

PROJECT DETAILS: Garfield County, CO (Nad 83)

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 SR 321-24 - Slot (A04) SR 321-24, True North
 Vertical (TVD) Reference: KB=30' @ 8037.00usft (H&P #329)
 Section (VS) Reference: Slot - (A04) SR 321-24(0.00N, 0.00E)
 Measured Depth Reference: KB=30' @ 8037.00usft (H&P #329)
 Calculation Method: Minimum Curvature

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SR 321-24 - VP	7051.00	-2015.92	-2443.92	1590013.90	2339705.00	39.430028	-107.837875	Circle (Radius: 50.00)
SR 321-24 - PBHL	10271.00	-2015.92	-2443.92	1590013.90	2339705.00	39.430028	-107.837875	Point

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
220.00	0.00	0.00	220.00	0.00	0.00	0.00	0.00	Start Build 3.00
386.67	5.00	210.00	386.46	-6.29	-3.63	6.81	7.27	Start DLS 3.00 TFO 24.24
1274.91	31.27	230.78	1223.64	-188.87	-205.23	278.50	279.81	Start 4498.11 hold at 1274.91 MD
5773.02	31.27	230.78	5068.36	-1665.10	-2014.06	2613.23	2614.57	Start Drop -1.50
7857.60	0.00	0.00	7051.00	-2015.92	-2443.92	3168.07	3169.42	Start 3220.00 hold at 7857.60 MD
11077.60	0.00	0.00	10271.00	-2015.92	-2443.92	3168.07	3169.42	TD at 11077.60

