Superior Resources Limited

ACN 112 844 407

ASX Release
20 September 2017

BOTTLETREE RESULTS CONFIRM LARGE SCALE MINERALISED SYSTEM

HIGHLIGHTS:

- **Post-drilling review of all data sets has confirmed that the Bottletree Prospect is part of a large-scale zoned mineralised system developed over several square kilometres**
- **New drill results are encouraging for a large bulk tonnage copper-gold mineralised system**
- **Check-assay results – confirm higher copper grades encountered at oxide-sulphide interface e.g. 5m @ 1.03% copper**
- **Wide zones of 40m to 150m downhole of 0.2% – 0.3% copper, extend from surface and open at depth**
- **The scale and concentric nature of the metal zoning suggests the deep mineralising source may be intrusive-driven**

Superior Resources Limited (ASX Code: **SPQ**) (**Superior** or **Company**) is pleased to advise that it has received all outstanding results for the initial four-hole (528 metres) reverse-circulation (**RC**) drilling program conducted at the Company's 100%-owned Bottletree Prospect. Preliminary results were reported to the market on 31 August 2017.

The Company's analysis of the drill results together with geophysical and geochemical data sets confirm that Bottletree is a large area of copper mineralisation located five kilometres south of and in the same geological terrane as Superior's Steam Engine Gold Prospect.

Soil Geochemistry Processing

As clearly indicated in Figure 1, Bottletree has a particularly strong surface expression, which appears as a several square kilometre copper-in-soil anomaly. Further processing has revealed strong evidence of metal zoning with a central copper zone surrounded by an annular pattern of zinc-in-soils (Figures 2 and 3).

This is the metal zoning pattern that would be expected from a large-scale bulk mineralised system, possibly driven by a buried intrusive body where there is a temperature gradient for the mineralising fluid from a hot copper core to a cooler zinc halo. Similar types of metal-zoned bulk-mineralised systems often include a gold zone surrounding the zinc halo.

Drill Results

Drill results from the initial drilling program indicate that both oxide and sulphide copper mineralisation have developed within a significant volume of rock. Copper grades similar to those previously drilled are now shown to extend to greater depths. Follow-up one metre check sampling has confirmed the earlier results for hole SBTRC002. Results have also been returned for hole SBTRC004, where a narrow low grade copper zone is reported. Updated key

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results (including some as previously announced (refer ASX announcement 31 August 2017)) include:

Hole ID	From	To	m	Cu %	Au g/t	
SBTRC001	24	178	**154**	**0.25**		2m sampling
SBTRC002	28	54	**26**	**0.44**		2m sampling including 1m check-sampling
includes SBTRC002	36	41	**5**	**1.05**	**0.3**	1m sampling including 1m check-sampling
SBTRC003	12	68	**56**	**0.19**		2m sampling
SBTRC004	2	14	**12**	**012**		2m sampling
SBTRC004	30	36	**6**	**0.15**		2m sampling

The limits to this large copper mineralised system have not yet been delineated and it remains open both laterally and at depth.

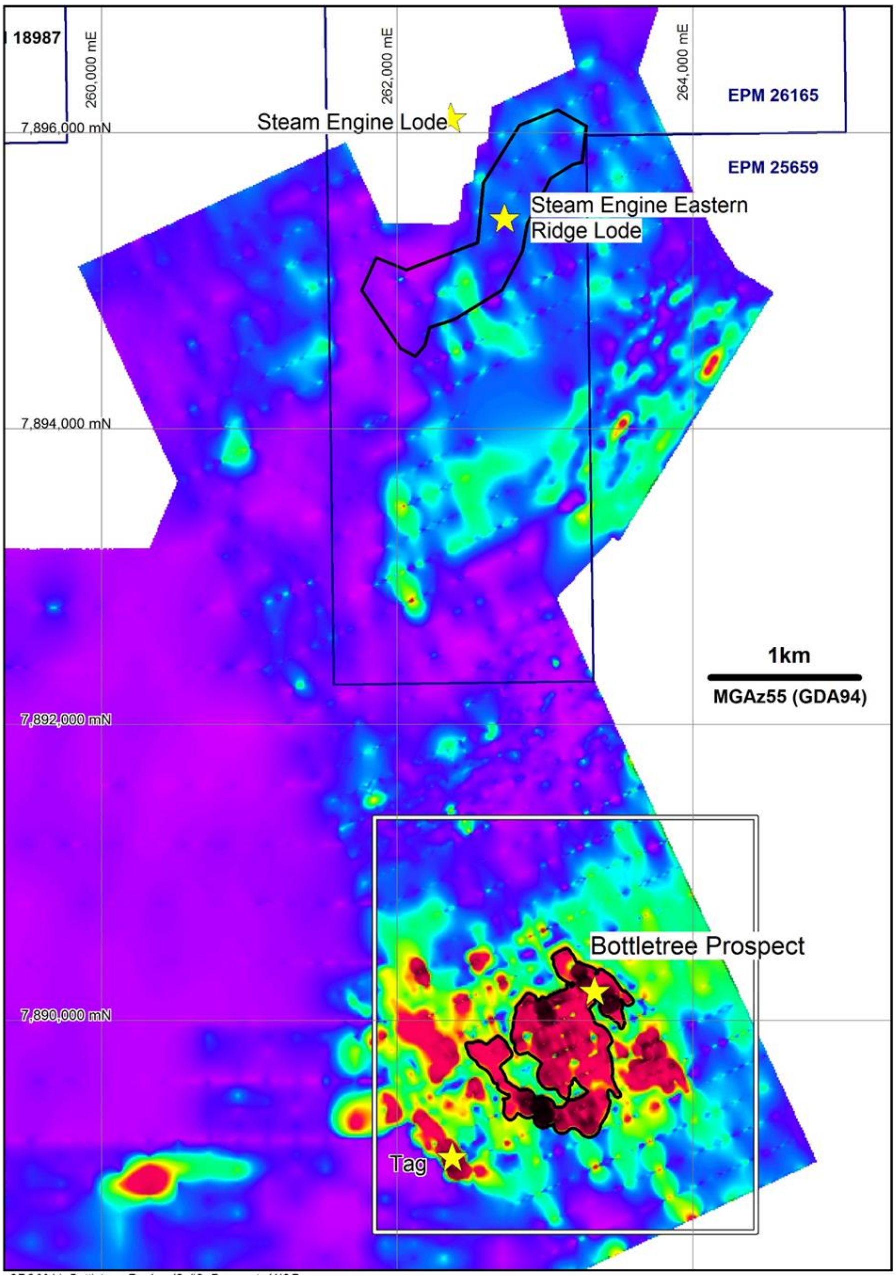

Figure 1. Copper-in-soil processed image showing large scale regional Bottletree anomaly.

