

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: Site Honea Pad, True North
 Vertical (TVD) Reference: KB @ 8593.00usft
 Section (VS) Reference: Slot - WMC 412-19-793(49.23N, 35.65E)
 Measured Depth Reference: KB @ 8593.00usft
 Calculation Method: Minimum Curvature

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
WMC 412-19-793 - VP	7558.00	173.82	-208.61	1588740.90	2343746.90	39.426818	-107.823455	Circle (Radius: 50.00)
WMC 412-19-793 - PBHL	10833.00	173.82	-208.61	1588740.90	2343746.90	39.426818	-107.823455	Point

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
200.00	0.00	0.00	200.00	49.23	35.65	0.00	0.00	Start Build 3.00
272.20	2.17	297.03	272.19	49.85	34.44	1.36	1.36	Start 7146.55 hold at 272.20 MD
7418.75	2.17	297.03	7413.63	172.58	-206.18	271.48	271.48	Start Drop -1.50
7563.16	0.00	0.00	7558.00	173.82	-208.61	274.21	274.21	Start 3275.00 hold at 7563.16 MD
10838.16	0.00	0.00	10833.00	173.82	-208.61	274.21	274.21	TD at 10838.16

WELL DETAILS: WMC 412-19-793

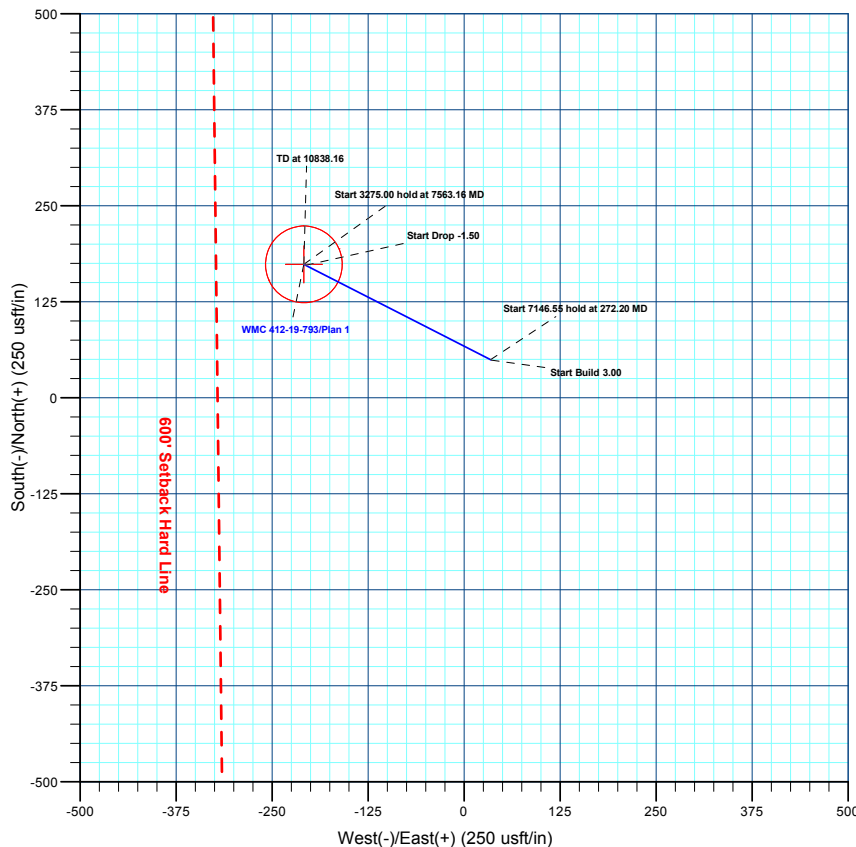
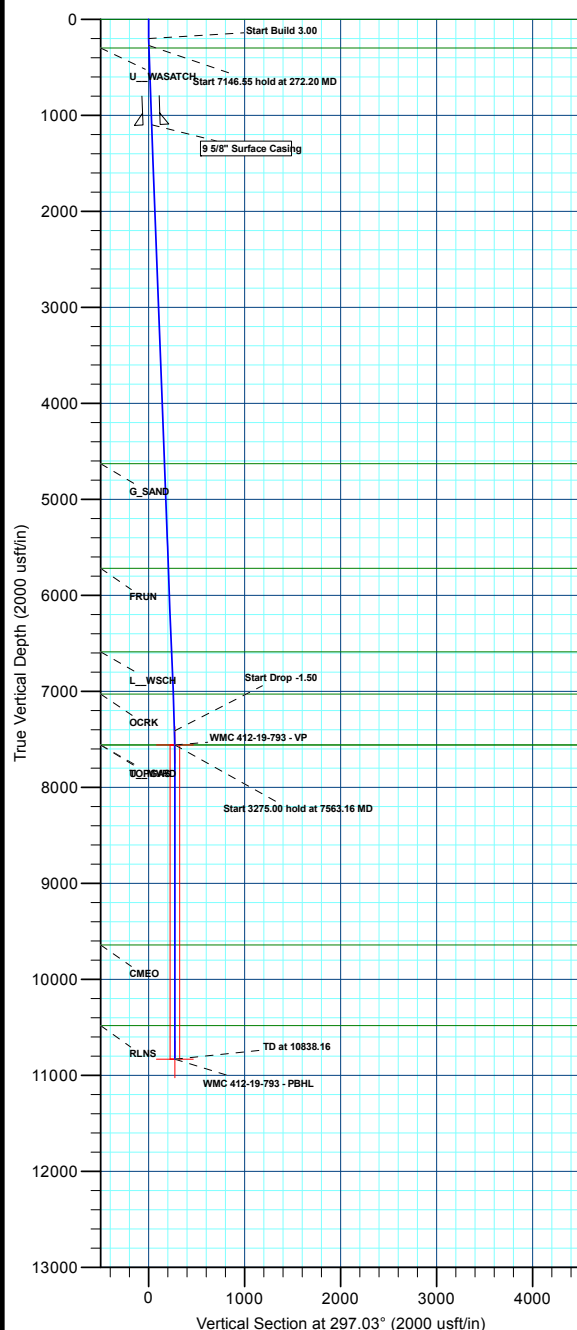
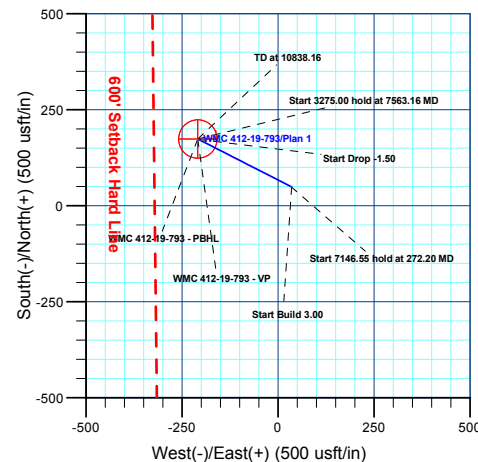
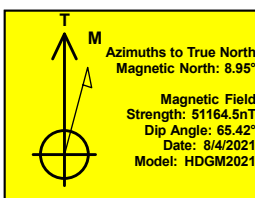
+N/-S	+E/-W	Northing	Ground Elev.	Easting	Latitude	Longitude	Slot
49.23	35.65	1588610.10	8563.00	2343987.90	39.426476	-107.822591	WMC 412-19-793

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
0.00	0.00	GRRV
300.00	300.04	U_WASATCH
4628.00	4631.13	G_SAND
5718.00	5721.91	FRUN
6588.00	6592.53	L_WSCH
7028.00	7032.85	OCRK
7558.00	7563.16	TOPGAS
7558.00	7563.16	U_MVRD
9643.00	9648.16	CMEQ
10483.00	10488.16	RLNS

CASING DETAILS

TVD	MD	Name	Size
1100.00	1100.61	9 5/8" Surface Casing	9-5/8



Plan: Plan 1 (WMC 412-19-793/Wellbore #1)

