

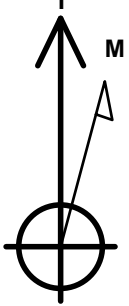
Bayswater Exploration & Production, LLC

Well Name: **Thornton F-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: 4907.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1443506.03 3196882.27 40.548665 -104.791527
 RKB - 23' WELL @ 4930.0ft (RKB - 23')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1629'FNL, 355'FWL, SEC.28	1.0	0.0	0.0	Point
BHL 1150'FNL, 470'FWL, SEC.30	7210.0	263.6	-10771.3	Point
LPL 1150'FNL, 470'FEL, SEC.29	7270.0	469.6	-809.0	Point



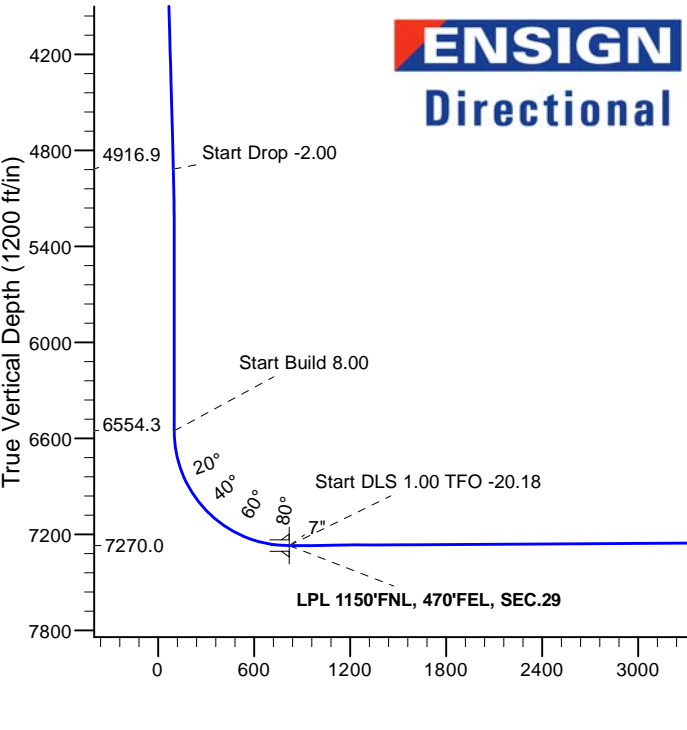
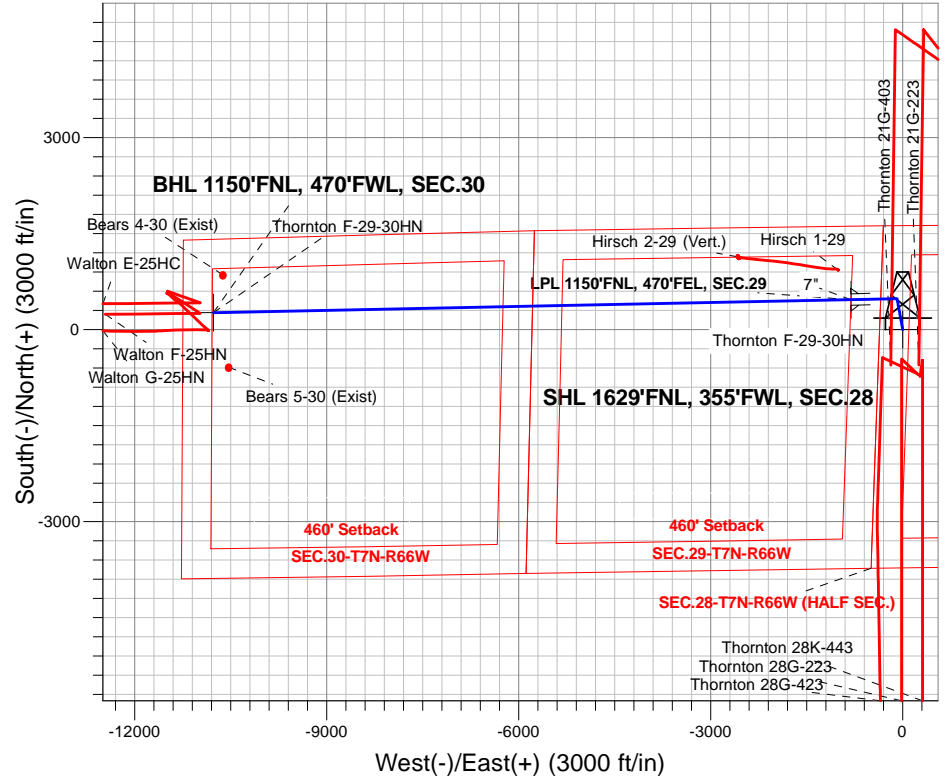
Azimuths to True North
 Magnetic North: 8.26°

