

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

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SR 521-24 - VP	7031.00	-2722.02	-2462.63	1589313.91	2339690.00	39.428105	-107.837865	Circle (Radius: 50.00)
SR 521-24 - PBHL	10251.00	-2722.02	-2462.63	1589313.91	2339690.00	39.428105	-107.837865	Point

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well SR 521-24 - Slot (A07) SR 521-24, True North
 Vertical (TVD) Reference: KB=30' @ 8037.00usft (H&P #329)
 Section (VS) Reference: Slot - (A07) SR 521-24(0.00N, 0.00E)
 Measured Depth Reference: KB=30' @ 8037.00usft (H&P #329)
 Calculation Method: Minimum Curvature

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	Start Build 3.00
416.67	5.00	195.00	416.46	-7.02	-1.88	6.47	7.27	Start DLS 3.00 TFO 31.03
1511.66	37.21	222.54	1425.69	-305.29	-244.80	390.62	393.07	Start 4137.68 hold at 1511.66 MD
5649.34	37.21	222.54	4720.89	-2149.00	-1936.78	2892.97	2895.48	Start Drop -1.50
8130.23	0.00	0.00	7031.00	-2722.02	-2462.63	3670.69	3673.22	Start 3220.00 hold at 8130.23 MD
11350.23	0.00	0.00	10251.00	-2722.02	-2462.63	3670.69	3673.22	TD at 11350.23

