.2	325.6	320.3	5.31	61.326	SF
1,300.0	1,285.5	1,266.1	1,266.1	4.0	2.7	-177.26	-198.3	-8.2	353.3	347.6	5.73	61.631	
1,400.0	1,382.4	1,353.7	1,353.5	4.5	2.8	-177.17	-202.8	-9.9	383.1	377.0	6.16	62.214	
1,500.0	1,479.2	1,440.0	1,439.5	5.0	3.0	-176.99	-209.1	-12.2	415.0	408.4	6.59	62.982	
1,600.0	1,576.1	1,525.0	1,524.1	5.5	3.2	-176.75	-217.1	-15.2	448.9	441.9	7.02	63.901	
1,700.0	1,672.9	1,608.7	1,607.2	6.0	3.4	-176.46	-226.6	-18.7	484.7	477.2	7.46	64.944	
1,800.0	1,769.8	1,691.0	1,688.6	6.5	3.6	-176.15	-237.7	-22.9	522.4	514.5	7.91	66.083	
1,900.0	1,866.6	1,771.9	1,768.4	7.0	3.8	-175.81	-250.2	-27.5	562.1	553.7	8.35	67.298	
2,000.0	1,963.5	1,851.3	1,846.5	7.5	4.0	-175.47	-263.9	-32.6	603.5	594.7	8.80	68.579	
2,100.0	2,060.4	1,929.4	1,922.9	8.0	4.3	-175.12	-279.0	-38.2	646.8	637.5	9.26	69.880	
2,200.0	2,157.2	2,019.1	2,010.4	8.5	4.6	-174.74	-297.1	-44.9	690.9	681.2	9.73	71.025	
2,300.0	2,254.1	2,108.7	2,098.0	9.0	4.9	-174.41	-315.1	-51.7	735.1	724.9	10.21	72.029	
2,400.0	2,350.9	2,198.3	2,185.5	9.5	5.3	-174.11	-333.2	-58.4	779.2	768.6	10.69	72.921	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton O-29-30HN - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.95	-209.8	-7.5	210.0				
100.0	100.0	95.0	95.0	0.1	0.1	-177.95	-209.8	-7.5	210.0	209.8	0.22	958.141	
200.0	200.0	195.0	195.0	0.3	0.3	-177.95	-209.8	-7.5	210.0	209.3	0.66	316.688	CC, ES
300.0	300.0	295.0	295.0	0.6	0.6	-175.68	-209.8	-7.5	211.3	210.2	1.12	188.106	
400.0	399.9	394.9	394.9	0.8	0.8	-175.75	-209.8	-7.5	215.2	213.6	1.59	135.313	
500.0	499.7	494.7	494.7	1.0	1.0	-175.87	-209.8	-7.5	221.7	219.7	2.06	107.721	
600.0	599.3	594.3	594.3	1.3	1.2	-176.03	-209.8	-7.5	230.9	228.3	2.53	91.379	
700.0	698.6	693.6	693.6	1.6	1.4	-176.21	-209.8	-7.5	242.6	239.6	2.99	81.011	
800.0	797.5	792.5	792.5	1.9	1.7	-176.40	-209.8	-7.5	256.9	253.4	3.46	74.192	
900.0	896.1	891.1	891.1	2.2	1.9	-176.61	-209.8	-7.5	273.8	269.9	3.93	69.648	
1,000.0	994.2	989.2	989.2	2.6	2.1	-176.82	-209.8	-7.5	293.3	288.9	4.40	66.649	
1,100.0	1,091.7	1,080.2	1,080.2	3.0	2.3	-176.97	-210.7	-7.7	316.2	311.4	4.84	65.329	
1,160.7	1,150.6	1,134.3	1,134.2	3.3	2.4	-177.02	-212.1	-8.1	332.4	327.3	5.10	65.165	SF
1,200.0	1,188.7	1,169.0	1,168.9	3.5	2.5	-177.04	-213.5	-8.4	343.7	338.4	5.27	65.271	
1,300.0	1,285.5	1,256.4	1,256.2	4.0	2.6	-177.04	-218.2	-9.6	373.7	368.0	5.69	65.711	
1,400.0	1,382.4	1,342.5	1,342.1	4.5	2.8	-176.96	-224.7	-11.3	405.9	399.7	6.11	66.373	
1,500.0	1,479.2	1,427.4	1,426.5	5.0	3.0	-176.83	-233.0	-13.4	440.1	433.5	6.55	67.218	
1,600.0	1,576.1	1,510.8	1,509.3	5.5	3.2	-176.67	-242.9	-15.9	476.3	469.3	6.98	68.212	
1,700.0	1,672.9	1,592.9	1,590.5	6.0	3.4	-176.48	-254.3	-18.9	514.5	507.0	7.42	69.324	
1,800.0	1,769.8	1,673.5	1,670.0	6.5	3.6	-176.28	-267.2	-22.2	554.6	546.7	7.86	70.531	
1,900.0	1,866.6	1,752.6	1,747.7	7.0	3.8	-176.06	-281.5	-25.8	596.5	588.2	8.31	71.818	
2,000.0	1,963.5	1,830.2	1,823.7	7.5	4.1	-175.83	-296.9	-29.7	640.3	631.5	8.75	73.172	
