

## QUANTUM RESOURCES LIMITED

(ASX: QUR)

### ASX and Media Release

5 September 2017

## Exploration Update – Results received from a further three holes in Thompson Bros Lithium Project

Quantum Resources Limited (ASX: “QUR” or “the Company”) is pleased to provide the following Exploration Update in relation to its Thompson Bros Lithium Project (“the Project”) in Manitoba, Canada.

### Highlights:

- **Hole TBL003 from 160.42 to 181.5metres (21.08 metre interval) of 1.74% Li<sub>2</sub>O**
- **Hole TBL004 from 33.48 to 54.63 metres (21.15 metre interval) of 1.55% Li<sub>2</sub>O**
- **Hole TBL005 from 139.59 to 146.1 metres (6.51 metre interval) of 1.28% Li<sub>2</sub>O**

The first six drill holes were completed at the Thompson Bros Lithium Project in Manitoba. Five of the holes encountered significant intervals of spodumene (lithium bearing mineral) mineralisation at downhole widths that are in line with or exceed those encountered from historical drill programs. The sixth hole was suspended before hitting mineralisation due to the early winter thaw requiring the drill rig to be pulled out whilst the winter roads were still accessible.

### **Hole Three TBL17-003: 160.42m – 181.5m (21.08m interval) returned an assay of 1.74% Li<sub>2</sub>O**

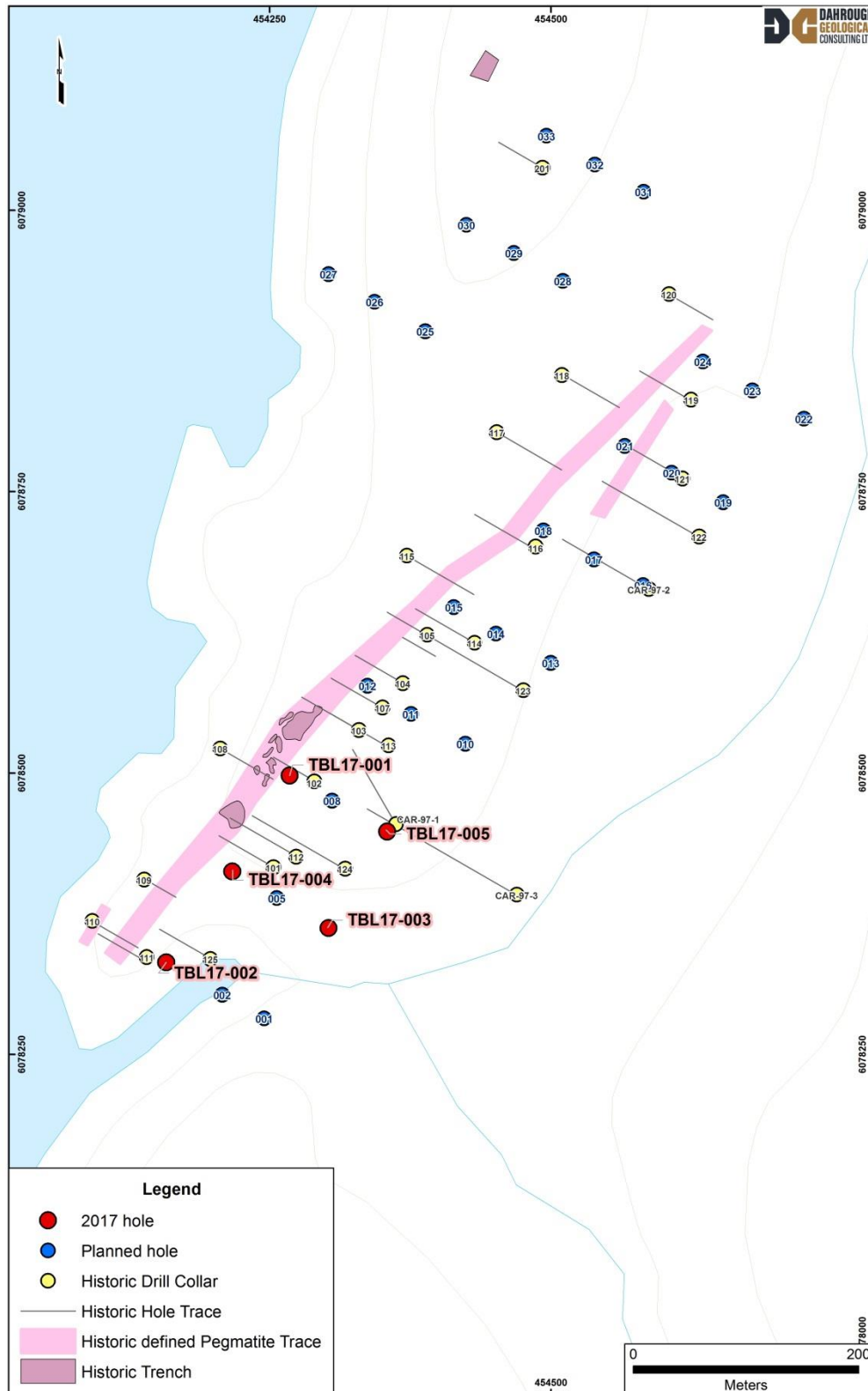
Between holes 001 and 002 but offset targeting depth extensions. Clearly shows the pegmatite persists to depth and continues to carry significant spodumene and high grade lithium.

