

Project: Garfield County, CO  
 Site: Sec 17, T7S, R93W  
 Well: RU 41-17  
 Wellbore: Wellbore #1  
 Design: Plan 4  
 Latitude: 39.450042  
 Longitude: -107.795880  
 Ground Level: 7861.40  
 KB=24' @ 7885.40usft (H&P #318)

## PROJECT DETAILS: Garfield County, CO

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

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well RU 41-17, True North  
 Vertical (TVD) Reference: KB=24' @ 7885.40usft (H&P #318)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: KB=24' @ 7885.40usft (H&P #318)  
 Calculation Method: Minimum Curvature

## WELL DETAILS: RU 41-17

7861.40  
 +N/-S 0.00 +E/-W 0.00 Northing 1596999.01 Easting 2351747.55 Latitude 39.450042 Longitude -107.795880

## WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

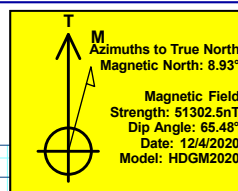
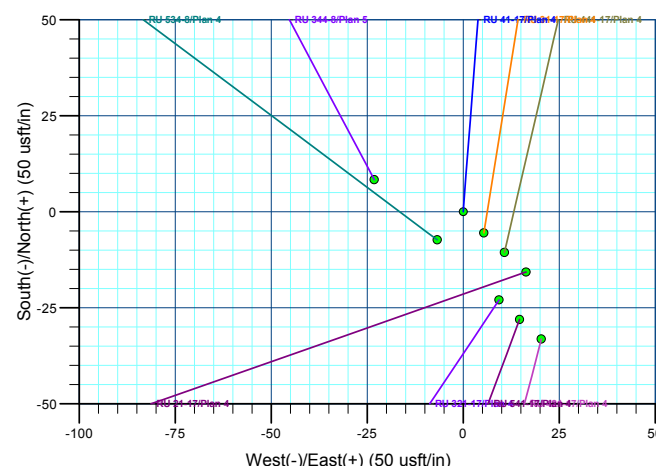
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
41-17 VP	6293.00	1953.92	148.58	1598948.55	2351945.45	39.455406	-107.795354	Point
41-17 PBHL	9993.00	1953.92	148.58	1598948.55	2351945.45	39.455406	-107.795354	Circle (Radius: 50.00)

## ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	Build 3.5°/100'
712.63	20.74	4.35	699.77	105.80	8.05	106.10	106.10	EOB @ 20.74° Inc / 4.35° Azm
5246.96	20.74	4.35	4940.21	1707.06	129.81	1711.98	1711.98	Drop 1.5°/100'
6629.76	0.00	0.00	6293.00	1953.92	148.58	1959.56	1959.56	EOD @ Vertical
10329.76	0.00	0.00	9993.00	1953.92	148.58	1959.56	1959.56	TD @ 10329.76' MD / 9993.00' TVD

