

Bayswater Exploration & Production, LLC

Well Name: **Thornton H-29-30HC**

Surface Location: Thornton 28-H Pad Sec.28-T7N-R66W

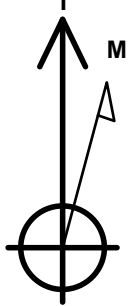
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone

Ground Elevation: 4906.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1443476.15	3196881.39	40.548583	-104.791531	
RKB - 23' WELL @ 4929.0ft (RKB - 23')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape Point
SHL 1659'FNL, 355'FWL, SEC.28	1.0	0.0	0.0	Point
BHL 1645'FNL, 470'FWL, SEC.30	7382.0	-202.0	-10773.2	Point
LPL 1645'FNL, 470'FEL, SEC.29	7419.0	4.4	-825.4	Point



Azimuths to True North
Magnetic North: 8.26°

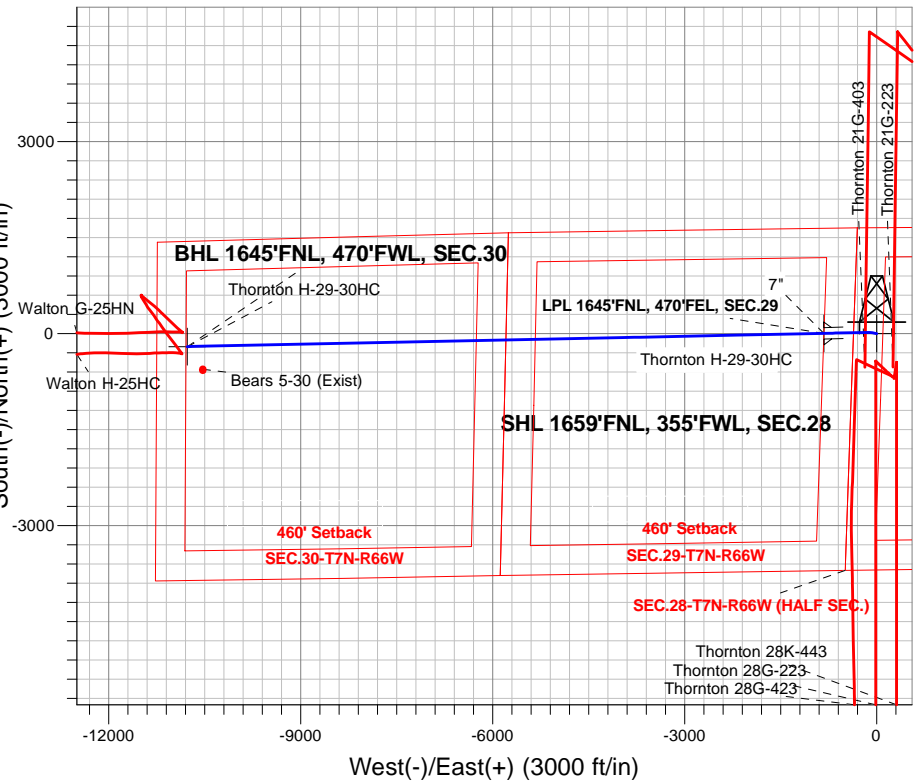
Magnetic Field
Strength: 52711.3nT
Dip Angle: 67.00°
Date: 2/22/2016
Model: IGRF2010

Thornton 28-H Pad Sec.28-T7N-R66W
Thornton H-29-30HC
Plan #1 (1-28-16)
8:53, February 22 2016

