

Bayswater Exploration & Production, LLC

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

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

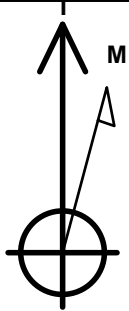
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone

Ground Elevation: 4905.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1443430.96	3196880.09	40.548459	-104.791537	
RKB - 23' WELL @ 4928.0ft (RKB - 23')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1704'FNL, 355'FWL, SEC.28	1.0	0.0	0.0	Point
BHL 2305'FNL, 470'FWL, SEC.30	7381.0	-817.4	-10775.2	Point
LPL 2305'FNL, 470'FEL, SEC.29	7418.0	-611.0	-847.4	Point



Azimuths to True North
Magnetic North: 8.26°

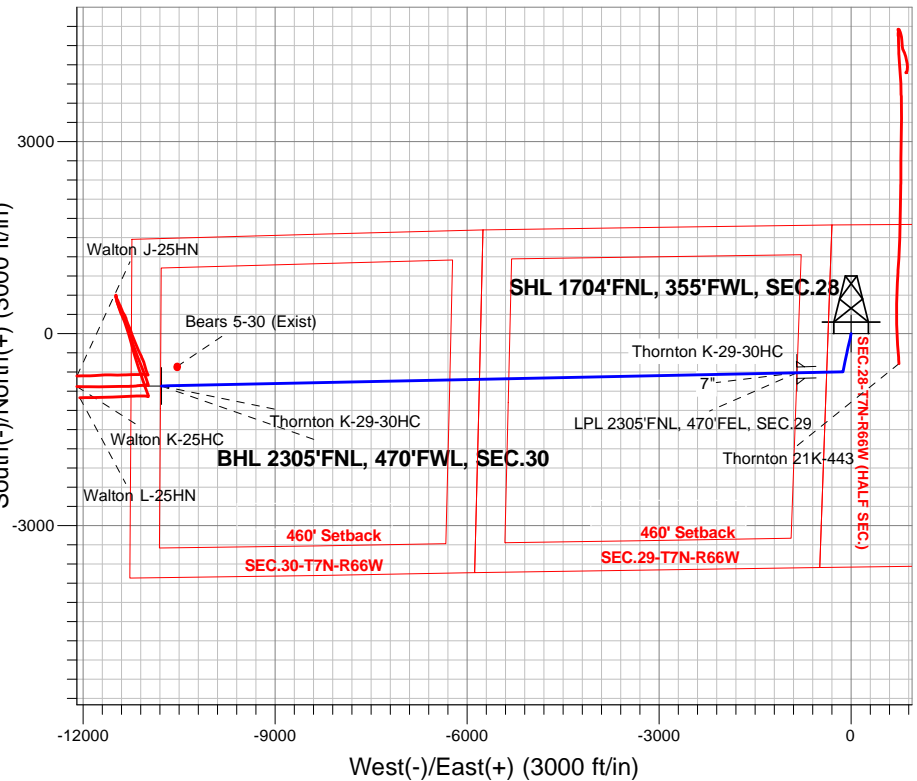
Magnetic Field
Strength: 52711.2snT
Dip Angle: 67.00°
Date: 2/22/2016
Model: IGRF2010

Thornton 28-H Pad Sec.28-T7N-R66W
Thornton K-29-30HC
Plan #3 (6-17-16)
10:49, June 21 2016

ANNOTATIONS

TVD	MD	Annotation
1400.0	1400.0	KOP - Start Build 1.50
5690.2	5731.0	Start Drop -2.00
6702.1	6744.3	Start Build 8.00
7418.0	7871.6	Start 9930.0 hold at 7871.6 MD
7381.6	17801.6	TD at 17801.6