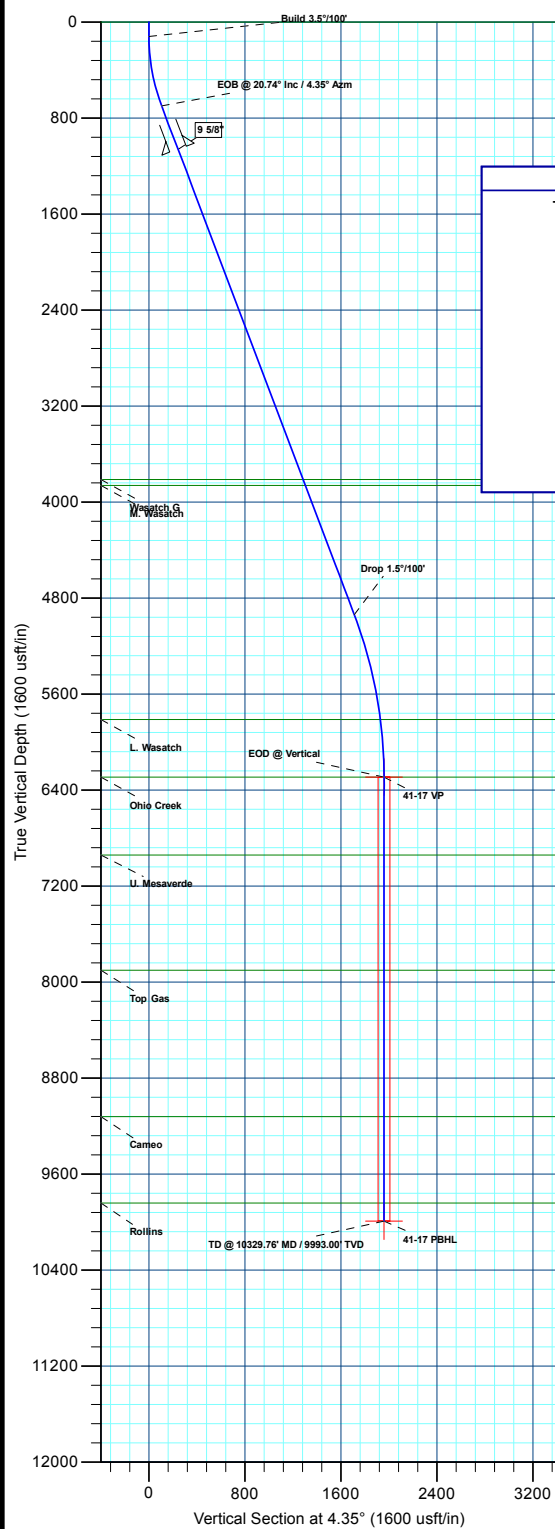
## FORMATION TOP DETAILS

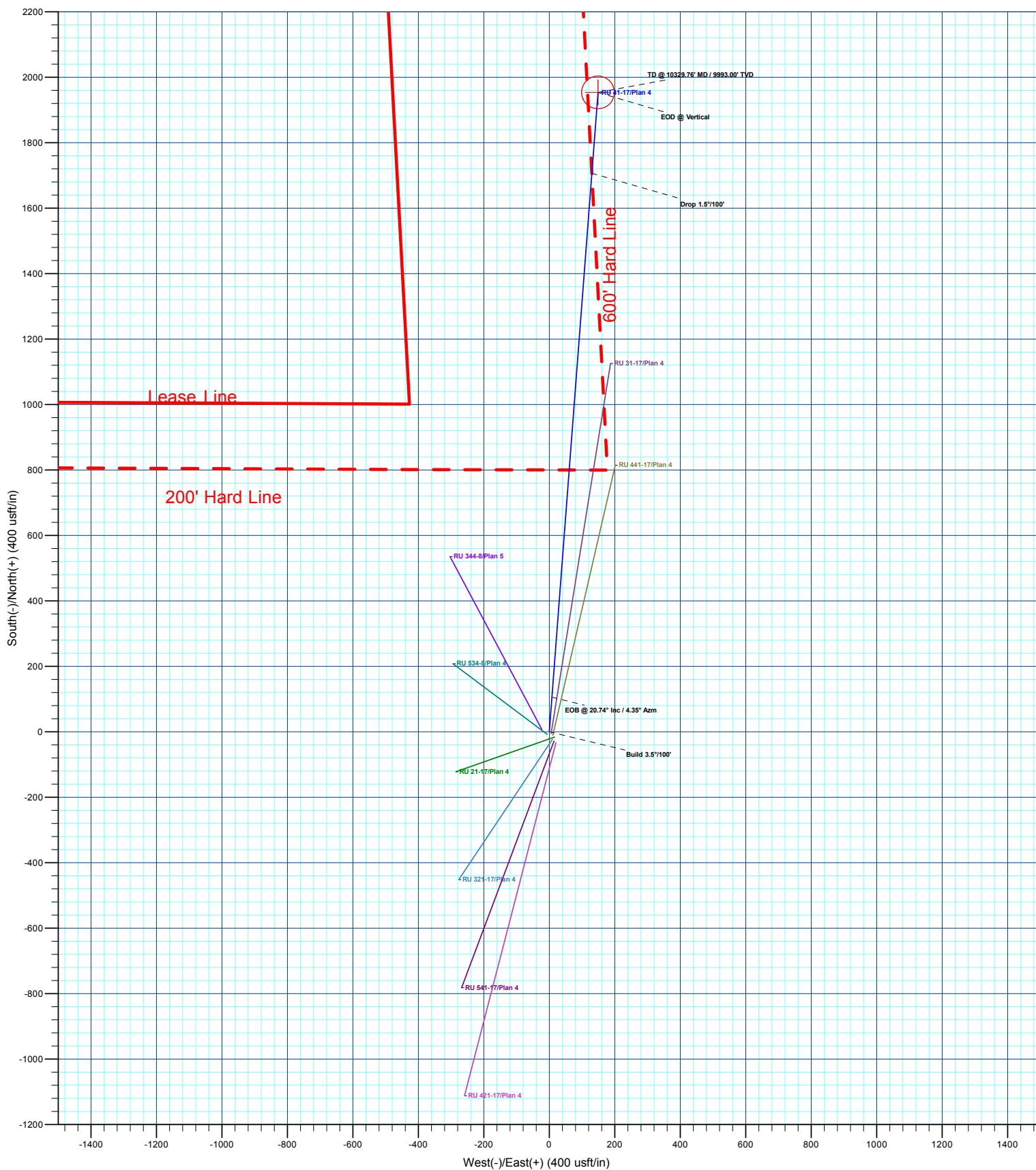
TVDPath	MDPath	Formation
0.00	0.00	U. Wasatch
3813.00	4041.63	Wasatch G
3863.00	4095.09	M. Wasatch
5813.00	6148.49	L. Wasatch
6293.00	6629.76	Ohio Creek
6943.00	7279.76	U. Mesaverde
7903.00	8239.76	Top Gas
9123.00	9459.76	Cameo
9843.00	10179.76	Rollins