ANNOTATIONS

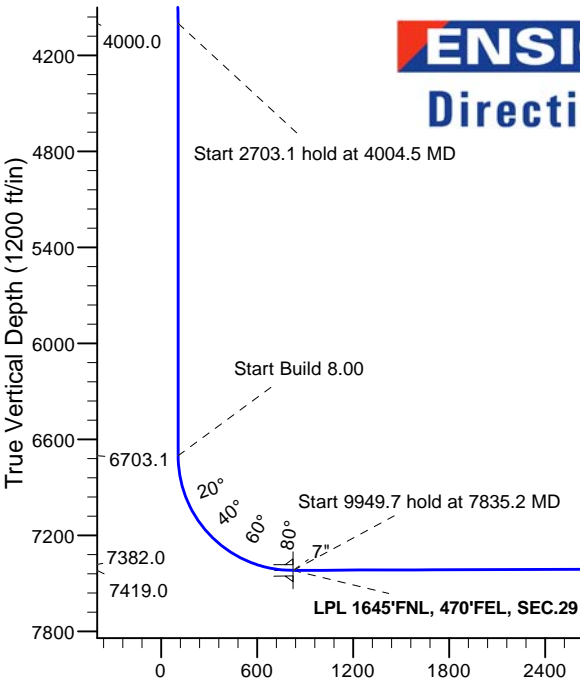
TVD	MD	Annotation
2500.0	2500.0	KOP - Start Build 1.50
3741.1	3745.3	Start Drop -2.00
4000.0	4004.5	Start 2703.1 hold at 4004.5 MD
6703.1	6707.6	Start Build 8.00
7419.0	7835.2	Start 9949.7 hold at 7835.2 MD
7382.0	17784.9	TD at 17784.9

South(-)/North(+) (3000 ft/in)



West(-)/East(+) (3000 ft/in)

ENSIGN
Directional



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	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
3	2845.6	5.18	280.23	2845.1	2.8	-15.4	1.50	280.23	15.3	
4	3745.3	5.18	280.23	3741.2	17.2	-95.4	0.00	0.00	95.0	
5	4004.5	0.00	0.00	4000.0	19.3	-106.9	2.00	180.00	106.5	
6	6707.6	0.00	0.00	6703.1	19.3	-106.9	0.00	0.00	106.5	
7	7834.8	90.21	268.81	7419.0	4.4	-825.3	8.00	268.81	825.1	
8	7834.9	90.21	268.81	7419.0	4.4	-825.4	0.00	0.00	825.2	LPL 1645'FNL, 470'FEL, SEC.29
9	7835.2	90.21	268.81	7419.0	4.4	-825.7	1.00	-3.32	825.5	
10	17784.9	90.21	268.81	7382.0	-202.0	-10773.2	0.00	0.00	10775.1	BHL 1645'FNL, 470'FWL, SEC.30

BHL 1645'FNL, 470'FWL, SEC.30

TD at 17784.9

Vertical Section at 268.93° (1200 ft/in)

ENSIGN

Directional

Bayswater Exploration & Production, LLC

SEC.28-T7N-R66W

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

Thornton H-29-30HC

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 H-29-30HC
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4929.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4929.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton H-29-30HC	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
From:	Lat/Long	Easting:	3,196,884.17 usft
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "
		Latitude:	40.548871
		Longitude:	-104.791518
		Grid Convergence:	0.46 °

Well	Thornton H-29-30HC		
Well Position	+N/-S	-104.9 ft	Northing:
	+E/-W	-3.6 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	0.0 ft
		Latitude:	40.548583
		Longitude:	-104.791531
		Ground Level:	4,906.0 ft

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

Design	Plan #1 (1-28-16)		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			268.93

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,845.6	5.18	280.23	2,845.1	2.8	-15.4	1.50	1.50	0.00	280.23	
3,745.3	5.18	280.23	3,741.2	17.2	-95.4	0.00	0.00	0.00	0.00	
4,004.5	0.00	0.00	4,000.0	19.3	-106.9	2.00	-2.00	0.00	180.00	
6,707.6	0.00	0.00	6,703.1	19.3	-106.9	0.00	0.00	0.00	0.00	
7,834.8	90.21	268.81	7,419.0	4.4	-825.3	8.00	8.00	0.00	268.81	
7,834.9	90.21	268.81	7,419.0	4.4	-825.4	0.00	0.00	0.00	0.00	LPL 1645'FNL, 470'F
7,835.2	90.21	268.81	7,419.0	4.4	-825.7	1.00	1.00	-0.06	-3.32	
17,784.9	90.21	268.81	7,382.0	-202.0	-10,773.2	0.00	0.00	0.00	0.00	BHL 1645'FNL, 470'F