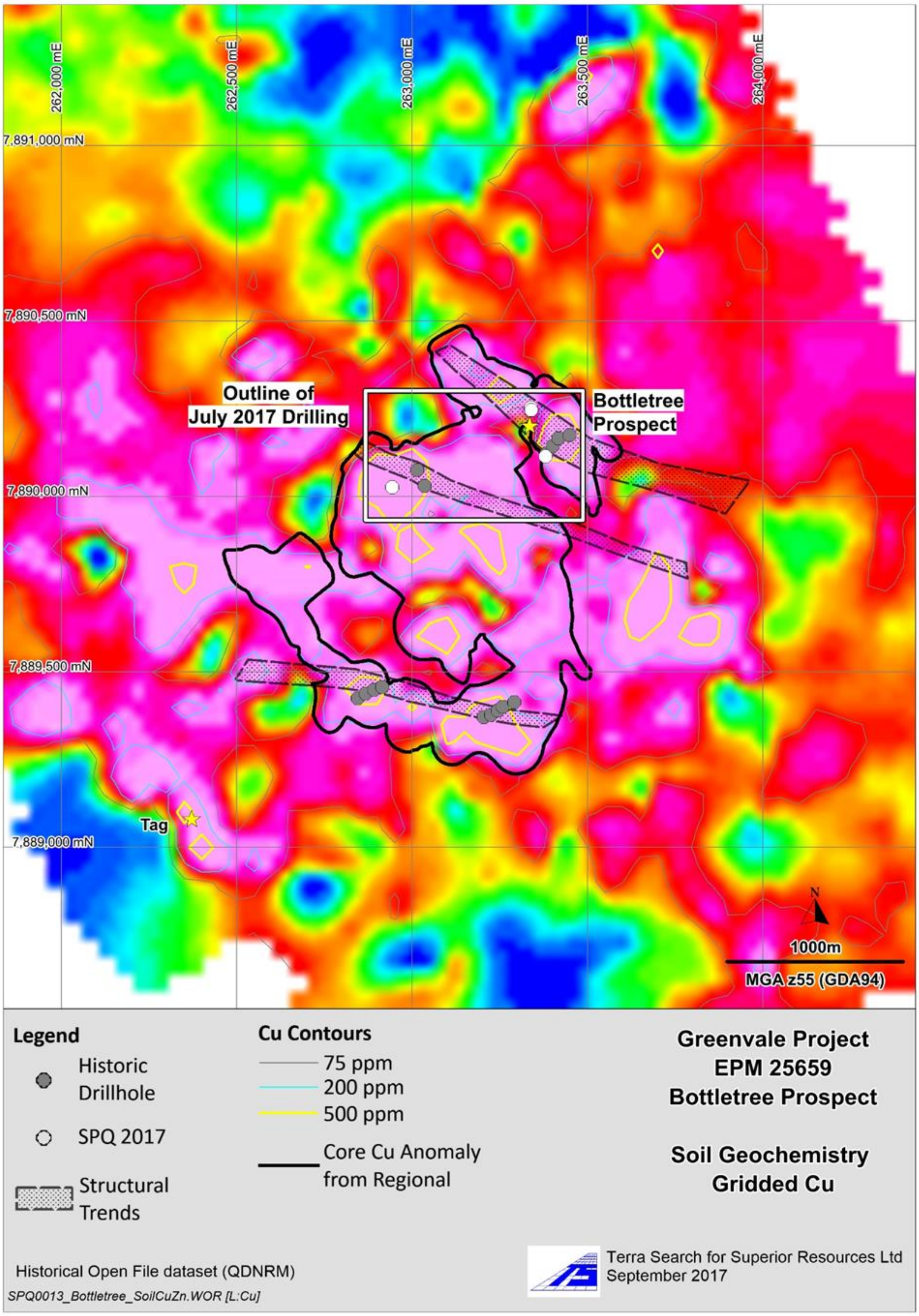

Figure 2. (Inset of Figure 1) Processed image of copper in soil. Several square kilometre Bottletree copper-in-soil anomaly, showing copper core, location of drill holes and mapped structures coincident with mineralisation.

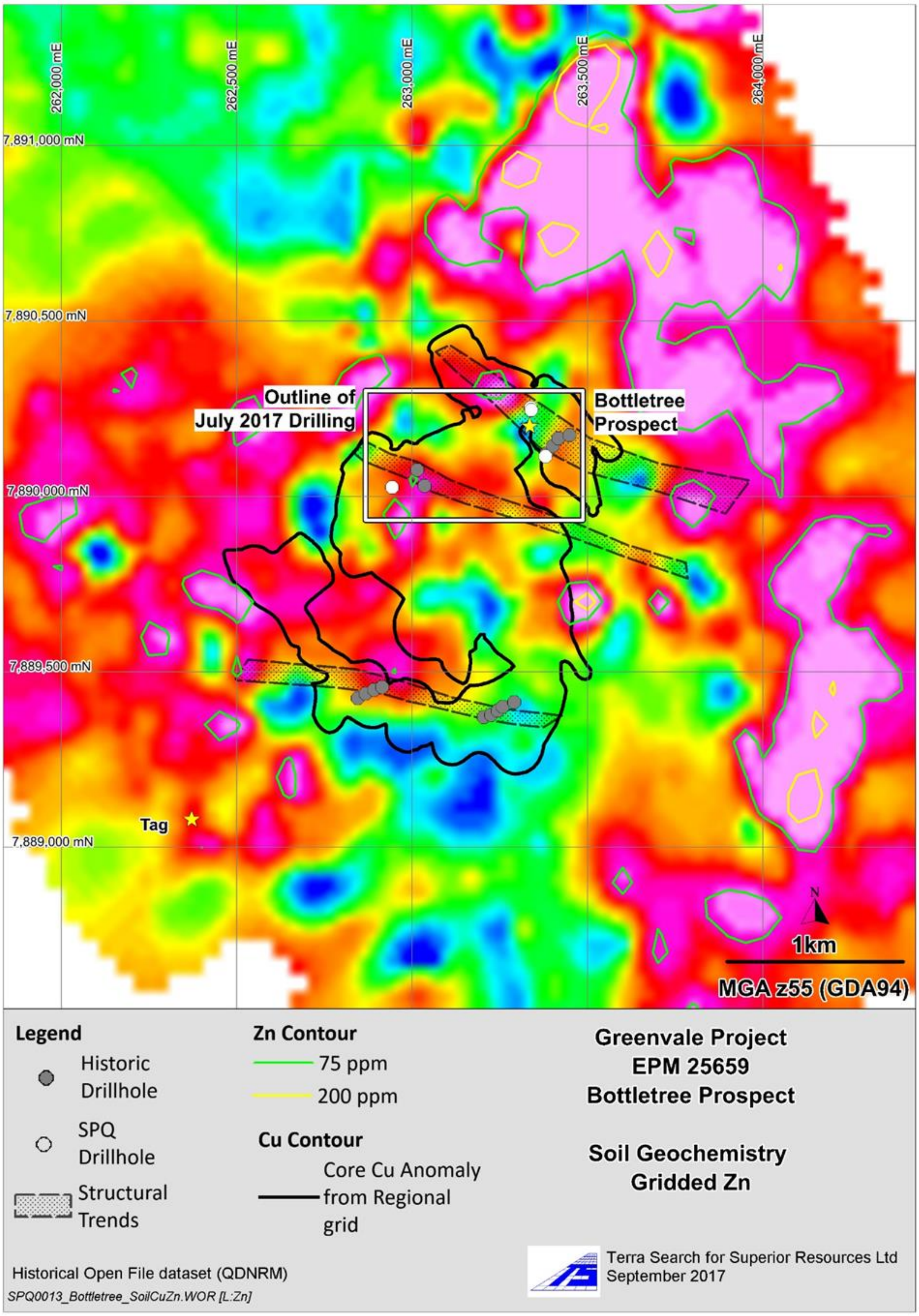

Figure 3. (Inset of Figure 1) Processed image of zinc in soil at Bottletree, showing annular relationship to copper core. This is the predicted characteristic of a large-scale mineralised system trending from a hot copper core to an outer zone of cooler zinc. The gold zone in such a system is often adjacent to the zinc halo.