Plan: Plan 4 (RU 41-17/Wellbore #1)

Created By: Chase Chambers Date: 10:37, December 11 2020





Plan: Plan 4 (RU 41-17/Wellbore #1)

Created By: Chase Chambers Date: 10:37, December 11 2020



# **Terra Energy Partners, LLP**

**Garfield County, CO**

**Sec 17, T7S, R93W**

**RU 41-17**

**Wellbore #1**

**Plan: Plan 4**

## **QES Well Planning Report**

**11 December, 2020**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RU 41-17
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Site:</b>	Sec 17, T7S, R93W	<b>North Reference:</b>	True
<b>Well:</b>	RU 41-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 4		

<b>Project</b>	Garfield County, CO		
<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 Central Zone		

Site		Sec 17, T7S, R93W			
Site Position:		Northing:	1,596,982.95 usft	Latitude:	39.449999
From:	Lat/Long	Easting:	2,351,763.53 usft	Longitude:	-107.795822
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.45 °

Well	RU 41-17					
Well Position	+N/-S	15.65 usft	Northing:	1,596,999.00 usft	Latitude:	39.450042
	+E/-W	-16.38 usft	Easting:	2,351,747.55 usft	Longitude:	-107.795880
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	7,861.40 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2020	12/4/2020	8.93	65.48	51,302.50000000

<b>Design</b>	Plan 4			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<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	4.35