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Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4929.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton H-29-30HC	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 1659'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
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.50									
2,600.0	1.50	280.23	2,600.0	0.2	-1.3	1.3	1.50	1.50	0.00
2,700.0	3.00	280.23	2,699.9	0.9	-5.2	5.1	1.50	1.50	0.00
2,800.0	4.50	280.23	2,799.7	2.1	-11.6	11.5	1.50	1.50	0.00
2,845.6	5.18	280.23	2,845.1	2.8	-15.4	15.3	1.50	1.50	0.00
2,900.0	5.18	280.23	2,899.3	3.6	-20.2	20.1	0.00	0.00	0.00
3,000.0	5.18	280.23	2,998.9	5.3	-29.1	29.0	0.00	0.00	0.00
3,100.0	5.18	280.23	3,098.5	6.9	-38.0	37.9	0.00	0.00	0.00
3,200.0	5.18	280.23	3,198.1	8.5	-46.9	46.7	0.00	0.00	0.00
3,300.0	5.18	280.23	3,297.7	10.1	-55.8	55.6	0.00	0.00	0.00
3,400.0	5.18	280.23	3,397.3	11.7	-64.7	64.4	0.00	0.00	0.00
3,500.0	5.18	280.23	3,496.9	13.3	-73.6	73.3	0.00	0.00	0.00
3,600.0	5.18	280.23	3,596.4	14.9	-82.4	82.2	0.00	0.00	0.00
3,700.0	5.18	280.23	3,696.0	16.5	-91.3	91.0	0.00	0.00	0.00
3,745.3	5.18	280.23	3,741.1	17.2	-95.4	95.0	0.00	0.00	0.00
Start Drop -2.00									
3,800.0	4.09	280.23	3,795.7	18.0	-99.7	99.4	2.00	-2.00	0.00
3,900.0	2.09	280.23	3,895.5	19.0	-105.0	104.7	2.00	-2.00	0.00
4,000.0	0.09	280.23	3,995.5	19.3	-106.9	106.5	2.00	-2.00	0.00
4,004.5	0.00	280.23	4,000.0	19.3	-106.9	106.5	2.00	-2.00	0.00
Start 2703.1 hold at 4004.5 MD									
4,100.0	0.00	0.00	4,095.5	19.3	-106.9	106.5	0.00	0.00	0.00
4,200.0	0.00	0.00	4,195.5	19.3	-106.9	106.5	0.00	0.00	0.00
4,300.0	0.00	0.00	4,295.5	19.3	-106.9	106.5	0.00	0.00	0.00
4,400.0	0.00	0.00	4,395.5	19.3	-106.9	106.5	0.00	0.00	0.00
4,500.0	0.00	0.00	4,495.5	19.3	-106.9	106.5	0.00	0.00	0.00