Magnetic Field
 Strength: 52711.3snT
 Dip Angle: 67.00°
 Date: 2/22/2016
 Model: IGRF2010

Thornton 28-H Pad Sec.28-T7N-R66W
 Thornton F-29-30HN
 Plan #1 (1-28-16)
 8:17, February 22 2016

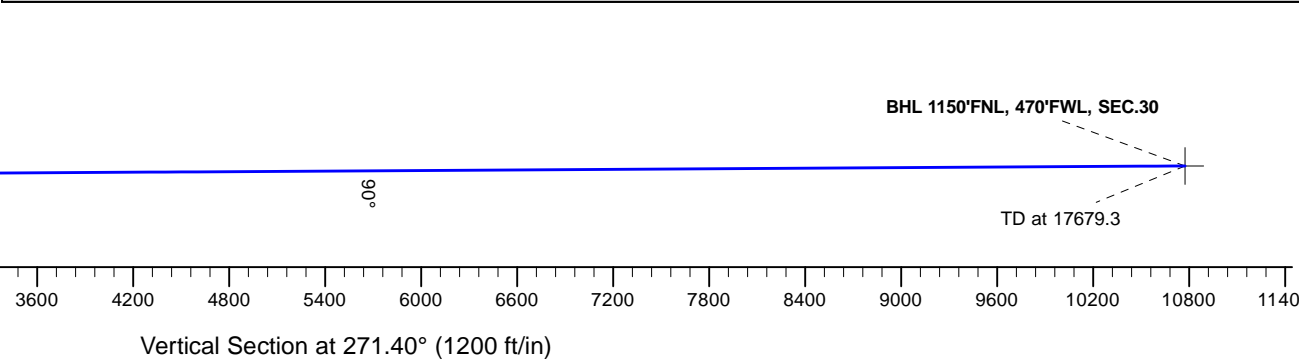
ANNOTATIONS

TVD	MD	Annotation
1200.0	1200.0	KOP - Start Build 1.50
4916.9	4947.5	Start Drop -2.00
6554.3	6586.0	Start Build 8.00
7270.0	7714.7	Start DLS 1.00 TFO -20.18
7270.0	7715.2	Start 9964.1 hold at 7715.2 MD
7210.0	17679.3	TD at 17679.3



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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1712.3	7.68	349.59	1710.7	33.7	-6.2	1.50	349.59	7.0	
4	4947.5	7.68	349.59	4917.0	459.2	-84.4	0.00	0.00	95.6	
5	5331.7	0.00	0.00	5300.0	484.5	-89.0	2.00	180.00	100.8	
6	6586.0	0.00	0.00	6554.2	484.5	-89.0	0.00	0.00	100.8	
7	7714.6	90.34	268.82	7270.0	469.6	-808.9	8.00	268.82	820.1	
8	7714.7	90.34	268.82	7270.0	469.6	-809.0	0.00	0.00	820.2	LPL 1150'FNL, 470'FEL, SEC.29
9	7715.2	90.34	268.82	7270.0	469.6	-809.5	1.00	-20.18	820.8	
10	17679.3	90.34	268.82	7210.0	263.6	-10771.3	0.00	0.00	10774.6	BHL 1150'FNL, 470'FWL, SEC.30