Created By: Chase Chambers Date: 13:08, January 26 2022



Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Honea Pad

WMC 412-19-793 - Slot WMC 412-19-793

Wellbore #1

Plan: Plan 1

KLX Well Planning Report

26 January, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Honea Pad
Company:	Terra Energy Partners, LLP	TVD Reference:	KB @ 8593.00usft
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB @ 8593.00usft
Site:	Honea Pad	North Reference:	True
Well:	WMC 412-19-793	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	Honea Pad				
Site Position:		Northing:	1,588,561.80 usft	Latitude:	39.426341
From:	Map	Easting:	2,343,951.00 usft	Longitude:	-107.822717
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.46

Well	WMC 412-19-793 - Slot WMC 412-19-793					
Well Position	+N/-S	49.23 usft	Northing:	1,588,610.10 usft	Latitude:	39.426476
	+E/-W	35.65 usft	Easting:	2,343,987.90 usft	Longitude:	-107.822591
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	8,563.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2021	8/4/2021	8.95	65.42	51,164.50000000

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	49.23	35.65	297.03

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	49.23	35.65	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	49.23	35.65	0.00	0.00	0.00	0.00	
272.20	2.17	297.03	272.19	49.85	34.44	3.00	3.00	0.00	297.03	
7,418.75	2.17	297.03	7,413.63	172.58	-206.18	0.00	0.00	0.00	0.00	
7,563.16	0.00	0.00	7,558.00	173.82	-208.61	1.50	-1.50	0.00	180.00	WMC 412-19-793 - VI
10,838.16	0.00	0.00	10,833.00	173.82	-208.61	0.00	0.00	0.00	0.00	WMC 412-19-793 - PI