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Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4929.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4929.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton H-29-30HC	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)
4,600.0	0.00	0.00	4,595.5	19.3	-106.9	106.5	0.00	0.00	0.00
4,700.0	0.00	0.00	4,695.5	19.3	-106.9	106.5	0.00	0.00	0.00
4,800.0	0.00	0.00	4,795.5	19.3	-106.9	106.5	0.00	0.00	0.00
4,900.0	0.00	0.00	4,895.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,000.0	0.00	0.00	4,995.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,100.0	0.00	0.00	5,095.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,200.0	0.00	0.00	5,195.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,300.0	0.00	0.00	5,295.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,400.0	0.00	0.00	5,395.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,500.0	0.00	0.00	5,495.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,600.0	0.00	0.00	5,595.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,700.0	0.00	0.00	5,695.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,800.0	0.00	0.00	5,795.5	19.3	-106.9	106.5	0.00	0.00	0.00
5,900.0	0.00	0.00	5,895.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,995.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,100.0	0.00	0.00	6,095.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,195.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,300.0	0.00	0.00	6,295.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,395.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,500.0	0.00	0.00	6,495.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,595.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,700.0	0.00	0.00	6,695.5	19.3	-106.9	106.5	0.00	0.00	0.00
6,707.6	0.00	0.00	6,703.1	19.3	-106.9	106.5	0.00	0.00	0.00
Start Build 8.00									
6,800.0	7.40	268.81	6,795.2	19.2	-112.9	112.5	8.00	8.00	0.00
6,900.0	15.40	268.81	6,893.2	18.8	-132.6	132.2	8.00	8.00	0.00
7,000.0	23.40	268.81	6,987.4	18.1	-165.8	165.4	8.00	8.00	0.00
7,100.0	31.40	268.81	7,076.1	17.1	-211.8	211.4	8.00	8.00	0.00
7,200.0	39.41	268.81	7,157.6	15.9	-269.6	269.3	8.00	8.00	0.00
7,300.0	47.41	268.81	7,230.2	14.5	-338.3	338.0	8.00	8.00	0.00
7,400.0	55.41	268.81	7,292.5	12.9	-416.4	416.1	8.00	8.00	0.00
7,500.0	63.42	268.81	7,343.3	11.1	-502.4	502.1	8.00	8.00	0.00
7,600.0	71.42	268.81	7,381.7	9.2	-594.6	594.3	8.00	8.00	0.00
7,700.0	79.42	268.81	7,406.8	7.2	-691.3	691.0	8.00	8.00	0.00
7,800.0	87.43	268.81	7,418.3	5.1	-790.5	790.3	8.00	8.00	0.00
7,834.8	90.21	268.81	7,419.0	4.4	-825.3	825.1	8.00	8.00	0.00
7,834.9	90.21	268.81	7,419.0	4.4	-825.4	825.2	0.00	0.00	0.00
7" - LPL 1645'FNL, 470'FEL, SEC.29									
7,835.2	90.21	268.81	7,419.0	4.4	-825.7	825.5	0.95	0.95	-0.06
Start 9949.7 hold at 7835.2 MD									
7,900.0	90.21	268.81	7,418.8	3.0	-890.5	890.3	0.00	0.00	0.00