<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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
712.63	20.74	4.35	699.77	105.80	8.05	3.50	3.50	0.00	4.35	
5,246.96	20.74	4.35	4,940.21	1,707.05	129.81	0.00	0.00	0.00	0.00	
6,629.76	0.00	0.00	6,293.00	1,953.92	148.58	1.50	-1.50	0.00	180.00	41-17 VP
10,329.76	0.00	0.00	9,993.00	1,953.92	148.58	0.00	0.00	0.00	0.00	41-17 PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RU 41-17
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Site:</b>	Sec 17, T7S, R93W	<b>North Reference:</b>	True
<b>Well:</b>	RU 41-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #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)
<b>U. Wasatch</b>									
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Build 3.5°/100'</b>									
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	2.80	4.35	199.97	1.95	0.15	1.95	3.50	3.50	0.00
300.00	6.30	4.35	299.64	9.86	0.75	9.89	3.50	3.50	0.00
400.00	9.80	4.35	398.64	23.82	1.81	23.89	3.50	3.50	0.00
500.00	13.30	4.35	496.60	43.78	3.33	43.91	3.50	3.50	0.00
600.00	16.80	4.35	593.15	69.67	5.30	69.87	3.50	3.50	0.00
700.00	20.30	4.35	687.94	101.38	7.71	101.68	3.50	3.50	0.00
<b>EOB @ 20.74° Inc / 4.35° Azm</b>									
712.63	20.74	4.35	699.77	105.80	8.05	106.10	3.50	3.50	0.00
800.00	20.74	4.35	781.48	136.65	10.39	137.05	0.00	0.00	0.00
900.00	20.74	4.35	875.00	171.97	13.08	172.46	0.00	0.00	0.00
1,000.00	20.74	4.35	968.51	207.28	15.76	207.88	0.00	0.00	0.00
<b>9 5/8"</b>									
1,100.00	20.74	4.35	1,062.03	242.60	18.45	243.30	0.00	0.00	0.00
1,200.00	20.74	4.35	1,155.55	277.91	21.13	278.71	0.00	0.00	0.00
1,300.00	20.74	4.35	1,249.07	313.22	23.82	314.13	0.00	0.00	0.00
1,400.00	20.74	4.35	1,342.59	348.54	26.50	349.54	0.00	0.00	0.00
1,500.00	20.74	4.35	1,436.11	383.85	29.19	384.96	0.00	0.00	0.00
1,600.00	20.74	4.35	1,529.63	419.17	31.87	420.38	0.00	0.00	0.00
1,700.00	20.74	4.35	1,623.14	454.48	34.56	455.79	0.00	0.00	0.00
1,800.00	20.74	4.35	1,716.66	489.79	37.24	491.21	0.00	0.00	0.00
1,900.00	20.74	4.35	1,810.18	525.11	39.93	526.62	0.00	0.00	0.00
2,000.00	20.74	4.35	1,903.70	560.42	42.62	562.04	0.00	0.00	0.00
2,100.00	20.74	4.35	1,997.22	595.74	45.30	597.46	0.00	0.00	0.00
2,200.00	20.74	4.35	2,090.74	631.05	47.99	632.87	0.00	0.00	0.00
2,300.00	20.74	4.35	2,184.25	666.36	50.67	668.29	0.00	0.00	0.00
2,400.00	20.74	4.35	2,277.77	701.68	53.36	703.70	0.00	0.00	0.00
2,500.00	20.74	4.35	2,371.29	736.99	56.04	739.12	0.00	0.00	0.00
2,600.00	20.74	4.35	2,464.81	772.31	58.73	774.54	0.00	0.00	0.00
2,700.00	20.74	4.35	2,558.33	807.62	61.41	809.95	0.00	0.00	0.00
2,800.00	20.74	4.35	2,651.85	842.93	64.10	845.37	0.00	0.00	0.00
2,900.00	20.74	4.35	2,745.37	878.25	66.78	880.78	0.00	0.00	0.00
3,000.00	20.74	4.35	2,838.88	913.56	69.47	916.20	0.00	0.00	0.00
3,100.00	20.74	4.35	2,932.40	948.88	72.15	951.61	0.00	0.00	0.00
3,200.00	20.74	4.35	3,025.92	984.19	74.84	987.03	0.00	0.00	0.00
3,300.00	20.74	4.35	3,119.44	1,019.50	77.52	1,022.45	0.00	0.00	0.00
3,400.00	20.74	4.35	3,212.96	1,054.82	80.21	1,057.86	0.00	0.00	0.00
3,500.00	20.74	4.35	3,306.48	1,090.13	82.90	1,093.28	0.00	0.00	0.00
3,600.00	20.74	4.35	3,399.99	1,125.45	85.58	1,128.69	0.00	0.00	0.00
3,700.00	20.74	4.35	3,493.51	1,160.76	88.27	1,164.11	0.00	0.00	0.00
3,800.00	20.74	4.35	3,587.03	1,196.07	90.95	1,199.53	0.00	0.00	0.00
3,900.00	20.74	4.35	3,680.55	1,231.39	93.64	1,234.94	0.00	0.00	0.00
4,000.00	20.74	4.35	3,774.07	1,266.70	96.32	1,270.36	0.00	0.00	0.00
<b>Wasatch G</b>									
4,041.63	20.74	4.35	3,813.00	1,281.40	97.44	1,285.10	0.00	0.00	0.00
<b>M. Wasatch</b>									
4,095.09	20.74	4.35	3,863.00	1,300.28	98.88	1,304.04	0.00	0.00	0.00
