

Tekton

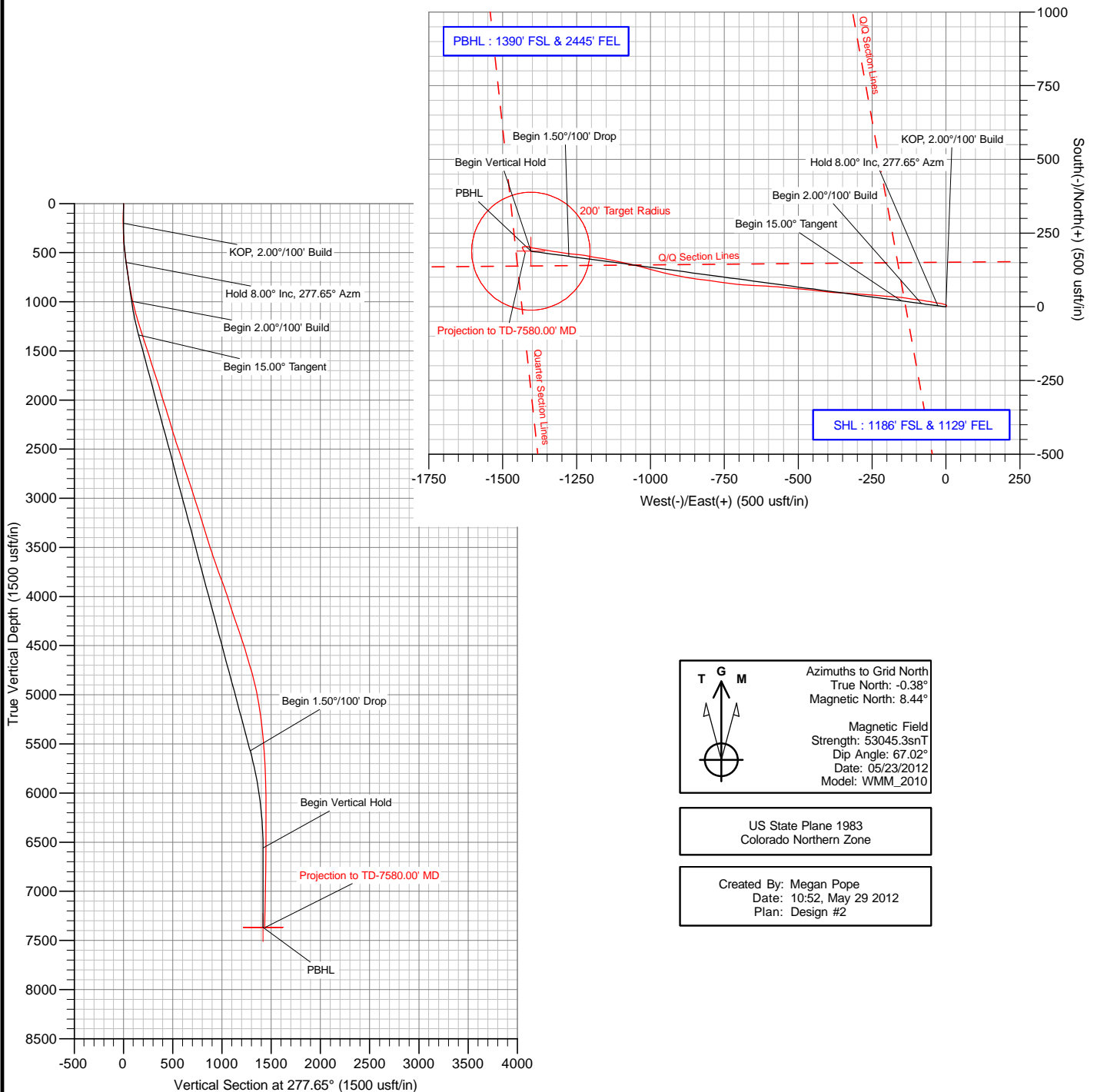
Company: Tekton
Site: Frye Farms
Well: 7-5-32
Project: Weld County, Colorado (NAD83)
Rig Name: Cade 22

MS Energy Services
WWW.MSENERGYSERVICES.COM

Planning: 936.442.2510 Fax: 936.442.2515
Operations: 936.442.2500 Fax: 936.442.2599

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	KOP, 2.00°/100' Build
600.00	8.00	277.65	598.70	3.71	-27.63	27.88	27.88	Hold 8.00° Inc, 277.65° Azm
1000.00	8.00	277.65	994.81	11.13	-82.80	83.55	83.55	Begin 2.00°/100' Build
1349.80	15.00	277.65	1337.38	20.41	-151.87	153.23	153.23	Begin 15.00° Tangent
5732.31	15.00	277.65	5570.64	171.45	-1275.75	1287.22	1287.22	Begin 1.50°/100' Drop
6732.05	0.00	0.00	6559.00	188.78	-1404.68	1417.31	1417.31	Begin Vertical Hold
7540.05	0.00	0.00	7367.00	188.78	-1404.68	1417.31	1417.31	PBHL