ENSIGN

Directional

**Bayswater Exploration &
Production, LLC**

SEC.28-T7N-R66W

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

Thornton F-29-30HN

Wellbore #1

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

Standard Planning Report

22 February, 2016



Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton F-29-30HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4930.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4930.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton F-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 F-29-30HN					
Well Position	+N/-S	-75.1 ft	Northing:	1,443,506.03 usft	Latitude:	40.548665
	+E/-W	-2.5 ft	Easting:	3,196,882.27 usft	Longitude:	-104.791527
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,907.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/22/2016	8.26	67.00	52,711

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	271.40

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,712.3	7.68	349.59	1,710.7	33.7	-6.2	1.50	1.50	0.00	349.59	
4,947.5	7.68	349.59	4,917.0	459.2	-84.4	0.00	0.00	0.00	0.00	
5,331.7	0.00	0.00	5,300.0	484.5	-89.0	2.00	-2.00	0.00	180.00	
6,586.0	0.00	0.00	6,554.2	484.5	-89.0	0.00	0.00	0.00	0.00	
7,714.6	90.34	268.82	7,270.0	469.6	-808.9	8.00	8.00	0.00	268.82	
7,714.7	90.34	268.82	7,270.0	469.6	-809.0	0.00	0.00	0.00	0.00	LPL 1150'FNL, 470'FE
7,715.2	90.34	268.82	7,270.0	469.6	-809.5	1.00	0.94	-0.35	-20.18	
17,679.3	90.34	268.82	7,210.0	263.6	-10,771.3	0.00	0.00	0.00	0.00	BHL 1150'FNL, 470'FI

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton F-29-30HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4930.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4930.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton F-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 1629'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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
KOP - Start Build 1.50										
1,300.0	1.50	349.59	1,300.0	1.3	-0.2	0.3	1.50	1.50	0.00	
1,400.0	3.00	349.59	1,399.9	5.1	-0.9	1.1	1.50	1.50	0.00	
1,500.0	4.50	349.59	1,499.7	11.6	-2.1	2.4	1.50	1.50	0.00	