2,100.0	2,060.4	1,906.3	1,897.8	8.0	4.4	-175.61	-313.5	-34.0	685.8	676.6	9.20	74.562	
2,200.0	2,157.2	1,992.3	1,981.3	8.5	4.7	-175.36	-333.4	-39.0	732.5	722.8	9.67	75.783	
2,300.0	2,254.1	2,080.7	2,067.1	9.0	5.1	-175.14	-353.8	-44.3	779.2	769.1	10.14	76.867	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton P-29-30HN - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.95	-224.8	-8.1	225.0				
100.0	100.0	94.0	94.0	0.1	0.1	-177.95	-224.8	-8.1	224.9	224.7	0.22	1,031.645	
200.0	200.0	194.0	194.0	0.3	0.3	-177.95	-224.8	-8.1	224.9	224.3	0.66	340.391	CC, ES
300.0	300.0	294.0	294.0	0.6	0.5	-175.67	-224.8	-8.1	226.2	225.1	1.12	201.816	
400.0	399.9	393.9	393.9	0.8	0.8	-175.74	-224.8	-8.1	230.2	228.6	1.59	144.914	
500.0	499.7	493.7	493.7	1.0	1.0	-175.85	-224.8	-8.1	236.7	234.6	2.06	115.107	
600.0	599.3	593.3	593.3	1.3	1.2	-176.00	-224.8	-8.1	245.8	243.3	2.52	97.380	
700.0	698.6	692.6	692.6	1.6	1.4	-176.17	-224.8	-8.1	257.5	254.5	2.99	86.066	
800.0	797.5	791.5	791.5	1.9	1.7	-176.36	-224.8	-8.1	271.8	268.4	3.46	78.557	
900.0	896.1	890.1	890.1	2.2	1.9	-176.55	-224.8	-8.1	288.8	284.8	3.93	73.489	
1,000.0	994.2	981.6	981.6	2.6	2.1	-176.72	-225.7	-8.2	309.2	304.8	4.37	70.786	
1,100.0	1,091.7	1,070.9	1,070.9	3.0	2.2	-176.83	-228.6	-8.6	334.4	329.6	4.80	69.733	
1,160.7	1,150.6	1,124.2	1,124.1	3.3	2.3	-176.88	-231.3	-9.0	352.0	346.9	5.06	69.628	SF
1,200.0	1,188.7	1,158.5	1,158.3	3.5	2.4	-176.91	-233.4	-9.3	364.1	358.9	5.22	69.749	
1,300.0	1,285.5	1,244.6	1,244.1	4.0	2.6	-176.95	-240.2	-10.3	396.5	390.8	5.65	70.237	
1,400.0	1,382.4	1,329.4	1,328.5	4.5	2.7	-176.95	-248.7	-11.5	430.9	424.9	6.07	70.943	
1,500.0	1,479.2	1,412.7	1,411.2	5.0	2.9	-176.92	-258.8	-12.9	467.4	460.9	6.51	71.831	
1,600.0	1,576.1	1,500.0	1,497.5	5.5	3.2	-176.86	-271.3	-14.7	505.9	499.0	6.95	72.759	
1,700.0	1,672.9	1,575.2	1,571.7	6.0	3.4	-176.79	-283.7	-16.5	546.3	538.9	7.38	74.013	
1,800.0	1,769.8	1,654.1	1,649.3	6.5	3.6	-176.71	-298.3	-18.6	588.6	580.8	7.82	75.262	
1,900.0	1,866.6	1,731.6	1,725.0	7.0	3.9	-176.61	-314.1	-20.8	632.7	624.5	8.26	76.592	
2,000.0	1,963.5	1,807.5	1,799.0	7.5	4.2	-176.51	-331.0	-23.2	678.6	669.9	8.70	77.991	
2,100.0	2,060.4	1,881.8	1,871.1	8.0	4.5	-176.41	-349.0	-25.8	726.3	717.1	9.14	79.439	
2,200.0	2,157.2	1,954.6	1,941.3	8.5	4.8	-176.30	-368.0	-28.5	775.6	766.0	9.59	80.879	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton Q-29-30HC - Wellbore #1 - Plan #1 (1-28-16) — **Offset Site Error:** 0.0 ft

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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.01	-239.7	-8.3	239.9				
100.0	100.0	94.0	94.0	0.1	0.1	-178.01	-239.7	-8.3	239.9	239.7	0.22	1,100.137	
200.0	200.0	194.0	194.0	0.3	0.3	-178.01	-239.7	-8.3	239.9	239.2	0.66	362.990	CC, ES
300.0	300.0	294.0	294.0	0.6	0.5	-175.73	-239.7	-8.3	241.2	240.1	1.12	215.138	
400.0	399.9	393.9	393.9	0.8	0.8	-175.80	-239.7	-8.3	245.1	243.5	1.59	154.316	
500.0	499.7	493.7	493.7	1.0	1.0	-175.90	-239.7	-8.3	251.6	249.6	2.06	122.370	