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

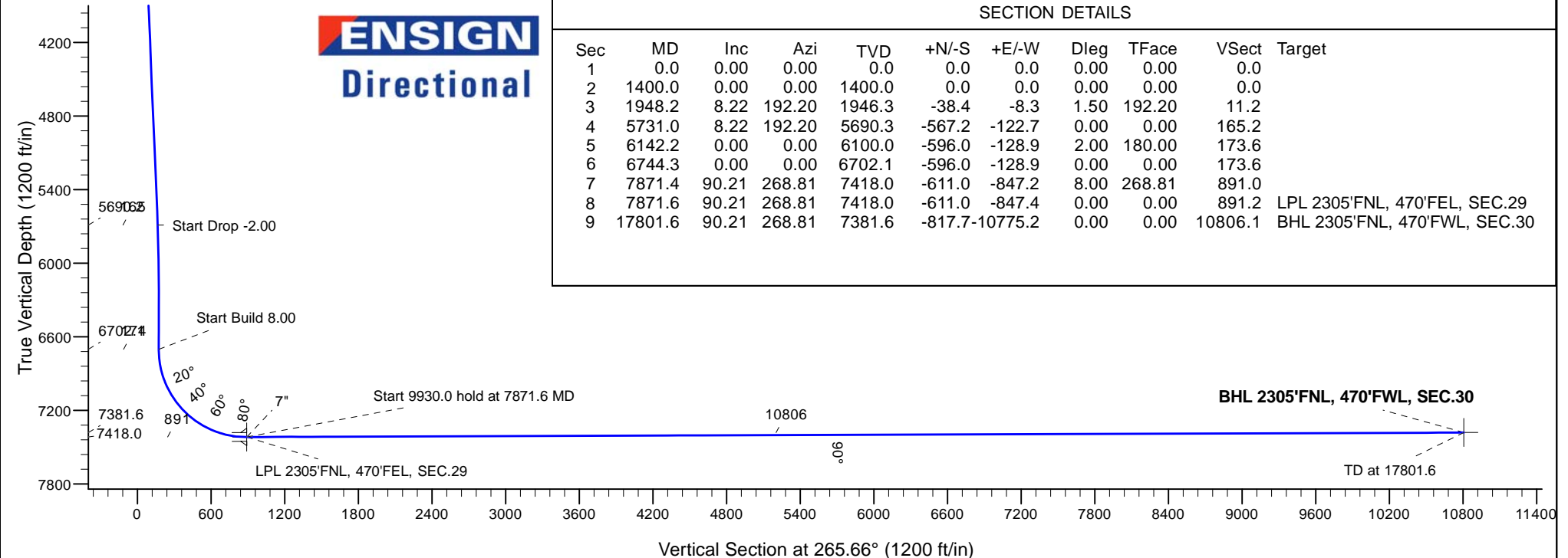


West(-)/East(+) (3000 ft/in)

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	1400.0	0.00	0.00	1400.0	0.0	0.0	0.00	0.00	0.0	
3	1948.2	8.22	192.20	1946.3	-38.4	-8.3	1.50	192.20	11.2	
4	5731.0	8.22	192.20	5690.3	-567.2	-122.7	0.00	0.00	165.2	
5	6142.2	0.00	0.00	6100.0	-596.0	-128.9	2.00	180.00	173.6	
6	6744.3	0.00	0.00	6702.1	-596.0	-128.9	0.00	0.00	173.6	
7	7871.4	90.21	268.81	7418.0	-611.0	-847.2	8.00	268.81	891.0	
8	7871.6	90.21	268.81	7418.0	-611.0	-847.4	0.00	0.00	891.2	LPL 2305'FNL, 470'FEL, SEC.29
9	17801.6	90.21	268.81	7381.6	-817.7	-10775.2	0.00	0.00	10806.1	BHL 2305'FNL, 470'FWL, SEC.30

ENSIGN
Directional





Bayswater Exploration & Production, LLC

SEC.28-T7N-R66W

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

Thornton K-29-30HC

Wellbore #1

Plan: Plan #3 (6-17-16)

Standard Planning Report

21 June, 2016



BAYSWATER
EXPLORATION & PRODUCTION, LLC

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton K-29-30HC
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4928.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4928.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton K-29-30HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (6-17-16)		