8,000.0	90.21	268.81	7,418.4	1.0	-990.5	990.3	0.00	0.00	0.00
8,100.0	90.21	268.81	7,418.0	-1.1	-1,090.5	1,090.3	0.00	0.00	0.00
8,200.0	90.21	268.81	7,417.6	-3.2	-1,190.4	1,190.3	0.00	0.00	0.00
8,300.0	90.21	268.81	7,417.3	-5.3	-1,290.4	1,290.3	0.00	0.00	0.00
8,400.0	90.21	268.81	7,416.9	-7.3	-1,390.4	1,390.3	0.00	0.00	0.00
8,500.0	90.21	268.81	7,416.5	-9.4	-1,490.4	1,490.3	0.00	0.00	0.00
8,600.0	90.21	268.81	7,416.2	-11.5	-1,590.3	1,590.3	0.00	0.00	0.00
8,700.0	90.21	268.81	7,415.8	-13.6	-1,690.3	1,690.3	0.00	0.00	0.00
8,800.0	90.21	268.81	7,415.4	-15.6	-1,790.3	1,790.3	0.00	0.00	0.00
8,900.0	90.21	268.81	7,415.0	-17.7	-1,890.3	1,890.3	0.00	0.00	0.00
9,000.0	90.21	268.81	7,414.7	-19.8	-1,990.3	1,990.3	0.00	0.00	0.00
9,100.0	90.21	268.81	7,414.3	-21.9	-2,090.2	2,090.3	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton H-29-30HC
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4929.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4929.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton H-29-30HC	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)
9,200.0	90.21	268.81	7,413.9	-23.9	-2,190.2	2,190.3	0.00	0.00	0.00
9,300.0	90.21	268.81	7,413.6	-26.0	-2,290.2	2,290.3	0.00	0.00	0.00
9,400.0	90.21	268.81	7,413.2	-28.1	-2,390.2	2,390.3	0.00	0.00	0.00
9,500.0	90.21	268.81	7,412.8	-30.1	-2,490.1	2,490.3	0.00	0.00	0.00
9,600.0	90.21	268.81	7,412.4	-32.2	-2,590.1	2,590.3	0.00	0.00	0.00
9,700.0	90.21	268.81	7,412.1	-34.3	-2,690.1	2,690.3	0.00	0.00	0.00
9,800.0	90.21	268.81	7,411.7	-36.4	-2,790.1	2,790.3	0.00	0.00	0.00
9,900.0	90.21	268.81	7,411.3	-38.4	-2,890.1	2,890.3	0.00	0.00	0.00
10,000.0	90.21	268.81	7,410.9	-40.5	-2,990.0	2,990.3	0.00	0.00	0.00
10,100.0	90.21	268.81	7,410.6	-42.6	-3,090.0	3,090.3	0.00	0.00	0.00
10,200.0	90.21	268.81	7,410.2	-44.7	-3,190.0	3,190.3	0.00	0.00	0.00
10,300.0	90.21	268.81	7,409.8	-46.7	-3,290.0	3,290.3	0.00	0.00	0.00
10,400.0	90.21	268.81	7,409.5	-48.8	-3,389.9	3,390.3	0.00	0.00	0.00
10,500.0	90.21	268.81	7,409.1	-50.9	-3,489.9	3,490.3	0.00	0.00	0.00
10,600.0	90.21	268.81	7,408.7	-53.0	-3,589.9	3,590.3	0.00	0.00	0.00
10,700.0	90.21	268.81	7,408.3	-55.0	-3,689.9	3,690.3	0.00	0.00	0.00
10,800.0	90.21	268.81	7,408.0	-57.1	-3,789.9	3,790.3	0.00	0.00	0.00
10,900.0	90.21	268.81	7,407.6	-59.2	-3,889.8	3,890.3	0.00	0.00	0.00
11,000.0	90.21	268.81	7,407.2	-61.3	-3,989.8	3,990.3	0.00	0.00	0.00
11,100.0	90.21	268.81	7,406.9	-63.3	-4,089.8	4,090.3	0.00	0.00	0.00
11,200.0	90.21	268.81	7,406.5	-65.4	-4,189.8	4,190.3	0.00	0.00	0.00
11,300.0	90.21	268.81	7,406.1	-67.5	-4,289.7	4,290.3	0.00	0.00	0.00
11,400.0	90.21	268.81	7,405.7	-69.6	-4,389.7	4,390.3	0.00	0.00	0.00
11,500.0	90.21	268.81	7,405.4	-71.6	-4,489.7	4,490.3	0.00	0.00	0.00
11,600.0	90.21	268.81	7,405.0	-73.7	-4,589.7	4,590.3	0.00	0.00	0.00
11,700.0	90.21	268.81	7,404.6	-75.8	-4,689.7	4,690.2	0.00	0.00	0.00
