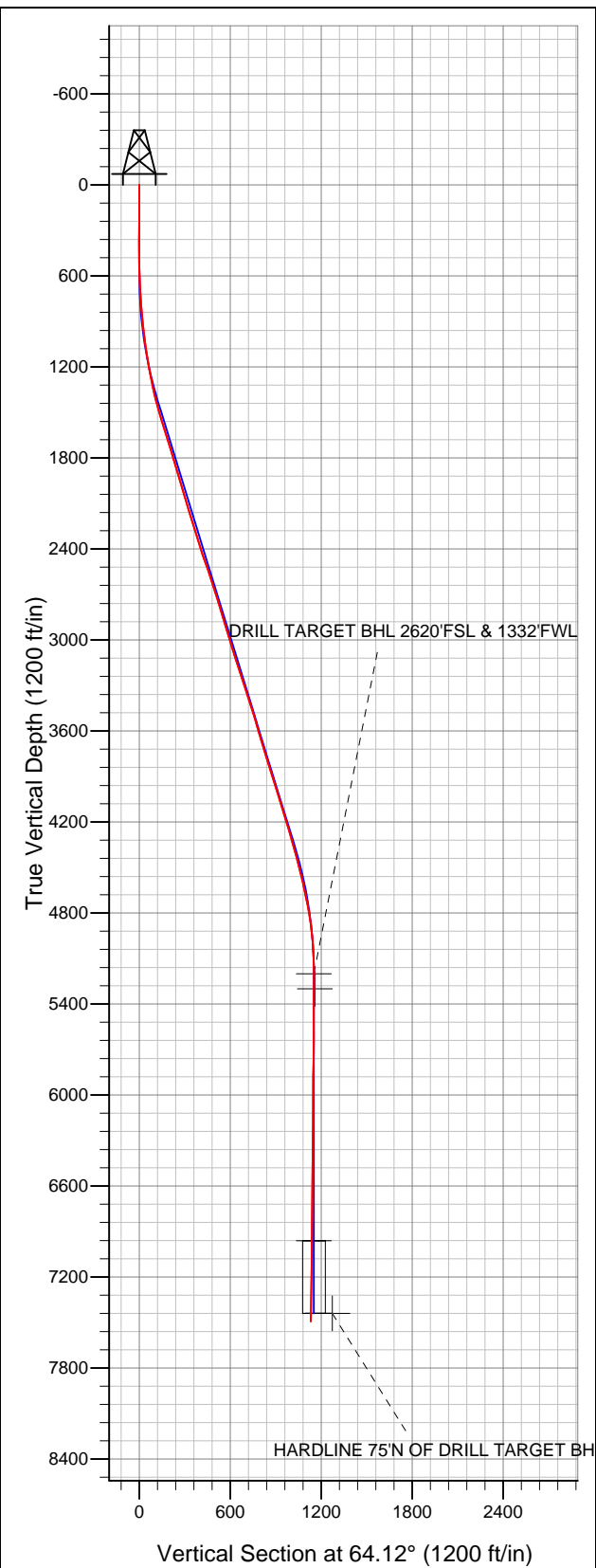


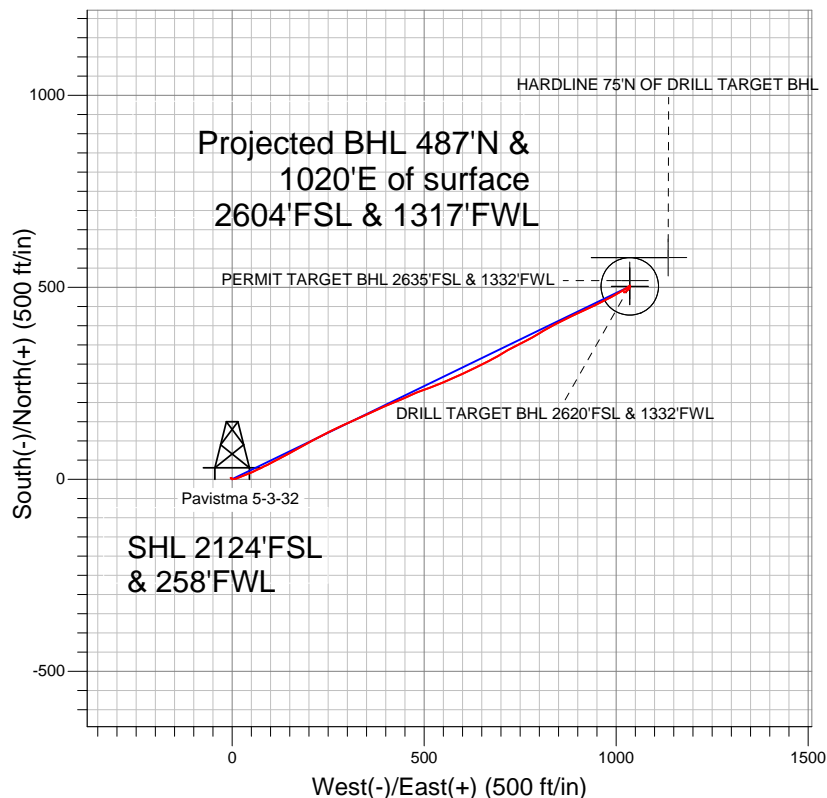
# Well Name: Pavistma 5-3-32

Surface Location: Pavistma 5-1-32 Pad Sec.32-T6N-R67W  
North American Datum 1983 US State Plane 1983Colorado Northern Zone  
Ground Elevation: 4954.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1404303.85	3160127.12	40.441790	-104.924700	
		Original Well Elev	WELL @ 4967.0ft (Original Well Elev)			



## Tekton Energy



### LEGEND

- Survey #1
- △ Pavistma 5-3-32, Wellbore #1, Plan #1 (2-1-12) V0
- Wellbore #1

## Final Survey Plot

Projected Final Survey -  
7652'MD & 7492'TVD @ 1130'VS  
1.30 deg Inc 262.20 deg AZ

Project: SEC.32-T6N-R67W  
Site: Pavistma 5-1-32 Pad Sec.32-T6N-R67W  
Well: Pavistma 5-3-32  
Plan: Wellbore #1



## **Tekton Energy**

**SEC.32-T6N-R67W**

**Pavistma 5-1-32 Pad Sec.32-T6N-R67W**

**Pavistma 5-3-32**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**27 February, 2012**

<b>Company:</b>	Tekton Energy	<b>Local Co-ordinate Reference:</b>	Well Pavistma 5-3-32
<b>Project:</b>	SEC.32-T6N-R67W	<b>TVD Reference:</b>	WELL @ 4967.0ft (Original Well Elev)
<b>Site:</b>	Pavistma 5-1-32 Pad Sec.32-T6N-R67W	<b>MD Reference:</b>	WELL @ 4967.0ft (Original Well Elev)
<b>Well:</b>	Pavistma 5-3-32	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

<b>Project</b>	SEC.32-T6N-R67W, Weld 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		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site	Pavistma 5-1-32 Pad Sec.32-T6N-R67W				