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Honea Pad
Company:	Terra Energy Partners, LLP	TVD Reference:	KB @ 8593.00usft
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB @ 8593.00usft
Site:	Honea Pad	North Reference:	True
Well:	WMC 412-19-793	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)
GRRV									
0.00	0.00	0.00	0.00	49.23	35.65	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	49.23	35.65	0.00	0.00	0.00	0.00
Start Build 3.00									
200.00	0.00	0.00	200.00	49.23	35.65	0.00	0.00	0.00	0.00
Start 7146.55 hold at 272.20 MD									
272.20	2.17	297.03	272.19	49.85	34.44	1.36	3.00	3.00	0.00
300.00	2.17	297.03	299.96	50.33	33.50	2.42	0.00	0.00	0.00
U_WASATCH									
300.04	2.17	297.03	300.00	50.33	33.50	2.42	0.00	0.00	0.00
400.00	2.17	297.03	399.89	52.04	30.13	6.19	0.00	0.00	0.00
500.00	2.17	297.03	499.82	53.76	26.77	9.97	0.00	0.00	0.00
600.00	2.17	297.03	599.75	55.48	23.40	13.75	0.00	0.00	0.00
700.00	2.17	297.03	699.68	57.19	20.03	17.53	0.00	0.00	0.00
800.00	2.17	297.03	799.61	58.91	16.67	21.31	0.00	0.00	0.00
900.00	2.17	297.03	899.53	60.63	13.30	25.09	0.00	0.00	0.00
1,000.00	2.17	297.03	999.46	62.35	9.93	28.87	0.00	0.00	0.00
1,100.00	2.17	297.03	1,099.39	64.06	6.57	32.65	0.00	0.00	0.00
9 5/8" Surface Casing									
1,100.61	2.17	297.03	1,100.00	64.07	6.55	32.68	0.00	0.00	0.00
1,200.00	2.17	297.03	1,199.32	65.78	3.20	36.43	0.00	0.00	0.00
1,300.00	2.17	297.03	1,299.25	67.50	-0.17	40.21	0.00	0.00	0.00
1,400.00	2.17	297.03	1,399.18	69.22	-3.53	43.99	0.00	0.00	0.00
1,500.00	2.17	297.03	1,499.11	70.93	-6.90	47.77	0.00	0.00	0.00
1,600.00	2.17	297.03	1,599.03	72.65	-10.27	51.55	0.00	0.00	0.00
1,700.00	2.17	297.03	1,698.96	74.37	-13.64	55.33	0.00	0.00	0.00
1,800.00	2.17	297.03	1,798.89	76.09	-17.00	59.11	0.00	0.00	0.00
1,900.00	2.17	297.03	1,898.82	77.80	-20.37	62.89	0.00	0.00	0.00
2,000.00	2.17	297.03	1,998.75	79.52	-23.74	66.67	0.00	0.00	0.00
2,100.00	2.17	297.03	2,098.68	81.24	-27.10	70.45	0.00	0.00	0.00
2,200.00	2.17	297.03	2,198.61	82.96	-30.47	74.23	0.00	0.00	0.00
2,300.00	2.17	297.03	2,298.53	84.67	-33.84	78.01	0.00	0.00	0.00
2,400.00	2.17	297.03	2,398.46	86.39	-37.20	81.79	0.00	0.00	0.00
2,500.00	2.17	297.03	2,498.39	88.11	-40.57	85.57	0.00	0.00	0.00
2,600.00	2.17	297.03	2,598.32	89.83	-43.94	89.35	0.00	0.00	0.00
2,700.00	2.17	297.03	2,698.25	91.54	-47.30	93.13	0.00	0.00	0.00
2,800.00	2.17	297.03	2,798.18	93.26	-50.67	96.91	0.00	0.00	0.00
2,900.00	2.17	297.03	2,898.11	94.98	-54.04	100.69	0.00	0.00	0.00
3,000.00	2.17	297.03	2,998.03	96.70	-57.41	104.47	0.00	0.00	0.00
3,100.00	2.17	297.03	3,097.96	98.41	-60.77	108.25	0.00	0.00	0.00
3,200.00	2.17	297.03	3,197.89	100.13	-64.14	112.02	0.00	0.00	0.00
3,300.00	2.17	297.03	3,297.82	101.85	-67.51	115.80	0.00	0.00	0.00
3,400.00	2.17	297.03	3,397.75	103.56	-70.87	119.58	0.00	0.00	0.00
3,500.00	2.17	297.03	3,497.68	105.28	-74.24	123.36	0.00	0.00	0.00
3,600.00	2.17	297.03	3,597.61	107.00	-77.61	127.14	0.00	0.00	0.00
3,700.00	2.17	297.03	3,697.53	108.72	-80.97	130.92	0.00	0.00	0.00
3,800.00	2.17	297.03	3,797.46	110.43	-84.34	134.70	0.00	0.00	0.00
3,900.00	2.17	297.03	3,897.39	112.15	-87.71	138.48	0.00	0.00	0.00
4,000.00	2.17	297.03	3,997.32	113.87	-91.07	142.26	0.00	0.00	0.00
4,100.00	2.17	297.03	4,097.25	115.59	-94.44	146.04	0.00	0.00	0.00
4,200.00	2.17	297.03	4,197.18	117.30	-97.81	149.82	0.00	0.00	0.00
4,300.00	2.17	297.03	4,297.10	119.02	-101.17	153.60	0.00	0.00	0.00
4,400.00	2.17	297.03	4,397.03	120.74	-104.54	157.38	0.00	0.00	0.00
4,500.00	2.17	297.03	4,496.96	122.46	-107.91	161.16	0.00	0.00	0.00

