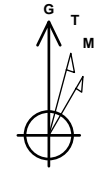




Company: B.P.  
Project: La Plata County, CO NAD83  
Site: Secord Pad  
Well: Secord 17U-34-06 3  
Wellbore: Lateral 2  
Design: Plan #2

PROJECT DETAILS: La Plata County, CO NAD83

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Southern Zone  
System Datum: Mean Sea Level  
Local North: Grid



Azimuths to Grid North  
True North: 1.24°  
Magnetic North: 10.46°

Magnetic Field  
Strength: 50120.3snT  
Dip Angle: 63.67°  
Date: 1/3/2018  
Model: HDGM

WELL DETAILS: Secord 17U-34-06 3

GL 7221' & RKB 11' @ 7232.00usft (Aztec 507)  
+N/-S +E/-W Northing Easting Latitude Longitude  
0.00 0.00 1196114.81 2409107.39 37.1876430 -107.5285171

Plan: Plan #2 (Secord 17U-34-06 3/Lateral 2)

Created By: Janie Collins Date: 12:49, March 22 2018

DESIGN TARGET DETAILS

Name TVD +N/-S +E/-W Northing Easting  
Secord 3 Lat 2 BHL 3177.00 593.21 3378.63 1196708.02 2412486.02

SECTION DETAILS

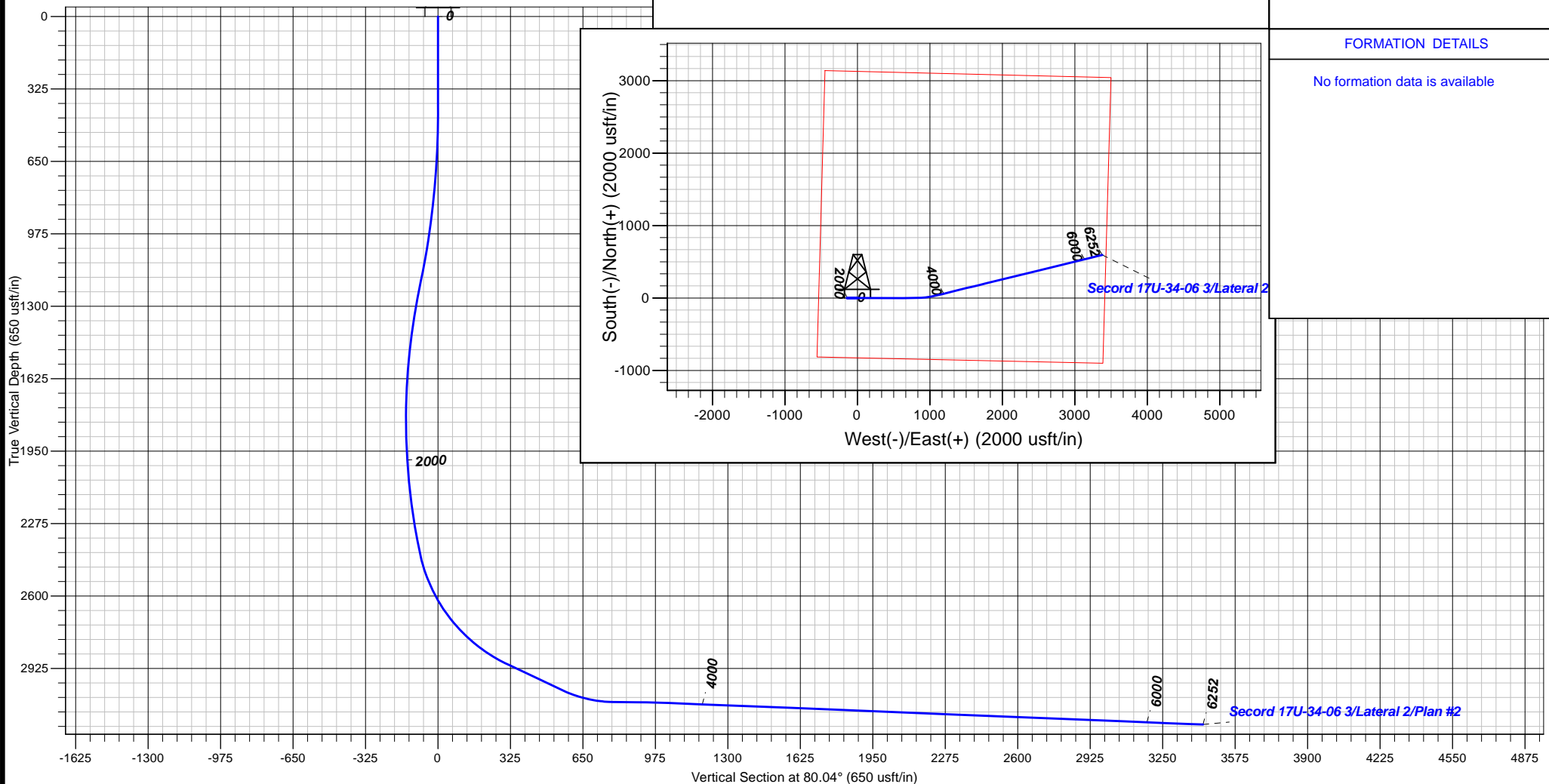
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
3358.70	65.00	90.00	3022.33	0.00	564.72	0.00	0.00	556.21	
3608.66	90.00	90.00	3076.00	0.00	806.82	10.00	0.00	794.67	
3886.59	87.69	76.29	3081.63	33.06	1082.04	5.00	-99.66	1071.46	
6252.43	87.69	76.29	3177.00	593.21	3378.63	0.00	0.00	3430.31	Secord 3 Lat 2 BHL