4,100.00	20.74	4.35	3,867.59	1,302.02	99.01	1,305.77	0.00	0.00	0.00
4,200.00	20.74	4.35	3,961.11	1,337.33	101.69	1,341.19	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RU 41-17
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Site:</b>	Sec 17, T7S, R93W	<b>North Reference:</b>	True
<b>Well:</b>	RU 41-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #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)
4,300.00	20.74	4.35	4,054.62	1,372.64	104.38	1,376.61	0.00	0.00	0.00
4,400.00	20.74	4.35	4,148.14	1,407.96	107.06	1,412.02	0.00	0.00	0.00
4,500.00	20.74	4.35	4,241.66	1,443.27	109.75	1,447.44	0.00	0.00	0.00
4,600.00	20.74	4.35	4,335.18	1,478.59	112.43	1,482.85	0.00	0.00	0.00
4,700.00	20.74	4.35	4,428.70	1,513.90	115.12	1,518.27	0.00	0.00	0.00
4,800.00	20.74	4.35	4,522.22	1,549.21	117.81	1,553.69	0.00	0.00	0.00
4,900.00	20.74	4.35	4,615.74	1,584.53	120.49	1,589.10	0.00	0.00	0.00
5,000.00	20.74	4.35	4,709.25	1,619.84	123.18	1,624.52	0.00	0.00	0.00
5,100.00	20.74	4.35	4,802.77	1,655.16	125.86	1,659.93	0.00	0.00	0.00
5,200.00	20.74	4.35	4,896.29	1,690.47	128.55	1,695.35	0.00	0.00	0.00
Drop 1.5°/100'									
5,246.96	20.74	4.35	4,940.21	1,707.06	129.81	1,711.98	0.00	0.00	0.00
5,300.00	19.95	4.35	4,989.94	1,725.44	131.21	1,730.42	1.50	-1.50	0.00
5,400.00	18.45	4.35	5,084.38	1,758.23	133.70	1,763.30	1.50	-1.50	0.00
5,500.00	16.95	4.35	5,179.64	1,788.53	136.00	1,793.70	1.50	-1.50	0.00
5,600.00	15.45	4.35	5,275.67	1,816.35	138.12	1,821.59	1.50	-1.50	0.00
5,700.00	13.95	4.35	5,372.39	1,841.64	140.04	1,846.96	1.50	-1.50	0.00
5,800.00	12.45	4.35	5,469.75	1,864.40	141.77	1,869.79	1.50	-1.50	0.00
5,900.00	10.95	4.35	5,567.67	1,884.62	143.31	1,890.06	1.50	-1.50	0.00
6,000.00	9.45	4.35	5,666.09	1,902.27	144.65	1,907.76	1.50	-1.50	0.00
6,100.00	7.95	4.35	5,764.94	1,917.34	145.80	1,922.88	1.50	-1.50	0.00
L. Wasatch									
6,148.49	7.22	4.35	5,813.00	1,923.72	146.28	1,929.28	1.50	-1.50	0.00
6,200.00	6.45	4.35	5,864.15	1,929.84	146.75	1,935.41	1.50	-1.50	0.00
6,300.00	4.95	4.35	5,963.65	1,939.73	147.50	1,945.33	1.50	-1.50	0.00
6,400.00	3.45	4.35	6,063.38	1,947.03	148.06	1,952.65	1.50	-1.50	0.00
6,500.00	1.95	4.35	6,163.27	1,951.72	148.41	1,957.35	1.50	-1.50	0.00
6,600.00	0.45	4.35	6,263.24	1,953.80	148.57	1,959.44	1.50	-1.50	0.00
EOD @ Vertical - Ohio Creek									
6,629.76	0.00	0.00	6,293.00	1,953.92	148.58	1,959.56	1.50	-1.50	0.00
6,700.00	0.00	0.00	6,363.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
6,800.00	0.00	0.00	6,463.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
6,900.00	0.00	0.00	6,563.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,000.00	0.00	0.00	6,663.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,100.00	0.00	0.00	6,763.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,200.00	0.00	0.00	6,863.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
U. Mesaverde									
7,279.76	0.00	0.00	6,943.00	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,300.00	0.00	0.00	6,963.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,400.00	0.00	0.00	7,063.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,500.00	0.00	0.00	7,163.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,600.00	0.00	0.00	7,263.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,700.00	0.00	0.00	7,363.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,800.00	0.00	0.00	7,463.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
7,900.00	0.00	0.00	7,563.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,000.00	0.00	0.00	7,663.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,100.00	0.00	0.00	7,763.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,200.00	0.00	0.00	7,863.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
