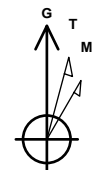




Company: B.P.  
Project: La Plata County, CO NAD83  
Site: UTE AD Pad  
Well: UTE AD 2  
Wellbore: Lateral 1  
Design: Plan #4

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: 1.30°  
Magnetic North: 10.47°

Magnetic Field  
Strength: 50143.1snT  
Dip Angle: 63.67°  
Date: 4/12/2017  
Model: HDGM

WELL DETAILS: UTE AD 2

GL 6498' & RKB 11' @ 6509.00usft (Aztec 507)  
+N/-S +E/-W Northing Easting Latitude Longitude  
0.00 0.00 1173209.41 2380138.20 37.1229822 -107.6261445

Plan: Plan #4 (UTE AD 2/Lateral 1)

Created By: Janie Collins Date: 16:14, October 16 2017

DESIGN TARGET DETAILS

Name TVD +N/-S +E/-W Northing Easting  
UTE AD 2 Lat 1 PBHL (copy) 2650.00 -3483.22 64.92 1169726.19 2380203.12

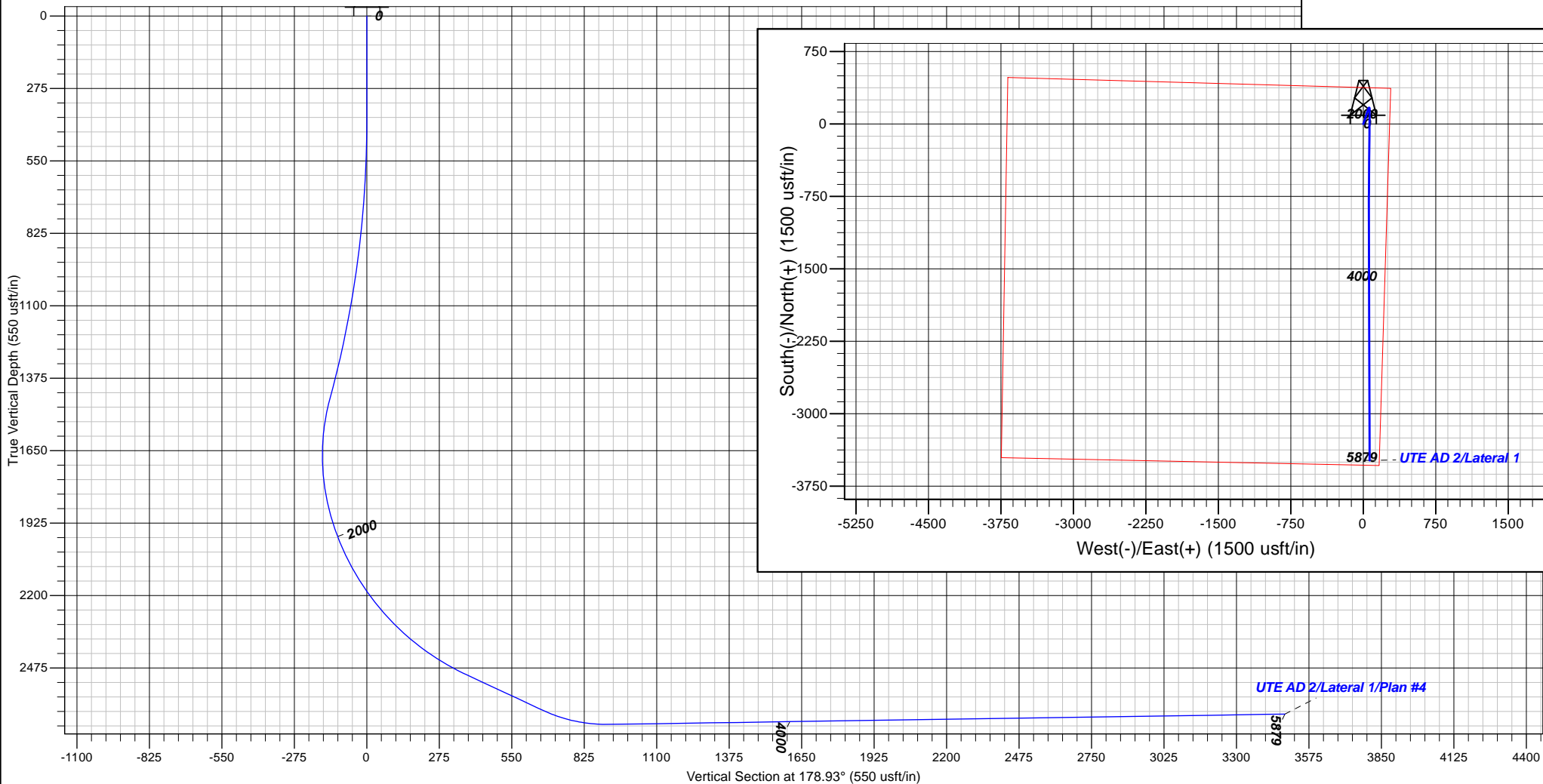
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
3054.44	65.00	180.50	2635.37	-666.47	57.89	0.00	0.00	667.44	
3313.23	90.87	179.83	2689.00	-917.40	57.24	10.00	-1.54	918.31	
5879.36	90.87	179.83	2650.00	-3483.22	64.92	0.00	0.00	3483.82	