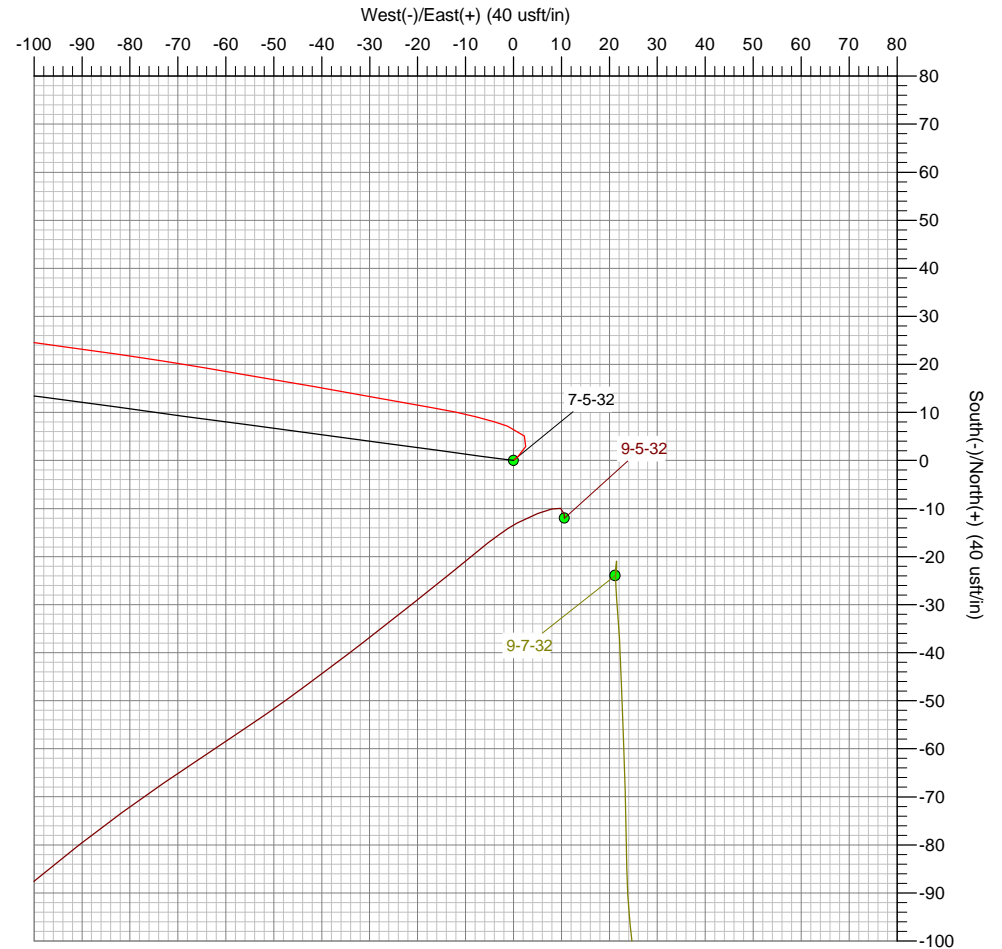
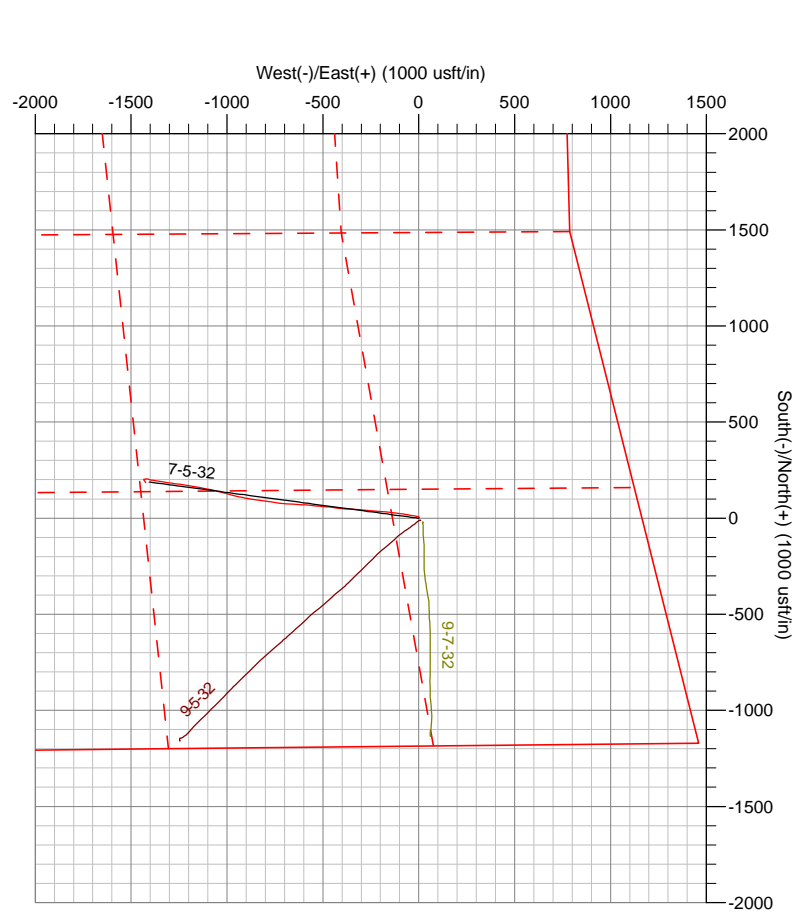
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Tekton