CASING DETAILS

No casing data is available

FORMATION DETAILS

No formation data is available





**B.P.**

**La Plata County, CO NAD83**

**Secord Pad**

**Secord 17U-34-06 3**

**Lateral 2**

**Plan: Plan #2**

## **Standard Planning Report**

**22 March, 2018**





<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well Secord 17U-34-06 3
<b>Company:</b>	B.P.	<b>TVD Reference:</b>	GL 7221' & RKB 11' @ 7232.00usft (Aztec 507)
<b>Project:</b>	La Plata County, CO NAD83	<b>MD Reference:</b>	GL 7221' & RKB 11' @ 7232.00usft (Aztec 507)
<b>Site:</b>	Secord Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Secord 17U-34-06 3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral 2		
<b>Design:</b>	Plan #2		

<b>Project</b>	La Plata County, CO NAD83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Southern Zone		

Site		Secord Pad			
Site Position:		Northing:	1,196,144.95 usft	Latitude:	37.1877252
From:	Map	Easting:	2,409,098.88 usft	Longitude:	-107.5285486
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.24 °

Well	Secord 17U-34-06 3					
Well Position	+N/-S	-30.14 usft	Northing:	1,196,114.81 usft	Latitude:	37.1876430
	+E/-W	8.51 usft	Easting:	2,409,107.39 usft	Longitude:	-107.5285172
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	7,221.00 usft

<b>Wellbore</b>	Lateral 2				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	1/3/2018	9.22	63.67	50,120

<b>Design</b>	Plan #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	3,358.70
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	80.04

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
3,358.70	65.00	90.00	3,022.33	0.00	564.72	0.00	0.00	0.00	0.00	
3,608.66	90.00	90.00	3,076.00	0.00	806.82	10.00	10.00	0.00	0.00	
3,886.59	87.69	76.29	3,081.63	33.06	1,082.04	5.00	-0.83	-4.93	-99.66	
6,252.43	87.69	76.29	3,177.00	593.21	3,378.63	0.00	0.00	0.00	0.00	Secord 3 Lat 2 BHL



<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well Secord 17U-34-06 3
<b>Company:</b>	B.P.	<b>TVD Reference:</b>	GL 7221' & RKB 11' @ 7232.00usft (Aztec 507)
<b>Project:</b>	La Plata County, CO NAD83	<b>MD Reference:</b>	GL 7221' & RKB 11' @ 7232.00usft (Aztec 507)
<b>Site:</b>	Secord Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	Secord 17U-34-06 3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral 2		
<b>Design:</b>	Plan #2		