UTE AD 2 Lat 1 PBHL (copy)

FORMATION TOP DETAILS

No formation data is available





**B.P.**

La Plata County, CO NAD83

UTE AD Pad

UTE AD 2

Lateral 1

Plan: Plan #4

## Standard Planning Report

16 October, 2017





<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well UTE AD 2
<b>Company:</b>	B.P.	<b>TVD Reference:</b>	GL 6498' & RKB 11' @ 6509.00usft (Aztec 507)
<b>Project:</b>	La Plata County, CO NAD83	<b>MD Reference:</b>	GL 6498' & RKB 11' @ 6509.00usft (Aztec 507)
<b>Site:</b>	UTE AD Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	UTE AD 2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral 1		
<b>Design:</b>	Plan #4		

<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		UTE AD Pad			
Site Position:		Northing:	1,173,239.40 usft	Latitude:	37.1230645
From:	Map	Easting:	2,380,138.86 usft	Longitude:	-107.6261446
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.30 °

Well	UTE AD 2					
Well Position	+N/-S	-29.99 usft	Northing:	1,173,209.41 usft	Latitude:	37.1229822
	+E/-W	-0.66 usft	Easting:	2,380,138.20 usft	Longitude:	-107.6261445
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,498.00 usft

<b>Wellbore</b>	Lateral 1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	4/12/2017	9.17	63.67	50,143

<b>Design</b>	Plan #4				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN		<b>Tie On Depth:</b>	3,054.44
<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	178.93	

<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
3,054.44	65.00	180.50	2,635.37	-666.47	57.89	0.00	0.00	0.00	0.00	
3,313.23	90.87	179.83	2,689.00	-917.40	57.24	10.00	10.00	-0.26	-1.54	
5,879.36	90.87	179.83	2,650.00	-3,483.22	64.92	0.00	0.00	0.00	0.00	UTE AD 2 Lat 1 PBHL



<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well UTE AD 2
<b>Company:</b>	B.P.	<b>TVD Reference:</b>	GL 6498' & RKB 11' @ 6509.00usft (Aztec 507)
<b>Project:</b>	La Plata County, CO NAD83	<b>MD Reference:</b>	GL 6498' & RKB 11' @ 6509.00usft (Aztec 507)
<b>Site:</b>	UTE AD Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	UTE AD 2	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral 1		
<b>Design:</b>	Plan #4		