The drill holes were designed to test a large (1.5km x 1km) surface copper geochemical anomaly comprising malachite-stained outcrops and a regionally extensive copper-in-soil anomaly, which is in part coincident with strong IP chargeability anomalies.

Next Steps

The Company is planning a second phase drilling program together with a detailed geophysical survey for the purpose of delineating the extent and characterisation of the mineralised system. This follow up work is planned for the remainder of 2017 and early 2018.

Superior's Managing Director, Peter Hwang said:

> "*We are very pleased with the results of the drilling program and further data processing at Bottletree. This work has now elevated the potential for Bottletree to be a large intrusion-related bulk tonnage copper-gold system, potentially of porphyry style.*
>
> *In addition, our analysis of all available data has highlighted the potential for identifying one or more higher grade copper-mineralised intrusive zones associated with the large mineralised system.*
>
> *The next program of work at Bottletree is planned to be an extensive follow-up program involving further drilling and geophysics and importantly, will be coupled with initial drilling programs on other prospects within the greater Greenvale Project*".

Analysis of Results

Drill holes from the Company's recent initial drilling program were completed as part of a 1,422 metre initial drilling program at four new prospects within the Company's 100% owned Greenvale Project, located about 250 kilometres west of Townsville (Figure 11).

Drill holes from the program are located in the northern portion of the copper mineralised area where previous explorers had mapped and drilled considerable thicknesses of copper mineralisation (e.g. 54m @ 0.32 % Cu) coincident with strong IP chargeability zones.

Superior's four scout holes were designed to test these zones at depth and probe the extent of the mineralisation. The drill results have established that both oxide and sulphide copper mineralisation occurs over a significant volume of rock. Copper grades similar to those previously drilled are now shown to extend to greater depths. The limits to this large copper mineralised system have not yet been delineated as, in places, it is still open both laterally and at depth.

The host sequence comprises deformed Ordovician aged meta-mafic volcanics, possible intrusives and volcaniclastics interlayered with schistose sediments and intruded by younger granites. Although, the metamorphic grade and deformation make it difficult to be certain about the original lithologies, the host rocks for the drilled copper mineralisation are interpreted to have probably originated as sea-floor basaltic volcanics and associated sediments.

Copper is disseminated through the package as chalcopyrite in the primary (sulphidic) zone, associated with pyrite and as malachite in the oxide zone. Fine quartz sulphide veins are rare. The highest copper grades are present where secondary enriched cuprite and chalcocite occur at the oxide-sulphide interface. Petrographic and textural evidence indicates sulphide mineralisation is pre-deformation and therefore likely to be Ordovician to Devonian in age.

Chalcopyrite is best developed in the meta-basalt and meta mafic volcaniclastic units. Meta-dacite and meta-diorite units are altered with prominent pyrite, phlogopite and chlorite, but copper values are lower. The combined thickness of these disseminated sulphide zones are the likely cause of the IP chargeability anomalies at Bottletree.

Overall, mineralisation controls at Bottletree are unclear, copper is interpreted as an early mineralisation event in the geological history of the rocks. A post-drilling review of the mapped geology in relation to the surface geochemistry and IP chargeability zones, suggests a west north west series of sub-parallel mineralised structures conjugate to lithological units within the volcanic-sedimentary host stratigraphy which, although deformed, appears to be broadly oriented east north east. Figures 4 and 5 are plan views showing drill hole locations in relation to copper-in-soil and gradient array IP chargeability anomalies.

A deeper intrusive related source is suggested by the large volume of mineralisation. More data is required to confirm the mineralisation setting and the timing of mineralisation. A pre-deformation, Ordovician age with a co-magmatic link to the volcanic hosts is currently proposed.

The Company is currently assessing the significance of these results in terms of the potential for the Bottletree area to host significant copper mineralisation. Electrical geophysics, most likely involving IP, is planned. Ground magnetics and innovative multi-element geochemistry are also likely to be effective, prior to extensive follow-up drill hole targeting.

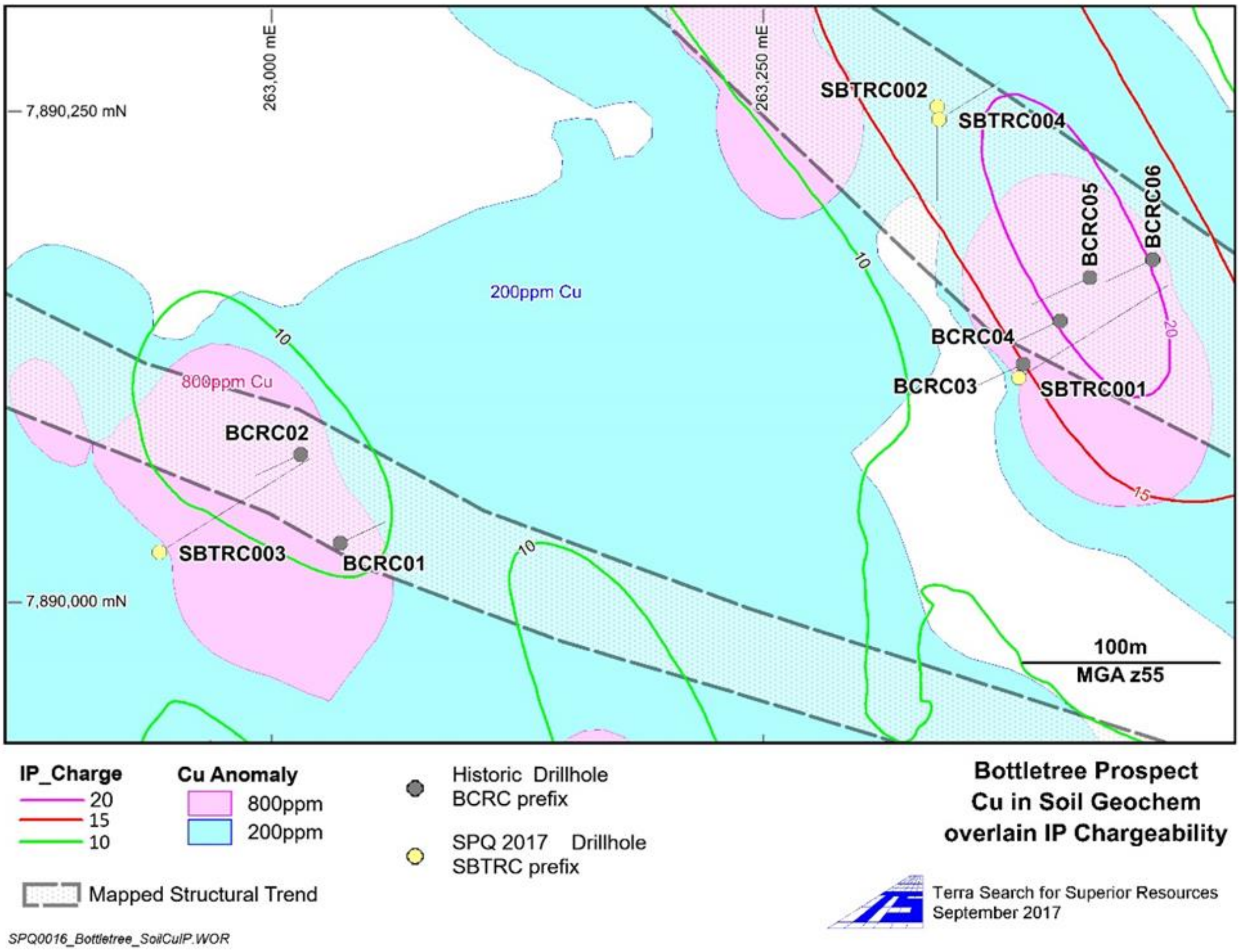

Figure 4. Plan view of northern section of Bottletree copper anomaly showing Superior's July 2017 drilling and historic drilling in relation to copper-in-soil anomalies, contours of IP chargeability highs, and mapped mineralised structure zones.

