



Terra Pilot MWD Tools LLC
5 North Cooley Dr.
Oklahoma City, OK 73127

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 16 2014

RECEIVED

November 11, 2014

State of New Mexico
Eddy County, NM

I, Brian Bobo, certify that: I am employed by Terra Pilot MWD Tool LLC (TX RRC Operator Number – 843257); that I did on the day(s) of 8/23/2014 through 8/31/2014 conduct or supervise the taking of MWD surveys from a depth of 0 feet measured depth (MWD Tie-In survey to Surface) to a depth of 4043 feet measured depth (MWD Projected Bottom Hole); that the data is true, correct, complete, and within the limitations of the tool as set forth by Terra Pilot MWD Tool LLC; that I am authorized and qualified to make this report; that the survey was conducted at the request of RKI E&P LLC, Inc. for the Longview Federal-31-#3H well; Well A.P. I. No.: 30-015-42050 in Eddy County, New Mexico and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Terra Pilot MWD Tool LLC.

A handwritten signature in black ink, appearing to be "BB" with a subscript "16", is written above a horizontal line.

Brian Bobo
Surveyor
Terra Pilot MWD Tool LLC

Company:	RKI EXPLORATION	Job Number:	TPNM14-03-255	Calculation Method:	Minimum Curvature
Well:	LONGVIEW FED 31-3H	Magnetic Decl.:	7.41	Proposed Azimuth:	355.79
Location:	EDDY CO., NEW MEXICO	Grid Corr.:		Well API #:	30-014-42050
Rig:	SILVER OAK #9	Total Grid Corr.:	7.41	Tie Into:	SRFC

Survey #	Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertic Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	E/W (ft)	Closure Distance (ft)	Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')
Tie In	MWD	0	0	0	0	0	0	0	0	0	0	0	0
1	MWD	350	0.8	142.4	350	349.9886	-2.04012	1.935897 S	1.490842 E	2.443421	142.4	0.228571	0.228571
2	MWD	561	1.8	172.3	211	560.9337	-6.57785	6.387059 S	2.833647 E	6.987423	156.0753	0.557408	0.473934
3	MWD	807	3.1	187.1	246	806.7059	-16.9573	16.81698 S	2.529131 E	17.0061	171.4473	0.583449	0.528455
4	MWD	958	3.8	197.4	151	957.4327	-25.6131	25.64353 S	0.528123 E	25.64897	178.8202	0.61743	0.463576
5	MWD	1112	5.2	200.6	154	1110.954	-36.6927	37.04618 S	3.453513 W	37.2068	185.3258	0.923243	0.909091
6	MWD	1205	6.2	204.1	93	1203.494	-44.9397	45.57559 S	6.987044 W	46.10806	188.716	1.137894	1.075269
7	MWD	1299	7.4	211.7	94	1296.833	-54.3119	55.35996 S	12.2409 W	56.69713	192.4683	1.593023	1.276596
8	MWD	1391	7.4	215.7	92	1388.067	-63.6551	65.212 S	18.8114 W	67.87101	196.091	0.559869	0
9	MWD	1483	7.2	221.5	92	1479.322	-72.2255	74.34138 S	26.08898 W	78.78627	199.3377	0.829636	-0.21739
10	MWD	1575	7.7	231.4	92	1570.549	-79.733	82.50495 S	34.72641 W	89.51531	202.8263	1.495058	0.543478
11	MWD	1667	7.9	239.1	92	1661.701	-86.0542	89.59719 S	44.96857 W	100.2488	206.6519	1.155581	0.217391
12	MWD	1760	8.8	239.3	93	1753.714	-92.0981	96.51138 S	56.5697 W	111.8686	210.3765	0.968244	0.967742
13	MWD	1853	8.1	238.7	93	1845.704	-98.2549	103.5472 S	68.28504 W	124.0358	213.4032	0.758625	-0.75269
14	MWD	1979	7.9	234.9	126	1970.478	-106.743	113.1379 S	82.95436 W	140.2912	216.2494	0.448639	-0.15873
15	MWD	2070	7.9	235.9	91	2060.615	-113.07	120.24 S	93.24931 W	152.1614	217.7945	0.151036	0
16	MWD	2165	7.7	234.9	95	2154.736	-119.591	127.5597 S	103.8624 W	164.4958	219.1534	0.254413	-0.21053
17	MWD	2259	8.2	241	94	2247.834	-125.635	134.4308 S	114.8779 W	176.8292	220.5156	1.042578	0.531915
18	MWD	2354	8.7	238.4	95	2341.802	-131.781	141.4802 S	126.923 W	190.0687	221.8955	0.662254	0.526316
19	MWD	2448	9.6	238.2	94	2434.605	-138.682	149.3358 S	139.64 W	204.4518	223.0783	0.958043	0.957447
20	MWD	2542	10.6	237	94	2527.148	-146.476	158.1752 S	153.5528 W	220.4493	224.1505	1.087074	1.06383
21	MWD	2637	11.2	235	95	2620.433	-155.407	168.2261 S	168.4387 W	238.058	225.0362	0.746484	0.631579
22	MWD	2732	10.6	235.6	95	2713.719	-164.524	178.4546 S	183.206 W	255.7548	225.7527	0.642763	-0.63158
23	MWD	2827	10.1	242.6	95	2807.177	-172.198	187.225 S	197.8117 W	272.3649	226.575	1.423509	-0.52632
24	MWD	2922	10.3	244	95	2900.676	-178.631	194.7815 S	212.8407 W	288.5152	227.5368	0.335284	0.210526
25	MWD	3016	11.4	239.6	94	2992.995	-185.851	203.1669 S	228.4073 W	305.6905	228.3471	1.464044	1.170213
26	MWD	3109	12.8	237.5	93	3083.927	-194.79	213.3537 S	245.0243 W	324.8949	228.9524	1.577795	1.505376
27	MWD	3204	12.4	235.6	95	3176.64	-204.907	224.7707 S	262.316 W	345.444	229.4077	0.606273	-0.42105
28	MWD	3298	11.8	235.7	94	3268.551	-214.801	235.889 S	278.5836 W	365.0376	229.7439	0.638687	-0.6383
29	MWD	3393	11.9	234	95	3361.527	-224.831	247.1201 S	294.532 W	384.4704	230.0025	0.382233	0.105263
30	MWD	3487	11.1	233.1	94	3453.639	-234.824	258.2498 S	309.6089 W	403.1757	230.168	0.872182	-0.85106
31	MWD	3582	10.3	231.4	95	3546.986	-244.56	269.0394 S	323.5597 W	420.8005	230.2565	0.90519	-0.84211
32	MWD	3676	9	232.2	94	3639.654	-253.375	278.789 S	335.9374 W	436.5516	230.3113	1.390285	-1.38298
33	MWD	3771	6.7	234.9	95	3733.758	-260.332	286.531 S	346.3443 W	449.5046	230.399	2.451313	-2.42105
34	MWD	3865	5.5	237.2	94	3827.224	-265.303	292.1245 S	354.6175 W	459.4456	230.5192	1.302551	-1.2766
35	MWD	3959	4.3	237.7	94	3920.879	-269.118	296.448 S	361.383 W	467.4175	230.6374	1.277392	-1.2766
36	MWD	4043	3.4	231	84	4004.689	-272.022	299.6984 S	365.9807 W	473.0338	230.6863	1.196055	-1.07143