1,600.0	6.00	349.59	1,599.3	20.6	-3.8	4.3	1.50	1.50	0.00	
1,700.0	7.50	349.59	1,698.6	32.1	-5.9	6.7	1.50	1.50	0.00	
1,712.3	7.68	349.59	1,710.7	33.7	-6.2	7.0	1.50	1.50	0.00	
1,800.0	7.68	349.59	1,797.7	45.3	-8.3	9.4	0.00	0.00	0.00	
1,900.0	7.68	349.59	1,896.8	58.4	-10.7	12.2	0.00	0.00	0.00	
2,000.0	7.68	349.59	1,995.9	71.6	-13.1	14.9	0.00	0.00	0.00	
2,100.0	7.68	349.59	2,095.0	84.7	-15.6	17.6	0.00	0.00	0.00	
2,200.0	7.68	349.59	2,194.1	97.9	-18.0	20.4	0.00	0.00	0.00	
2,300.0	7.68	349.59	2,293.2	111.0	-20.4	23.1	0.00	0.00	0.00	
2,400.0	7.68	349.59	2,392.3	124.2	-22.8	25.8	0.00	0.00	0.00	
2,500.0	7.68	349.59	2,491.4	137.3	-25.2	28.6	0.00	0.00	0.00	
2,600.0	7.68	349.59	2,590.5	150.5	-27.6	31.3	0.00	0.00	0.00	
2,700.0	7.68	349.59	2,689.6	163.6	-30.1	34.1	0.00	0.00	0.00	
2,800.0	7.68	349.59	2,788.7	176.8	-32.5	36.8	0.00	0.00	0.00	
2,900.0	7.68	349.59	2,887.8	189.9	-34.9	39.5	0.00	0.00	0.00	
3,000.0	7.68	349.59	2,986.9	203.1	-37.3	42.3	0.00	0.00	0.00	
3,100.0	7.68	349.59	3,086.0	216.2	-39.7	45.0	0.00	0.00	0.00	
3,200.0	7.68	349.59	3,185.1	229.4	-42.1	47.7	0.00	0.00	0.00	
3,300.0	7.68	349.59	3,284.2	242.5	-44.6	50.5	0.00	0.00	0.00	
3,400.0	7.68	349.59	3,383.3	255.7	-47.0	53.2	0.00	0.00	0.00	
3,500.0	7.68	349.59	3,482.4	268.8	-49.4	55.9	0.00	0.00	0.00	
3,600.0	7.68	349.59	3,581.5	282.0	-51.8	58.7	0.00	0.00	0.00	
3,700.0	7.68	349.59	3,680.6	295.1	-54.2	61.4	0.00	0.00	0.00	
3,800.0	7.68	349.59	3,779.7	308.3	-56.6	64.2	0.00	0.00	0.00	
3,900.0	7.68	349.59	3,878.8	321.4	-59.0	66.9	0.00	0.00	0.00	
4,000.0	7.68	349.59	3,977.9	334.6	-61.5	69.6	0.00	0.00	0.00	
4,100.0	7.68	349.59	4,077.0	347.7	-63.9	72.4	0.00	0.00	0.00	
4,200.0	7.68	349.59	4,176.1	360.9	-66.3	75.1	0.00	0.00	0.00	
4,300.0	7.68	349.59	4,275.2	374.0	-68.7	77.8	0.00	0.00	0.00	
4,400.0	7.68	349.59	4,374.3	387.2	-71.1	80.6	0.00	0.00	0.00	
4,500.0	7.68	349.59	4,473.4	400.3	-73.5	83.3	0.00	0.00	0.00	
4,600.0	7.68	349.59	4,572.5	413.5	-76.0	86.0	0.00	0.00	0.00	
4,700.0	7.68	349.59	4,671.6	426.6	-78.4	88.8	0.00	0.00	0.00	
4,800.0	7.68	349.59	4,770.7	439.8	-80.8	91.5	0.00	0.00	0.00	
4,900.0	7.68	349.59	4,869.8	452.9	-83.2	94.3	0.00	0.00	0.00	