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 K-29-30HC			
Well Position	+N/-S	-150.1 ft	Northing:	1,443,430.96 usft
	+E/-W	-5.3 ft	Easting:	3,196,880.09 usft
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft
			Ground Level:	4,905.0 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 #3 (6-17-16)			
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	265.66

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	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,948.2	8.22	192.20	1,946.3	-38.4	-8.3	1.50	1.50	0.00	192.20	
5,731.0	8.22	192.20	5,690.3	-567.2	-122.7	0.00	0.00	0.00	0.00	
6,142.2	0.00	0.00	6,100.0	-596.0	-128.9	2.00	-2.00	0.00	180.00	
6,744.3	0.00	0.00	6,702.1	-596.0	-128.9	0.00	0.00	0.00	0.00	
7,871.4	90.21	268.81	7,418.0	-611.0	-847.2	8.00	8.00	0.00	268.81	
7,871.6	90.21	268.81	7,418.0	-611.0	-847.4	0.00	0.00	0.00	0.00	LPL 2305'FNL, 470'F
17,801.6	90.21	268.81	7,381.6	-817.7	-10,775.2	0.00	0.00	0.00	0.00	BHL 2305'FNL, 470'F

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Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton K-29-30HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (6-17-16)		

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 1704'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
KOP - Start Build 1.50									
1,500.0	1.50	192.20	1,500.0	-1.3	-0.3	0.4	1.50	1.50	0.00
1,600.0	3.00	192.20	1,599.9	-5.1	-1.1	1.5	1.50	1.50	0.00
1,700.0	4.50	192.20	1,699.7	-11.5	-2.5	3.4	1.50	1.50	0.00
1,800.0	6.00	192.20	1,799.3	-20.5	-4.4	6.0	1.50	1.50	0.00
1,900.0	7.50	192.20	1,898.6	-31.9	-6.9	9.3	1.50	1.50	0.00
1,948.2	8.22	192.20	1,946.3	-38.4	-8.3	11.2	1.50	1.50	0.00
2,000.0	8.22	192.20	1,997.6	-45.6	-9.9	13.3	0.00	0.00	0.00
2,100.0	8.22	192.20	2,096.6	-59.6	-12.9	17.4	0.00	0.00	0.00
2,200.0	8.22	192.20	2,195.5	-73.6	-15.9	21.4	0.00	0.00	0.00
2,300.0	8.22	192.20	2,294.5	-87.6	-18.9	25.5	0.00	0.00	0.00
2,400.0	8.22	192.20	2,393.5	-101.5	-22.0	29.6	0.00	0.00	0.00
2,500.0	8.22	192.20	2,492.4	-115.5	-25.0	33.7	0.00	0.00	0.00
2,600.0	8.22	192.20	2,591.4	-129.5	-28.0	37.7	0.00	0.00	0.00
2,700.0	8.22	192.20	2,690.4	-143.5	-31.0	41.8	0.00	0.00	0.00
2,800.0	8.22	192.20	2,789.4	-157.5	-34.1	45.9	0.00	0.00	0.00
2,900.0	8.22	192.20	2,888.3	-171.4	-37.1	49.9	0.00	0.00	0.00
3,000.0	8.22	192.20	2,987.3	-185.4	-40.1	54.0	0.00	0.00	0.00
3,100.0	8.22	192.20	3,086.3	-199.4	-43.1	58.1	0.00	0.00	0.00
3,200.0	8.22	192.20	3,185.2	-213.4	-46.1	62.2	0.00	0.00	0.00
3,300.0	8.22	192.20	3,284.2	-227.4	-49.2	66.2	0.00	0.00	0.00
3,400.0	8.22	192.20	3,383.2	-241.3	-52.2	70.3	0.00	0.00	0.00
3,500.0	8.22	192.20	3,482.2	-255.3	-55.2	74.4	0.00	0.00	0.00
3,600.0	8.22	192.20	3,581.1	-269.3	-58.2	78.5	0.00	0.00	0.00
3,700.0	8.22	192.20	3,680.1	-283.3	-61.3	82.5	0.00	0.00	0.00
3,800.0	8.22	192.20	3,779.1	-297.3	-64.3	86.6	0.00	0.00	0.00
3,900.0	8.22	192.20	3,878.1	-311.2	-67.3	90.7	0.00	0.00	0.00
4,000.0	8.22	192.20	3,977.0	-325.2	-70.3	94.7	0.00	0.00	0.00
4,100.0	8.22	192.20	4,076.0	-339.2	-73.4	98.8	0.00	0.00	0.00
4,200.0	8.22	192.20	4,175.0	-353.2	-76.4	102.9	0.00	0.00	0.00
4,300.0	8.22	192.20	4,273.9	-367.2	-79.4	107.0	0.00	0.00	0.00
4,400.0	8.22	192.20	4,372.9	-381.1	-82.4	111.0	0.00	0.00	0.00
4,500.0	8.22	192.20	4,471.9	-395.1	-85.5	115.1	0.00	0.00	0.00
4,600.0	8.22	192.20	4,570.9	-409.1	-88.5	119.2	0.00	0.00	0.00
4,700.0	8.22	192.20	4,669.8	-423.1	-91.5	123.3	0.00	0.00	0.00
4,800.0	8.22	192.20	4,768.8	-437.1	-94.5	127.3	0.00	0.00	0.00
4,900.0	8.22	192.20	4,867.8	-451.0	-97.5	131.4	0.00	0.00	0.00