WELL DETAILS: SR 521-24

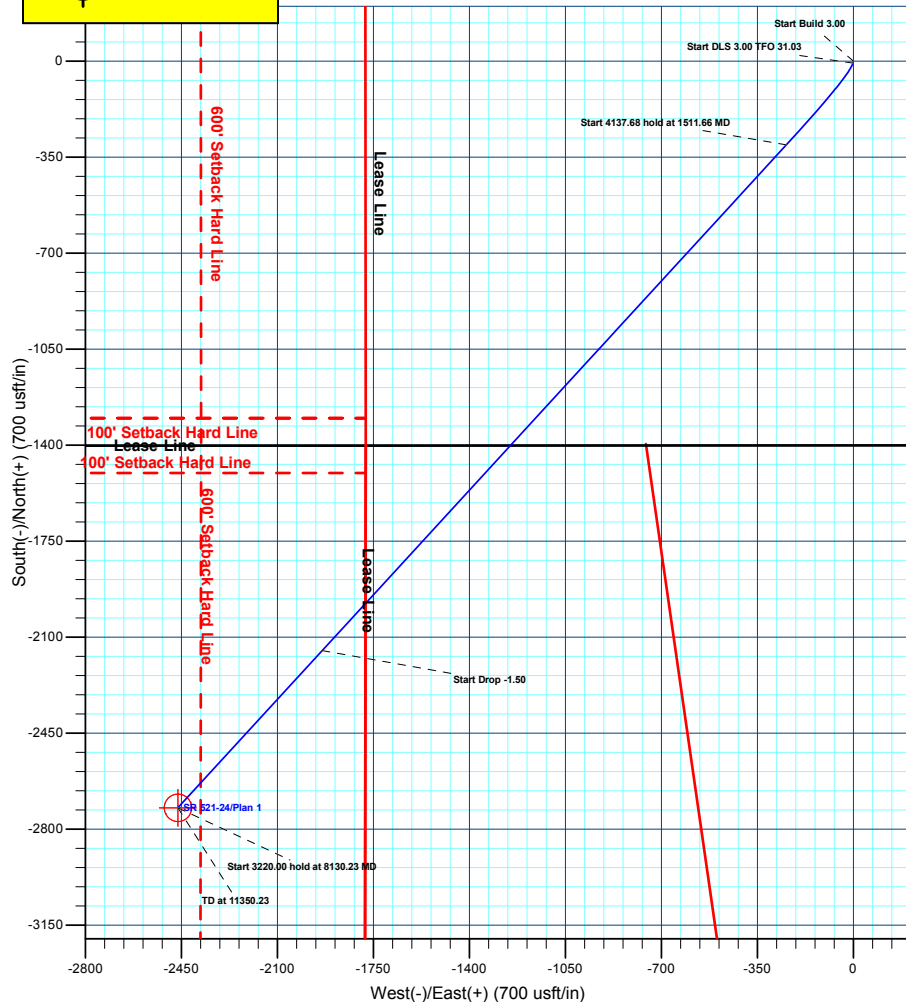
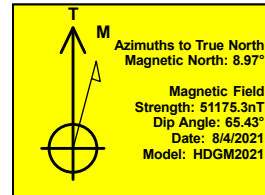
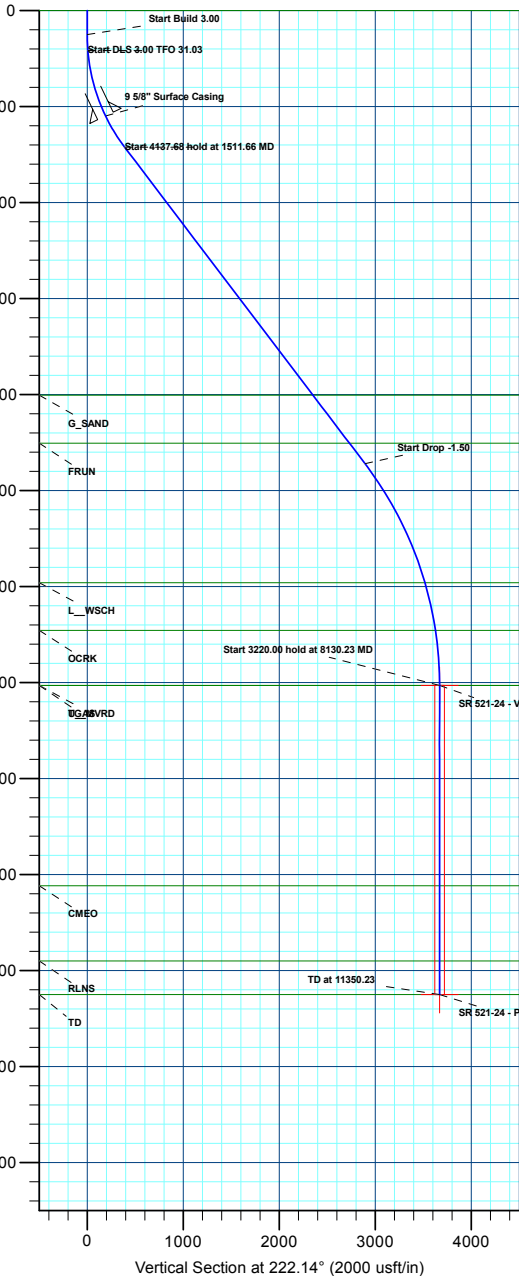
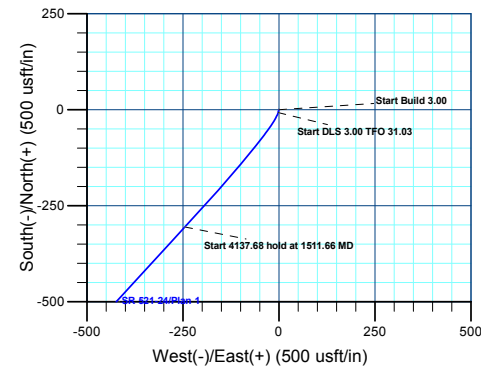
+N/-S	+E/-W	Northing	Ground Elev.	8007.00	Latitude	Longitude	Slot
0.00	0.00	1591971.90	2342221.60	8007.00	39.435579	-107.829146	(A07) SR 521-24

CASING DETAILS

TVD	MD	Name	Size
1100.00	1129.07	9 5/8" Surface Casing	9-5/8

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
0.00	0.00	U_WSCH
4006.00	4751.68	G_SAND
4506.00	5379.51	FRUN
5961.00	7045.72	L_WSCH
6456.00	7553.04	OCRK
7031.00	8130.23	TCAS
7031.00	8130.23	U_MVRD
9117.00	10216.23	CMEO
9901.00	11000.23	RLNS
10251.00	11350.23	TD



Plan: Plan 1 (SR 521-24/Wellbore #1)