## 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)
3,054.44	65.00	180.50	2,635.37	-666.47	57.89	667.44	0.00	0.00	0.00
3,100.00	69.55	180.37	2,652.96	-708.49	57.57	709.44	10.00	10.00	-0.29
3,200.00	79.55	180.11	2,679.56	-804.75	57.18	805.68	10.00	10.00	-0.26
3,300.00	89.55	179.86	2,689.05	-904.17	57.21	905.08	10.00	10.00	-0.25
3,313.23	90.87	179.83	2,689.00	-917.40	57.24	918.31	10.00	10.00	-0.24
3,400.00	90.87	179.83	2,687.68	-1,004.16	57.50	1,005.06	0.00	0.00	0.00
3,500.00	90.87	179.83	2,686.16	-1,104.15	57.80	1,105.03	0.00	0.00	0.00
3,600.00	90.87	179.83	2,684.64	-1,204.14	58.10	1,205.01	0.00	0.00	0.00
3,700.00	90.87	179.83	2,683.12	-1,304.13	58.40	1,304.99	0.00	0.00	0.00
3,800.00	90.87	179.83	2,681.60	-1,404.11	58.70	1,404.96	0.00	0.00	0.00
3,900.00	90.87	179.83	2,680.08	-1,504.10	59.00	1,504.94	0.00	0.00	0.00
4,000.00	90.87	179.83	2,678.56	-1,604.09	59.30	1,604.92	0.00	0.00	0.00
4,100.00	90.87	179.83	2,677.04	-1,704.08	59.60	1,704.89	0.00	0.00	0.00
4,200.00	90.87	179.83	2,675.52	-1,804.07	59.90	1,804.87	0.00	0.00	0.00
4,300.00	90.87	179.83	2,674.00	-1,904.05	60.20	1,904.84	0.00	0.00	0.00
4,400.00	90.87	179.83	2,672.48	-2,004.04	60.50	2,004.82	0.00	0.00	0.00
4,500.00	90.87	179.83	2,670.96	-2,104.03	60.79	2,104.80	0.00	0.00	0.00
4,600.00	90.87	179.83	2,669.44	-2,204.02	61.09	2,204.77	0.00	0.00	0.00
4,700.00	90.87	179.83	2,667.92	-2,304.01	61.39	2,304.75	0.00	0.00	0.00
4,800.00	90.87	179.83	2,666.40	-2,403.99	61.69	2,404.73	0.00	0.00	0.00
4,900.00	90.87	179.83	2,664.88	-2,503.98	61.99	2,504.70	0.00	0.00	0.00
5,000.00	90.87	179.83	2,663.37	-2,603.97	62.29	2,604.68	0.00	0.00	0.00
5,100.00	90.87	179.83	2,661.85	-2,703.96	62.59	2,704.65	0.00	0.00	0.00
5,200.00	90.87	179.83	2,660.33	-2,803.95	62.89	2,804.63	0.00	0.00	0.00
5,300.00	90.87	179.83	2,658.81	-2,903.93	63.19	2,904.61	0.00	0.00	0.00
5,400.00	90.87	179.83	2,657.29	-3,003.92	63.49	3,004.58	0.00	0.00	0.00
5,500.00	90.87	179.83	2,655.77	-3,103.91	63.79	3,104.56	0.00	0.00	0.00
5,600.00	90.87	179.83	2,654.25	-3,203.90	64.08	3,204.54	0.00	0.00	0.00
5,700.00	90.87	179.83	2,652.73	-3,303.89	64.38	3,304.51	0.00	0.00	0.00
5,800.00	90.87	179.83	2,651.21	-3,403.87	64.68	3,404.49	0.00	0.00	0.00
5,879.36	90.87	179.83	2,650.00	-3,483.22	64.92	3,483.83	0.00	0.00	0.00
UTE AD 2 Lat 1 PBHL (copy)									

## 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									
UTE AD 2 Lat 1 PBHL (c	0.00	360.00	2,650.00	-3,483.22	64.92	1,169,726.19	2,380,203.12	37.1134224	-107.6256501
- plan hits target center									
- Point									