### **Hole Four TBL17-004: 33.48m – 54.63m (21.15m interval) returned an assay grade of 1.55% Li<sub>2</sub>O.**

Along strike and between holes 001 and 002.

### **Hole Five TBL17-005: 139.59m – 146.1m (6.51m interval) returned an assay grade of 1.28% Li<sub>2</sub>O.**

Offset from hole 001 targeting depth extension.



**Fig 1: Current Drill Program with completed and scheduled holes at Thompson Bros**

Report Number: A17-03782																		
Analyte Symbol					Al	B	Ba	Be	Ca	Cs	Nb	Rb	Sn	Ta	Received Weight	Li	Li2O	
Unit Symbol					%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	Kg	%	%	
Detection Limit	From	To	Length		0.01	10	3	3	0.01	0.1	2.4	0.4	0.5	0.2		0.001	0.01	
TBL003-001	145	146	1	ASSAY	5.64	30	324	< 3	2.98	38.9	< 2.4	27.7	< 0.5	< 0.2	2.16	0.047	0.10	
TBL003-002	146	147	1	ASSAY	8.3	330	79	5	5.93	51.6	< 2.4	43.2	6.6	< 0.2	1.93	0.069	0.15	
TBL003-003	147	148.22	1.22	ASSAY	7.17	480	164	14	5.71	53.6	< 2.4	57.9	13.2	2.1	2.66	0.050	0.11	
TBL003-004	148.22	149.62	1.4	ASSAY	8.43	50	90	102	0.71	70.6	26.1	520	46.1	42.3	3.16	0.027	0.06	
TBL003-005				AMIS0343	8.46	150	83	254	0.3	381	25.7	3890	78	154	0.029	0.711	1.53	
TBL003-006	149.62	151	1.38	ASSAY	5.9	1150	322	16	1.49	166	< 2.4	197	9.8	3.1	2.9	0.079	0.17	
TBL003-007	151	152.5	1.5	ASSAY	5.87	110	193	4	5.03	30.6	< 2.4	35.1	11.4	< 0.2	3.43	0.036	0.08	
TBL003-008	152.5	154	1.5	ASSAY	5.65	250	464	< 3	2.8	66	< 2.4	61.7	6.2	< 0.2	3.97	0.065	0.14	
TBL003-009	154	155	1	ASSAY	5.35	930	259	6	3.06	52.9	6.5	87.5	13	0.4	2.12	0.054	0.12	
TBL003-010	155	156.09	1.09	ASSAY	5.47	400	434	7	1.72	57	2.5	194	18.5	0.4	2.39	0.089	0.19	
TBL003-011	156.09	157	0.91	ASSAY	7.95	60	80	6	0.2	11.5	8.3	243	17	3.2	1.91	0.031	0.07	
TBL003-012	157	158	1	ASSAY	9.08	40	81	7	0.24	9.3	4.9	219	7.5	2.5	2.18	0.025	0.05	
TBL003-013	158	159	1	ASSAY	9.05	30	140	7	0.25	15.3	4.6	326	6.8	3.1	2.05	0.061	0.13	
TBL003-014	159	160.42	1.42	ASSAY	8.61	30	64	9	0.2	23.6	< 2.4	498	6.3	1	2.67	0.055	0.12	
TBL003-015	160.42	161.5	1.08	ASSAY	8.92	20	26	58	0.11	17	< 2.4	399	8.4	0.8	2.26	0.622	1.34	
TBL003-016	160.42	161.5	1.08	DUP-P	9	20	27	58	0.16	16.7	< 2.4	400	8.5	1	0	0.639	1.38	