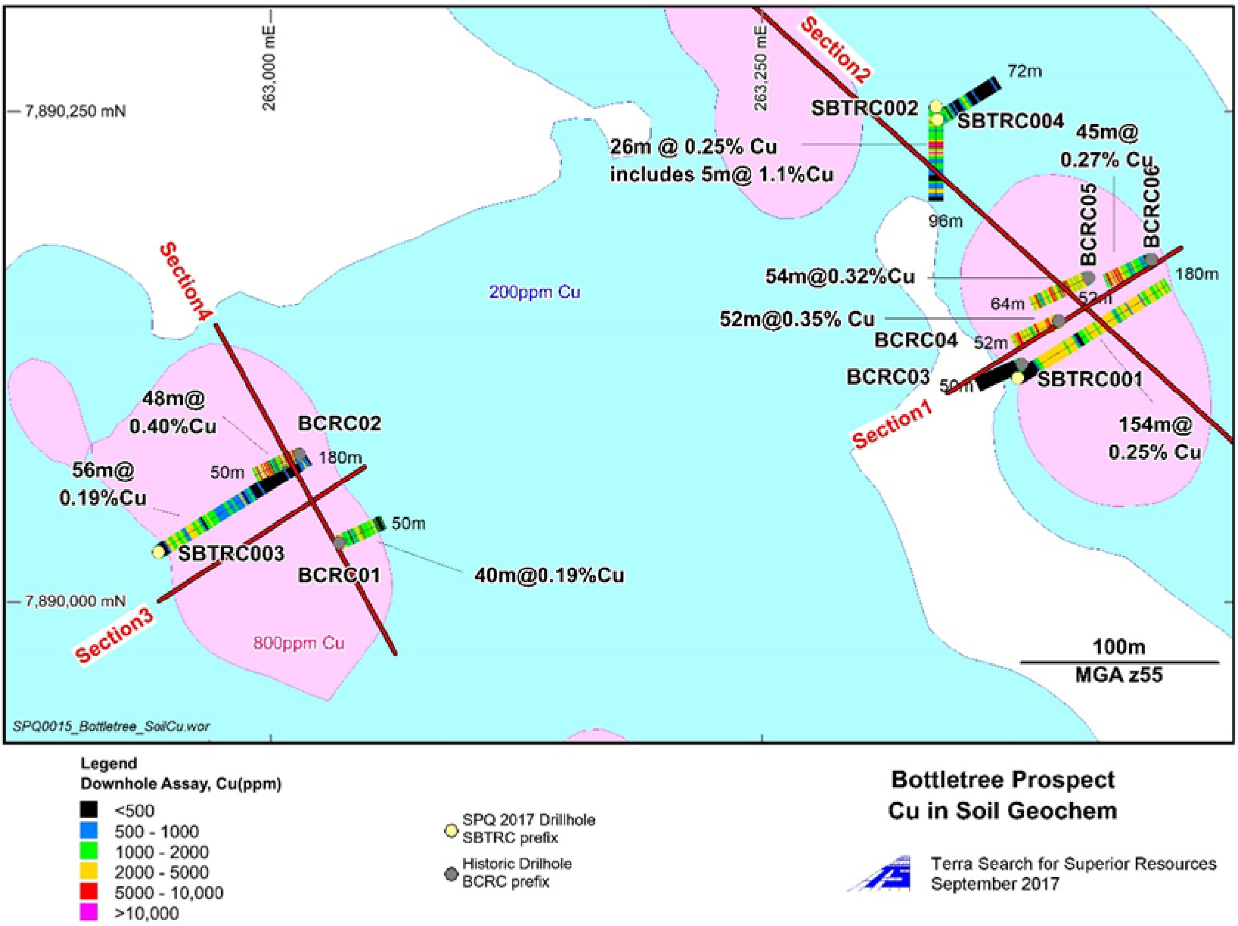

Figure 5. Plan view of northern section of Bottletree copper anomaly showing traces of Superior's July 2017 and historic drill holes with down hole copper, key intercepts and orientation of drill sections.

Figures 6 to 10 show the cross-sectional lateral and depth extent of mineralisation as revealed by downhole copper analyses, sulphide content and associated host geology and alteration and accompanying legend.

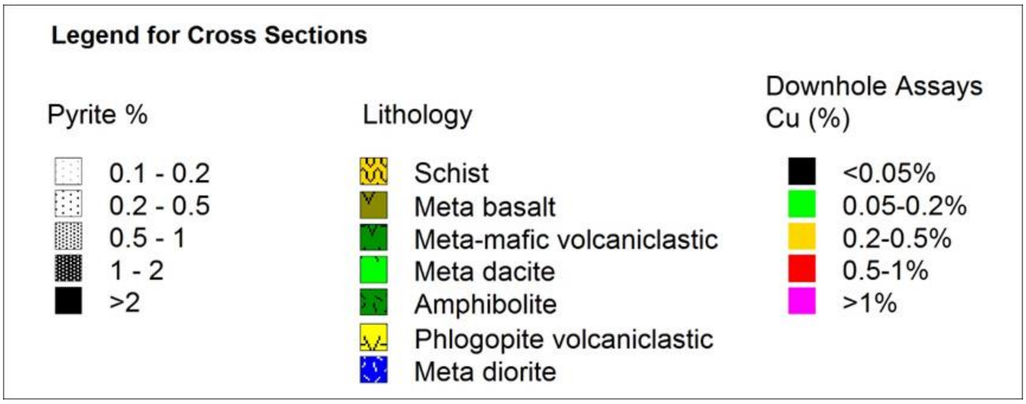

Figure 6. Legend for Cross Sections in Figures 7 to 10, showing downhole lithologies, copper and pyrite content.