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Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton K-29-30HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (6-17-16)		

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	8.22	192.20	4,966.7	-465.0	-100.6	135.5	0.00	0.00	0.00
5,100.0	8.22	192.20	5,065.7	-479.0	-103.6	139.5	0.00	0.00	0.00
5,200.0	8.22	192.20	5,164.7	-493.0	-106.6	143.6	0.00	0.00	0.00
5,300.0	8.22	192.20	5,263.7	-507.0	-109.6	147.7	0.00	0.00	0.00
5,400.0	8.22	192.20	5,362.6	-520.9	-112.7	151.8	0.00	0.00	0.00
5,500.0	8.22	192.20	5,461.6	-534.9	-115.7	155.8	0.00	0.00	0.00
5,600.0	8.22	192.20	5,560.6	-548.9	-118.7	159.9	0.00	0.00	0.00
5,700.0	8.22	192.20	5,659.5	-562.9	-121.7	164.0	0.00	0.00	0.00
5,731.0	8.22	192.20	5,690.2	-567.2	-122.7	165.2	0.00	0.00	0.00
Start Drop -2.00									
5,800.0	6.84	192.20	5,758.6	-576.0	-124.6	167.8	2.00	-2.00	0.00
5,900.0	4.84	192.20	5,858.1	-586.0	-126.7	170.7	2.00	-2.00	0.00
6,000.0	2.84	192.20	5,957.9	-592.6	-128.2	172.6	2.00	-2.00	0.00
6,100.0	0.84	192.20	6,057.8	-595.7	-128.8	173.5	2.00	-2.00	0.00
6,142.2	0.00	0.00	6,100.0	-596.0	-128.9	173.6	2.00	-2.00	0.00
6,200.0	0.00	0.00	6,157.8	-596.0	-128.9	173.6	0.00	0.00	0.00
6,300.0	0.00	0.00	6,257.8	-596.0	-128.9	173.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,357.8	-596.0	-128.9	173.6	0.00	0.00	0.00
6,500.0	0.00	0.00	6,457.8	-596.0	-128.9	173.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,557.8	-596.0	-128.9	173.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,657.8	-596.0	-128.9	173.6	0.00	0.00	0.00
6,744.3	0.00	0.00	6,702.1	-596.0	-128.9	173.6	0.00	0.00	0.00
Start Build 8.00									
6,800.0	4.46	268.81	6,757.8	-596.0	-131.1	175.8	8.00	8.00	0.00
6,900.0	12.46	268.81	6,856.6	-596.4	-145.8	190.5	8.00	8.00	0.00
7,000.0	20.46	268.81	6,952.4	-596.9	-174.1	218.7	8.00	8.00	0.00
7,100.0	28.47	268.81	7,043.4	-597.8	-215.4	260.1	8.00	8.00	0.00
7,200.0	36.47	268.81	7,127.7	-598.9	-269.1	313.6	8.00	8.00	0.00