Weld County, Colorado (NAD83)

Frye Farms

7-5-32

Wellbore #1

Survey: MS MWD

Standard Survey Report

29 May, 2012

Company:	Tekton	Local Co-ordinate Reference:	Well 7-5-32
Project:	Weld County, Colorado (NAD83)	TVD Reference:	WELL @ 4897.00usft (Cade 22)
Site:	Frye Farms	MD Reference:	WELL @ 4897.00usft (Cade 22)
Well:	7-5-32	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	Southern Region

Project	Weld County, Colorado (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Well	7-5-32					
Well Position	+N/-S	0.00 usft	Northing:	1,403,409.94 usft	Latitude:	40° 26' 21.3537 N
	+E/-W	0.00 usft	Easting:	3,164,083.42 usft	Longitude:	104° 54' 37.828 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,881.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	05/23/12	8.82	67.02	53,045

Design	Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		277.65

Survey Program	Date	05/29/12			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
81.00	7,580.00	MS MWD (Wellbore #1)	MWD	MWD - Standard	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
81.00	1.80	48.40	80.99	0.84	0.95	-0.83	2.22	2.22	0.00	
169.00	1.70	27.00	168.95	2.93	2.58	-2.17	0.75	-0.11	-24.32	
257.00	1.80	318.60	256.91	5.13	2.26	-1.55	2.24	0.11	-77.73	
349.00	3.40	290.80	348.82	7.18	-1.25	2.19	2.17	1.74	-30.22	
440.00	5.20	283.90	439.56	9.13	-7.78	8.92	2.05	1.98	-7.58	
530.00	7.00	279.90	529.05	11.05	-17.14	18.46	2.05	2.00	-4.44	
622.00	7.70	280.20	620.29	13.11	-28.73	30.22	0.76	0.76	0.33	
713.00	8.50	280.20	710.38	15.38	-41.35	43.03	0.88	0.88	0.00	
809.00	9.10	279.40	805.25	17.87	-55.82	57.70	0.64	0.63	-0.83	
862.00	9.70	279.70	857.54	19.31	-64.36	66.35	1.14	1.13	0.57	
1,009.00	12.50	277.60	1,001.78	23.50	-92.34	94.64	1.92	1.90	-1.43	
1,104.00	15.10	278.20	1,094.03	26.63	-114.78	117.30	2.74	2.74	0.63	
1,200.00	17.30	277.60	1,186.21	30.30	-141.31	144.08	2.30	2.29	-0.63	
1,390.00	18.00	273.80	1,367.27	35.98	-198.60	201.63	0.71	0.37	-2.00	

Company:	Tekton	Local Co-ordinate Reference:	Well 7-5-32
Project:	Weld County, Colorado (NAD83)	TVD Reference:	WELL @ 4897.00usft (Cade 22)
Site:	Frye Farms	MD Reference:	WELL @ 4897.00usft (Cade 22)
Well:	7-5-32	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	Southern Region