600.0	599.3	593.3	593.3	1.3	1.2	-176.03	-239.7	-8.3	260.7	258.2	2.52	103.297	
700.0	698.6	692.6	692.6	1.6	1.4	-176.19	-239.7	-8.3	272.5	269.5	2.99	91.057	
800.0	797.5	791.5	791.5	1.9	1.7	-176.37	-239.7	-8.3	286.8	283.3	3.46	82.873	
900.0	896.1	883.5	883.5	2.2	1.8	-176.53	-240.6	-8.4	304.7	300.8	3.90	78.165	
1,000.0	994.2	973.4	973.4	2.6	2.0	-176.65	-243.6	-8.8	327.4	323.1	4.33	75.703	
1,100.0	1,091.7	1,061.7	1,061.5	3.0	2.2	-176.74	-248.6	-9.3	354.9	350.2	4.76	74.636	
1,160.7	1,150.6	1,114.3	1,114.0	3.3	2.3	-176.78	-252.6	-9.7	373.9	368.9	5.02	74.505	SF
1,200.0	1,188.7	1,148.1	1,147.6	3.5	2.4	-176.81	-255.5	-10.1	387.0	381.8	5.19	74.621	
1,300.0	1,285.5	1,233.0	1,232.1	4.0	2.5	-176.86	-264.1	-11.0	421.5	415.9	5.61	75.099	
1,400.0	1,382.4	1,316.5	1,314.9	4.5	2.7	-176.88	-274.4	-12.1	458.1	452.1	6.04	75.795	
1,500.0	1,479.2	1,400.0	1,397.5	5.0	3.0	-176.87	-286.5	-13.4	496.8	490.3	6.48	76.633	
1,600.0	1,576.1	1,479.1	1,475.5	5.5	3.2	-176.85	-299.6	-14.9	537.3	530.4	6.92	77.678	
1,700.0	1,672.9	1,558.1	1,553.1	6.0	3.5	-176.81	-314.3	-16.5	579.8	572.4	7.36	78.810	
1,800.0	1,769.8	1,635.6	1,629.0	6.5	3.7	-176.76	-330.2	-18.2	624.1	616.3	7.80	80.039	
1,900.0	1,866.6	1,711.6	1,702.9	7.0	4.0	-176.71	-347.3	-20.1	670.1	661.9	8.24	81.348	
2,000.0	1,963.5	1,785.9	1,775.0	7.5	4.3	-176.64	-365.5	-22.1	717.9	709.3	8.68	82.714	
2,100.0	2,060.4	1,858.7	1,845.2	8.0	4.7	-176.58	-384.7	-24.2	767.4	758.3	9.13	84.081	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton R-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.00	-255.0	-8.9	255.3				
100.0	100.0	94.0	94.0	0.1	0.1	-178.00	-255.0	-8.9	255.2	255.0	0.22	1,170.381	
200.0	200.0	194.0	194.0	0.3	0.3	-178.00	-255.0	-8.9	255.2	254.5	0.66	386.167	CC, ES
300.0	300.0	294.0	294.0	0.6	0.5	-175.73	-255.0	-8.9	256.5	255.4	1.12	228.800	
400.0	399.9	393.9	393.9	0.8	0.8	-175.79	-255.0	-8.9	260.4	258.8	1.59	163.960	
500.0	499.7	493.7	493.7	1.0	1.0	-175.88	-255.0	-8.9	266.9	264.9	2.06	129.819	
600.0	599.3	593.3	593.3	1.3	1.2	-176.01	-255.0	-8.9	276.1	273.5	2.52	109.364	
700.0	698.6	692.6	692.6	1.6	1.4	-176.16	-255.0	-8.9	287.8	284.8	2.99	96.175	
800.0	797.5	784.8	784.8	1.9	1.6	-176.30	-256.0	-9.0	303.1	299.7	3.43	88.406	
900.0	896.1	875.4	875.3	2.2	1.8	-176.42	-259.0	-9.3	323.4	319.5	3.86	83.856	
1,000.0	994.2	964.4	964.2	2.6	2.0	-176.51	-264.1	-9.8	348.4	344.1	4.29	81.254	
1,100.0	1,091.7	1,051.6	1,051.1	3.0	2.1	-176.57	-271.1	-10.6	378.2	373.5	4.72	80.046	
1,160.7	1,150.6	1,100.0	1,099.3	3.3	2.2	-176.60	-275.8	-11.0	398.6	393.6	4.98	79.961	
1,200.0	1,188.7	1,136.7	1,135.8	3.5	2.3	-176.63	-279.8	-11.5	412.4	407.3	5.16	79.939	SF
1,300.0	1,285.5	1,220.4	1,218.8	4.0	2.5	-176.67	-290.2	-12.5	449.1	443.5	5.59	80.357	
1,400.0	1,382.4	1,300.0	1,297.5	4.5	2.8	-176.69	-301.8	-13.7	487.8	481.8	6.02	81.063	
1,500.0	1,479.2	1,383.2	1,379.6	5.0	3.0	-176.68	-315.6	-15.2	528.5	522.0	6.46	81.800	
1,600.0	1,576.1	1,462.4	1,457.3	5.5	3.3	-176.66	-330.5	-16.7	571.1	564.2	6.90	82.754	