TBL003-017	160.42	161.5	1.08	DUP-R	9.24	20	23	53	0.14	17	< 2.4	389	9.7	1	0	0.722	1.55	
TBL003-018	161.5	162.5	1	ASSAY	8.59	10	12	38	0.13	9.7	< 2.4	286	10.5	0.7	2.05	0.782	1.68	
TBL003-019	162.5	163.5	1	ASSAY	8.25	20	230	4	0.24	7.4	< 2.4	285	8.1	0.5	2	0.680	1.46	
TBL003-020	163.5	164.5	1	ASSAY	8.76	20	18	13	0.18	4.5	5.1	147	8.9	0.9	2.16	0.776	1.67	
TBL003-021				QtrBik	0.02	< 10	< 3	< 3	< 0.01	0.8	< 2.4	< 0.4	< 0.5	< 0.2	0.199	0.000	0.00	
TBL003-022	164.5	165.5	1	ASSAY	8.66	10	13	61	0.19	5.8	< 2.4	187	10.5	0.6	2.06	0.740	1.59	
TBL003-023	165.5	166.52	1.02	ASSAY	9.4	90	9	81	0.38	6.8	< 2.4	119	10.5	1.1	1.99	1.210	2.61	
TBL003-024	166.52	167.5	0.98	ASSAY	9.8	120	46	8	0.2	18.4	< 2.4	298	8.1	1.3	0.8	0.627	1.35	
TBL003-025	166.52	167.5	0.98	DupQtr	9.72	150	45	5	0.26	17.6	< 2.4	299	8.1	1.3	0.909	0.598	1.29	
TBL003-026	167.5	168.5	1	ASSAY	8.71	10	32	5	0.11	5.7	< 2.4	171	8.5	0.5	2.06	0.843	1.81	
TBL003-027	168.5	169.5	1	ASSAY	8.7	30	26	< 3	0.11	5.6	< 2.4	170	7.2	0.4	2.1	1.040	2.24	
TBL003-028	169.5	170.5	1	ASSAY	8.75	10	22	5	0.19	5.2	< 2.4	175	9.2	0.9	2.17	0.836	1.80	
TBL003-029				AMIS0343	8.67	180	81	271	0.3	375	25.7	3960	78.9	153	0.033	0.771	1.66	
TBL003-030	170.5	171.5	1	ASSAY	8.39	10	13	99	0.22	8.2	< 2.4	158	10.3	1.6	2.16	0.925	1.99	
TBL003-031	171.5	172.5	1	ASSAY	8.13	10	21	7	0.16	6.3	5.2	231	8.1	0.6	1.95	0.761	1.64	
TBL003-032	172.5	173.5	1	ASSAY	8.82	20	20	7	0.18	4.8	4.5	152	8.9	0.9	1.86	0.915	1.97	
TBL003-033	173.5	174.5	1	ASSAY	8.78	10	25	4	0.16	7.1	< 2.4	154	6.7	0.4	1.75	0.877	1.89	
TBL003-034	174.5	175.5	1	ASSAY	8.78	20	47	5	0.16	10.4	< 2.4	254	7.7	0.5	1.85	0.603	1.30	
TBL003-035	175.5	176.5	1	ASSAY	8.93	20	16	5	0.21	4.8	< 2.4	98.1	7	0.6	2.1	0.648	1.40	
TBL003-036	176.5	177.5	1	ASSAY	9.14	< 10	19	18	0.18	4.4	< 2.4	117	7.7	2	2.09	1.040	2.24	
TBL003-037	176.5	177.5	1	DUP-P	8.98	< 10	19	18	0.19	4.7	< 2.4	115	8.5	2	0	1.030	2.22	
TBL003-038	176.5	177.5	1	DUP-R	8.81	< 10	18	18	0.17	6	< 2.4	119	8.1	2.1	0	1.030	2.22	
TBL003-039	177.5	178.5	1	ASSAY	8.23	20	72	4	0.34	7.6	< 2.4	183	9.6	0.6	2	0.683	1.47	
TBL003-040	178.5	179.5	1	ASSAY	9	< 10	212	3	0.14	12	< 2.4	328	6	0.3	2.05	0.617	1.33	