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Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4930.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton F-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)
4,947.5	7.68	349.59	4,916.9	459.2	-84.4	95.6	0.00	0.00	0.00
Start Drop -2.00									
5,000.0	6.63	349.59	4,969.0	465.6	-85.5	96.9	2.00	-2.00	0.00
5,100.0	4.63	349.59	5,068.5	475.3	-87.3	98.9	2.00	-2.00	0.00
5,200.0	2.63	349.59	5,168.3	481.5	-88.5	100.2	2.00	-2.00	0.00
5,300.0	0.63	349.59	5,268.3	484.3	-89.0	100.8	2.00	-2.00	0.00
5,331.7	0.00	0.00	5,300.0	484.5	-89.0	100.8	2.00	-2.00	0.00
5,400.0	0.00	0.00	5,368.3	484.5	-89.0	100.8	0.00	0.00	0.00
5,500.0	0.00	0.00	5,468.3	484.5	-89.0	100.8	0.00	0.00	0.00
5,600.0	0.00	0.00	5,568.3	484.5	-89.0	100.8	0.00	0.00	0.00
5,700.0	0.00	0.00	5,668.3	484.5	-89.0	100.8	0.00	0.00	0.00
5,800.0	0.00	0.00	5,768.3	484.5	-89.0	100.8	0.00	0.00	0.00
5,900.0	0.00	0.00	5,868.3	484.5	-89.0	100.8	0.00	0.00	0.00
6,000.0	0.00	0.00	5,968.3	484.5	-89.0	100.8	0.00	0.00	0.00
6,100.0	0.00	0.00	6,068.3	484.5	-89.0	100.8	0.00	0.00	0.00
6,200.0	0.00	0.00	6,168.3	484.5	-89.0	100.8	0.00	0.00	0.00
6,300.0	0.00	0.00	6,268.3	484.5	-89.0	100.8	0.00	0.00	0.00
6,400.0	0.00	0.00	6,368.3	484.5	-89.0	100.8	0.00	0.00	0.00
6,500.0	0.00	0.00	6,468.3	484.5	-89.0	100.8	0.00	0.00	0.00
6,586.0	0.00	0.00	6,554.3	484.5	-89.0	100.8	0.00	0.00	0.00
Start Build 8.00									
6,600.0	1.12	268.82	6,568.3	484.5	-89.1	101.0	8.02	8.02	0.00
6,700.0	9.13	268.82	6,667.8	484.3	-98.1	109.9	8.00	8.00	0.00
6,800.0	17.13	268.82	6,765.1	483.8	-120.8	132.6	8.00	8.00	0.00
6,900.0	25.14	268.82	6,858.3	483.1	-156.8	168.5	8.00	8.00	0.00
7,000.0	33.14	268.82	6,945.6	482.1	-205.4	217.2	8.00	8.00	0.00
7,100.0	41.15	268.82	7,025.2	480.9	-265.7	277.4	8.00	8.00	0.00
7,200.0	49.15	268.82	7,095.7	479.4	-336.6	348.2	8.00	8.00	0.00
7,300.0	57.16	268.82	7,155.6	477.7	-416.5	428.1	8.00	8.00	0.00
7,400.0	65.16	268.82	7,203.8	475.9	-504.0	515.5	8.00	8.00	0.00
7,500.0	73.17	268.82	7,239.3	474.0	-597.4	608.8	8.00	8.00	0.00
7,600.0	81.17	268.82	7,261.5	472.0	-694.8	706.1	8.00	8.00	0.00
7,700.0	89.17	268.82	7,269.9	469.9	-794.3	805.6	8.00	8.00	0.00
7,714.6	90.34	268.82	7,270.0	469.6	-808.9	820.1	8.00	8.00	0.00
7,714.7	90.34	268.82	7,270.0	469.6	-809.0	820.2	0.00	0.00	0.00
Start DLS 1.00 TFO -20.18 - 7" - LPL 1150'FNL, 470'FEL, SEC.29									
7,715.2	90.34	268.82	7,270.0	469.6	-809.5	820.8	0.99	0.93	-0.34
Start 9964.1 hold at 7715.2 MD									
7,800.0	90.34	268.82	7,269.5	467.9	-894.3	905.5	0.00	0.00	0.00
7,900.0	90.34	268.82	7,268.9	465.8	-994.3	1,005.4	0.00	0.00	0.00
8,000.0	90.34	268.82	7,268.3	463.7	-1,094.2	1,105.3	0.00	0.00	0.00
8,100.0	90.34	268.82	7,267.7	461.7	-1,194.2	1,205.2	0.00	0.00	0.00
8,200.0	90.34	268.82	7,267.1	459.6	-1,294.2	1,305.1	0.00	0.00	0.00
8,300.0	90.34	268.82	7,266.5	457.5	-1,394.2	1,405.0	0.00	0.00	0.00
8,400.0	90.34	268.82	7,265.9	455.5	-1,494.2	1,504.9	0.00	0.00	0.00
8,500.0	90.34	268.82	7,265.3	453.4	-1,594.1	1,604.7	0.00	0.00	0.00
8,600.0	90.34	268.82	7,264.7	451.3	-1,694.1	1,704.6	0.00	0.00	0.00
8,700.0	90.34	268.82	7,264.1	449.3	-1,794.1	1,804.5	0.00	0.00	0.00
8,800.0	90.34	268.82	7,263.5	447.2	-1,894.1	1,904.4	0.00	0.00	0.00
8,900.0	90.34	268.82	7,262.9	445.1	-1,994.0	2,004.3	0.00	0.00	0.00
9,000.0	90.34	268.82	7,262.3	443.1	-2,094.0	2,104.2	0.00	0.00	0.00
9,100.0	90.34	268.82	7,261.7	441.0	-2,194.0	2,204.1	0.00	0.00	0.00
9,200.0	90.34	268.82	7,261.1	438.9	-2,294.0	2,304.0	0.00	0.00	0.00