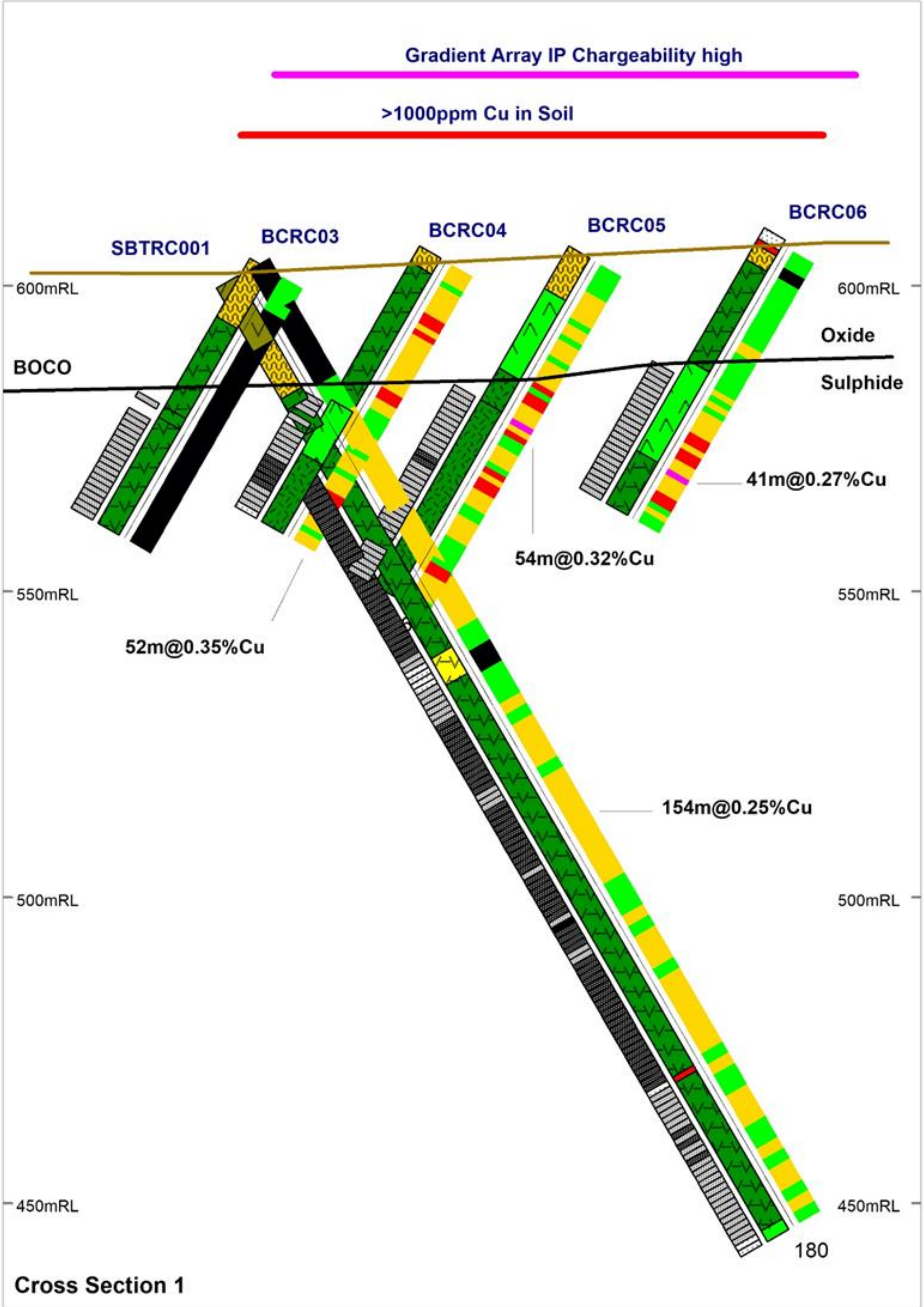

Figure 7. Cross section #1. Downhole lithologies, copper and pyrite content in relation to copper-in-soil anomaly and IP chargeability high.

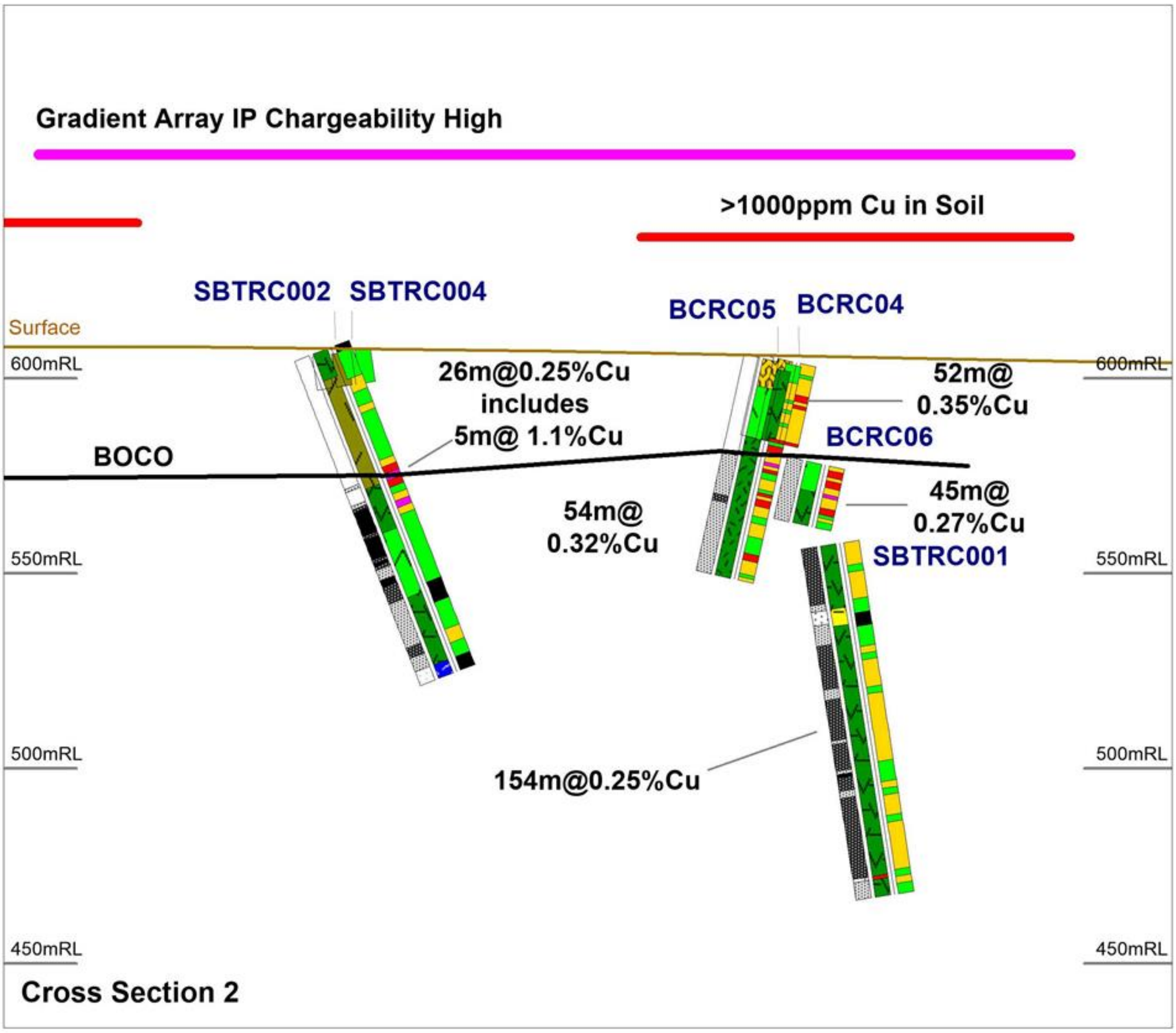

Figure 8. Cross section #2. Downhole lithologies, copper and pyrite content in relation to copper-in-soil anomaly and IP chargeability high.