TBL003-041	179.5	180.5	1	ASSAY	9.09	210	139	5	0.33	9.2	< 2.4	234	9.7	0.7	2.08	1.000	2.15	
TBL003-042	180.5	181.5	1	ASSAY	8.23	30	42	4	0.23	4.9	5.2	103	5.9	0.5	0.994	0.715	1.54	
TBL003-043	180.5	181.5	1	DupQtr	8.16	20	51	4	0.3	4.6	< 2.4	117	6.8	0.5	0.962	0.741	1.60	
TBL003-044	181.5	182.68	1.18	ASSAY	9.16	30	42	106	0.18	11.4	6.5	205	15.1	8.8	2.35	0.224	0.48	
TBL003-045	182.68	184	1.32	ASSAY	5.85	1330	597	8	0.96	27.3	3	126	8.3	3.4	2.39	0.079	0.17	
TBL003-046	184	185	1	ASSAY	6.5	30	392	< 3	4.09	6.7	< 2.4	27.9	0.6	< 0.2	2.08	0.046	0.10	
TBL003-047	185	186	1	ASSAY	5.77	370	603	4	1.05	23.6	< 2.4	39.4	1.2	< 0.2	2.32	0.055	0.12	
TBL003-048	207	208.5	1.5	ASSAY	5.9	120	675	< 3	2.79	19.6	< 2.4	33.9	1.2	< 0.2	2.81	0.039	0.08	
TBL003-049	208.5	210.12	1.62	ASSAY	6.24	80	750	9	2.71	54.6	< 2.4	103	7.9	1.3	3.27	0.058	0.13	
TBL003-050	210.12	211	0.88	ASSAY	8.05	60	51	27	0.3	12.3	2.7	176	14	5	2.25	0.244	0.53	
TBL003-051				AMIS0343	8.49	180	79	276	0.29	377	25	3960	79.7	155	0.036	0.788	1.70	
TBL003-052	211	212	1	ASSAY	8.2	20	77	5	0.21	9.2	5.2	212	4.9	0.6	1.77	0.231	0.50	
TBL003-053	212	213.47	1.47	ASSAY	8.79	20	31	48	0.22	8.7	4.1	145	9.1	1.3	3.21	0.351	0.76	
TBL003-054	212	213.47	1.47	DUP-P	8.65	20	30	48	0.23	9.7	< 2.4	145	8.9	1.2	0	0.355	0.76	
TBL003-055	212	213.47	1.47	DUP-R	8.58	20	31	52	0.23	13.4	< 2.4	146	8.4	1	0	0.361	0.78	
TBL003-056	213.47	215	1.53	ASSAY	5.63	680	477	7	1.76	36.8	< 2.4	68.5	6.6	0.4	3.06	0.092	0.20	
TBL003-057	215	216.5	1.5	ASSAY	5.69	60	473	< 3	1.37	11.9	< 2.4	46.3	2.2	< 0.2	3.52	0.072	0.15	
TBL003-058	216.5	218.09	1.59	ASSAY	5.64	60	422	< 3	0.69	22.4	3.9	222	7.9	1.7	4	0.084	0.18	
TBL003-059	218.09	219.76	1.67	ASSAY	7.5	20	52	25	0.3	5	< 2.4	170	8.4	1.5	3.54	0.011	0.02	
TBL003-060			0	QtrBik	0.02	< 10	< 3	< 3	0.02	1.4	< 2.4	2	< 0.5	< 0.2	0.207	0.001	0.00	
TBL003-061	219.76	221	1.24	ASSAY	6.2	110	526	4	1.56	19.3	< 2.4	73.4	4.2	< 0.2	2.26	0.063	0.14	
TBL003-062	221	222.5	1.5	ASSAY	5.8	20	604	< 3	1.24	9.6	< 2.4	41	19.9	< 0.2	3.39	0.049	0.11	
TBL003-063	222.5	224.03	1.53	ASSAY	5.98	< 10	335	< 3	4.21	4.7	4	21.9	2.3	< 0.2	3.88	0.023	0.05	