1,700.0	1,672.9	1,539.9	1,533.2	6.0	3.6	-176.63	-346.5	-18.3	615.5	608.1	7.34	83.830	
1,800.0	1,769.8	1,616.0	1,607.2	6.5	3.9	-176.59	-363.8	-20.1	661.7	653.9	7.78	85.004	
1,900.0	1,866.6	1,690.4	1,679.4	7.0	4.2	-176.55	-382.0	-22.0	709.6	701.3	8.23	86.250	
2,000.0	1,963.5	1,763.3	1,749.6	7.5	4.6	-176.50	-401.3	-24.0	759.2	750.5	8.67	87.524	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton S-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-178.00	-270.0	-9.4	270.2				
100.0	100.0	93.0	93.0	0.1	0.1	-178.00	-270.0	-9.4	270.1	269.9	0.22	1,245.325	
200.0	200.0	193.0	193.0	0.3	0.3	-178.00	-270.0	-9.4	270.1	269.5	0.66	410.176	CC, ES
300.0	300.0	293.0	293.0	0.6	0.5	-175.72	-270.0	-9.4	271.4	270.3	1.12	242.611	
400.0	399.9	392.9	392.9	0.8	0.8	-175.77	-270.0	-9.4	275.3	273.8	1.59	173.608	
500.0	499.7	492.7	492.7	1.0	1.0	-175.86	-270.0	-9.4	281.9	279.8	2.05	137.232	
600.0	599.3	592.3	592.3	1.3	1.2	-175.98	-270.0	-9.4	291.0	288.5	2.52	115.383	
700.0	698.6	684.8	684.8	1.6	1.4	-176.10	-270.9	-9.5	303.7	300.8	2.96	102.680	
800.0	797.5	775.8	775.8	1.9	1.6	-176.21	-274.0	-9.8	321.4	318.0	3.39	94.916	
900.0	896.1	865.5	865.3	2.2	1.7	-176.30	-279.1	-10.3	344.0	340.1	3.82	90.041	
1,000.0	994.2	953.5	952.9	2.6	1.9	-176.37	-286.2	-11.0	371.3	367.0	4.26	87.172	
1,100.0	1,091.7	1,039.5	1,038.5	3.0	2.1	-176.42	-295.1	-11.8	403.3	398.6	4.70	85.774	
1,160.7	1,150.6	1,090.7	1,089.3	3.3	2.3	-176.44	-301.3	-12.4	424.9	419.9	4.97	85.484	SF
1,200.0	1,188.7	1,123.4	1,121.8	3.5	2.3	-176.47	-305.6	-12.8	439.6	434.5	5.14	85.535	
1,300.0	1,285.5	1,205.7	1,203.2	4.0	2.6	-176.51	-317.7	-14.0	478.4	472.9	5.57	85.857	
1,400.0	1,382.4	1,286.5	1,282.8	4.5	2.8	-176.53	-331.2	-15.3	519.2	513.2	6.01	86.396	
1,500.0	1,479.2	1,365.8	1,360.7	5.0	3.1	-176.54	-346.1	-16.7	561.8	555.4	6.45	87.119	
1,600.0	1,576.1	1,443.5	1,436.7	5.5	3.4	-176.53	-362.3	-18.2	606.3	599.4	6.89	87.994	
1,700.0	1,672.9	1,519.6	1,510.8	6.0	3.7	-176.51	-379.6	-19.9	652.6	645.3	7.33	88.994	
1,800.0	1,769.8	1,600.0	1,588.6	6.5	4.1	-176.48	-399.5	-21.7	700.7	692.9	7.79	89.939	
1,900.0	1,866.6	1,667.2	1,653.3	7.0	4.4	-176.44	-417.4	-23.4	750.3	742.1	8.22	91.246	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton T-29-30HC - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.99	-284.9	-10.0	285.2				
100.0	100.0	93.0	93.0	0.1	0.1	-177.99	-284.9	-10.0	285.1	284.9	0.22	1,314.235	
200.0	200.0	193.0	193.0	0.3	0.3	-177.99	-284.9	-10.0	285.1	284.4	0.66	432.873	CC, ES
300.0	300.0	293.0	293.0	0.6	0.5	-175.71	-284.9	-10.0	286.4	285.3	1.12	255.971	
400.0	399.9	392.9	392.9	0.8	0.8	-175.76	-284.9	-10.0	290.3	288.7	1.59	183.033	
500.0	499.7	492.7	492.7	1.0	1.0	-175.85	-284.9	-10.0	296.8	294.8	2.05	144.509	
600.0	599.3	585.4	585.4	1.3	1.2	-175.94	-285.9	-10.1	307.0	304.5	2.49	123.300	
700.0	698.6	676.8	676.7	1.6	1.4	-176.03	-289.0	-10.4	322.1	319.2	2.92	110.336	
800.0	797.5	766.9	766.7	1.9	1.5	-176.11	-294.2	-10.9	342.1	338.8	3.36	101.953	