Created By: Chase Chambers Date: 12:54, April 19 2022



Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

S. Leverich 13-09 Pad

SR 521-24 - Slot (A07) SR 521-24

Wellbore #1

Plan: Plan 1

KLX Well Planning Report

15 February, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 521-24 - Slot (A07) SR 521-24
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 521-24	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 521-24 - Slot (A07) SR 521-24					
Well Position	+N/-S	10.03 usft	Northing:	1,591,971.90 usft	Latitude:	39.435579
	+E/-W	36.05 usft	Easting:	2,342,221.60 usft	Longitude:	-107.829147
Position Uncertainty	0.00 usft		Wellhead Elevation:		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	222.14

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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
416.67	5.00	195.00	416.46	-7.02	-1.88	3.00	3.00	0.00	195.00	
1,511.66	37.21	222.54	1,425.69	-305.29	-244.80	3.00	2.94	2.52	31.03	
5,649.34	37.21	222.54	4,720.89	-2,149.00	-1,936.78	0.00	0.00	0.00	0.00	
8,130.23	0.00	0.00	7,031.00	-2,722.02	-2,462.63	1.50	-1.50	0.00	180.00	SR 521-24 - VP
11,350.23	0.00	0.00	10,251.00	-2,722.02	-2,462.63	0.00	0.00	0.00	0.00	SR 521-24 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 521-24 - Slot (A07) SR 521-24
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 521-24	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	0.00
100.00	0.00	0.00	100.00	0.00	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	0.00
Start Build 3.00										
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	1.50	195.00	299.99	-0.63	-0.17	0.58	3.00	3.00	0.00	0.00
400.00	4.50	195.00	399.85	-5.69	-1.52	5.24	3.00	3.00	0.00	0.00
Start DLS 3.00 TFO 31.03										
416.67	5.00	195.00	416.66	-7.02	-1.88	6.47	3.00	3.00	0.00	0.00
500.00	7.26	205.25	499.31	-15.29	-5.07	14.74	3.00	2.71	12.31	0.00
600.00	10.12	211.34	598.15	-28.51	-12.33	29.41	3.00	2.86	6.08	0.00
700.00	13.04	214.74	696.11	-45.28	-23.33	49.23	3.00	2.92	3.40	0.00
800.00	15.99	216.91	792.91	-65.57	-38.03	74.14	3.00	2.95	2.17	0.00
900.00	18.96	218.41	888.28	-89.32	-56.40	104.07	3.00	2.97	1.51	0.00
1,000.00	21.93	219.52	981.97	-116.46	-78.38	138.95	3.00	2.97	1.11	0.00
1,100.00	24.91	220.38	1,073.72	-146.91	-103.92	178.66	3.00	2.98	0.86	0.00
9 5/8" Surface Casing										
1,129.07	25.78	220.59	1,100.00	-156.38	-112.00	191.10	3.00	2.98	0.74	0.00
1,200.00	27.90	221.06	1,163.28	-180.60	-132.94	223.11	3.00	2.99	0.66	0.00
1,300.00	30.88	221.63	1,250.40	-217.43	-165.36	272.18	3.00	2.99	0.56	0.00