Report Number: A17-03783																	
Analyte Symbol					Al	B	Ba	Be	Ca	Cs	Nb	Rb	Sn	Ta	Received Weight	Li	Li2O
Unit Symbol					%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	Kg	%	%
Detection Limit	From	To	Length		0.01	10	3	3	0.01	0.1	2.4	0.4	0.5	0.2		0.001	0.01
TBL004-001	30.46	32	1.54	ASSAY	5.87	1750	371	9	0.93	115	13.2	217	10.4	5.1	3.06	0.067	0.14
TBL004-002	32	33.48	1.48	ASSAY	5.83	2250	447	20	0.9	115	6.6	329	15	5.5	3.41	0.103	0.22
TBL004-003	33.48	34.5	1.02	ASSAY	8.25	130	55	141	0.19	22.8	13.3	396	21.3	15.8	2.39	0.541	1.16
TBL004-004	34.5	35.5	1	ASSAY	8.22	60	12	165	0.2	15.3	< 2.4	259	15.3	2	2.15	0.826	1.78
TBL004-005	35.5	36.5	1	ASSAY	8.57	60	11	9	0.24	8.4	< 2.4	152	8.8	1.1	2.41	0.703	1.51
TBL004-006				AMIS0343	7.97	50	22	5	0.37	13.9	< 2.4	294	8.3	0.6	0.033	0.647	1.39
TBL004-007	36.5	37.5	1	ASSAY	8.05	40	21	65	0.21	16.7	< 2.4	334	11.3	1.1	2.39	0.953	2.05
TBL004-008	37.5	38.5	1	ASSAY	8.38	220	77	277	0.22	355	29.4	3900	77.2	167	2.32	0.677	1.46
TBL004-009	38.5	39.5	1	ASSAY	7.59	120	41	12	0.3	9.9	2.9	174	10.5	1.4	2.53	0.623	1.34
TBL004-010	39.5	40.5	1	ASSAY	8.4	50	10	29	0.22	14.9	6.1	279	10.9	1.1	2.48	0.795	1.71
TBL004-011	39.5	40.5	1	DUP-P	8.36	40	23	30	0.19	16.4	< 2.4	283	9.1	0.8	0	0.793	1.71
TBL004-012	39.5	40.5	1	DUP-R	8.75	40	22	27	0.22	14.6	5.1	279	8.8	0.9	0	0.792	1.71
TBL004-013	40.5	41.5	1	ASSAY	8.13	120	33	46	0.26	10	43.1	137	9.3	1.8	2.52	0.691	1.49
TBL004-014	41.5	42.5	1	ASSAY	8.22	40	68	6	0.29	10.7	3.5	151	9.4	1	2.54	0.776	1.67
TBL004-015	42.5	43.47	0.97	ASSAY	8.57	30	82	5	0.24	18.3	< 2.4	314	8.6	0.7	2.59	0.624	1.34
TBL004-016	43.47	44.5	1.03	ASSAY	8.46	80	32	13	0.39	16.4	2.6	278	10	3.5	2.34	0.471	1.01
TBL004-017	44.5	45.5	1	ASSAY	8.6	190	23	13	0.28	7.5	5.1	151	9.8	2.2	2.44	0.597	1.29
TBL004-018	45.5	46.54	1.04	ASSAY	8.18	70	21	199	0.26	10.4	< 2.4	146	9.9	1.4	0.982	0.736	1.58
TBL004-019	45.5	46.54	1.04	DupQtr	8.2	60	23	105	0.25	10.2	< 2.4	175	8.3	2.4	1.28	0.706	1.52
TBL004-020	46.54	47.5	0.96	ASSAY	8.27	40	17	68	0.21	11.1	< 2.4	202	9.4	1	2.42	0.991	2.13
TBL004-021	47.5	48.5	1	ASSAY	7.99	40	25	10	0.2	10	< 2.4	203	6.7	0.5	2.18	0.698	1.50
TBL004-022	48.5	49.5	1	ASSAY	8.59	30	19	125	0.2	16.2	8.5	225	14.4	11	2.56	0.473	1.02
TBL004-023				QtzBik	0.02	< 10	< 3	< 3	0.1	7.6	5.8	0.6	0.8	< 0.2	0.203	0.001	0.00
TBL004-024	49.5	50.5	1	ASSAY	8.98	40	21	73	0.2	11	14.1	173	17	10	1.92	0.665	1.43
TBL004-025	50.5	51.54	1.04	ASSAY	8.77	50	44	6	0.25	11.4	< 2.4	179	8.6	0.7	2.5	0.882	1.90
TBL004-026	51.54	52.5	0.96	ASSAY	8.7	50	30	5	0.27	7.4	< 2.4	134	8.8	0.9	2.29	0.694	1.49
TBL004-027	52.5	53.47	0.97	ASSAY	8.66	50	25	6	0.36	4.9	2.9	125	11.3	1.2	2.26	0.636	1.37
TBL004-028	53.47	54.63	1.16	ASSAY	8.73	350	32	9	0.49	7.9	< 2.4	134	14.7	1.1	2.93	1.060	2.28
TBL004-029	54.63	56.27	1.64	ASSAY	8.32	60	73	14	0.45	15.4	6.9	253	20.1	7.6	4.02	0.025	0.05
TBL004-030	56.27	57.71	1.44	ASSAY	5.28	330	554	< 3	1.2	29.1	< 2.4	58.1	1.9	0.3	3.74	0.071	0.15
TBL004-031	57.71	59.54	1.83	ASSAY	5.24	30	441	< 3	2.34	5.3	< 2.4	32.6	< 0.5	< 0.2	4.09	0.062	0.13