WELL DETAILS: SR 321-24

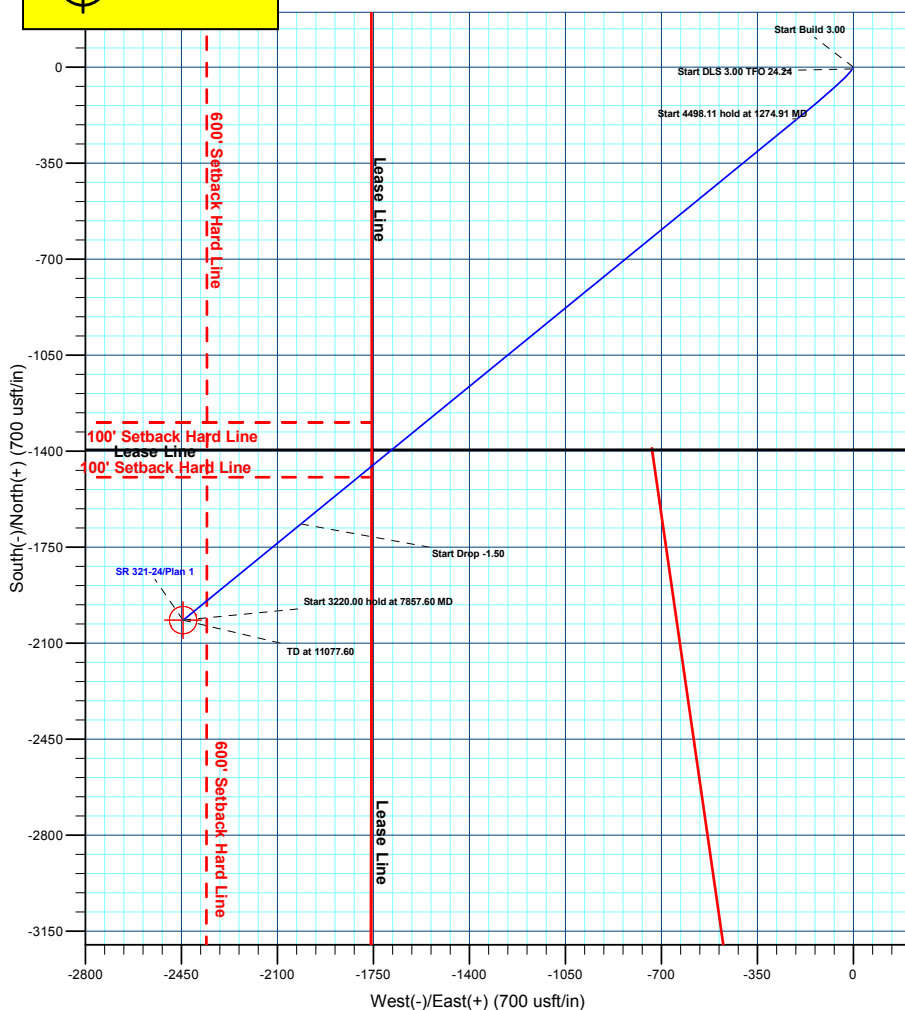
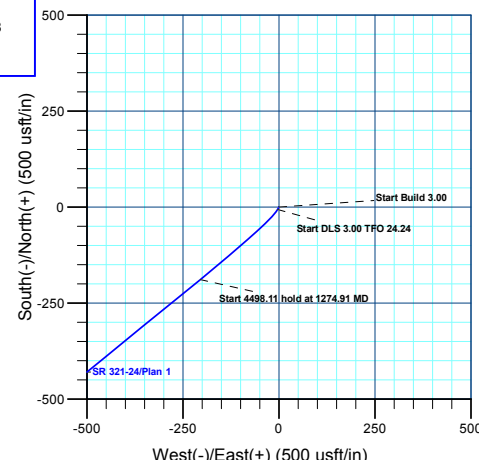
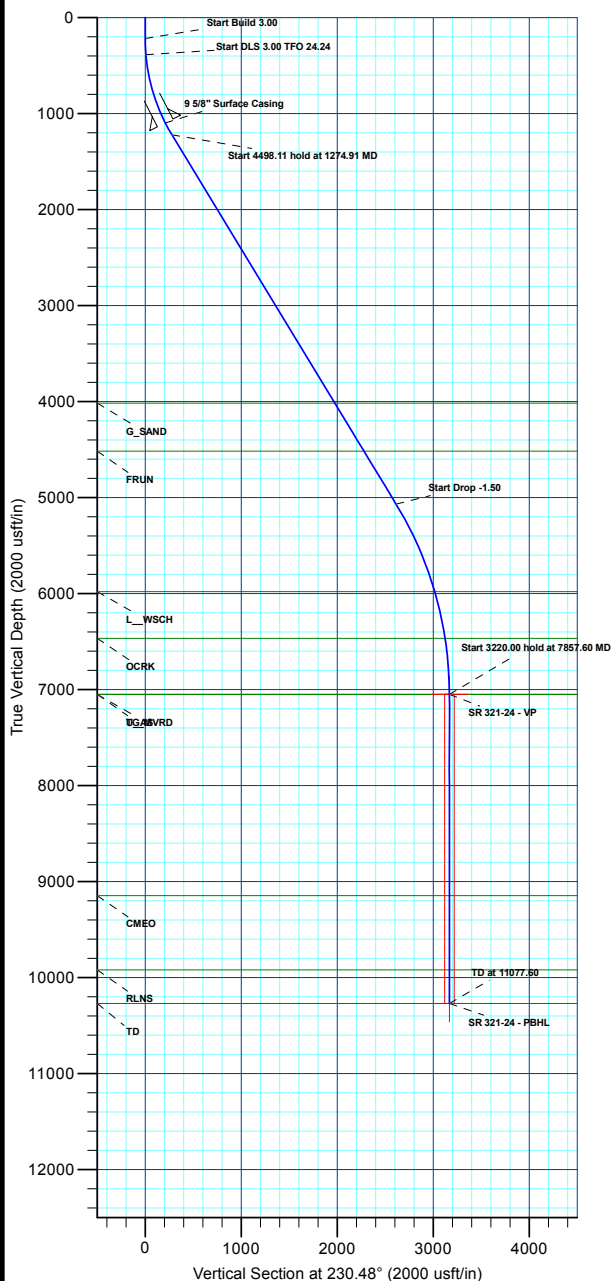
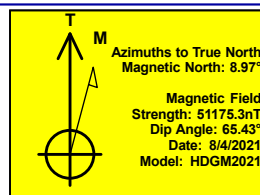
		Ground Elev: 8007.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1591966.50	2342199.80	39.435563	-107.829223

CASING DETAILS

TVD	MD	Name	Size
1100.00	1133.31	9 5/8" Surface Casing	9-5/8

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
0.00	0.00	U_WSCH
4016.00	4541.81	G_SAND
4516.00	5126.79	FRUN
5981.00	6773.09	L_WSCH
6466.00	7270.29	OCRK
7051.00	7857.60	TGAS
7051.00	7857.60	U_MVRD
9147.00	9953.60	CMEQ
9921.00	10727.60	RLNS