11,800.0	90.21	268.81	7,404.3	-77.9	-4,789.6	4,790.2	0.00	0.00	0.00
11,900.0	90.21	268.81	7,403.9	-79.9	-4,889.6	4,890.2	0.00	0.00	0.00
12,000.0	90.21	268.81	7,403.5	-82.0	-4,989.6	4,990.2	0.00	0.00	0.00
12,100.0	90.21	268.81	7,403.1	-84.1	-5,089.6	5,090.2	0.00	0.00	0.00
12,200.0	90.21	268.81	7,402.8	-86.2	-5,189.5	5,190.2	0.00	0.00	0.00
12,300.0	90.21	268.81	7,402.4	-88.2	-5,289.5	5,290.2	0.00	0.00	0.00
12,400.0	90.21	268.81	7,402.0	-90.3	-5,389.5	5,390.2	0.00	0.00	0.00
12,500.0	90.21	268.81	7,401.7	-92.4	-5,489.5	5,490.2	0.00	0.00	0.00
12,600.0	90.21	268.81	7,401.3	-94.5	-5,589.5	5,590.2	0.00	0.00	0.00
12,700.0	90.21	268.81	7,400.9	-96.5	-5,689.4	5,690.2	0.00	0.00	0.00
12,800.0	90.21	268.81	7,400.5	-98.6	-5,789.4	5,790.2	0.00	0.00	0.00
12,900.0	90.21	268.81	7,400.2	-100.7	-5,889.4	5,890.2	0.00	0.00	0.00
13,000.0	90.21	268.81	7,399.8	-102.8	-5,989.4	5,990.2	0.00	0.00	0.00
13,100.0	90.21	268.81	7,399.4	-104.8	-6,089.3	6,090.2	0.00	0.00	0.00
13,200.0	90.21	268.81	7,399.0	-106.9	-6,189.3	6,190.2	0.00	0.00	0.00
13,300.0	90.21	268.81	7,398.7	-109.0	-6,289.3	6,290.2	0.00	0.00	0.00
13,400.0	90.21	268.81	7,398.3	-111.1	-6,389.3	6,390.2	0.00	0.00	0.00
13,500.0	90.21	268.81	7,397.9	-113.1	-6,489.3	6,490.2	0.00	0.00	0.00
13,600.0	90.21	268.81	7,397.6	-115.2	-6,589.2	6,590.2	0.00	0.00	0.00
13,700.0	90.21	268.81	7,397.2	-117.3	-6,689.2	6,690.2	0.00	0.00	0.00
13,800.0	90.21	268.81	7,396.8	-119.4	-6,789.2	6,790.2	0.00	0.00	0.00
13,900.0	90.21	268.81	7,396.4	-121.4	-6,889.2	6,890.2	0.00	0.00	0.00
14,000.0	90.21	268.81	7,396.1	-123.5	-6,989.1	6,990.2	0.00	0.00	0.00
14,100.0	90.21	268.81	7,395.7	-125.6	-7,089.1	7,090.2	0.00	0.00	0.00
14,200.0	90.21	268.81	7,395.3	-127.7	-7,189.1	7,190.2	0.00	0.00	0.00
14,300.0	90.21	268.81	7,395.0	-129.7	-7,289.1	7,290.2	0.00	0.00	0.00
14,400.0	90.21	268.81	7,394.6	-131.8	-7,389.1	7,390.2	0.00	0.00	0.00
14,500.0	90.21	268.81	7,394.2	-133.9	-7,489.0	7,490.2	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton H-29-30HC
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4929.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4929.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton H-29-30HC	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)	
14,600.0	90.21	268.81	7,393.8	-135.9	-7,589.0	7,590.2	0.00	0.00	0.00	
14,700.0	90.21	268.81	7,393.5	-138.0	-7,689.0	7,690.2	0.00	0.00	0.00	
14,800.0	90.21	268.81	7,393.1	-140.1	-7,789.0	7,790.2	0.00	0.00	0.00	
14,900.0	90.21	268.81	7,392.7	-142.2	-7,888.9	7,890.2	0.00	0.00	0.00	
15,000.0	90.21	268.81	7,392.4	-144.2	-7,988.9	7,990.2	0.00	0.00	0.00	
15,100.0	90.21	268.81	7,392.0	-146.3	-8,088.9	8,090.2	0.00	0.00	0.00	
15,200.0	90.21	268.81	7,391.6	-148.4	-8,188.9	8,190.2	0.00	0.00	0.00	
15,300.0	90.21	268.81	7,391.2	-150.5	-8,288.9	8,290.2	0.00	0.00	0.00	
15,400.0	90.21	268.81	7,390.9	-152.5	-8,388.8	8,390.2	0.00	0.00	0.00	
15,500.0	90.21	268.81	7,390.5	-154.6	-8,488.8	8,490.2	0.00	0.00	0.00	