900.0	896.1	855.6	855.1	2.2	1.7	-176.17	-301.4	-11.5	367.0	363.2	3.80	96.621	
1,000.0	994.2	942.4	941.4	2.6	1.9	-176.22	-310.4	-12.3	396.5	392.3	4.24	93.442	
1,100.0	1,091.7	1,027.2	1,025.6	3.0	2.2	-176.26	-321.1	-13.3	430.7	426.0	4.69	91.818	
1,160.7	1,150.6	1,077.6	1,075.4	3.3	2.3	-176.27	-328.3	-14.0	453.6	448.7	4.96	91.413	SF
1,200.0	1,188.7	1,109.9	1,107.3	3.5	2.4	-176.30	-333.3	-14.4	469.2	464.0	5.13	91.415	
1,300.0	1,285.5	1,190.8	1,187.0	4.0	2.7	-176.34	-346.9	-15.7	510.0	504.4	5.57	91.604	
1,400.0	1,382.4	1,270.2	1,265.0	4.5	3.0	-176.36	-362.0	-17.1	552.8	546.8	6.01	92.024	
1,500.0	1,479.2	1,348.0	1,341.0	5.0	3.3	-176.37	-378.2	-18.6	597.4	590.9	6.45	92.638	
1,600.0	1,576.1	1,424.2	1,415.2	5.5	3.6	-176.36	-395.7	-20.2	643.8	636.9	6.89	93.412	
1,700.0	1,672.9	1,500.0	1,488.6	6.0	3.9	-176.35	-414.5	-21.9	691.9	684.6	7.34	94.275	
1,800.0	1,769.8	1,571.9	1,557.9	6.5	4.3	-176.32	-433.7	-23.6	741.7	733.9	7.78	95.323	
1,900.0	1,866.6	1,643.3	1,626.3	7.0	4.7	-176.30	-454.0	-25.5	793.2	784.9	8.23	96.369	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton U-29-30HN - Wellbore #1 - Plan #2 (2-18-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.98	-299.8	-10.6	300.1				
100.0	100.0	93.0	93.0	0.1	0.1	-177.98	-299.8	-10.6	300.0	299.8	0.22	1,383.145	
200.0	200.0	193.0	193.0	0.3	0.3	-177.98	-299.8	-10.6	300.0	299.4	0.66	455.570	CC, ES
300.0	300.0	293.0	293.0	0.6	0.5	-175.70	-299.8	-10.6	301.3	300.2	1.12	269.332	
400.0	399.9	392.9	392.9	0.8	0.8	-175.75	-299.8	-10.6	305.2	303.7	1.59	192.457	
500.0	499.7	485.7	485.7	1.0	1.0	-175.82	-300.8	-10.6	312.8	310.8	2.02	154.753	
600.0	599.3	577.3	577.2	1.3	1.1	-175.88	-303.9	-10.9	325.3	322.9	2.45	132.629	
700.0	698.6	667.8	667.6	1.6	1.3	-175.94	-309.2	-11.4	342.8	339.9	2.89	118.493	
800.0	797.5	757.0	756.5	1.9	1.5	-176.00	-316.4	-12.0	365.2	361.8	3.34	109.342	
900.0	896.1	844.6	843.6	2.2	1.7	-176.04	-325.6	-12.8	392.3	388.5	3.79	103.521	
1,000.0	994.2	930.3	928.6	2.6	2.0	-176.08	-336.4	-13.8	424.0	419.8	4.24	100.002	
1,100.0	1,091.7	1,013.8	1,011.2	3.0	2.2	-176.11	-348.9	-14.9	460.3	455.7	4.69	98.125	
1,160.7	1,150.6	1,063.4	1,060.0	3.3	2.4	-176.12	-357.1	-15.6	484.5	479.6	4.97	97.589	
1,200.0	1,188.7	1,100.0	1,096.1	3.5	2.5	-176.15	-363.6	-16.1	500.9	495.7	5.15	97.335	SF
1,300.0	1,285.5	1,174.5	1,169.3	4.0	2.8	-176.18	-377.8	-17.4	543.7	538.2	5.57	97.558	
1,400.0	1,382.4	1,252.5	1,245.4	4.5	3.1	-176.21	-394.2	-18.8	588.4	582.4	6.01	97.838	
1,500.0	1,479.2	1,328.8	1,319.7	5.0	3.5	-176.22	-411.8	-20.4	634.9	628.5	6.46	98.324	
1,600.0	1,576.1	1,400.0	1,388.6	5.5	3.8	-176.22	-429.5	-21.9	683.2	676.3	6.89	99.087	
1,700.0	1,672.9	1,476.7	1,462.5	6.0	4.2	-176.21	-450.0	-23.7	733.1	725.8	7.35	99.784	
1,800.0	1,769.8	1,548.2	1,531.0	6.5	4.6	-176.20	-470.5	-25.5	784.7	776.9	7.80	100.569	

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton V-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.98	-314.8	-11.1	315.1				