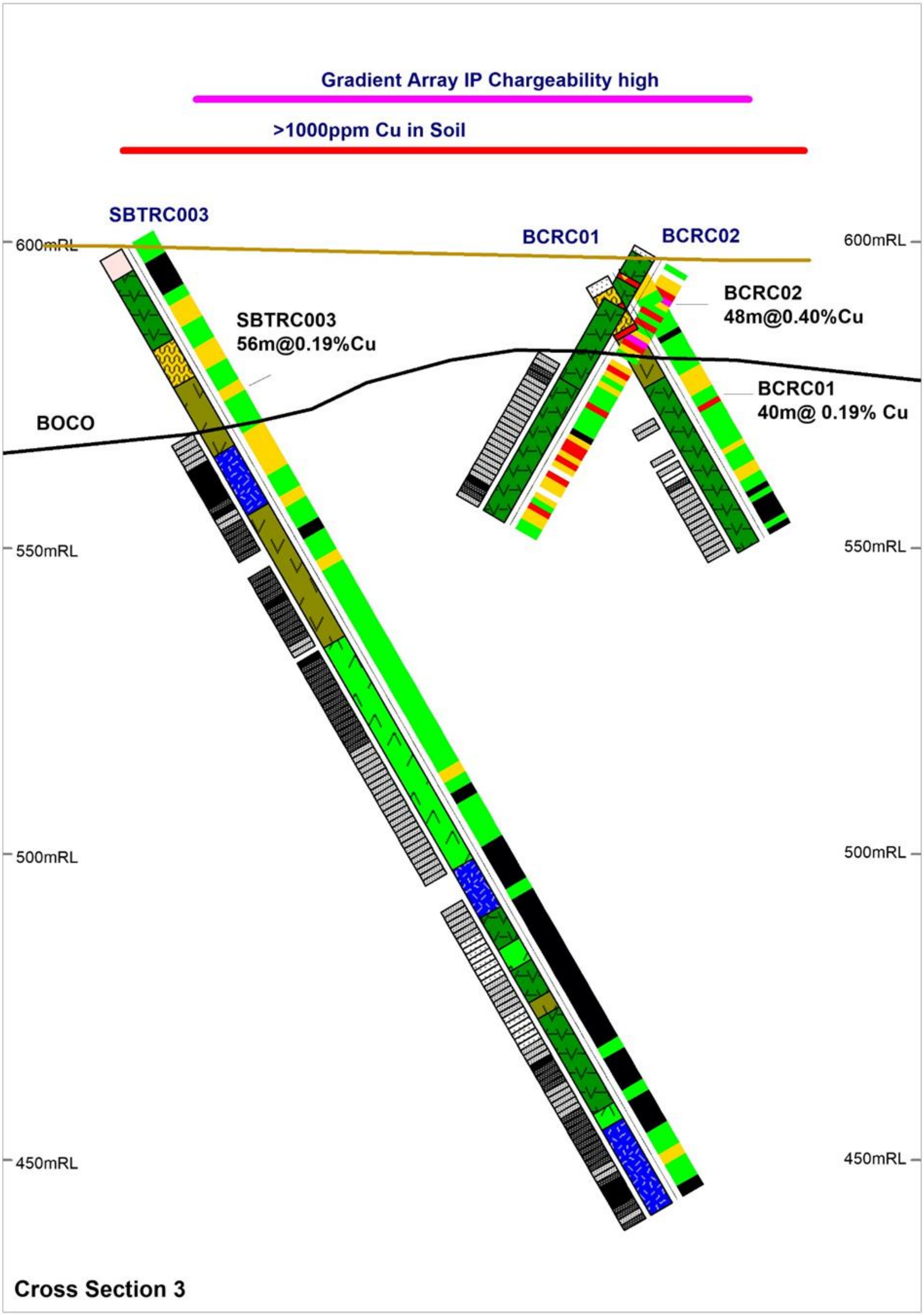

Figure 9. Cross section #3. Downhole lithologies, copper and pyrite content in relation to copper-in-soil anomaly and IP chargeability high.

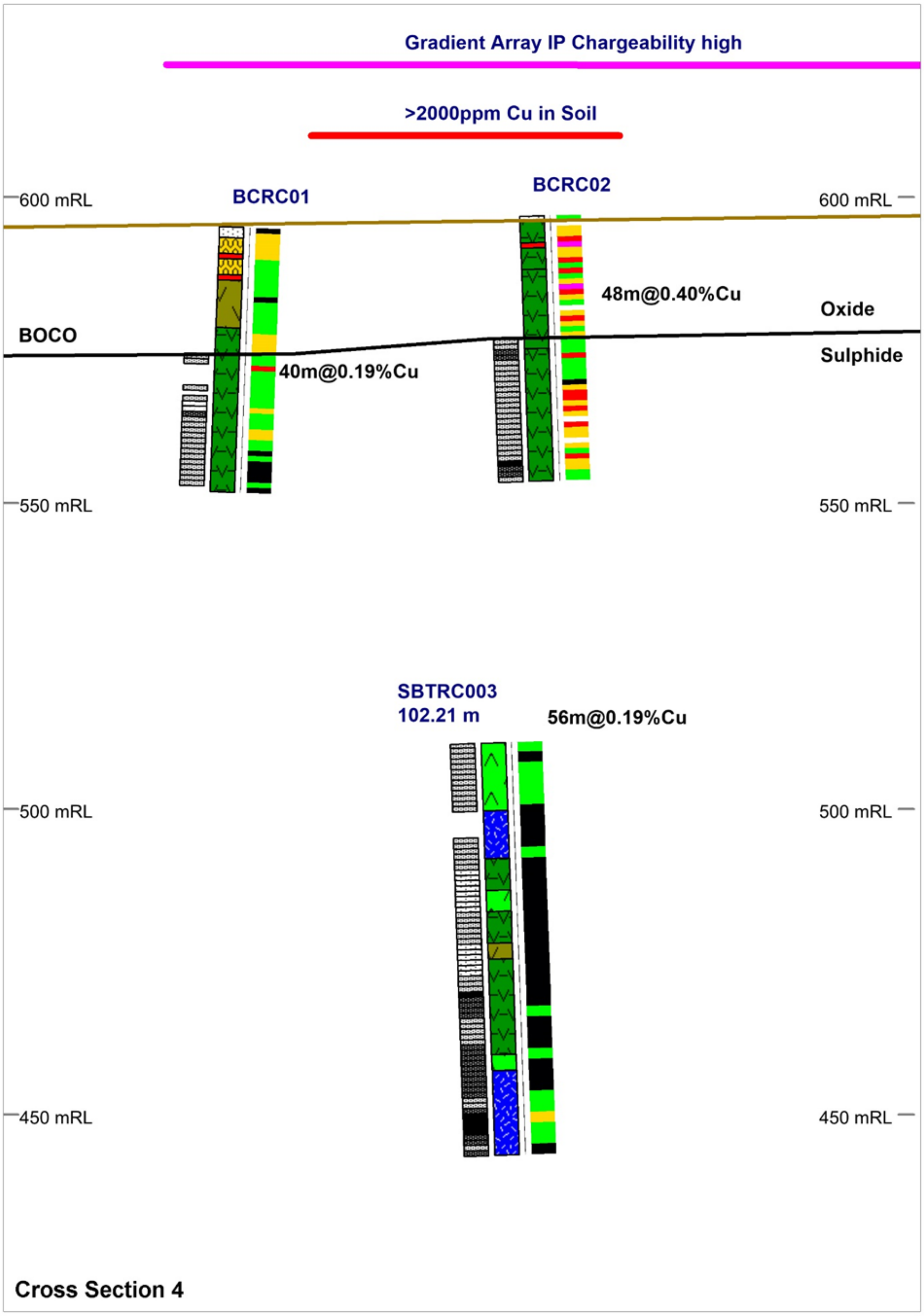

Figure 10. Cross section #4. Downhole lithologies, copper and pyrite content in relation to copper-in-soil anomaly and IP chargeability high.