Plan: Plan 1 (SR 321-24/Wellbore #1)

Created By: Chase Chambers Date: 12:32, April 12 2022



Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

S. Leverich 13-09 Pad

SR 321-24 - Slot (A04) SR 321-24

Wellbore #1

Plan: Plan 1

KLX Well Planning Report

14 February, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 321-24 - Slot (A04) SR 321-24
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 8037.00usft (H&P #329)
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB=30' @ 8037.00usft (H&P #329)
Site:	S. Leverich 13-09 Pad	North Reference:	True
Well:	SR 321-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Project	Garfield County, CO (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	S. Leverich 13-09 Pad			
Site Position:		Northing:	1,591,962.80 usft	Latitude: 39.435551
From: Map		Easting:	2,342,185.30 usft	Longitude: -107.829274
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: -1.47 °

Well	SR 321-24 - Slot (A04) SR 321-24			
Well Position	+N/-S	4.07 usft	Northing:	1,591,966.50 usft
	+E/-W	14.40 usft	Easting:	2,342,199.80 usft
Position Uncertainty		0.00 usft	Wellhead Elevation:	Latitude: 39.435563
				Longitude: -107.829223
				Ground Level: 8,007.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021	8/4/2021	8.97	65.43	51,175.30000000

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	230.48

Plan Sections										
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	
220.00	0.00	0.00	220.00	0.00	0.00	0.00	0.00	0.00	0.00	
386.67	5.00	210.00	386.46	-6.29	-3.63	3.00	3.00	0.00	210.00	
1,274.91	31.27	230.78	1,223.64	-188.87	-205.23	3.00	2.96	2.34	24.24	
5,773.02	31.27	230.78	5,068.36	-1,665.10	-2,014.06	0.00	0.00	0.00	0.00	
7,857.60	0.00	0.00	7,051.00	-2,015.92	-2,443.92	1.50	-1.50	0.00	180.00	SR 321-24 - VP
11,077.60	0.00	0.00	10,271.00	-2,015.92	-2,443.92	0.00	0.00	0.00	0.00	SR 321-24 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 321-24 - Slot (A04) SR 321-24
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 8037.00usft (H&P #329)
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB=30' @ 8037.00usft (H&P #329)
Site:	S. Leverich 13-09 Pad	North Reference:	True
Well:	SR 321-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