100.0	100.0	92.0	92.0	0.1	0.1	-177.98	-314.8	-11.1	315.0	314.8	0.22	1,459.623	
200.0	200.0	192.0	192.0	0.3	0.3	-177.98	-314.8	-11.1	315.0	314.3	0.66	479.912	CC, ES
300.0	300.0	292.0	292.0	0.6	0.5	-175.70	-314.8	-11.1	316.3	315.2	1.12	283.258	
400.0	399.9	384.8	384.8	0.8	0.7	-175.73	-315.7	-11.2	321.2	319.7	1.55	207.069	
500.0	499.7	476.5	476.4	1.0	0.9	-175.77	-318.8	-11.5	331.1	329.2	1.99	166.706	
600.0	599.3	567.3	567.1	1.3	1.1	-175.81	-324.1	-11.9	346.0	343.6	2.43	142.306	
700.0	698.6	657.0	656.5	1.6	1.3	-175.86	-331.4	-12.5	365.8	362.9	2.88	126.875	
800.0	797.5	745.2	744.2	1.9	1.5	-175.90	-340.6	-13.3	390.4	387.1	3.34	116.965	
900.0	896.1	831.7	829.9	2.2	1.8	-175.93	-351.6	-14.2	419.7	415.9	3.79	110.647	
1,000.0	994.2	916.1	913.4	2.6	2.1	-175.96	-364.2	-15.2	453.6	449.4	4.25	106.773	
1,100.0	1,091.7	1,000.0	996.1	3.0	2.4	-175.98	-378.5	-16.4	492.0	487.3	4.71	104.541	
1,160.7	1,150.6	1,047.0	1,042.2	3.3	2.5	-175.99	-387.3	-17.1	517.4	512.4	4.98	103.948	
1,200.0	1,188.7	1,078.1	1,072.7	3.5	2.7	-176.01	-393.5	-17.7	534.5	529.3	5.15	103.808	
1,300.0	1,285.5	1,156.1	1,149.0	4.0	3.0	-176.05	-410.0	-19.0	579.3	573.7	5.59	103.663	SF
1,400.0	1,382.4	1,232.6	1,223.3	4.5	3.3	-176.08	-427.7	-20.5	625.9	619.9	6.03	103.783	
1,500.0	1,479.2	1,300.0	1,288.6	5.0	3.7	-176.10	-444.5	-21.9	674.3	667.8	6.46	104.397	
1,600.0	1,576.1	1,380.6	1,366.3	5.5	4.1	-176.10	-466.1	-23.7	724.3	717.3	6.92	104.639	
1,700.0	1,672.9	1,452.2	1,434.8	6.0	4.5	-176.10	-486.7	-25.4	775.9	768.5	7.38	105.204	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton W-29-30HC - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.97	-329.7	-11.7	330.0				
100.0	100.0	92.0	92.0	0.1	0.1	-177.97	-329.7	-11.7	329.9	329.7	0.22	1,528.891	
200.0	200.0	192.0	192.0	0.3	0.3	-177.97	-329.7	-11.7	329.9	329.3	0.66	502.686	CC, ES
300.0	300.0	284.6	284.6	0.6	0.5	-175.68	-330.6	-11.7	332.2	331.2	1.08	306.524	
400.0	399.9	376.3	376.3	0.8	0.7	-175.69	-333.8	-12.0	339.6	338.0	1.52	222.835	
500.0	499.7	467.3	467.1	1.0	0.9	-175.71	-339.0	-12.4	351.9	349.9	1.98	178.065	
600.0	599.3	557.4	556.8	1.3	1.1	-175.74	-346.4	-13.0	369.1	366.6	2.43	151.620	
700.0	698.6	646.1	645.1	1.6	1.4	-175.76	-355.6	-13.8	391.2	388.3	2.89	135.135	
800.0	797.5	733.2	731.5	1.9	1.6	-175.79	-366.7	-14.7	418.0	414.6	3.36	124.585	
900.0	896.1	818.4	815.7	2.2	1.9	-175.81	-379.5	-15.7	449.5	445.7	3.81	117.829	
1,000.0	994.2	900.0	896.1	2.6	2.2	-175.83	-393.5	-16.8	485.5	481.2	4.27	113.720	
1,100.0	1,091.7	982.3	976.9	3.0	2.5	-175.84	-409.3	-18.1	525.9	521.2	4.73	111.212	
1,160.7	1,150.6	1,030.1	1,023.6	3.3	2.7	-175.84	-419.3	-18.9	552.5	547.5	5.00	110.409	
1,200.0	1,188.7	1,060.7	1,053.4	3.5	2.9	-175.87	-426.0	-19.5	570.4	565.2	5.18	110.189	
1,300.0	1,285.5	1,137.2	1,127.9	4.0	3.2	-175.91	-443.7	-20.9	617.1	611.5	5.62	109.859	
1,400.0	1,382.4	1,212.2	1,200.3	4.5	3.6	-175.94	-462.6	-22.4	665.5	659.5	6.06	109.809	SF
1,500.0	1,479.2	1,285.4	1,270.9	5.0	4.0	-175.96	-482.4	-24.1	715.6	709.1	6.51	109.987	