1,400.00	33.87	222.10	1,334.85	-257.31	-201.10	325.72	3.00	2.99	0.47	0.00
1,500.00	36.86	222.50	1,416.38	-300.11	-240.06	383.60	3.00	2.99	0.40	0.00
Start 4137.68 hold at 1511.66 MD										
1,511.66	37.21	222.54	1,425.69	-305.29	-244.80	390.62	3.00	2.99	0.37	0.00
1,600.00	37.21	222.54	1,496.04	-344.65	-280.93	444.05	0.00	0.00	0.00	0.00
1,700.00	37.21	222.54	1,575.68	-389.21	-321.82	504.53	0.00	0.00	0.00	0.00
1,800.00	37.21	222.54	1,655.32	-433.77	-362.71	565.00	0.00	0.00	0.00	0.00
1,900.00	37.21	222.54	1,734.96	-478.33	-403.60	625.48	0.00	0.00	0.00	0.00
2,000.00	37.21	222.54	1,814.60	-522.89	-444.49	685.96	0.00	0.00	0.00	0.00
2,100.00	37.21	222.54	1,894.23	-567.44	-485.39	746.43	0.00	0.00	0.00	0.00
2,200.00	37.21	222.54	1,973.87	-612.00	-526.28	806.91	0.00	0.00	0.00	0.00
2,300.00	37.21	222.54	2,053.51	-656.56	-567.17	867.39	0.00	0.00	0.00	0.00
2,400.00	37.21	222.54	2,133.15	-701.12	-608.06	927.86	0.00	0.00	0.00	0.00
2,500.00	37.21	222.54	2,212.79	-745.68	-648.95	988.34	0.00	0.00	0.00	0.00
2,600.00	37.21	222.54	2,292.43	-790.24	-689.85	1,048.82	0.00	0.00	0.00	0.00
2,700.00	37.21	222.54	2,372.07	-834.80	-730.74	1,109.30	0.00	0.00	0.00	0.00
2,800.00	37.21	222.54	2,451.71	-879.36	-771.63	1,169.77	0.00	0.00	0.00	0.00
2,900.00	37.21	222.54	2,531.35	-923.92	-812.52	1,230.25	0.00	0.00	0.00	0.00
3,000.00	37.21	222.54	2,610.98	-968.48	-853.41	1,290.73	0.00	0.00	0.00	0.00
3,100.00	37.21	222.54	2,690.62	-1,013.04	-894.30	1,351.20	0.00	0.00	0.00	0.00
3,200.00	37.21	222.54	2,770.26	-1,057.59	-935.20	1,411.68	0.00	0.00	0.00	0.00
3,300.00	37.21	222.54	2,849.90	-1,102.15	-976.09	1,472.16	0.00	0.00	0.00	0.00
3,400.00	37.21	222.54	2,929.54	-1,146.71	-1,016.98	1,532.63	0.00	0.00	0.00	0.00
3,500.00	37.21	222.54	3,009.18	-1,191.27	-1,057.87	1,593.11	0.00	0.00	0.00	0.00
3,600.00	37.21	222.54	3,088.82	-1,235.83	-1,098.76	1,653.59	0.00	0.00	0.00	0.00
3,700.00	37.21	222.54	3,168.46	-1,280.39	-1,139.65	1,714.07	0.00	0.00	0.00	0.00
3,800.00	37.21	222.54	3,248.10	-1,324.95	-1,180.55	1,774.54	0.00	0.00	0.00	0.00
3,900.00	37.21	222.54	3,327.73	-1,369.51	-1,221.44	1,835.02	0.00	0.00	0.00	0.00
4,000.00	37.21	222.54	3,407.37	-1,414.07	-1,262.33	1,895.50	0.00	0.00	0.00	0.00
4,100.00	37.21	222.54	3,487.01	-1,458.63	-1,303.22	1,955.97	0.00	0.00	0.00	0.00
4,200.00	37.21	222.54	3,566.65	-1,503.19	-1,344.11	2,016.45	0.00	0.00	0.00	0.00
4,300.00	37.21	222.54	3,646.29	-1,547.74	-1,385.01	2,076.93	0.00	0.00	0.00	0.00
4,400.00	37.21	222.54	3,725.93	-1,592.30	-1,425.90	2,137.40	0.00	0.00	0.00	0.00