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)
U_WSCH									
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
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 3.00									
220.00	0.00	0.00	220.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	2.40	210.00	299.98	-1.45	-0.84	1.57	3.00	3.00	0.00
Start DLS 3.00 TFO 24.24									
386.67	5.00	210.00	386.46	-6.29	-3.63	6.81	3.00	3.00	0.00
400.00	5.37	211.76	399.73	-7.33	-4.25	7.94	3.00	2.75	13.17
500.00	8.22	219.81	499.02	-16.80	-11.29	19.40	3.00	2.85	8.05
600.00	11.15	223.69	597.59	-29.28	-22.55	36.03	3.00	2.93	3.89
700.00	14.11	225.97	695.16	-44.75	-37.99	57.78	3.00	2.96	2.28
800.00	17.08	227.47	791.47	-63.15	-57.58	84.60	3.00	2.97	1.50
900.00	20.06	228.53	886.25	-84.44	-81.26	116.42	3.00	2.98	1.07
1,000.00	23.05	229.33	979.25	-108.56	-108.97	153.14	3.00	2.99	0.80
1,100.00	26.04	229.96	1,070.20	-135.44	-140.63	194.67	3.00	2.99	0.62
9 5/8" Surface Casing									
1,133.31	27.03	230.14	1,100.00	-144.99	-152.03	209.54	3.00	2.99	0.54
1,200.00	29.03	230.46	1,158.87	-165.01	-176.15	240.88	3.00	2.99	0.49
Start 4498.11 hold at 1274.91 MD									
1,274.91	31.27	230.78	1,223.64	-188.87	-205.23	278.50	3.00	2.99	0.43
1,300.00	31.27	230.78	1,245.09	-197.11	-215.32	291.53	0.00	0.00	0.00
1,400.00	31.27	230.78	1,330.56	-229.93	-255.53	343.43	0.00	0.00	0.00
1,500.00	31.27	230.78	1,416.03	-262.75	-295.75	395.34	0.00	0.00	0.00
1,600.00	31.27	230.78	1,501.51	-295.56	-335.96	447.24	0.00	0.00	0.00
1,700.00	31.27	230.78	1,586.98	-328.38	-376.17	499.15	0.00	0.00	0.00
1,800.00	31.27	230.78	1,672.46	-361.20	-416.39	551.05	0.00	0.00	0.00
1,900.00	31.27	230.78	1,757.93	-394.02	-456.60	602.95	0.00	0.00	0.00
2,000.00	31.27	230.78	1,843.41	-426.84	-496.81	654.86	0.00	0.00	0.00
2,100.00	31.27	230.78	1,928.88	-459.66	-537.02	706.76	0.00	0.00	0.00
2,200.00	31.27	230.78	2,014.35	-492.48	-577.24	758.67	0.00	0.00	0.00
2,300.00	31.27	230.78	2,099.83	-525.30	-617.45	810.57	0.00	0.00	0.00
2,400.00	31.27	230.78	2,185.30	-558.11	-657.66	862.48	0.00	0.00	0.00
2,500.00	31.27	230.78	2,270.78	-590.93	-697.88	914.38	0.00	0.00	0.00
2,600.00	31.27	230.78	2,356.25	-623.75	-738.09	966.29	0.00	0.00	0.00
2,700.00	31.27	230.78	2,441.72	-656.57	-778.30	1,018.19	0.00	0.00	0.00
2,800.00	31.27	230.78	2,527.20	-689.39	-818.52	1,070.10	0.00	0.00	0.00
2,900.00	31.27	230.78	2,612.67	-722.21	-858.73	1,122.00	0.00	0.00	0.00
3,000.00	31.27	230.78	2,698.15	-755.03	-898.94	1,173.91	0.00	0.00	0.00
3,100.00	31.27	230.78	2,783.62	-787.85	-939.16	1,225.81	0.00	0.00	0.00
3,200.00	31.27	230.78	2,869.10	-820.66	-979.37	1,277.72	0.00	0.00	0.00
3,300.00	31.27	230.78	2,954.57	-853.48	-1,019.58	1,329.62	0.00	0.00	0.00
3,400.00	31.27	230.78	3,040.04	-886.30	-1,059.80	1,381.53	0.00	0.00	0.00
3,500.00	31.27	230.78	3,125.52	-919.12	-1,100.01	1,433.43	0.00	0.00	0.00
3,600.00	31.27	230.78	3,210.99	-951.94	-1,140.22	1,485.33	0.00	0.00	0.00
3,700.00	31.27	230.78	3,296.47	-984.76	-1,180.44	1,537.24	0.00	0.00	0.00
3,800.00	31.27	230.78	3,381.94	-1,017.58	-1,220.65	1,589.14	0.00	0.00	0.00
3,900.00	31.27	230.78	3,467.41	-1,050.40	-1,260.86	1,641.05	0.00	0.00	0.00
4,000.00	31.27	230.78	3,552.89	-1,083.21	-1,301.07	1,692.95	0.00	0.00	0.00
4,100.00	31.27	230.78	3,638.36	-1,116.03	-1,341.29	1,744.86	0.00	0.00	0.00
4,200.00	31.27	230.78	3,723.84	-1,148.85	-1,381.50	1,796.76	0.00	0.00	0.00
4,300.00	31.27	230.78	3,809.31	-1,181.67	-1,421.71	1,848.67	0.00	0.00	0.00
4,400.00	31.27	230.78	3,894.79	-1,214.49	-1,461.93	1,900.57	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 321-24 - Slot (A04) SR 321-24
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 8037.00usft (H&P #329)
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB=30' @ 8037.00usft (H&P #329)
Site:	S. Leverich 13-09 Pad	North Reference:	True
Well:	SR 321-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