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Company:	Terra Energy Partners, LLP	TVD Reference:	KB @ 8593.00usft
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB @ 8593.00usft
Site:	Honea Pad	North Reference:	True
Well:	WMC 412-19-793	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)
4,600.00	2.17	297.03	4,596.89	124.17	-111.28	164.94	0.00	0.00	0.00
G_SAND									
4,631.13	2.17	297.03	4,628.00	124.71	-112.32	166.12	0.00	0.00	0.00
4,700.00	2.17	297.03	4,696.82	125.89	-114.64	168.72	0.00	0.00	0.00
4,800.00	2.17	297.03	4,796.75	127.61	-118.01	172.50	0.00	0.00	0.00
4,900.00	2.17	297.03	4,896.68	129.33	-121.38	176.28	0.00	0.00	0.00
5,000.00	2.17	297.03	4,996.60	131.04	-124.74	180.06	0.00	0.00	0.00
5,100.00	2.17	297.03	5,096.53	132.76	-128.11	183.84	0.00	0.00	0.00
5,200.00	2.17	297.03	5,196.46	134.48	-131.48	187.62	0.00	0.00	0.00
5,300.00	2.17	297.03	5,296.39	136.20	-134.84	191.40	0.00	0.00	0.00
5,400.00	2.17	297.03	5,396.32	137.91	-138.21	195.18	0.00	0.00	0.00
5,500.00	2.17	297.03	5,496.25	139.63	-141.58	198.96	0.00	0.00	0.00
5,600.00	2.17	297.03	5,596.18	141.35	-144.94	202.74	0.00	0.00	0.00
5,700.00	2.17	297.03	5,696.10	143.07	-148.31	206.52	0.00	0.00	0.00
FRUN									
5,721.91	2.17	297.03	5,718.00	143.44	-149.05	207.34	0.00	0.00	0.00
5,800.00	2.17	297.03	5,796.03	144.78	-151.68	210.30	0.00	0.00	0.00
5,900.00	2.17	297.03	5,895.96	146.50	-155.05	214.07	0.00	0.00	0.00
6,000.00	2.17	297.03	5,995.89	148.22	-158.41	217.85	0.00	0.00	0.00
6,100.00	2.17	297.03	6,095.82	149.94	-161.78	221.63	0.00	0.00	0.00
6,200.00	2.17	297.03	6,195.75	151.65	-165.15	225.41	0.00	0.00	0.00
6,300.00	2.17	297.03	6,295.68	153.37	-168.51	229.19	0.00	0.00	0.00
6,400.00	2.17	297.03	6,395.60	155.09	-171.88	232.97	0.00	0.00	0.00
6,500.00	2.17	297.03	6,495.53	156.80	-175.25	236.75	0.00	0.00	0.00
L_WSCH									
6,592.53	2.17	297.03	6,588.00	158.39	-178.36	240.25	0.00	0.00	0.00
6,600.00	2.17	297.03	6,595.46	158.52	-178.61	240.53	0.00	0.00	0.00
6,700.00	2.17	297.03	6,695.39	160.24	-181.98	244.31	0.00	0.00	0.00
6,800.00	2.17	297.03	6,795.32	161.96	-185.35	248.09	0.00	0.00	0.00
6,900.00	2.17	297.03	6,895.25	163.67	-188.71	251.87	0.00	0.00	0.00
7,000.00	2.17	297.03	6,995.18	165.39	-192.08	255.65	0.00	0.00	0.00
OCRK									
7,032.85	2.17	297.03	7,028.00	165.96	-193.19	256.89	0.00	0.00	0.00
7,100.00	2.17	297.03	7,095.10	167.11	-195.45	259.43	0.00	0.00	0.00
7,200.00	2.17	297.03	7,195.03	168.83	-198.82	263.21	0.00	0.00	0.00
7,300.00	2.17	297.03	7,294.96	170.54	-202.18	266.99	0.00	0.00	0.00
7,400.00	2.17	297.03	7,394.89	172.26	-205.55	270.77	0.00	0.00	0.00
Start Drop -1.50									
7,418.75	2.17	297.03	7,413.63	172.58	-206.18	271.48	0.00	0.00	0.00
7,500.00	0.95	297.03	7,494.84	173.59	-208.15	273.69	1.50	-1.50	0.00
Start 3275.00 hold at 7563.16 MD - U_MVRD - TOPGAS									
7,563.16	0.00	0.00	7,558.00	173.82	-208.61	274.21	1.50	-1.50	0.00
7,600.00	0.00	0.00	7,594.84	173.82	-208.61	274.21	0.00	0.00	0.00
7,700.00	0.00	0.00	7,694.84	173.82	-208.61	274.21	0.00	0.00	0.00
7,800.00	0.00	0.00	7,794.84	173.82	-208.61	274.21	0.00	0.00	0.00
7,900.00	0.00	0.00	7,894.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,000.00	0.00	0.00	7,994.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,100.00	0.00	0.00	8,094.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,200.00	0.00	0.00	8,194.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,300.00	0.00	0.00	8,294.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,400.00	0.00	0.00	8,394.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,500.00	0.00	0.00	8,494.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,600.00	0.00	0.00	8,594.84	173.82	-208.61	274.21	0.00	0.00	0.00

