

Kambi TX LP MWD Survey Report

Company: Lime Rock Resources Job Number: KTX-165 Calculation Method: Minimum Curvature
 Well: Gant 7G Federal #2 Magnetic Decl.: 185
 Location: Eddy Co., N.M. Grid Corr.: 30-015-42447
 Rig: UDI 33 Total Grid Corr.: Surface

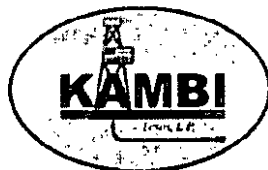
Survey #	Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')		
								N/S (ft)	E/W (ft)						
Tie	GL	0	0.00	0.00	0	0	0	0	0	0	0	0	0		
1	MWD	467.00	0.80	189.20	467	466.98	3.25	3.22	S	0.52	W	3.26	189.20	0.17	0.17
2	MWD	528.00	2.20	210.00	61	527.96	4.74	4.65	S	1.17	W	4.80	194.17	2.43	2.30
3	MWD	582.00	4.80	197.10	54	581.86	7.89	7.71	S	2.36	W	8.06	197.00	5.00	4.81
4	MWD	623.00	6.60	189.80	41	622.65	11.91	11.67	S	3.26	W	12.12	195.62	4.72	4.39
5	MWD	687.00	9.20	183.30	64	686.04	20.69	20.41	S	4.18	W	20.83	191.59	4.29	4.06
6	MWD	750.00	11.90	182.70	63	747.97	32.22	31.92	S	4.78	W	32.28	188.52	4.29	4.29
7	MWD	846.00	14.50	185.00	96	841.43	54.13	53.79	S	6.29	W	54.15	186.67	2.76	2.71
8	MWD	911.00	16.70	186.00	65	904.03	71.61	71.18	S	7.98	W	71.63	186.40	3.41	3.38
9	MWD	974.00	19.00	185.60	63	963.99	90.92	90.40	S	9.93	W	90.94	186.27	3.66	3.65
10	mwd	1039.00	21.60	184.40	65	1024.95	113.46	112.86	S	11.88	W	113.48	186.01	4.05	4.00
11	MWD	1102.00	24.60	183.70	63	1082.89	138.17	137.51	S	13.61	W	138.18	185.65	4.78	4.76
12	MWD	1166.00	27.00	184.10	64	1140.51	166.02	165.30	S	15.51	W	166.03	185.36	3.76	3.75
13	MWD	1230.00	30.30	185.70	64	1196.67	196.70	195.86	S	18.16	W	196.70	185.30	5.29	5.16
14	MWD	1294.00	33.70	185.20	64	1250.93	230.61	229.62	S	21.37	W	230.61	185.32	5.33	5.31
15	MWD	1359.00	35.90	184.30	65	1304.31	267.70	266.59	S	24.43	W	267.70	185.24	3.48	3.38
16	MWD	1422.00	38.40	184.40	63	1354.52	305.74	304.52	S	27.32	W	305.74	185.13	3.97	3.97
17	MWD	1486.00	38.70	183.50	64	1404.57	345.62	344.31	S	30.07	W	345.62	184.99	0.99	0.47
18	MWD	1550.00	39.30	182.40	64	1454.31	385.87	384.53	S	32.14	W	385.87	184.78	1.43	0.94
19	MWD	1614.00	38.00	184.80	64	1504.29	425.82	424.42	S	34.63	W	425.83	184.67	3.10	-2.03
20	MWD	1677.00	35.70	185.70	63	1554.70	463.60	462.04	S	38.08	W	463.61	184.71	3.75	-3.65
21	MWD	1741.00	35.50	185.90	64	1606.74	500.85	499.10	S	41.85	W	500.86	184.79	0.36	-0.31
22	MWD	1805.00	35.80	185.90	64	1658.75	538.15	536.21	S	45.68	W	538.15	184.87	0.47	0.47
23	MWD	1869.00	36.30	185.40	64	1710.49	575.81	573.69	S	49.39	W	575.81	184.92	0.91	0.78
24	MWD	1933.00	34.70	184.80	64	1762.59	612.97	610.70	S	52.70	W	612.97	184.93	2.56	-2.50
25	MWD	1998.00	32.20	183.70	65	1816.82	648.79	646.43	S	55.36	W	648.79	184.89	3.96	-3.85
26	MWD	2062.00	29.40	184.30	64	1871.79	681.56	679.12	S	57.64	W	681.56	184.85	4.40	-4.38
27	MWD	2126.00	26.50	184.00	64	1928.32	711.55	709.03	S	59.81	W	711.55	184.82	4.54	-4.53
28	MWD	2188.00	23.90	185.40	62	1984.41	737.94	735.34	S	61.96	W	737.94	184.82	4.30	-4.19
29	MWD	2254.00	21.30	185.10	66	2045.34	763.30	760.59	S	64.29	W	763.30	184.83	3.94	-3.94
30	MWD	2386.00	15.80	182.70	132	2170.44	805.26	802.46	S	67.27	W	805.27	184.79	4.21	-4.17
31	MWD	2450.00	13.20	182.30	64	2232.39	821.27	818.46	S	67.97	W	821.28	184.75	4.07	-4.06
32	MWD	2514.00	11.10	175.70	64	2294.96	834.65	831.91	S	67.80	W	834.67	184.66	3.93	-3.28