Report Number: A17-03784																		
Analyte Symbol					Al	B	Ba	Be	Ca	Cs	Nb	Rb	Sb	Sn	Ta	Received Weight	Li	Li2O
Unit Symbol					%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	Kg	%	%
Detection Limit	From	To	Length		0.01	10	3	3	0.01	0.1	2.4	0.4	2	0.5	0.2		0.001	0.01
TBL005-001	136.5	138	1.5	ASSAY	7.12	20	707	8	2.1	20.7	< 2.4	98.4	< 2	6.3	0.5	3.52	0.059	0.13
TBL005-002	138	139.59	1.59	ASSAY	8.28	30	179	20	3.1	71.5	7.5	331	< 2	26.4	5.3	3.98	0.112	0.24
TBL005-003	139.59	140.5	0.91	ASSAY	8.64	30	29	178	0.38	16.7	6.8	283	< 2	11.6	1.4	2.04	0.638	1.37
TBL005-004	140.5	141.5	1	ASSAY	8.9	40	60	7	0.35	9.9	3.4	221	< 2	9.7	1.1	2.28	0.567	1.22
TBL005-005				AMIS0343	8.32	160	82	243	0.38	363	28.4	3920	7	77.8	150	0.03	0.710	1.53
TBL005-006	141.5	142.5	1	ASSAY	8.65	20	37	5	0.22	14.2	< 2.4	324	< 2	6.4	0.5	2.43	0.469	1.01
TBL005-007	142.5	143.5	1	ASSAY	8.97	< 10	98	6	0.24	15.2	< 2.4	419	< 2	6.8	0.5	2.17	0.369	0.79
TBL005-008	143.5	144.5	1	ASSAY	8.67	130	23	4	0.21	6.8	< 2.4	181	< 2	10.1	0.7	0.917	0.833	1.79
TBL005-009	143.5	144.5	1	DupQtr	8.25	100	30	5	0.21	6.1	< 2.4	166	< 2	11.6	0.9	1.13	0.838	1.80
TBL005-010	144.5	145.5	1	ASSAY	8.23	20	16	164	0.33	13.3	3.2	222	< 2	17.7	4.6	2.41	0.662	1.43
TBL005-011	145.5	146.1	0.6	ASSAY	8.32	30	117	167	0.27	22.4	9.7	263	< 2	23.1	18	1.53	0.617	1.33
TBL005-012	146.1	147.18	1.08	ASSAY	7.71	20	540	66	1.51	72	11.3	273	< 2	17.1	11.5	2.61	0.130	0.28
TBL005-013	147.18	148.07	0.89	ASSAY	7.15	10	640	11	2.17	51.3	3.1	120	< 2	7.3	5.2	2.22	0.070	0.15
TBL005-014	148.07	149.2	1.13	ASSAY	7.87	10	277	116	1.16	52.5	14	249	< 2	21.7	10.8	2.56	0.043	0.09
TBL005-015	185.5	187	1.5	ASSAY	5.51	110	495	< 3	1.06	29	< 2.4	47	< 2	2.3	< 0.2	3.52	0.044	0.10
TBL005-016	187	188.6	1.6	ASSAY	5.45	1770	544	9	0.85	59.6	3	104	< 2	9.7	2.3	3.98	0.037	0.08
TBL005-017	188.6	189.48	0.88	ASSAY	8.15	450	119	7	0.25	19.4	11.2	368	< 2	28.5	4.2	2.08	0.016	0.03
TBL005-018	189.48	190.5	1.02	ASSAY	8.28	120	64	8	1.3	10.4	7.4	235	< 2	19.7	1.8	2.09	0.010	0.02
TBL005-019				QtzBik	0.05	< 10	< 3	< 3	0.1	0.3	< 2.4	1.3	< 2	< 0.5	< 0.2	0.202	0.001	0.00
TBL005-020	190.5	191.41	0.91	ASSAY	8.62	30	87	193	0.23	29.3	10.8	334	< 2	36	12	2.08	0.008	0.02
TBL005-021	191.41	193	1.59	ASSAY	5.8	670	576	4	1.09	167	< 2.4	92.5	< 2	8.3	0.3	3.27	0.041	0.09
TBL005-022	193	194.53	1.53	ASSAY	5.7	300	571	27	1.59	77.6	< 2.4	124	< 2	11.4	2.2	3.82	0.028	0.06