7,300.0	44.47	268.81	7,203.7	-600.3	-333.9	378.4	8.00	8.00	0.00
7,400.0	52.48	268.81	7,269.9	-601.8	-408.7	453.1	8.00	8.00	0.00
7,500.0	60.48	268.81	7,325.1	-603.6	-492.0	536.2	8.00	8.00	0.00
7,600.0	68.49	268.81	7,368.1	-605.4	-582.1	626.3	8.00	8.00	0.00
7,700.0	76.49	268.81	7,398.2	-607.4	-677.4	721.4	8.00	8.00	0.00
7,800.0	84.49	268.81	7,414.7	-609.5	-775.9	819.8	8.00	8.00	0.00
7,871.4	90.21	268.81	7,418.0	-611.0	-847.2	891.0	8.00	8.00	0.00
7,871.6	90.21	268.81	7,418.0	-611.0	-847.4	891.2	0.00	0.00	0.00
Start 9930.0 hold at 7871.6 MD - 7" - LPL 2305'FNL, 470'FEL, SEC.29									
7,900.0	90.21	268.81	7,417.9	-611.6	-875.8	919.6	0.00	0.00	0.00
8,000.0	90.21	268.81	7,417.5	-613.6	-975.8	1,019.4	0.00	0.00	0.00
8,100.0	90.21	268.81	7,417.2	-615.7	-1,075.8	1,119.3	0.00	0.00	0.00
8,200.0	90.21	268.81	7,416.8	-617.8	-1,175.7	1,219.1	0.00	0.00	0.00
8,300.0	90.21	268.81	7,416.4	-619.9	-1,275.7	1,319.0	0.00	0.00	0.00
8,400.0	90.21	268.81	7,416.1	-622.0	-1,375.7	1,418.8	0.00	0.00	0.00
8,500.0	90.21	268.81	7,415.7	-624.0	-1,475.7	1,518.7	0.00	0.00	0.00
8,600.0	90.21	268.81	7,415.3	-626.1	-1,575.6	1,618.5	0.00	0.00	0.00
8,700.0	90.21	268.81	7,415.0	-628.2	-1,675.6	1,718.4	0.00	0.00	0.00
8,800.0	90.21	268.81	7,414.6	-630.3	-1,775.6	1,818.2	0.00	0.00	0.00
8,900.0	90.21	268.81	7,414.2	-632.4	-1,875.6	1,918.1	0.00	0.00	0.00
9,000.0	90.21	268.81	7,413.9	-634.5	-1,975.6	2,017.9	0.00	0.00	0.00
9,100.0	90.21	268.81	7,413.5	-636.5	-2,075.5	2,117.8	0.00	0.00	0.00
9,200.0	90.21	268.81	7,413.1	-638.6	-2,175.5	2,217.6	0.00	0.00	0.00
9,300.0	90.21	268.81	7,412.8	-640.7	-2,275.5	2,317.4	0.00	0.00	0.00
9,400.0	90.21	268.81	7,412.4	-642.8	-2,375.5	2,417.3	0.00	0.00	0.00

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Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4928.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4928.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton K-29-30HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (6-17-16)		