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Site:	S. Leverich 13-09 Pad	North Reference:	True
Well:	SR 521-24	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	37.21	222.54	3,805.57	-1,636.86	-1,466.79	2,197.88	0.00	0.00	0.00	
4,600.00	37.21	222.54	3,885.21	-1,681.42	-1,507.68	2,258.36	0.00	0.00	0.00	
4,700.00	37.21	222.54	3,964.85	-1,725.98	-1,548.57	2,318.83	0.00	0.00	0.00	
G_SAND										
4,751.68	37.21	222.54	4,006.00	-1,749.01	-1,569.70	2,350.09	0.00	0.00	0.00	
4,800.00	37.21	222.54	4,044.48	-1,770.54	-1,589.46	2,379.31	0.00	0.00	0.00	
4,900.00	37.21	222.54	4,124.12	-1,815.10	-1,630.36	2,439.79	0.00	0.00	0.00	
5,000.00	37.21	222.54	4,203.76	-1,859.66	-1,671.25	2,500.27	0.00	0.00	0.00	
5,100.00	37.21	222.54	4,283.40	-1,904.22	-1,712.14	2,560.74	0.00	0.00	0.00	
5,200.00	37.21	222.54	4,363.04	-1,948.78	-1,753.03	2,621.22	0.00	0.00	0.00	
5,300.00	37.21	222.54	4,442.68	-1,993.33	-1,793.92	2,681.70	0.00	0.00	0.00	
FRUN										
5,379.51	37.21	222.54	4,506.00	-2,028.76	-1,826.44	2,729.78	0.00	0.00	0.00	
5,400.00	37.21	222.54	4,522.32	-2,037.89	-1,834.82	2,742.17	0.00	0.00	0.00	
5,500.00	37.21	222.54	4,601.96	-2,082.45	-1,875.71	2,802.65	0.00	0.00	0.00	
5,600.00	37.21	222.54	4,681.60	-2,127.01	-1,916.60	2,863.13	0.00	0.00	0.00	
Start Drop -1.50										
5,649.34	37.21	222.54	4,720.89	-2,149.00	-1,936.78	2,892.97	0.00	0.00	0.00	
5,700.00	36.45	222.54	4,761.44	-2,171.37	-1,957.31	2,923.34	1.50	-1.50	0.00	
5,800.00	34.95	222.54	4,842.64	-2,214.37	-1,996.77	2,981.69	1.50	-1.50	0.00	
5,900.00	33.45	222.54	4,925.34	-2,255.79	-2,034.77	3,037.90	1.50	-1.50	0.00	
6,000.00	31.95	222.54	5,009.49	-2,295.59	-2,071.30	3,091.93	1.50	-1.50	0.00	
6,100.00	30.45	222.54	5,095.02	-2,333.76	-2,106.33	3,143.73	1.50	-1.50	0.00	
6,200.00	28.95	222.54	5,181.87	-2,370.27	-2,139.83	3,193.28	1.50	-1.50	0.00	
6,300.00	27.45	222.54	5,270.00	-2,405.09	-2,171.79	3,240.54	1.50	-1.50	0.00	
6,400.00	25.95	222.54	5,359.33	-2,438.20	-2,202.17	3,285.48	1.50	-1.50	0.00	
6,500.00	24.45	222.54	5,449.81	-2,469.57	-2,230.96	3,328.06	1.50	-1.50	0.00	
6,600.00	22.95	222.54	5,541.37	-2,499.19	-2,258.14	3,368.25	1.50	-1.50	0.00	
6,700.00	21.45	222.54	5,633.95	-2,527.03	-2,283.69	3,406.04	1.50	-1.50	0.00	
6,800.00	19.95	222.54	5,727.49	-2,553.08	-2,307.60	3,441.39	1.50	-1.50	0.00	
6,900.00	18.45	222.54	5,821.92	-2,577.31	-2,329.84	3,474.28	1.50	-1.50	0.00	
7,000.00	16.95	222.54	5,917.19	-2,599.71	-2,350.40	3,504.69	1.50	-1.50	0.00	
L_WSCH										
7,045.72	16.27	222.54	5,961.00	-2,609.34	-2,359.23	3,517.76	1.50	-1.50	0.00	
7,100.00	15.45	222.54	6,013.21	-2,620.27	-2,369.26	3,532.60	1.50	-1.50	0.00	
7,200.00	13.95	222.54	6,109.93	-2,638.97	-2,386.42	3,557.98	1.50	-1.50	0.00	
7,300.00	12.45	222.54	6,207.29	-2,655.80	-2,401.87	3,580.82	1.50	-1.50	0.00	
7,400.00	10.95	222.54	6,305.21	-2,670.75	-2,415.58	3,601.10	1.50	-1.50	0.00	
7,500.00	9.45	222.54	6,403.62	-2,683.80	-2,427.56	3,618.81	1.50	-1.50	0.00	
OCRK										
7,553.04	8.66	222.54	6,456.00	-2,689.95	-2,433.20	3,627.16	1.50	-1.50	0.00	
7,600.00	7.95	222.54	6,502.47	-2,694.95	-2,437.79	3,633.94	1.50	-1.50	0.00	
7,700.00	6.45	222.54	6,601.68	-2,704.18	-2,446.27	3,646.48	1.50	-1.50	0.00	
7,800.00	4.95	222.54	6,701.18	-2,711.51	-2,452.99	3,656.42	1.50	-1.50	0.00	
7,900.00	3.45	222.54	6,800.91	-2,716.91	-2,457.94	3,663.75	1.50	-1.50	0.00	
8,000.00	1.95	222.54	6,900.79	-2,720.38	-2,461.13	3,668.47	1.50	-1.50	0.00	
8,100.00	0.45	222.54	7,000.77	-2,721.93	-2,462.55	3,670.57	1.50	-1.50	0.00	
Start 3220.00 hold at 8130.23 MD - U_MVRD - TGAS										
8,130.23	0.00	0.00	7,031.00	-2,722.02	-2,462.63	3,670.69	1.50	-1.50	0.00	
8,200.00	0.00	0.00	7,100.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
8,300.00	0.00	0.00	7,200.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
8,400.00	0.00	0.00	7,300.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
8,500.00	0.00	0.00	7,400.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 521-24 - Slot (A07) SR 521-24