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Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4930.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton F-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)	
9,300.0	90.34	268.82	7,260.5	436.8	-2,393.9	2,403.9	0.00	0.00	0.00	
9,400.0	90.34	268.82	7,259.9	434.8	-2,493.9	2,503.8	0.00	0.00	0.00	
9,500.0	90.34	268.82	7,259.2	432.7	-2,593.9	2,603.7	0.00	0.00	0.00	
9,600.0	90.34	268.82	7,258.6	430.6	-2,693.9	2,703.6	0.00	0.00	0.00	
9,700.0	90.34	268.82	7,258.0	428.6	-2,793.9	2,803.5	0.00	0.00	0.00	
9,800.0	90.34	268.82	7,257.4	426.5	-2,893.8	2,903.4	0.00	0.00	0.00	
9,900.0	90.34	268.82	7,256.8	424.4	-2,993.8	3,003.3	0.00	0.00	0.00	
10,000.0	90.34	268.82	7,256.2	422.4	-3,093.8	3,103.2	0.00	0.00	0.00	
10,100.0	90.34	268.82	7,255.6	420.3	-3,193.8	3,203.1	0.00	0.00	0.00	
10,200.0	90.34	268.82	7,255.0	418.2	-3,293.7	3,303.0	0.00	0.00	0.00	
10,300.0	90.34	268.82	7,254.4	416.2	-3,393.7	3,402.9	0.00	0.00	0.00	
10,400.0	90.34	268.82	7,253.8	414.1	-3,493.7	3,502.8	0.00	0.00	0.00	
10,500.0	90.34	268.82	7,253.2	412.0	-3,593.7	3,602.7	0.00	0.00	0.00	
10,600.0	90.34	268.82	7,252.6	410.0	-3,693.6	3,702.6	0.00	0.00	0.00	
10,700.0	90.34	268.82	7,252.0	407.9	-3,793.6	3,802.5	0.00	0.00	0.00	
10,800.0	90.34	268.82	7,251.4	405.8	-3,893.6	3,902.4	0.00	0.00	0.00	
10,900.0	90.34	268.82	7,250.8	403.8	-3,993.6	4,002.3	0.00	0.00	0.00	
11,000.0	90.34	268.82	7,250.2	401.7	-4,093.6	4,102.2	0.00	0.00	0.00	
11,100.0	90.34	268.82	7,249.6	399.6	-4,193.5	4,202.1	0.00	0.00	0.00	
11,200.0	90.34	268.82	7,249.0	397.6	-4,293.5	4,301.9	0.00	0.00	0.00	
11,300.0	90.34	268.82	7,248.4	395.5	-4,393.5	4,401.8	0.00	0.00	0.00	
11,400.0	90.34	268.82	7,247.8	393.4	-4,493.5	4,501.7	0.00	0.00	0.00	
11,500.0	90.34	268.82	7,247.2	391.4	-4,593.4	4,601.6	0.00	0.00	0.00	
11,600.0	90.34	268.82	7,246.6	389.3	-4,693.4	4,701.5	0.00	0.00	0.00	
11,700.0	90.34	268.82	7,246.0	387.2	-4,793.4	4,801.4	0.00	0.00	0.00	
11,800.0	90.34	268.82	7,245.4	385.2	-4,893.4	4,901.3	0.00	0.00	0.00	
11,900.0	90.34	268.82	7,244.8	383.1	-4,993.3	5,001.2	0.00	0.00	0.00	
12,000.0	90.34	268.82	7,244.2	381.0	-5,093.3	5,101.1	0.00	0.00	0.00	
12,100.0	90.34	268.82	7,243.6	379.0	-5,193.3	5,201.0	0.00	0.00	0.00	
12,200.0	90.34	268.82	7,243.0	376.9	-5,293.3	5,300.9	0.00	0.00	0.00	
12,300.0	90.34	268.82	7,242.4	374.8	-5,393.3	5,400.8	0.00	0.00	0.00	
12,400.0	90.34	268.82	7,241.8	372.7	-5,493.2	5,500.7	0.00	0.00	0.00	
12,500.0	90.34	268.82	7,241.2	370.7	-5,593.2	5,600.6	0.00	0.00	0.00	