1,600.0	1,576.1	1,357.1	1,339.5	5.5	4.4	-175.97	-503.1	-25.7	767.4	760.5	6.96	110.297	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Thornton 28-H Pad Sec.28-T7N-R66W - Thornton X-29-30HN - Wellbore #1 - Plan #1 (1-28-16)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-177.97	-344.6	-12.2	345.0				
100.0	100.0	92.0	92.0	0.1	0.1	-177.97	-344.6	-12.2	344.9	344.6	0.22	1,598.141	CC, ES
200.0	200.0	184.4	184.4	0.3	0.3	-177.96	-345.6	-12.3	345.9	345.3	0.62	553.854	
300.0	300.0	275.9	275.9	0.6	0.5	-175.65	-348.7	-12.5	350.6	349.5	1.07	328.465	
400.0	399.9	367.0	366.8	0.8	0.7	-175.65	-353.9	-13.0	360.3	358.8	1.53	235.671	
500.0	499.7	457.2	456.7	1.0	0.9	-175.65	-361.3	-13.5	374.9	372.9	1.99	187.977	
600.0	599.3	546.3	545.3	1.3	1.2	-175.66	-370.6	-14.3	394.4	392.0	2.46	160.288	
700.0	698.6	634.0	632.3	1.6	1.5	-175.67	-381.8	-15.2	418.8	415.8	2.93	143.102	
800.0	797.5	720.0	717.3	1.9	1.8	-175.69	-394.7	-16.2	447.8	444.4	3.39	132.080	
900.0	896.1	800.0	796.1	2.2	2.1	-175.70	-408.4	-17.3	481.4	477.6	3.84	125.268	
1,000.0	994.2	885.7	880.2	2.6	2.4	-175.71	-424.9	-18.6	519.5	515.2	4.31	120.479	
1,100.0	1,091.7	965.1	957.7	3.0	2.8	-175.72	-441.9	-19.9	561.9	557.1	4.77	117.832	
1,160.7	1,150.6	1,012.0	1,003.3	3.3	3.0	-175.72	-452.7	-20.7	589.6	584.6	5.04	116.906	
1,200.0	1,188.7	1,041.9	1,032.4	3.5	3.1	-175.74	-459.8	-21.3	608.3	603.0	5.22	116.609	
1,300.0	1,285.5	1,116.9	1,104.9	4.0	3.5	-175.78	-478.8	-22.8	656.8	651.2	5.66	116.091	
1,400.0	1,382.4	1,190.3	1,175.5	4.5	3.9	-175.82	-498.7	-24.4	707.1	701.0	6.10	115.860	SF
1,500.0	1,479.2	1,262.0	1,244.2	5.0	4.3	-175.84	-519.5	-26.0	758.9	752.4	6.55	115.873	

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

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Walton 25D Pad Sec.25-T7N-R67W - Walton A-25HN - Wellbore #1 - Plan #1 (1-14-15)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,600.0	7,298.6	7,100.0	7,012.3	290.5	20.4	-0.82	1,167.5	-11,066.8	716.8	631.4	85.47	8.387	
17,700.0	7,298.1	7,130.3	7,038.4	293.3	20.4	-0.85	1,167.4	-11,082.2	630.5	544.3	86.25	7.311	
17,800.0	7,297.6	7,150.0	7,055.0	296.1	20.3	-0.87	1,167.3	-11,092.8	546.4	459.4	87.00	6.280	
17,900.0	7,297.1	7,200.0	7,095.8	298.9	20.2	-0.94	1,167.0	-11,121.7	464.5	376.7	87.80	5.290	
17,922.5	7,297.0	7,200.0	7,095.8	299.5	20.2	-0.94	1,167.0	-11,121.7	446.4	358.4	87.97	5.075	CC, ES, SF

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Walton 25D Pad Sec.25-T7N-R67W - Walton B-25HC - Wellbore #1 - Plan #1 (1-14-15)

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,500.0	7,299.1	7,100.0	7,039.3	287.7	19.4	-27.46	1,002.8	-11,038.9	789.9	633.4	156.57	5.045	
17,600.0	7,298.6	7,125.8	7,062.5	290.5	19.3	-29.20	1,002.6	-11,050.1	702.2	537.4	164.77	4.262	
17,700.0	7,298.1	7,150.0	7,083.9	293.3	19.3	-31.00	1,002.5	-11,061.5	616.5	443.2	173.30	3.558	
17,800.0	7,297.6	7,178.5	7,108.5	296.1	19.3	-33.33	1,002.4	-11,075.7	533.5	349.5	184.00	2.899	