Top Gas									
8,239.76	0.00	0.00	7,903.00	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,300.00	0.00	0.00	7,963.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,400.00	0.00	0.00	8,063.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,500.00	0.00	0.00	8,163.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RU 41-17
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Site:</b>	Sec 17, T7S, R93W	<b>North Reference:</b>	True
<b>Well:</b>	RU 41-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #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)
8,600.00	0.00	0.00	8,263.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,700.00	0.00	0.00	8,363.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,800.00	0.00	0.00	8,463.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
8,900.00	0.00	0.00	8,563.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,000.00	0.00	0.00	8,663.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,100.00	0.00	0.00	8,763.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,200.00	0.00	0.00	8,863.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,300.00	0.00	0.00	8,963.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,400.00	0.00	0.00	9,063.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
Cameo									
9,459.76	0.00	0.00	9,123.00	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,500.00	0.00	0.00	9,163.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,600.00	0.00	0.00	9,263.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,700.00	0.00	0.00	9,363.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,800.00	0.00	0.00	9,463.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
9,900.00	0.00	0.00	9,563.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
10,000.00	0.00	0.00	9,663.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
10,100.00	0.00	0.00	9,763.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
Rollins									
10,179.76	0.00	0.00	9,843.00	1,953.92	148.58	1,959.56	0.00	0.00	0.00
10,200.00	0.00	0.00	9,863.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
10,300.00	0.00	0.00	9,963.24	1,953.92	148.58	1,959.56	0.00	0.00	0.00
TD @ 10329.76' MD / 9993.00' TVD									
10,329.76	0.00	0.00	9,993.00	1,953.92	148.58	1,959.56	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
41-17 VP	0.00	0.00	6,293.00	1,953.92	148.58	1,598,948.54	2,351,945.45	39.455406	-107.795354
- hit/miss target									
- Shape									
- Point									
41-17 PBHL	0.00	0.00	9,993.00	1,953.92	148.58	1,598,948.54	2,351,945.45	39.455406	-107.795354
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,100.00	1,062.03	9 5/8"	9-5/8	12-1/4	

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RU 41-17
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Project:</b>	Garfield County, CO	<b>MD Reference:</b>	KB=24' @ 7885.40usft (H&P #318)
<b>Site:</b>	Sec 17, T7S, R93W	<b>North Reference:</b>	True
<b>Well:</b>	RU 41-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 4		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
0.00	0.00	U. Wasatch				
4,041.63	3,813.00	Wasatch G				
4,095.09	3,863.00	M. Wasatch				
6,148.49	5,813.00	L. Wasatch				
6,629.76	6,293.00	Ohio Creek				
7,279.76	6,943.00	U. Mesaverde				
8,239.76	7,903.00	Top Gas				
9,459.76	9,123.00	Cameo				
10,179.76	9,843.00	Rollins				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.00	120.00	0.00	0.00	Build 3.5°/100'	
712.63	699.77	105.80	8.05	EOB @ 20.74° Inc / 4.35° Azm	
5,246.96	4,940.21	1,707.06	129.81	Drop 1.5°/100'	
6,629.76	6,293.00	1,953.92	148.58	EOD @ Vertical	
10,329.76	9,993.00	1,953.92	148.58	TD @ 10329.76' MD / 9993.00' TVD	