15,600.0	90.21	268.81	7,390.1	-156.7	-8,588.8	8,590.2	0.00	0.00	0.00	
15,700.0	90.21	268.81	7,389.8	-158.8	-8,688.8	8,690.2	0.00	0.00	0.00	
15,800.0	90.21	268.81	7,389.4	-160.8	-8,788.7	8,790.2	0.00	0.00	0.00	
15,900.0	90.21	268.81	7,389.0	-162.9	-8,888.7	8,890.2	0.00	0.00	0.00	
16,000.0	90.21	268.81	7,388.6	-165.0	-8,988.7	8,990.2	0.00	0.00	0.00	
16,100.0	90.21	268.81	7,388.3	-167.1	-9,088.7	9,090.2	0.00	0.00	0.00	
16,200.0	90.21	268.81	7,387.9	-169.1	-9,188.7	9,190.2	0.00	0.00	0.00	
16,300.0	90.21	268.81	7,387.5	-171.2	-9,288.6	9,290.2	0.00	0.00	0.00	
16,400.0	90.21	268.81	7,387.1	-173.3	-9,388.6	9,390.2	0.00	0.00	0.00	
16,500.0	90.21	268.81	7,386.8	-175.4	-9,488.6	9,490.2	0.00	0.00	0.00	
16,600.0	90.21	268.81	7,386.4	-177.4	-9,588.6	9,590.2	0.00	0.00	0.00	
16,700.0	90.21	268.81	7,386.0	-179.5	-9,688.5	9,690.2	0.00	0.00	0.00	
16,800.0	90.21	268.81	7,385.7	-181.6	-9,788.5	9,790.2	0.00	0.00	0.00	
16,900.0	90.21	268.81	7,385.3	-183.7	-9,888.5	9,890.2	0.00	0.00	0.00	
17,000.0	90.21	268.81	7,384.9	-185.7	-9,988.5	9,990.2	0.00	0.00	0.00	
17,100.0	90.21	268.81	7,384.5	-187.8	-10,088.5	10,090.2	0.00	0.00	0.00	
17,200.0	90.21	268.81	7,384.2	-189.9	-10,188.4	10,190.2	0.00	0.00	0.00	
17,300.0	90.21	268.81	7,383.8	-192.0	-10,288.4	10,290.2	0.00	0.00	0.00	
17,400.0	90.21	268.81	7,383.4	-194.0	-10,388.4	10,390.2	0.00	0.00	0.00	
17,500.0	90.21	268.81	7,383.1	-196.1	-10,488.4	10,490.2	0.00	0.00	0.00	
17,600.0	90.21	268.81	7,382.7	-198.2	-10,588.3	10,590.2	0.00	0.00	0.00	
17,700.0	90.21	268.81	7,382.3	-200.3	-10,688.3	10,690.2	0.00	0.00	0.00	
17,784.9	90.21	268.81	7,382.0	-202.0	-10,773.2	10,775.1	0.00	0.00	0.00	
TD at 17784.9 - BHL 1645'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		
- hit/miss target										
- Shape								Longitude		
SHL 1659'FNL, 355'FWL - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,443,476.16	3,196,881.39	40.548583 -104.791531		
BHL 1645'FNL, 470'FWL - plan hits target center - Point	0.00	0.00	7,382.0	-202.0	-10,773.2	1,443,188.07	3,186,110.47	40.548022 -104.830296		
LPL 1645'FNL, 470'FEL, - plan hits target center - Point	0.00	0.00	7,419.0	4.4	-825.4	1,443,473.95	3,196,056.02	40.548595 -104.794501		

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton H-29-30HC
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4929.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4929.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton H-29-30HC	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 (")	
7,834.9	7,419.0	7"	7	8-3/4	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2,500.0	2,500.0	0.0	0.0	KOP - Start Build 1.50	
3,745.3	3,741.1	17.2	-95.4	Start Drop -2.00	
4,004.5	4,000.0	19.3	-106.9	Start 2703.1 hold at 4004.5 MD	
6,707.6	6,703.1	19.3	-106.9	Start Build 8.00	
7,835.2	7,419.0	4.4	-825.7	Start 9949.7 hold at 7835.2 MD	
17,784.9	7,382.0	-202.0	-10,773.2	TD at 17784.9	