**Table 1: Assays received.**

These results show the clear depth extension of the mineralised pegmatite with grades remaining consistently high or increasing with depth.

## Ongoing Work Programs

The Company is very encouraged by the results from the first 5 holes together with the feedback from Mr Frederickson upon returning from the site.

There are currently fire risks in the area due to the lack of rainfall so far this summer which is restricting the Company from recommencing its drilling program. QUR is eager to continue the drilling program, as well as some additional mapping and field exploration within the current summer season (this current calendar year) pending relaxation of potential bushfire conditions and availability of a suitable drill rig and operators. In the meantime, the Company will use the dozer that is currently on site to finish clearing for access and drill site preparation (pending fire restrictions).

### **QUR Managing Director, Mr. Avi Kimelman said:**

*“The results from the most recent hole,s and the previous two, have provided a strong reflection to the historic drill data, as they have either matched-up or exceeded the historic data which builds around the historical resource numbers. These holes have re-confirmed the presence of extensive zones of lithium bearing mineralisation at Thompson Bros and QUR aim to work towards development a JORC Resource on the Project with the continuance the work program.”*

For and on behalf of the Board



Avi Kimelman  
Director

About Quantum Resources Limited (ASX: “QUR” or the “Company”):

QUR own the rights to back in to earn up to 80% ownership interest of the Thompson Bros. Lithium Project from Ashburton Ventures Inc. by financing their commitments relating to their Option Agreement with Strider Resources Ltd.

The Thompson Bros. Lithium Project, located in Manitoba, Canada contains a historical **(NON-JORC COMPLIANT)** resource estimate of 4,305,000 tonnes of 1.3% Li<sub>2</sub>O, open at depth and along strike. These estimates are historical estimates and are not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify the historical estimates as mineral resources and/or reserves in accordance with the JORC Code. It is uncertain that following evaluation and/or further exploration work that the historical estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code.