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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)
8,700.00	0.00	0.00	8,694.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,800.00	0.00	0.00	8,794.84	173.82	-208.61	274.21	0.00	0.00	0.00
8,900.00	0.00	0.00	8,894.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,000.00	0.00	0.00	8,994.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,100.00	0.00	0.00	9,094.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,200.00	0.00	0.00	9,194.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,300.00	0.00	0.00	9,294.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,400.00	0.00	0.00	9,394.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,500.00	0.00	0.00	9,494.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,600.00	0.00	0.00	9,594.84	173.82	-208.61	274.21	0.00	0.00	0.00
CME0									
9,648.16	0.00	0.00	9,643.00	173.82	-208.61	274.21	0.00	0.00	0.00
9,700.00	0.00	0.00	9,694.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,800.00	0.00	0.00	9,794.84	173.82	-208.61	274.21	0.00	0.00	0.00
9,900.00	0.00	0.00	9,894.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,000.00	0.00	0.00	9,994.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,100.00	0.00	0.00	10,094.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,200.00	0.00	0.00	10,194.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,300.00	0.00	0.00	10,294.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,400.00	0.00	0.00	10,394.84	173.82	-208.61	274.21	0.00	0.00	0.00
RLNS									
10,488.16	0.00	0.00	10,483.00	173.82	-208.61	274.21	0.00	0.00	0.00
10,500.00	0.00	0.00	10,494.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,600.00	0.00	0.00	10,594.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,700.00	0.00	0.00	10,694.84	173.82	-208.61	274.21	0.00	0.00	0.00
10,800.00	0.00	0.00	10,794.84	173.82	-208.61	274.21	0.00	0.00	0.00
TD at 10838.16									
10,838.16	0.00	0.00	10,833.00	173.82	-208.61	274.21	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
- hit/miss target									
- Shape									
WMC 412-19-793 - VP	0.00	0.00	7,558.00	173.82	-208.61	1,588,740.90	2,343,746.90	39.426818	-107.823456
- plan hits target center									
- Circle (radius 50.00)									
WMC 412-19-793 - PBH	0.00	0.00	10,833.00	173.82	-208.61	1,588,740.90	2,343,746.90	39.426818	-107.823456
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,100.61	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:	Site Honea Pad
Company:	Terra Energy Partners, LLP	TVD Reference:	KB @ 8593.00usft
Project:	Garfield County, CO (Nad 83)	MD Reference:	KB @ 8593.00usft
Site:	Honea Pad	North Reference:	True
Well:	WMC 412-19-793	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	GRRV				
300.04	300.00	U__WASATCH				
4,631.13	4,628.00	G_SAND				
5,721.91	5,718.00	FRUN				
6,592.53	6,588.00	L__WSCH				
7,032.85	7,028.00	OCRK				
7,563.16	7,558.00	U__MVRD				
7,563.16	7,558.00	TOPGAS				
9,648.16	9,643.00	CME0				
10,488.16	10,483.00	RLNS				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
200.00	200.00	49.23	35.65	Start Build 3.00	
272.20	272.19	49.85	34.44	Start 7146.55 hold at 272.20 MD	
7,418.75	7,413.63	172.58	-206.18	Start Drop -1.50	
7,563.16	7,558.00	173.82	-208.61	Start 3275.00 hold at 7563.16 MD	
10,838.16	10,833.00	173.82	-208.61	TD at 10838.16	