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)	
9,500.0	90.21	268.81	7,412.0	-644.9	-2,475.4	2,517.1	0.00	0.00	0.00	
9,600.0	90.21	268.81	7,411.7	-646.9	-2,575.4	2,617.0	0.00	0.00	0.00	
9,700.0	90.21	268.81	7,411.3	-649.0	-2,675.4	2,716.8	0.00	0.00	0.00	
9,800.0	90.21	268.81	7,410.9	-651.1	-2,775.4	2,816.7	0.00	0.00	0.00	
9,900.0	90.21	268.81	7,410.6	-653.2	-2,875.4	2,916.5	0.00	0.00	0.00	
10,000.0	90.21	268.81	7,410.2	-655.3	-2,975.3	3,016.4	0.00	0.00	0.00	
10,100.0	90.21	268.81	7,409.8	-657.4	-3,075.3	3,116.2	0.00	0.00	0.00	
10,200.0	90.21	268.81	7,409.5	-659.4	-3,175.3	3,216.1	0.00	0.00	0.00	
10,300.0	90.21	268.81	7,409.1	-661.5	-3,275.3	3,315.9	0.00	0.00	0.00	
10,400.0	90.21	268.81	7,408.7	-663.6	-3,375.2	3,415.8	0.00	0.00	0.00	
10,500.0	90.21	268.81	7,408.4	-665.7	-3,475.2	3,515.6	0.00	0.00	0.00	
10,600.0	90.21	268.81	7,408.0	-667.8	-3,575.2	3,615.5	0.00	0.00	0.00	
10,700.0	90.21	268.81	7,407.6	-669.8	-3,675.2	3,715.3	0.00	0.00	0.00	
10,800.0	90.21	268.81	7,407.3	-671.9	-3,775.2	3,815.2	0.00	0.00	0.00	
10,900.0	90.21	268.81	7,406.9	-674.0	-3,875.1	3,915.0	0.00	0.00	0.00	
11,000.0	90.21	268.81	7,406.5	-676.1	-3,975.1	4,014.9	0.00	0.00	0.00	
11,100.0	90.21	268.81	7,406.2	-678.2	-4,075.1	4,114.7	0.00	0.00	0.00	
11,200.0	90.21	268.81	7,405.8	-680.3	-4,175.1	4,214.6	0.00	0.00	0.00	
11,300.0	90.21	268.81	7,405.4	-682.3	-4,275.0	4,314.4	0.00	0.00	0.00	
11,400.0	90.21	268.81	7,405.1	-684.4	-4,375.0	4,414.3	0.00	0.00	0.00	
11,500.0	90.21	268.81	7,404.7	-686.5	-4,475.0	4,514.1	0.00	0.00	0.00	
11,600.0	90.21	268.81	7,404.3	-688.6	-4,575.0	4,614.0	0.00	0.00	0.00	
11,700.0	90.21	268.81	7,404.0	-690.7	-4,675.0	4,713.8	0.00	0.00	0.00	
11,800.0	90.21	268.81	7,403.6	-692.8	-4,774.9	4,813.7	0.00	0.00	0.00	
11,900.0	90.21	268.81	7,403.2	-694.8	-4,874.9	4,913.5	0.00	0.00	0.00	
12,000.0	90.21	268.81	7,402.9	-696.9	-4,974.9	5,013.4	0.00	0.00	0.00	
12,100.0	90.21	268.81	7,402.5	-699.0	-5,074.9	5,113.2	0.00	0.00	0.00	
12,200.0	90.21	268.81	7,402.1	-701.1	-5,174.8	5,213.1	0.00	0.00	0.00	
12,300.0	90.21	268.81	7,401.8	-703.2	-5,274.8	5,312.9	0.00	0.00	0.00	