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)
4,500.00	31.27	230.78	3,980.26	-1,247.31	-1,502.14	1,952.48	0.00	0.00	0.00
G_SAND									
4,541.81	31.27	230.78	4,016.00	-1,261.03	-1,518.96	1,974.18	0.00	0.00	0.00
4,600.00	31.27	230.78	4,065.73	-1,280.13	-1,542.35	2,004.38	0.00	0.00	0.00
4,700.00	31.27	230.78	4,151.21	-1,312.95	-1,582.57	2,056.29	0.00	0.00	0.00
4,800.00	31.27	230.78	4,236.68	-1,345.77	-1,622.78	2,108.19	0.00	0.00	0.00
4,900.00	31.27	230.78	4,322.16	-1,378.58	-1,662.99	2,160.10	0.00	0.00	0.00
5,000.00	31.27	230.78	4,407.63	-1,411.40	-1,703.21	2,212.00	0.00	0.00	0.00
5,100.00	31.27	230.78	4,493.10	-1,444.22	-1,743.42	2,263.90	0.00	0.00	0.00
FRUN									
5,126.79	31.27	230.78	4,516.00	-1,453.01	-1,754.19	2,277.81	0.00	0.00	0.00
5,200.00	31.27	230.78	4,578.58	-1,477.04	-1,783.63	2,315.81	0.00	0.00	0.00
5,300.00	31.27	230.78	4,664.05	-1,509.86	-1,823.85	2,367.71	0.00	0.00	0.00
5,400.00	31.27	230.78	4,749.53	-1,542.68	-1,864.06	2,419.62	0.00	0.00	0.00
5,500.00	31.27	230.78	4,835.00	-1,575.50	-1,904.27	2,471.52	0.00	0.00	0.00
5,600.00	31.27	230.78	4,920.48	-1,608.32	-1,944.49	2,523.43	0.00	0.00	0.00
5,700.00	31.27	230.78	5,005.95	-1,641.13	-1,984.70	2,575.33	0.00	0.00	0.00
Start Drop -1.50									
5,773.02	31.27	230.78	5,068.36	-1,665.10	-2,014.06	2,613.23	0.00	0.00	0.00
5,800.00	30.86	230.78	5,091.47	-1,673.90	-2,024.85	2,627.16	1.50	-1.50	0.00
5,900.00	29.36	230.78	5,177.97	-1,705.62	-2,063.72	2,677.33	1.50	-1.50	0.00
6,000.00	27.86	230.78	5,265.76	-1,735.90	-2,100.82	2,725.21	1.50	-1.50	0.00
6,100.00	26.36	230.78	5,354.76	-1,764.72	-2,136.13	2,770.79	1.50	-1.50	0.00
6,200.00	24.86	230.78	5,444.93	-1,792.05	-2,169.62	2,814.02	1.50	-1.50	0.00
6,300.00	23.36	230.78	5,536.21	-1,817.88	-2,201.27	2,854.87	1.50	-1.50	0.00
6,400.00	21.86	230.78	5,628.51	-1,842.20	-2,231.06	2,893.32	1.50	-1.50	0.00
6,500.00	20.36	230.78	5,721.80	-1,864.97	-2,258.97	2,929.34	1.50	-1.50	0.00
6,600.00	18.86	230.78	5,815.99	-1,886.19	-2,284.97	2,962.91	1.50	-1.50	0.00
6,700.00	17.36	230.78	5,911.03	-1,905.85	-2,309.06	2,994.00	1.50	-1.50	0.00
L_WSCH									
6,773.09	16.27	230.78	5,981.00	-1,919.22	-2,325.44	3,015.14	1.50	-1.50	0.00
6,800.00	15.86	230.78	6,006.86	-1,923.93	-2,331.21	3,022.59	1.50	-1.50	0.00
6,900.00	14.36	230.78	6,103.40	-1,940.42	-2,351.41	3,048.66	1.50	-1.50	0.00
7,000.00	12.86	230.78	6,200.58	-1,955.30	-2,369.65	3,072.20	1.50	-1.50	0.00
7,100.00	11.36	230.78	6,298.35	-1,968.57	-2,385.91	3,093.19	1.50	-1.50	0.00
7,200.00	9.86	230.78	6,396.64	-1,980.21	-2,400.18	3,111.60	1.50	-1.50	0.00
OCRK									
7,270.29	8.81	230.78	6,466.00	-1,987.42	-2,409.01	3,123.01	1.50	-1.50	0.00
7,300.00	8.36	230.78	6,495.37	-1,990.23	-2,412.45	3,127.44	1.50	-1.50	0.00
7,400.00	6.86	230.78	6,594.49	-1,998.61	-2,422.71	3,140.69	1.50	-1.50	0.00
7,500.00	5.36	230.78	6,693.92	-2,005.34	-2,430.96	3,151.34	1.50	-1.50	0.00
7,600.00	3.86	230.78	6,793.59	-2,010.43	-2,437.20	3,159.39	1.50	-1.50	0.00
7,700.00	2.36	230.78	6,893.44	-2,013.86	-2,441.40	3,164.82	1.50	-1.50	0.00
7,800.00	0.86	230.78	6,993.40	-2,015.64	-2,443.59	3,167.64	1.50	-1.50	0.00
Start 3220.00 hold at 7857.60 MD - U_MVRD - TGAS									
7,857.60	0.00	0.00	7,051.00	-2,015.92	-2,443.92	3,168.07	1.50	-1.50	0.00
7,900.00	0.00	0.00	7,093.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,000.00	0.00	0.00	7,193.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,100.00	0.00	0.00	7,293.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,200.00	0.00	0.00	7,393.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,300.00	0.00	0.00	7,493.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,400.00	0.00	0.00	7,593.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,500.00	0.00	0.00	7,693.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 321-24 - Slot (A04) SR 321-24
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 8037.00usft (H&P #329)
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB=30' @ 8037.00usft (H&P #329)
Site:	S. Leverich 13-09 Pad	North Reference:	True
Well:	SR 321-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