**Planned Survey**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,358.70	65.00	90.00	3,022.33	0.00	564.72	556.21	0.00	0.00	0.00
3,400.00	69.13	90.00	3,038.42	0.00	602.75	593.67	10.00	10.00	0.00
3,500.00	79.13	90.00	3,065.73	0.00	698.81	688.29	10.00	10.00	0.00
3,600.00	89.13	90.00	3,075.93	0.00	798.16	786.14	10.00	10.00	0.00
3,608.66	90.00	90.00	3,076.00	0.00	806.82	794.67	10.00	10.00	0.00
3,700.00	89.23	85.50	3,076.61	3.59	898.07	885.16	5.00	-0.84	-4.93
3,800.00	88.40	80.57	3,078.68	15.71	997.28	984.97	5.00	-0.83	-4.93
3,886.59	87.69	76.29	3,081.63	33.06	1,082.04	1,071.46	5.00	-0.82	-4.93
3,900.00	87.69	76.29	3,082.17	36.24	1,095.06	1,084.82	0.00	0.00	0.00
4,000.00	87.69	76.29	3,086.20	59.92	1,192.13	1,184.53	0.00	0.00	0.00
4,100.00	87.69	76.29	3,090.23	83.59	1,289.20	1,284.23	0.00	0.00	0.00
4,200.00	87.69	76.29	3,094.26	107.27	1,386.27	1,383.94	0.00	0.00	0.00
4,300.00	87.69	76.29	3,098.29	130.94	1,483.35	1,483.64	0.00	0.00	0.00
4,400.00	87.69	76.29	3,102.33	154.62	1,580.42	1,583.35	0.00	0.00	0.00
4,500.00	87.69	76.29	3,106.36	178.30	1,677.49	1,683.05	0.00	0.00	0.00
4,600.00	87.69	76.29	3,110.39	201.97	1,774.57	1,782.76	0.00	0.00	0.00
4,700.00	87.69	76.29	3,114.42	225.65	1,871.64	1,882.46	0.00	0.00	0.00
4,800.00	87.69	76.29	3,118.45	249.33	1,968.71	1,982.17	0.00	0.00	0.00
4,900.00	87.69	76.29	3,122.48	273.00	2,065.79	2,081.87	0.00	0.00	0.00
5,000.00	87.69	76.29	3,126.51	296.68	2,162.86	2,181.58	0.00	0.00	0.00
5,100.00	87.69	76.29	3,130.54	320.36	2,259.93	2,281.28	0.00	0.00	0.00
5,200.00	87.69	76.29	3,134.58	344.03	2,357.00	2,380.99	0.00	0.00	0.00
5,300.00	87.69	76.29	3,138.61	367.71	2,454.08	2,480.69	0.00	0.00	0.00
5,400.00	87.69	76.29	3,142.64	391.39	2,551.15	2,580.40	0.00	0.00	0.00
5,500.00	87.69	76.29	3,146.67	415.06	2,648.22	2,680.10	0.00	0.00	0.00
5,600.00	87.69	76.29	3,150.70	438.74	2,745.30	2,779.81	0.00	0.00	0.00
5,700.00	87.69	76.29	3,154.73	462.41	2,842.37	2,879.51	0.00	0.00	0.00
5,800.00	87.69	76.29	3,158.76	486.09	2,939.44	2,979.22	0.00	0.00	0.00
5,900.00	87.69	76.29	3,162.79	509.77	3,036.52	3,078.92	0.00	0.00	0.00
6,000.00	87.69	76.29	3,166.82	533.44	3,133.59	3,178.63	0.00	0.00	0.00
6,100.00	87.69	76.29	3,170.86	557.12	3,230.66	3,278.33	0.00	0.00	0.00
6,200.00	87.69	76.29	3,174.89	580.80	3,327.74	3,378.04	0.00	0.00	0.00
6,252.43	87.69	76.29	3,177.00	593.21	3,378.63	3,430.31	0.00	0.00	0.00
Secord 3 Lat 2 BHL									

**Design Targets**

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Secord 3 Lat 2 BHL	0.00	360.00	3,177.00	593.21	3,378.63	1,196,708.02	2,412,486.02	37.1894727	-107.5169660
- plan hits target center									
- Point									