12,600.0	90.34	268.82	7,240.6	368.6	-5,693.2	5,700.5	0.00	0.00	0.00	
12,700.0	90.34	268.82	7,240.0	366.5	-5,793.2	5,800.4	0.00	0.00	0.00	
12,800.0	90.34	268.82	7,239.4	364.5	-5,893.1	5,900.3	0.00	0.00	0.00	
12,900.0	90.34	268.82	7,238.8	362.4	-5,993.1	6,000.2	0.00	0.00	0.00	
13,000.0	90.34	268.82	7,238.2	360.3	-6,093.1	6,100.1	0.00	0.00	0.00	
13,100.0	90.34	268.82	7,237.6	358.3	-6,193.1	6,200.0	0.00	0.00	0.00	
13,200.0	90.34	268.82	7,237.0	356.2	-6,293.0	6,299.9	0.00	0.00	0.00	
13,300.0	90.34	268.82	7,236.4	354.1	-6,393.0	6,399.8	0.00	0.00	0.00	
13,400.0	90.34	268.82	7,235.8	352.1	-6,493.0	6,499.7	0.00	0.00	0.00	
13,500.0	90.34	268.82	7,235.2	350.0	-6,593.0	6,599.6	0.00	0.00	0.00	
13,600.0	90.34	268.82	7,234.6	347.9	-6,692.9	6,699.5	0.00	0.00	0.00	
13,700.0	90.34	268.82	7,234.0	345.9	-6,792.9	6,799.4	0.00	0.00	0.00	
13,800.0	90.34	268.82	7,233.4	343.8	-6,892.9	6,899.3	0.00	0.00	0.00	
13,900.0	90.34	268.82	7,232.8	341.7	-6,992.9	6,999.1	0.00	0.00	0.00	
14,000.0	90.34	268.82	7,232.2	339.7	-7,092.9	7,099.0	0.00	0.00	0.00	
14,100.0	90.34	268.82	7,231.6	337.6	-7,192.8	7,198.9	0.00	0.00	0.00	
14,200.0	90.34	268.82	7,230.9	335.5	-7,292.8	7,298.8	0.00	0.00	0.00	
14,300.0	90.34	268.82	7,230.3	333.5	-7,392.8	7,398.7	0.00	0.00	0.00	
14,400.0	90.34	268.82	7,229.7	331.4	-7,492.8	7,498.6	0.00	0.00	0.00	
14,500.0	90.34	268.82	7,229.1	329.3	-7,592.7	7,598.5	0.00	0.00	0.00	
14,600.0	90.34	268.82	7,228.5	327.3	-7,692.7	7,698.4	0.00	0.00	0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton F-29-30HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4930.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4930.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton F-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)	
14,700.0	90.34	268.82	7,227.9	325.2	-7,792.7	7,798.3	0.00	0.00	0.00	
14,800.0	90.34	268.82	7,227.3	323.1	-7,892.7	7,898.2	0.00	0.00	0.00	
14,900.0	90.34	268.82	7,226.7	321.1	-7,992.6	7,998.1	0.00	0.00	0.00	
15,000.0	90.34	268.82	7,226.1	319.0	-8,092.6	8,098.0	0.00	0.00	0.00	
15,100.0	90.34	268.82	7,225.5	316.9	-8,192.6	8,197.9	0.00	0.00	0.00	
15,200.0	90.34	268.82	7,224.9	314.8	-8,292.6	8,297.8	0.00	0.00	0.00	
15,300.0	90.34	268.82	7,224.3	312.8	-8,392.6	8,397.7	0.00	0.00	0.00	
15,400.0	90.34	268.82	7,223.7	310.7	-8,492.5	8,497.6	0.00	0.00	0.00	
15,500.0	90.34	268.82	7,223.1	308.6	-8,592.5	8,597.5	0.00	0.00	0.00	
15,600.0	90.34	268.82	7,222.5	306.6	-8,692.5	8,697.4	0.00	0.00	0.00	
15,700.0	90.34	268.82	7,221.9	304.5	-8,792.5	8,797.3	0.00	0.00	0.00	
15,800.0	90.34	268.82	7,221.3	302.4	-8,892.4	8,897.2	0.00	0.00	0.00	