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 521-24	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	7,500.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
8,700.00	0.00	0.00	7,600.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
8,800.00	0.00	0.00	7,700.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
8,900.00	0.00	0.00	7,800.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,000.00	0.00	0.00	7,900.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,100.00	0.00	0.00	8,000.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,200.00	0.00	0.00	8,100.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,300.00	0.00	0.00	8,200.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,400.00	0.00	0.00	8,300.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,500.00	0.00	0.00	8,400.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,600.00	0.00	0.00	8,500.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,700.00	0.00	0.00	8,600.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,800.00	0.00	0.00	8,700.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
9,900.00	0.00	0.00	8,800.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,000.00	0.00	0.00	8,900.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,100.00	0.00	0.00	9,000.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,200.00	0.00	0.00	9,100.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
CMEO										
10,216.23	0.00	0.00	9,117.00	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,300.00	0.00	0.00	9,200.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,400.00	0.00	0.00	9,300.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,500.00	0.00	0.00	9,400.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,600.00	0.00	0.00	9,500.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,700.00	0.00	0.00	9,600.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,800.00	0.00	0.00	9,700.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
10,900.00	0.00	0.00	9,800.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
11,000.00	0.00	0.00	9,900.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
RLNS										
11,000.23	0.00	0.00	9,901.00	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
11,100.00	0.00	0.00	10,000.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
11,200.00	0.00	0.00	10,100.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
11,300.00	0.00	0.00	10,200.77	-2,722.02	-2,462.63	3,670.69	0.00	0.00	0.00	
TD at 11350.23 - TD										
11,350.23	0.00	0.00	10,251.00	-2,722.02	-2,462.63	3,670.69	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 521-24 - VP - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,031.00	-2,722.02	-2,462.63	1,589,313.90	2,339,690.00	39.428105	-107.837865	
SR 521-24 - PBHL - plan hits target center - Point	0.00	0.00	10,251.00	-2,722.02	-2,462.63	1,589,313.90	2,339,690.00	39.428105	-107.837865	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SR 521-24 - Slot (A07) SR 521-24
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 521-24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,129.07	1,100.00	9 5/8" Surface Casing	9-5/8	12-1/4

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
0.00	0.00	U__WSCH		0.00	
4,751.68	4,006.00	G_SAND			
5,379.51	4,506.00	FRUN			
7,045.72	5,961.00	L__WSCH			
7,553.04	6,456.00	OCRK			
8,130.23	7,031.00	U__MVRD			
8,130.23	7,031.00	TGAS			
10,216.23	9,117.00	CMEO			
11,000.23	9,901.00	RLNS			
11,350.23	10,251.00	TD		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
250.00	250.00	0.00	0.00	Start Build 3.00	
416.67	416.46	-7.02	-1.88	Start DLS 3.00 TFO 31.03	
1,511.66	1,425.69	-305.29	-244.80	Start 4137.68 hold at 1511.66 MD	
5,649.34	4,720.89	-2,149.00	-1,936.78	Start Drop -1.50	
8,130.23	7,031.00	-2,722.02	-2,462.63	Start 3220.00 hold at 8130.23 MD	
11,350.23	10,251.00	-2,722.02	-2,462.63	TD at 11350.23	