Site Position:		Northing:	1,404,322.06ft	Latitude:	40.441840
From:	Lat/Long	Easting:	3,160,124.21ft	Longitude:	-104.924710
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.37 °

Well	Pavistma 5-3-32					
Well Position	+N/-S	0.0 ft	Northing:	1,404,303.85 ft	Latitude:	40.441790
	+E/-W	0.0 ft	Easting:	3,160,127.12 ft	Longitude:	-104.924700
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,954.0 ft

<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>
	IGRF2010	2/1/2012	8.87	67.04	53,109

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	5,200.0	0.0	0.0	64.12	

<b>Survey Program</b>	<b>Date</b>	2/27/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
95.0	7,652.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
95.0	0.80	318.10	95.0	0.5	-0.4	-0.2	0.84	0.84	0.00	
186.0	1.30	316.50	186.0	1.7	-1.6	-0.7	0.55	0.55	-1.76	
306.0	1.00	300.60	306.0	3.2	-3.4	-1.7	0.36	-0.25	-13.25	
427.0	0.80	143.30	427.0	3.1	-3.8	-2.1	1.46	-0.17	-130.00	
550.0	3.00	109.00	549.9	1.4	-0.3	0.4	1.94	1.79	-27.89	
675.0	2.20	85.60	674.8	0.5	5.2	4.9	1.05	-0.64	-18.72	
800.0	4.20	67.10	799.6	2.4	11.8	11.7	1.78	1.60	-14.80	
862.0	5.70	68.40	861.3	4.5	16.8	17.0	2.43	2.42	2.10	
925.0	5.80	68.50	924.0	6.8	22.7	23.3	0.16	0.16	0.16	
1,050.0	7.80	68.90	1,048.1	12.1	36.4	38.1	1.60	1.60	0.32	
1,174.0	9.90	65.60	1,170.6	19.6	54.0	57.1	1.74	1.69	-2.66	
1,299.0	11.70	64.50	1,293.4	29.5	75.2	80.6	1.45	1.44	-0.88	