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	7,793.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,700.00	0.00	0.00	7,893.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,800.00	0.00	0.00	7,993.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
8,900.00	0.00	0.00	8,093.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,000.00	0.00	0.00	8,193.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,100.00	0.00	0.00	8,293.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,200.00	0.00	0.00	8,393.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,300.00	0.00	0.00	8,493.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,400.00	0.00	0.00	8,593.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,500.00	0.00	0.00	8,693.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,600.00	0.00	0.00	8,793.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,700.00	0.00	0.00	8,893.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,800.00	0.00	0.00	8,993.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
9,900.00	0.00	0.00	9,093.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
CMEO									
9,953.60	0.00	0.00	9,147.00	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,000.00	0.00	0.00	9,193.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,100.00	0.00	0.00	9,293.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,200.00	0.00	0.00	9,393.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,300.00	0.00	0.00	9,493.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,400.00	0.00	0.00	9,593.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,500.00	0.00	0.00	9,693.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,600.00	0.00	0.00	9,793.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,700.00	0.00	0.00	9,893.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
RLNS									
10,727.60	0.00	0.00	9,921.00	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,800.00	0.00	0.00	9,993.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
10,900.00	0.00	0.00	10,093.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
11,000.00	0.00	0.00	10,193.40	-2,015.92	-2,443.92	3,168.07	0.00	0.00	0.00
TD at 11077.60									
11,077.60	0.00	0.00	10,271.00	-2,015.92	-2,443.92	3,168.07	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
SR 321-24 - VP - hit/miss target - Shape - Circle (radius 50.00)	0.00	0.00	7,051.00	-2,015.92	-2,443.92	1,590,013.90	2,339,705.00	39.430028	-107.837876
SR 321-24 - PBHL - plan hits target center - Point	0.00	0.00	10,271.00	-2,015.92	-2,443.92	1,590,013.90	2,339,705.00	39.430028	-107.837876

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,133.31	1,100.00	9 5/8" Surface Casing	9-5/8	12-1/4

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 321-24 - Slot (A04) SR 321-24
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 8037.00usft (H&P #329)
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB=30' @ 8037.00usft (H&P #329)
Site:	S. Leverich 13-09 Pad	North Reference:	True
Well:	SR 321-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
0.00	0.00	U__WSCH		0.00	
4,541.81	4,016.00	G_SAND			
5,126.79	4,516.00	FRUN			
6,773.09	5,981.00	L__WSCH			
7,270.29	6,466.00	OCRK			
7,857.60	7,051.00	U__MVRD			
7,857.60	7,051.00	TGAS			
9,953.60	9,147.00	CME0			
10,727.60	9,921.00	RLNS			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
220.00	220.00	0.00	0.00	Start Build 3.00
386.67	386.46	-6.29	-3.63	Start DLS 3.00 TFO 24.24
1,274.91	1,223.64	-188.87	-205.23	Start 4498.11 hold at 1274.91 MD
5,773.02	5,068.36	-1,665.10	-2,014.06	Start Drop -1.50
7,857.60	7,051.00	-2,015.92	-2,443.92	Start 3220.00 hold at 7857.60 MD
11,077.60	10,271.00	-2,015.92	-2,443.92	TD at 11077.60