12,400.0	90.21	268.81	7,401.4	-705.2	-5,374.8	5,412.8	0.00	0.00	0.00	
12,500.0	90.21	268.81	7,401.0	-707.3	-5,474.8	5,512.6	0.00	0.00	0.00	
12,600.0	90.21	268.81	7,400.7	-709.4	-5,574.8	5,612.5	0.00	0.00	0.00	
12,700.0	90.21	268.81	7,400.3	-711.5	-5,674.7	5,712.3	0.00	0.00	0.00	
12,800.0	90.21	268.81	7,399.9	-713.6	-5,774.7	5,812.1	0.00	0.00	0.00	
12,900.0	90.21	268.81	7,399.6	-715.7	-5,874.7	5,912.0	0.00	0.00	0.00	
13,000.0	90.21	268.81	7,399.2	-717.7	-5,974.7	6,011.8	0.00	0.00	0.00	
13,100.0	90.21	268.81	7,398.8	-719.8	-6,074.6	6,111.7	0.00	0.00	0.00	
13,200.0	90.21	268.81	7,398.5	-721.9	-6,174.6	6,211.5	0.00	0.00	0.00	
13,300.0	90.21	268.81	7,398.1	-724.0	-6,274.6	6,311.4	0.00	0.00	0.00	
13,400.0	90.21	268.81	7,397.7	-726.1	-6,374.6	6,411.2	0.00	0.00	0.00	
13,500.0	90.21	268.81	7,397.4	-728.1	-6,474.6	6,511.1	0.00	0.00	0.00	
13,600.0	90.21	268.81	7,397.0	-730.2	-6,574.5	6,610.9	0.00	0.00	0.00	
13,700.0	90.21	268.81	7,396.6	-732.3	-6,674.5	6,710.8	0.00	0.00	0.00	
13,800.0	90.21	268.81	7,396.3	-734.4	-6,774.5	6,810.6	0.00	0.00	0.00	
13,900.0	90.21	268.81	7,395.9	-736.5	-6,874.5	6,910.5	0.00	0.00	0.00	
14,000.0	90.21	268.81	7,395.5	-738.6	-6,974.4	7,010.3	0.00	0.00	0.00	
14,100.0	90.21	268.81	7,395.2	-740.6	-7,074.4	7,110.2	0.00	0.00	0.00	
14,200.0	90.21	268.81	7,394.8	-742.7	-7,174.4	7,210.0	0.00	0.00	0.00	
14,300.0	90.21	268.81	7,394.4	-744.8	-7,274.4	7,309.9	0.00	0.00	0.00	
14,400.0	90.21	268.81	7,394.1	-746.9	-7,374.4	7,409.7	0.00	0.00	0.00	
14,500.0	90.21	268.81	7,393.7	-749.0	-7,474.3	7,509.6	0.00	0.00	0.00	
14,600.0	90.21	268.81	7,393.3	-751.0	-7,574.3	7,609.4	0.00	0.00	0.00	
14,700.0	90.21	268.81	7,393.0	-753.1	-7,674.3	7,709.3	0.00	0.00	0.00	
14,800.0	90.21	268.81	7,392.6	-755.2	-7,774.3	7,809.1	0.00	0.00	0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton K-29-30HC
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4928.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4928.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton K-29-30HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (6-17-16)		