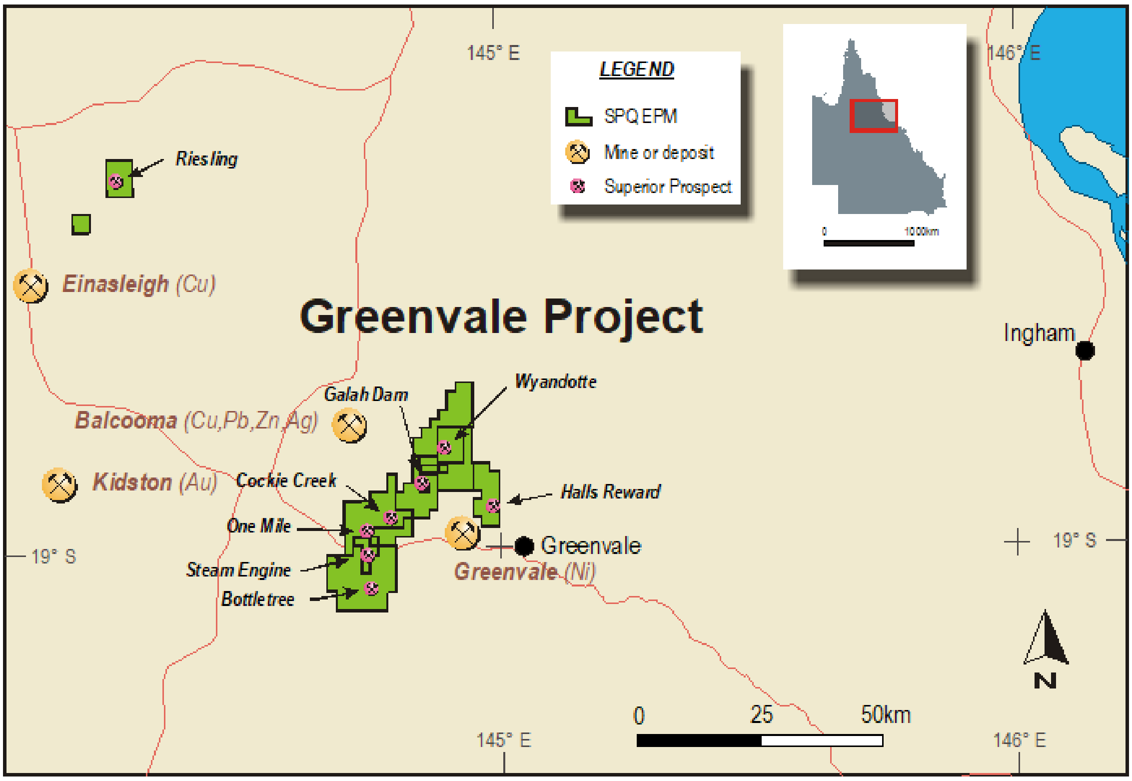

Figure 11. Location of the Bottletree Prospect and other prospects within the Greenvale Project.

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Information in this report related to exploration results are based on data compiled by Dr Simon Beams of Terra Search Pty Ltd. Dr Beams is a member of both the AIG and the AusIMM. Dr Beams has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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'. Dr Beams discloses that entities that he is associated with hold shares in Superior Resources Limited. Dr Beams consents to the inclusion in the report of the statements based on the information in the form and context in which it appears.

Certain statements made in this report may contain or comprise certain forward-looking statements. Although Superior Resources Limited believes that any estimates and expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results and estimations could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in the economic and market conditions, success of business and operating initiatives and changes in the regulatory environment. Superior undertakes no obligation to update publicly or release any revisions of any forward-looking statements to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events.

APPENDIX 1. Summary Intercepts Using Original 2m sampling, 1m follow up sampling and 1m check sampling. ALS and PXRF comparison.

SUMMARY							
Hole ID	From	To	m	Cu % PXRF	Cu % ALS	Au ppm ALS	
SBTRC001	24	178	154	0.2	0.25		
SBTRC002	28	54	26	0.53	0.44		With Original 2m
SBTRC002	28	54	28	0.53	0.44		With Original 2m and Check 1m Sampling
SBTRC002	36	41	5	1.53	1.05	0.3	Original 1m sampling
SBTRC002	36	41	5	1.53	1	0.3	Repeat1m sampling
SBTRC002	36	41	5	1.53	1.03	0.3	Average 1m sampling
SBTRC002	36	42	6	1.43	0.83	0.23	2m sampling
SBTRC003	12	47	35	0.22	0.21		
SBTRC004	2	14	12	0.15	0.12		
SBTRC004	30	36	6	0.14	0.15		

APPENDIX 2. Full Listing of Down Hole Drill Results

Hole_ID	Sample No	From	To	Comments	ME-ICP41	ME-ICP41
					Cu ppm	Cu ppm Check
SBTRC001	5046932	0	2		105	
SBTRC001	5046933	2	4		127	
SBTRC001	5046934	4	6		128	
SBTRC001	5046935	6	8		159	
SBTRC001	5046936	8	10		121	
SBTRC001	5046937	10	12		64	
SBTRC001	5046938	12	14		107	
SBTRC001	5046939	14	16		94	
SBTRC001	5046940	16	18		58	
SBTRC001	5046941	18	20		62	
SBTRC001	5046942	20	22		226	
SBTRC001	5046943	22	24		737	
SBTRC001	5046944	24	26		1220	
SBTRC001	5046945	26	28		1960	
SBTRC001	5046946	28	30		3240	
SBTRC001	5046947	30	32		3150	
SBTRC001	5046948	32	34		2580	
SBTRC001	5046949	34	36		4010	
SBTRC001	5046950	36	38		4190	
SBTRC001	5046951	38	40		2860	
SBTRC001	5046952	40	42		3250	
SBTRC001	5046953	42	44		4180	
SBTRC001	5046954	44	46		3780	
SBTRC001	5046955	46	48		4220	
SBTRC001	5046956	48	50	original	2090	
SBTRC001	5046957	48	50	duplicate	2000	
SBTRC001	5046958	50	52		3720	
SBTRC001	5046959	52	54		2050	
SBTRC001	5046960	54	56		3430	
SBTRC001	5046961	56	58		3290	
SBTRC001	5046962	58	60		1280	
SBTRC001	5046963	60	62		3220	
SBTRC001	5046964	62	64		2940	
SBTRC001	5046965	64	66		2290	
SBTRC001	5046966	66	68		2300	
SBTRC001	5046967	68	70		1920	
SBTRC001	5046968	70	72		580	
SBTRC001	5046969	72	74		490	
SBTRC001	5046970	74	76		474	
SBTRC001	5046971	76	78		1300	
SBTRC001	5046972	78	80		1070	
SBTRC001	5046973	80	82		1820	
SBTRC001	5046974	82	84		3250	
SBTRC001	5046975	84	86		1160	
SBTRC001	5046976	86	88		2240	