**Competent Person Statement**

*The information in this announcement that relates to Exploration Results is based on information compiled by Mr Olaf Frederickson. Mr Frederickson is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the “JORC Code”).*

## Appendix 2: Thompson Bros. Property, Manitoba, Canada

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling technique</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</li> <li>Aspects of the determination of mineralisation that are material to the Public report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Samples will be collected from split NQ-sized drill core.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method etc.).</li> </ul>	<ul style="list-style-type: none"> <li>The current drilling is standard NQ-sized core.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed</li> <li>Measurements taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>NQ-sized core recovery is very good.</li> </ul>

	JORC Code explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.</li> <li>• The total length and percentage of the relevant intersections logged</li> </ul>	<ul style="list-style-type: none"> <li>• All core will be Geologically logged in detail, with basic geotechnical logging.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>• For all sample types, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill core will be cut in half, with half retained in the core box for record. The other half will be placed in individual bags and sent to an analytical lab to be crushed and pulverized.</li> <li>• Occasional QAQC samples will utilize quartered core as field duplicate samples.</li> <li>• Sample lengths will be approximately 1 metre.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• All Samples were assayed with a sodium peroxide fusion followed by ICP/MS.</li> <li>• Samples were then followed up with a four acid digestion followed up with ICP-OES for lithium specific results to allow for better precision on detection limits.</li> <li>• Standards, blanks and duplicates will be inserted at a rate of 5%.</li> </ul>



	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physically and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• External laboratory checks will be instrumented at a rate of 5%</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resources estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill collar locations are initially placed using handheld GPS (Garman GPS 62 and 64 series, using both GPS and Glonass satellites) system with expected accuracy of +/- 5m horizontal.</li> <li>• The grid system for Thompson Bros. Project is UTM NAD83 Zone 14 U</li> <li>• Topographic control is based on the recorded GPS Elevation.</li> <li>• At the end of the project, the drill collars will be surveyed with a high-precision GPS.</li> <li>• The holes are surveyed with a Reflex EZ-TRAC downhole tool.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Reserve and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling is on-going.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Historic drilling was oriented to intersect the target pegmatite as closely to perpendicular as could be achieved.</li> <li>• The current drilling will also be perpendicular to the pegmatite.</li> </ul>

	JORC Code explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are being collected and sealed in sample bags, combined into 5 gallon plastic pails by the field crew. They will be transported by the crew to a courier to send directly to the lab.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of and audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No independent audits or reviews have been undertaken.</li> </ul>

## Section2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenements and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interest, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The tenure is secure and in good standing at the time of writing. There are no known impediments to permitting, or licencing to explore or mine in the area.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgement and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Historic exploration carried out by several parties on the Property has been summarized in and Independent Technical Report for Rodinia Minerals Inc. dated 2009-07-13.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological settings and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Spodumene-bearing albite-quartz-muscovite pegmatites intruding greenschist facies metasediments.</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>A summary of all information material for the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>Easting and northing of the drill hole collar</li> <li>Elevation or RL (Reduced level-elevation above sea level in metres)and the drill hole collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Summary of drill information presented in Appendix 3.</li> <li>Easting, northing and RL subject to update with the higher precision GPS survey.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration results, weighing averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No composites were made.</li> <li>Historic Lithium content expressed is as Li<sub>2</sub>O Determined by multiplying Li content as weight percentage by 2.153.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known')</li> </ul>	<ul style="list-style-type: none"> <li>The mineralized pegmatite intersected by historic drilling trends at approximately 030° and dips steeply to the southeast.</li> <li>Historic and current drilling reported apparent thicknesses of mineralization.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts would be included for any significant discovery being reported. These should include, but not be limited too plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate plan maps of sample locations have been included in the body of the report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable, will be done when analytical results are received.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations, geophysical survey results, geochemical survey results, bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or containing substances.</li> </ul>	
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, providing this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling will continue as long as weather permits to follow-up historic work.</li> <li>See figure in the text of report for map of historic drilling and trend.</li> </ul>

**APPENDIX 3**  
**Current Drilling**

<b>Drillhole</b>	<b>Easting</b>	<b>Northing</b>	<b>Dip</b>	<b>Azimuth</b>	<b>Depth (m)</b>	<b>Elevation (m)</b>
TBL17-001	454267	6078491	-45	300	150.88	320
TBL17-002	454133	6078839	-45	300	151	269
TBL17-003	454306	6078374	-45	300	224.03	272
TBL17-004	454217	6078412	-45	300	105.77	270
TBL17-005	454352	6078456	-45	300	194.53	279