<b>Company:</b>	Tekton Energy	<b>Local Co-ordinate Reference:</b>	Well Pavistma 5-3-32
<b>Project:</b>	SEC.32-T6N-R67W	<b>TVD Reference:</b>	WELL @ 4967.0ft (Original Well Elev)
<b>Site:</b>	Pavistma 5-1-32 Pad Sec.32-T6N-R67W	<b>MD Reference:</b>	WELL @ 4967.0ft (Original Well Elev)
<b>Well:</b>	Pavistma 5-3-32	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
1,424.0	13.90	62.10	1,415.3	42.0	99.9	108.2	1.81	1.76	-1.92	
1,548.0	16.70	61.30	1,534.9	57.5	128.7	140.9	2.26	2.26	-0.65	
1,673.0	17.80	62.20	1,654.3	75.0	161.4	178.0	0.91	0.88	0.72	
1,798.0	17.00	61.60	1,773.6	92.6	194.4	215.3	0.66	-0.64	-0.48	
1,922.0	16.30	61.70	1,892.4	109.5	225.6	250.8	0.56	-0.56	0.08	
2,047.0	16.70	63.40	2,012.2	125.9	257.1	286.3	0.50	0.32	1.36	
2,172.0	16.30	67.00	2,132.1	140.8	289.4	321.8	0.88	-0.32	2.88	
2,296.0	17.90	65.00	2,250.6	155.6	322.6	358.2	1.37	1.29	-1.61	
2,421.0	17.10	64.40	2,369.8	171.7	356.6	395.8	0.66	-0.64	-0.48	
2,546.0	19.20	67.10	2,488.6	187.6	392.1	434.7	1.81	1.68	2.16	
2,670.0	19.00	67.20	2,605.7	203.4	429.5	475.2	0.16	-0.16	0.08	
2,795.0	15.90	65.60	2,725.0	218.3	463.9	512.7	2.51	-2.48	-1.28	
2,920.0	16.90	69.00	2,844.9	231.9	496.4	547.9	1.11	0.80	2.72	
3,044.0	17.80	69.40	2,963.2	245.0	531.0	584.7	0.73	0.73	0.32	
3,169.0	17.50	66.10	3,082.4	259.4	566.1	622.5	0.84	-0.24	-2.64	
3,294.0	17.50	65.30	3,201.6	274.8	600.3	660.1	0.19	0.00	-0.64	
3,418.0	18.10	64.60	3,319.6	290.9	634.7	698.0	0.51	0.48	-0.56	
3,543.0	18.30	62.50	3,438.4	308.3	669.6	737.0	0.55	0.16	-1.68	
3,668.0	15.30	57.40	3,558.0	326.2	700.9	773.0	2.67	-2.40	-4.08	
3,792.0	16.90	63.20	3,677.2	343.2	730.8	807.3	1.83	1.29	4.68	
3,917.0	17.30	63.30	3,796.7	359.7	763.6	844.1	0.32	0.32	0.08	
4,042.0	18.50	59.10	3,915.6	378.3	797.3	882.4	1.41	0.96	-3.36	
4,167.0	16.30	59.80	4,034.9	397.3	829.4	919.7	1.77	-1.76	0.56	
4,291.0	17.40	64.50	4,153.6	414.0	861.2	955.6	1.41	0.89	3.79	
4,416.0	16.20	65.70	4,273.2	429.2	894.0	991.7	1.00	-0.96	0.96	
4,541.0	15.80	65.30	4,393.4	443.5	925.3	1,026.1	0.33	-0.32	-0.32	
4,666.0	14.00	62.20	4,514.2	457.7	954.2	1,058.2	1.57	-1.44	-2.48	
4,790.0	12.20	61.20	4,635.0	471.0	978.9	1,086.3	1.46	-1.45	-0.81	
4,915.0	10.70	62.10	4,757.5	482.8	1,000.8	1,111.1	1.21	-1.20	0.72	
5,039.0	7.80	61.20	4,879.8	492.2	1,018.3	1,131.0	2.34	-2.34	-0.73	
5,164.0	4.40	51.70	5,004.1	499.3	1,029.5	1,144.2	2.83	-2.72	-7.60	