15,900.0	90.34	268.82	7,220.7	300.4	-8,992.4	8,997.1	0.00	0.00	0.00	
16,000.0	90.34	268.82	7,220.1	298.3	-9,092.4	9,097.0	0.00	0.00	0.00	
16,100.0	90.34	268.82	7,219.5	296.2	-9,192.4	9,196.9	0.00	0.00	0.00	
16,200.0	90.34	268.82	7,218.9	294.2	-9,292.3	9,296.8	0.00	0.00	0.00	
16,300.0	90.34	268.82	7,218.3	292.1	-9,392.3	9,396.7	0.00	0.00	0.00	
16,400.0	90.34	268.82	7,217.7	290.0	-9,492.3	9,496.6	0.00	0.00	0.00	
16,500.0	90.34	268.82	7,217.1	288.0	-9,592.3	9,596.5	0.00	0.00	0.00	
16,600.0	90.34	268.82	7,216.5	285.9	-9,692.3	9,696.3	0.00	0.00	0.00	
16,700.0	90.34	268.82	7,215.9	283.8	-9,792.2	9,796.2	0.00	0.00	0.00	
16,800.0	90.34	268.82	7,215.3	281.8	-9,892.2	9,896.1	0.00	0.00	0.00	
16,900.0	90.34	268.82	7,214.7	279.7	-9,992.2	9,996.0	0.00	0.00	0.00	
17,000.0	90.34	268.82	7,214.1	277.6	-10,092.2	10,095.9	0.00	0.00	0.00	
17,100.0	90.34	268.82	7,213.5	275.6	-10,192.1	10,195.8	0.00	0.00	0.00	
17,200.0	90.34	268.82	7,212.9	273.5	-10,292.1	10,295.7	0.00	0.00	0.00	
17,300.0	90.34	268.82	7,212.3	271.4	-10,392.1	10,395.6	0.00	0.00	0.00	
17,400.0	90.34	268.82	7,211.7	269.4	-10,492.1	10,495.5	0.00	0.00	0.00	
17,500.0	90.34	268.82	7,211.1	267.3	-10,592.0	10,595.4	0.00	0.00	0.00	
17,600.0	90.34	268.82	7,210.5	265.2	-10,692.0	10,695.3	0.00	0.00	0.00	
17,679.3	90.34	268.82	7,210.0	263.6	-10,771.3	10,774.5	0.00	0.00	0.00	
TD at 17679.3 - BHL 1150'FNL, 470'FWL, SEC.30										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL 1629'FNL, 355'FWL - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	1,443,506.04	3,196,882.27	40.548665	-104.791527	
BHL 1150'FNL, 470'FWL - plan hits target center - Point	0.00	0.00	7,210.0	263.6	-10,771.3	1,443,683.54	3,186,109.51	40.549382	-104.830286	
LPL 1150'FNL, 470'FEL, - plan hits target center - Point	0.00	0.00	7,270.0	469.6	-809.0	1,443,969.17	3,196,069.59	40.549954	-104.794438	

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton F-29-30HN
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4930.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4930.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton F-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 (")
7,714.7	7,270.0	7"	7	8-3/4

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,200.0	1,200.0	0.0	0.0	KOP - Start Build 1.50	
4,947.5	4,916.9	459.2	-84.4	Start Drop -2.00	
6,586.0	6,554.3	484.5	-89.0	Start Build 8.00	
7,714.7	7,270.0	469.6	-809.0	Start DLS 1.00 TFO -20.18	
7,715.2	7,270.0	469.6	-809.5	Start 9964.1 hold at 7715.2 MD	
17,679.3	7,210.0	263.6	-10,771.3	TD at 17679.3	