17,900.0	7,297.1	7,210.8	7,135.8	298.9	19.2	-36.30	1,002.3	-11,093.0	453.9	256.6	197.25	2.301	
17,922.5	7,297.0	7,218.8	7,142.4	299.5	19.2	-37.09	1,002.2	-11,097.5	436.6	235.9	200.68	2.175	CC, ES, SF

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Walton 25D Pad Sec.25-T7N-R67W - Walton C-25HN - Wellbore #1 - Plan #1 (1-14-15) — **Offset Site Error:** 0.0 ft

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

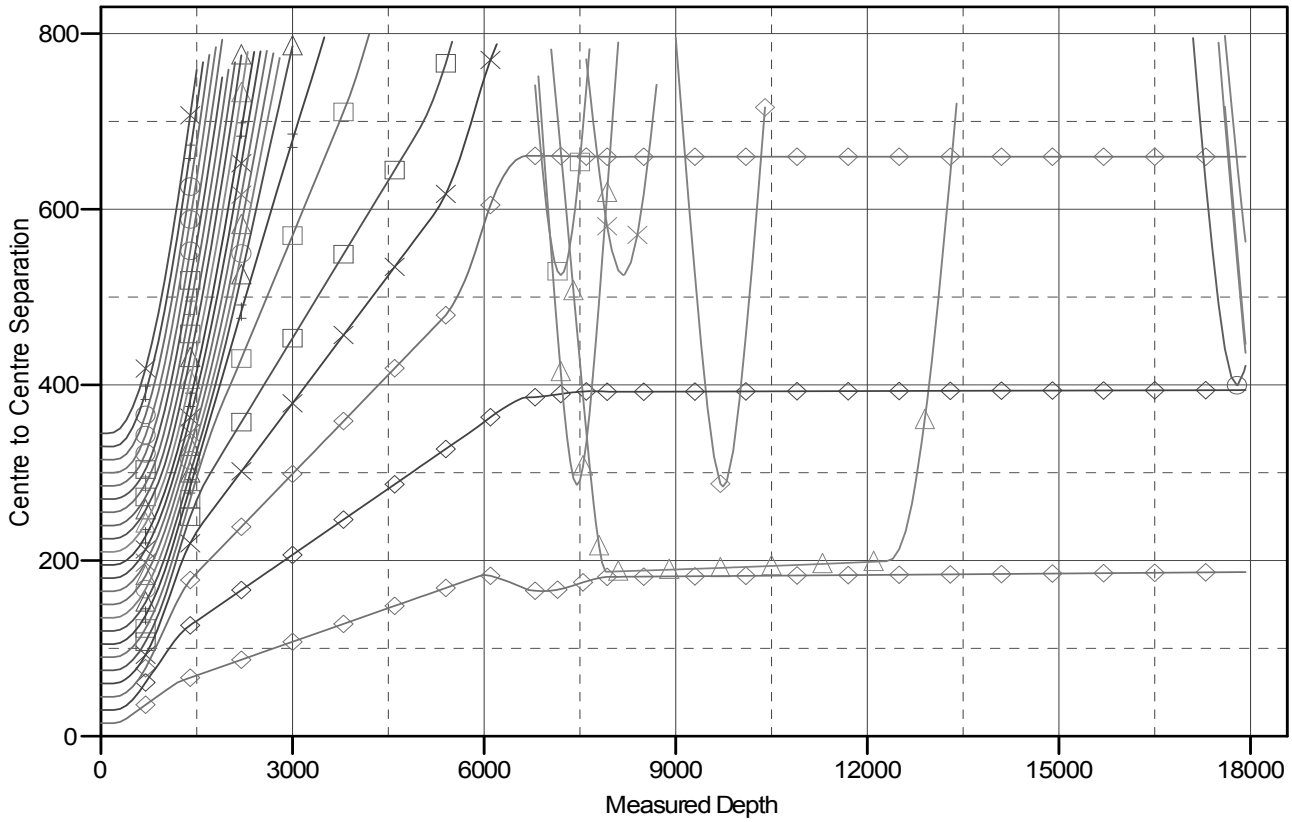
Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,600.0	7,298.6	7,075.8	7,015.0	290.5	18.2	-43.58	837.5	-11,069.9	797.8	579.5	218.29	3.655	
17,700.0	7,298.1	7,100.0	7,035.8	293.3	18.1	-45.32	837.4	-11,082.1	720.2	493.8	226.32	3.182	
17,800.0	7,297.6	7,131.1	7,062.0	296.1	18.1	-47.67	837.2	-11,099.0	646.5	410.1	236.33	2.735	
17,900.0	7,297.1	7,164.6	7,089.4	298.9	18.1	-50.33	837.1	-11,118.3	577.7	330.5	247.18	2.337	
17,922.5	7,297.0	7,172.8	7,095.9	299.5	18.1	-50.99	837.0	-11,123.3	563.0	313.2	249.81	2.254	CC, ES, SF

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4932.0ft (RKB - 23')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Thornton A-29-30HN
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.46°

Ladder Plot



L E G E N D

l, Wellbore #1 V0	Thornton V-29-30HN, Wellbore #1, Plan #1 (1-28-16) V0	Thornton O-29-30HN, Wellbore #1, P
ore #1 V0	Thornton D-29-30HN, Wellbore #1, Plan #1 (1-28-16) V0	Thornton N-29-30HC, Wellbore #1, P
, Wellbore #1 V0	Thornton Q-29-30HC, Wellbore #1, Plan #1 (1-28-16) V0	Thornton C-29-30HN, Wellbore #1, P
lanned), Wellbore #1, COGCC Planned V0	Thornton W-29-30HC, Wellbore #1, Plan #1 (1-28-16) V0	Thornton E-29-30HC, Wellbore #1, P
lan #1 (1-14-15) V0	Thornton T-29-30HC, Wellbore #1, Plan #1 (1-28-16) V0	Thornton L-29-30HN, Wellbore #1, Pl
lan #1 (1-14-15) V0	Thornton G-29-30HN, Wellbore #1, Plan #1 (1-28-16) V0	Thornton I-29-30HN, Wellbore #1, Pla
lan #1 (1-14-15) V0	Thornton J-29-30HN, Wellbore #1, Plan #2 (2-18-16) V0	Thornton R-29-30HN, Wellbore #1, P
#1, Plan #2 (2-18-16) V0	Thornton U-29-30HN, Wellbore #1, Plan #2 (2-18-16) V0	Thornton F-29-30HN, Wellbore #1, P
#1, Plan #2 (2-18-16) V0	Thornton P-29-30HN, Wellbore #1, Plan #2 (2-18-16) V0	Thornton 21G-403, Wellbore #1, Plan
#1, Plan #1 (1-28-16) V0	Thornton B-29-30HC, Wellbore #1, Plan #1 (1-28-16) V0	Thornton 21G-223, Wellbore #1, Plan

Company:	Bayswater Exploration & Production, LLC	**Local Co-ordinate Reference:**	Well Thornton A-29-30HN
Project:	SEC.28-T7N-R66W	**TVD Reference:**	WELL @ 4932.0ft (RKB - 23')
Reference Site:	Thornton 28-H Pad Sec.28-T7N-R66W	**MD Reference:**	WELL @ 4932.0ft (RKB - 23')
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	Thornton A-29-30HN	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-28-16)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4932.0ft (RKB - 23')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Thornton A-29-30HN
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.46°