5,289.0	1.90	51.90	5,128.9	503.5	1,034.9	1,150.9	2.00	-2.00	0.16	
5,360.1	0.25	69.68	5,200.0	504.3	1,036.0	1,152.2	2.33	-2.31	25.01	
<b>DRILL TARGET BHL 2620'FSL &amp; 1332'FWL</b>										
5,413.0	1.00	224.10	5,252.9	504.0	1,035.8	1,151.9	2.33	1.41	291.86	
5,460.0	0.70	209.10	5,299.9	503.5	1,035.3	1,151.3	0.79	-0.64	-31.93	
<b>PERMIT TARGET BHL 2635'FSL &amp; 1332'FWL</b>										
5,538.0	0.50	149.80	5,377.9	502.8	1,035.3	1,150.9	0.79	-0.25	-76.00	
5,663.0	0.40	117.20	5,502.9	502.1	1,035.9	1,151.2	0.22	-0.08	-26.08	
5,787.0	0.80	217.70	5,626.9	501.2	1,035.8	1,150.7	0.77	0.32	81.05	
5,912.0	1.20	190.30	5,751.9	499.2	1,035.0	1,149.1	0.49	0.32	-21.92	
6,037.0	0.90	216.00	5,876.8	497.2	1,034.2	1,147.5	0.44	-0.24	20.56	
6,161.0	0.50	216.20	6,000.8	495.9	1,033.3	1,146.2	0.32	-0.32	0.16	
6,286.0	0.30	220.40	6,125.8	495.2	1,032.8	1,145.4	0.16	-0.16	3.36	
6,411.0	0.70	225.80	6,250.8	494.5	1,032.0	1,144.4	0.32	0.32	4.32	
6,535.0	0.60	220.40	6,374.8	493.4	1,031.1	1,143.0	0.09	-0.08	-4.35	
6,660.0	0.20	225.30	6,499.8	492.8	1,030.5	1,142.2	0.32	-0.32	3.92	
6,785.0	0.60	271.80	6,624.8	492.7	1,029.7	1,141.4	0.39	0.32	37.20	
6,909.0	0.70	261.10	6,748.8	492.6	1,028.3	1,140.2	0.13	0.08	-8.63	
7,034.0	0.70	182.50	6,873.8	491.7	1,027.5	1,139.1	0.71	0.00	-62.88	
7,121.1	0.65	214.90	6,960.8	490.7	1,027.2	1,138.4	0.44	-0.05	37.21	
<b>TARGET CIRCLE 2620'FSL &amp; 1332'FWL</b>										
7,159.0	0.70	228.40	6,998.8	490.4	1,026.9	1,138.0	0.44	0.12	35.59	
7,284.0	0.70	210.30	7,123.8	489.2	1,025.9	1,136.6	0.18	0.00	-14.48	

<b>Company:</b>	Tekton Energy	<b>Local Co-ordinate Reference:</b>	Well Pavistma 5-3-32
<b>Project:</b>	SEC.32-T6N-R67W	<b>TVD Reference:</b>	WELL @ 4967.0ft (Original Well Elev)
<b>Site:</b>	Pavistma 5-1-32 Pad Sec.32-T6N-R67W	<b>MD Reference:</b>	WELL @ 4967.0ft (Original Well Elev)
<b>Well:</b>	Pavistma 5-3-32	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,408.0	1.10	239.30	7,247.8	488.0	1,024.5	1,134.8	0.48	0.32	23.39
7,533.0	1.00	262.60	7,372.7	487.2	1,022.4	1,132.5	0.35	-0.08	18.64
7,597.8	1.27	262.24	7,437.5	487.1	1,021.1	1,131.3	0.41	0.41	-0.56
<b>HARDLINE 75'N OF DRILL TARGET BHL</b>									
7,606.0	1.30	262.20	7,445.7	487.0	1,021.0	1,131.2	0.41	0.41	-0.43
7,652.0	1.30	262.20	7,491.7	486.9	1,019.9	1,130.2	0.00	0.00	0.00

Checked By: _____	Approved By: _____	Date: _____
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