Kambi TX LP

Company: Lime Rock Resources Well: Grant 7G Federal #2 Location: Eddy Co., N.M. Rig: UDI 33	Job Number: KTX-165 Magnetic Decl.: Grid Corr.: Total Grid Corr.:
Calculation Method Minimum Curvature Proposed Azimuth 185 WELL API # 30-015-42447 Tie Into: Surface	

Survey #	Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')		
								N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)				
33	MWD	2578.00	9.10	173.10	64	2357.96	845.69	843.08	S	66.73	W	845.72	184.53	3.20	-3.13
34	MWD	2642.00	6.80	173.90	64	2421.34	854.36	851.87	S	65.72	W	854.40	184.41	3.60	-3.59
35	MWD	2675.00	5.20	177.30	33	2454.16	857.76	855.31	S	65.44	W	857.81	184.38	4.96	-4.85
36	MWD	2703.00	4.50	177.70	28	2482.06	860.10	857.67	S	65.34	W	860.16	184.36	2.50	-2.50
37	MWD	2737.00	3.00	186.90	34	2515.99	862.32	859.89	S	65.39	W	862.37	184.35	4.74	-4.41
38	MWD	2802.00	1.80	279.00	65	2580.95	863.95	861.42	S	66.60	W	863.99	184.42	5.47	-1.85
39	MWD	2898.00	2.00	283.20	96	2676.90	863.60	860.80	S	69.72	W	863.62	184.63	0.25	0.21
40	MWD	2993.00	2.00	335.00	95	2771.85	861.93	858.92	S	72.04	W	861.94	184.79	1.84	0.00
41	MWD	3093.00	2.20	337.50	100	2871.78	858.72	855.56	S	73.51	W	858.72	184.91	0.22	0.20
42	MWD	3188.00	1.00	3.90	95	2966.74	856.27	853.05	S	74.15	W	856.27	184.97	1.45	-1.26
43	MWD	3283.00	0.90	15.40	95	3061.73	854.71	851.51	S	73.90	W	854.71	184.96	0.23	-0.11
44	MWD	3379.00	1.00	26.80	96	3157.71	853.19	850.03	S	73.32	W	853.19	184.93	0.22	0.10
45	MWD	3475.00	1.00	13.40	96	3253.70	851.58	848.47	S	72.75	W	851.58	184.90	0.24	0.00
46	MWD	3517.00	1.00	16.40	42	3295.69	850.86	847.76	S	72.56	W	850.86	184.89	0.12	0.00
47	MWD	3667.00	1.40	20.40	150	3445.66	847.81	844.79	S	71.55	W	847.81	184.84	0.27	0.27
48	MWD	3763.00	0.60	77.00	96	3541.65	846.52	843.58	S	70.65	W	846.53	184.79	1.23	-0.83
49	MWD	3859.00	1.00	118.60	96	3637.64	846.70	843.86	S	69.43	W	846.71	184.70	0.71	0.42
50	MWD	3955.00	0.80	106.00	96	3733.63	847.17	844.45	S	68.05	W	847.19	184.61	0.29	-0.21
51	MWD	4050.00	0.80	122.90	95	3828.62	847.60	844.99	S	66.85	W	847.63	184.52	0.25	0.00
52	MWD	4146.00	1.00	117.70	96	3924.60	848.24	845.75	S	65.55	W	848.28	184.43	0.22	0.21
53	MWD	4243.00	1.20	131.50	97	4021.59	849.17	846.81	S	64.04	W	849.23	184.32	0.34	0.21
54	MWD	4307.00	1.00	122.30	64	4085.57	849.83	847.55	S	63.07	W	849.90	184.26	0.42	-0.31
55	MWD	4403.00	1.00	135.70	96	4181.56	850.76	848.60	S	61.77	W	850.85	184.16	0.24	0.00
56	PTB	4478.00	0.80	121.00	75	4256.55	851.41	849.34	S	60.87	W	851.52	184.10	0.41	-0.27

42447



November 03, 2015

State of New Mexico

County of Eddy

I, Kansas Swope, certify that; I am employed by Kambi-Texas, LP; that on the day(s) of August 12, 2014 – August 17, 2014 we conducted and or supervised the taking of MWD surveys for Grant 7G Federal #2 from a depth of 467.00 feet to a depth of 4478.00 feet; that the data is true, correct, complete, and within the limitations of the tool as set forth by Kambi-Texas, LP; that I am authorized and qualified to make this report; that this survey was conducted accordingly at the request of Lime Rock Resources; that I reviewed this report and find it conforms to the principles and procedures as set forth by Kambi-Texas, LP.

A handwritten signature in cursive script, appearing to read "Kansas Swope", is written over a solid horizontal line.

Kansas Swope
Manager
Kambi-Texas LP