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)
1,581.00	17.40	274.50	1,549.23	40.18	-256.52	259.59	0.33	-0.31	0.37
1,771.00	18.40	274.40	1,730.03	44.71	-314.74	317.89	0.53	0.53	-0.05
1,962.00	16.30	272.30	1,912.33	48.09	-371.59	374.68	1.15	-1.10	-1.10
2,057.00	17.70	276.30	2,003.18	50.21	-399.26	402.40	1.92	1.47	4.21
2,152.00	18.10	277.50	2,093.58	53.73	-428.25	431.59	0.57	0.42	1.26
2,247.00	17.00	276.60	2,184.16	57.25	-456.68	460.23	1.19	-1.16	-0.95
2,373.00	16.60	273.90	2,304.78	60.59	-492.93	496.61	0.70	-0.32	-2.14
2,500.00	18.60	275.50	2,425.83	63.76	-531.20	534.96	1.62	1.57	1.26
2,627.00	18.60	275.30	2,546.20	67.58	-571.52	575.43	0.05	0.00	-0.16
2,753.00	17.00	272.60	2,666.16	70.27	-609.94	613.86	1.43	-1.27	-2.14
2,879.00	18.70	273.50	2,786.10	72.34	-648.50	652.36	1.37	1.35	0.71
3,006.00	18.10	273.60	2,906.60	74.82	-688.51	692.34	0.47	-0.47	0.08
3,132.00	17.90	277.80	3,026.44	78.68	-727.23	731.23	1.04	-0.16	3.33
3,259.00	17.80	278.80	3,147.33	84.29	-765.75	770.16	0.25	-0.08	0.79
3,386.00	17.80	276.90	3,268.25	89.60	-804.20	808.97	0.46	0.00	-1.50
3,513.00	17.00	277.10	3,389.44	94.22	-841.90	846.95	0.63	-0.63	0.16
3,640.00	17.00	280.00	3,510.89	99.74	-878.61	884.07	0.67	0.00	2.28
3,767.00	19.40	281.70	3,631.53	107.24	-917.55	923.66	1.94	1.89	1.34
3,894.00	20.30	283.80	3,750.98	116.78	-959.60	966.61	0.90	0.71	1.65
4,020.00	20.30	284.80	3,869.16	127.57	-1,001.96	1,010.02	0.28	0.00	0.79
4,146.00	18.00	285.30	3,988.18	138.30	-1,041.87	1,051.01	1.83	-1.83	0.40
4,273.00	17.70	282.00	4,109.07	147.49	-1,079.69	1,089.71	0.83	-0.24	-2.60
4,400.00	19.00	282.10	4,229.60	155.84	-1,118.79	1,129.57	1.02	1.02	0.08
4,527.00	19.60	279.10	4,349.47	163.54	-1,160.04	1,171.48	0.91	0.47	-2.36
4,653.00	17.90	280.50	4,468.78	170.41	-1,199.94	1,211.95	1.40	-1.35	1.11
4,781.00	16.70	276.80	4,590.99	176.17	-1,237.55	1,249.99	1.27	-0.94	-2.89
4,908.00	16.10	276.90	4,712.82	180.45	-1,273.15	1,285.84	0.47	-0.47	0.08
5,035.00	14.70	278.00	4,835.26	184.81	-1,306.59	1,319.57	1.13	-1.10	0.87
5,161.00	12.00	279.30	4,957.84	189.15	-1,335.36	1,348.65	2.16	-2.14	1.03
5,288.00	9.70	279.30	5,082.57	193.01	-1,358.95	1,372.54	1.81	-1.81	0.00
5,416.00	7.80	279.80	5,209.07	196.23	-1,378.15	1,392.01	1.49	-1.48	0.39
5,543.00	5.90	281.10	5,335.16	198.96	-1,393.05	1,407.13	1.50	-1.50	1.02
5,669.00	5.00	287.10	5,460.59	201.82	-1,404.65	1,419.01	0.84	-0.71	4.76
5,795.00	4.60	280.90	5,586.15	204.39	-1,414.86	1,429.48	0.52	-0.32	-4.92
5,922.00	2.50	255.10	5,712.90	204.64	-1,422.54	1,437.12	2.04	-1.65	-20.31
6,049.00	1.80	265.00	5,839.81	203.75	-1,427.20	1,441.62	0.62	-0.55	7.80
6,239.00	0.90	253.80	6,029.76	203.08	-1,431.61	1,445.90	0.49	-0.47	-5.89
6,430.00	0.40	232.00	6,220.75	202.25	-1,433.57	1,447.74	0.29	-0.26	-11.41
6,714.00	0.60	153.60	6,504.74	200.31	-1,433.69	1,447.60	0.23	0.07	-27.61
7,000.00	1.70	147.40	6,790.68	195.39	-1,430.74	1,444.02	0.39	0.38	-2.17
7,286.00	1.90	148.50	7,076.54	187.77	-1,425.98	1,438.28	0.07	0.07	0.38
7,529.00	0.10	141.90	7,319.49	184.17	-1,423.74	1,435.59	0.74	-0.74	-2.72
7,580.00	0.10	141.90	7,370.49	184.10	-1,423.69	1,435.53	0.00	0.00	0.00
Projection to TD-7580.00' MD									

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Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,580.00	7,370.49	184.10	-1,423.69	Projection to TD-7580.00' MD