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)	
14,900.0	90.21	268.81	7,392.2	-757.3	-7,874.2	7,909.0	0.00	0.00	0.00	
15,000.0	90.21	268.81	7,391.9	-759.4	-7,974.2	8,008.8	0.00	0.00	0.00	
15,100.0	90.21	268.81	7,391.5	-761.5	-8,074.2	8,108.7	0.00	0.00	0.00	
15,200.0	90.21	268.81	7,391.1	-763.5	-8,174.2	8,208.5	0.00	0.00	0.00	
15,300.0	90.21	268.81	7,390.8	-765.6	-8,274.2	8,308.4	0.00	0.00	0.00	
15,400.0	90.21	268.81	7,390.4	-767.7	-8,374.1	8,408.2	0.00	0.00	0.00	
15,500.0	90.21	268.81	7,390.0	-769.8	-8,474.1	8,508.1	0.00	0.00	0.00	
15,600.0	90.21	268.81	7,389.7	-771.9	-8,574.1	8,607.9	0.00	0.00	0.00	
15,700.0	90.21	268.81	7,389.3	-773.9	-8,674.1	8,707.8	0.00	0.00	0.00	
15,800.0	90.21	268.81	7,388.9	-776.0	-8,774.0	8,807.6	0.00	0.00	0.00	
15,900.0	90.21	268.81	7,388.6	-778.1	-8,874.0	8,907.5	0.00	0.00	0.00	
16,000.0	90.21	268.81	7,388.2	-780.2	-8,974.0	9,007.3	0.00	0.00	0.00	
16,100.0	90.21	268.81	7,387.8	-782.3	-9,074.0	9,107.2	0.00	0.00	0.00	
16,200.0	90.21	268.81	7,387.5	-784.4	-9,173.9	9,207.0	0.00	0.00	0.00	
16,300.0	90.21	268.81	7,387.1	-786.4	-9,273.9	9,306.8	0.00	0.00	0.00	
16,400.0	90.21	268.81	7,386.7	-788.5	-9,373.9	9,406.7	0.00	0.00	0.00	
16,500.0	90.21	268.81	7,386.4	-790.6	-9,473.9	9,506.5	0.00	0.00	0.00	
16,600.0	90.21	268.81	7,386.0	-792.7	-9,573.9	9,606.4	0.00	0.00	0.00	
16,700.0	90.21	268.81	7,385.6	-794.8	-9,673.8	9,706.2	0.00	0.00	0.00	
16,800.0	90.21	268.81	7,385.3	-796.9	-9,773.8	9,806.1	0.00	0.00	0.00	
16,900.0	90.21	268.81	7,384.9	-798.9	-9,873.8	9,905.9	0.00	0.00	0.00	
17,000.0	90.21	268.81	7,384.5	-801.0	-9,973.8	10,005.8	0.00	0.00	0.00	
17,100.0	90.21	268.81	7,384.2	-803.1	-10,073.7	10,105.6	0.00	0.00	0.00	
17,200.0	90.21	268.81	7,383.8	-805.2	-10,173.7	10,205.5	0.00	0.00	0.00	
17,300.0	90.21	268.81	7,383.4	-807.3	-10,273.7	10,305.3	0.00	0.00	0.00	
17,400.0	90.21	268.81	7,383.1	-809.3	-10,373.7	10,405.2	0.00	0.00	0.00	
17,500.0	90.21	268.81	7,382.7	-811.4	-10,473.7	10,505.0	0.00	0.00	0.00	
17,600.0	90.21	268.81	7,382.3	-813.5	-10,573.6	10,604.9	0.00	0.00	0.00	
17,700.0	90.21	268.81	7,382.0	-815.6	-10,673.6	10,704.7	0.00	0.00	0.00	
17,800.0	90.21	268.81	7,381.6	-817.7	-10,773.6	10,804.6	0.00	0.00	0.00	
17,801.6	90.21	268.81	7,381.6	-817.7	-10,775.2	10,806.1	0.00	0.00	0.00	
TD at 17801.6 - BHL 2305'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 1704'FNL, 355'FWL	0.00	0.00	1.0	0.0	0.0	1,443,430.97	3,196,880.09	40.548459		
- plan hits target center										
- Point										
BHL 2305'FNL, 470'FWL	0.00	0.00	7,381.0	-817.4	-10,775.2	1,442,527.57	3,186,112.13	40.546209		
- plan misses target center by 0.7ft at 17801.6ft MD (7381.6 TVD, -817.7 N, -10775.2 E)										
- Point										
LPL 2305'FNL, 470'FEL,	0.00	0.00	7,418.0	-611.0	-847.4	1,442,813.27	3,196,037.66	40.546782		
- plan hits target center										
- Point										

Database:	US_EDM	Local Co-ordinate Reference:	Well Thornton K-29-30HC
Company:	Bayswater Exploration & Production, LLC	TVD Reference:	WELL @ 4928.0ft (RKB - 23')
Project:	SEC.28-T7N-R66W	MD Reference:	WELL @ 4928.0ft (RKB - 23')
Site:	Thornton 28-H Pad Sec.28-T7N-R66W	North Reference:	True
Well:	Thornton K-29-30HC	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (6-17-16)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,871.6	7,418.0	7"	7	8-3/4	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,400.0	1,400.0	0.0	0.0	KOP - Start Build 1.50	
5,731.0	5,690.2	-567.2	-122.7	Start Drop -2.00	
6,744.3	6,702.1	-596.0	-128.9	Start Build 8.00	
7,871.6	7,418.0	-611.0	-847.4	Start 9930.0 hold at 7871.6 MD	
17,801.6	7,381.6	-817.7	-10,775.2	TD at 17801.6	