Hole_ID	Sample No	From	To	Comments	ME-ICP41	ME-ICP41
					Cu ppm	Cu ppm Check
SBTRC001	5046977	88	90		2510	
SBTRC001	5046978	90	92		2830	
SBTRC001	5046979	92	94		2080	
SBTRC001	5046980	94	96		1840	
SBTRC001	5046981	96	98		2960	
SBTRC001	5046982	98	100	original	2750	
SBTRC001	5046983	98	100	duplicate	2980	
SBTRC001	5046984	100	102		2590	
SBTRC001	5046985	102	104		3460	
SBTRC001	5046986	104	106		3610	
SBTRC001	5046987	106	108		2330	
SBTRC001	5046988	108	110		3370	
SBTRC001	5046989	110	112		2910	
SBTRC001	5046990	112	114		3050	
SBTRC001	5046991	114	116		2530	
SBTRC001	5046992	116	118		1110	
SBTRC001	5046993	118	120		726	
SBTRC001	5046994	120	122		1460	
SBTRC001	5046995	122	124		2270	
SBTRC001	5046996	124	126		1760	
SBTRC001	5046997	126	128		2050	
SBTRC001	5046998	128	130		2560	
SBTRC001	5046999	130	132		2300	
SBTRC001	5047000	132	134		783	
SBTRC001	5047001	134	136		2930	
SBTRC001	5047002	136	138		3240	
SBTRC001	5047003	138	140		3290	
SBTRC001	5047004	140	142		2900	
SBTRC001	5047005	142	144		3130	
SBTRC001	5047006	144	146		3210	
SBTRC001	5047007	146	148		3000	
SBTRC001	5047008	148	150		808	
SBTRC001	5047009	150	152		2110	
SBTRC001	5047010	152	154		1680	
SBTRC001	5047011	154	156		1820	
SBTRC001	5047012	156	158		3890	
SBTRC001	5047013	158	160		3250	
SBTRC001	5047014	160	162		4010	
SBTRC001	5047015	162	164		1970	
SBTRC001	5047016	164	166		1400	
SBTRC001	5047017	166	168		2730	
SBTRC001	5047018	168	170		1770	
SBTRC001	5047019	170	172		2890	
SBTRC001	5047020	172	174		2100	
SBTRC001	5047021	174	176		1800	
SBTRC001	5047022	176	178		3430	

Hole_ID	Sample No	From	To	Comments	ME-ICP41	ME-ICP41
					Cu ppm	Cu ppm Check
SBTRC001	5047023	178	180		1200	
SBTRC002	5046881	0	2		265	
SBTRC002	5046882	2	4		835	
SBTRC002	5046883	4	6		1140	
SBTRC002	5046884	6	8		1170	
SBTRC002	5046885	8	10		625	
SBTRC002	5046886	10	12		2970	
SBTRC002	5046887	12	14		2750	
SBTRC002	5046888	14	16		1890	
SBTRC002	5046889	16	18		1390	
SBTRC002	5046890	18	20		2840	
SBTRC002	5046891	20	22		1730	
SBTRC002	5046892	22	24		1270	
SBTRC002	5046893	24	26		561	
SBTRC002	5046894	26	28		1030	
SBTRC002	5046895	28	30		1550	
SBTRC002	5046896	30	32		1360	
SBTRC002	5046897	32	34		1740	
SBTRC002	5046898	34	36		2650	
SBTRC002	5046899	36	38		8300	
SBTRC002	5047341	36	37	Bulk 1m	13050	12550
SBTRC002	5047342	37	38	Bulk 1m	4280	3970
SBTRC002	5046900	38	40		11400	
SBTRC002	5047343	38	39	Bulk 1m	6460	6480
SBTRC002	5047344	39	40	Bulk 1m	21200	20600
SBTRC002	5046901	40	42		5310	
SBTRC002	5047345	40	41	Bulk 1m	7430	6850
SBTRC002	5047346	41	42	Rep 1m	2360	6270
SBTRC002	5046902	42	44		1790	
SBTRC002	5046903	44	46		2790	
SBTRC002	5046904	46	48		12450	
SBTRC002	5046905	48	50	original	2790	
SBTRC002	5046906	48	50	duplicate	2930	
SBTRC002	5046907	50	52		1780	
SBTRC002	5046908	52	54		1760	
SBTRC002	5046909	54	56		996	
SBTRC002	5046910	56	58		833	
SBTRC002	5046911	58	60		1470	
SBTRC002	5046912	60	62		1530	
SBTRC002	5046913	62	64		1300	
SBTRC002	5046914	64	66		749	
SBTRC002	5046915	66	68		596	
SBTRC002	5046916	68	70		961	
SBTRC002	5046917	70	72		395	
SBTRC002	5046918	72	74		335	
SBTRC002	5046919	74	76		309	

Hole_ID	Sample No	From	To	Comments	ME-ICP41	ME-ICP41
					Cu ppm	Cu ppm Check
SBTRC002	5046920	76	78		1330	
SBTRC002	5046921	78	80		818	
SBTRC002	5046922	80	82		806	
SBTRC002	5046923	82	84		692	
SBTRC002	5046924	84	86		3540	
SBTRC002	5046925	86	88		2030	
SBTRC002	5046926	88	90		559	
SBTRC002	5046927	90	92		907	
SBTRC002	5046928	92	94		487	
SBTRC002	5046929	94	96		489	
SBTRC003	5047026	0	2		1010	
SBTRC003	5047027	2	4		607	
SBTRC003	5047028	4	6		443	
SBTRC003	5047029	6	8		425	
SBTRC003	5047030	8	10		345	
SBTRC003	5047031	10	12		614	
SBTRC003	5047032	12	14		2250	
SBTRC003	5047033	14	16		2120	
SBTRC003	5047034	16	18		1680	
SBTRC003	5047035	18	20		1800	
SBTRC003	5047036	20	22		2870	
SBTRC003	5047037	22	24		2660	
SBTRC003	5047038	24	26		1120	
SBTRC003	5047039	26	28		1200	
SBTRC003	5047040	28	30		2690	
SBTRC003	5047041	30	32		1200	
SBTRC003	5047042	32	34		714	
SBTRC003	5047043	34	36		952	
SBTRC003	5047044	36	38		4660	
SBTRC003	5047045	38	40		3480	
SBTRC003	5047046	40	42		2730	
SBTRC003	5047047	42	44		3100	
SBTRC003	5047048	44	46		1650	
SBTRC003	5047049	46	48		1250	
SBTRC003	5047050	48	50	original	2260	
SBTRC003	5047051	48	50	duplicate	2210	
SBTRC003	5047052	50	52		1020	
SBTRC003	5047053	52	54		848	
SBTRC003	5047054	54	56		174	
SBTRC003	5047055	56	58		1770	
SBTRC003	5047056	58	60		1610	
SBTRC003	5047057	60	62		3840	
SBTRC003	5047058	62	64		1330	
SBTRC003	5047059	64	66		1370	
SBTRC003	5047060	66	68		1110	
SBTRC003	5047061	68	70		1650	

Hole_ID	Sample No	From	To	Comments	ME-ICP41	ME-ICP41
					Cu ppm	Cu ppm Check
SBTRC003	5047062	70	72		729	
SBTRC003	5047063	72	74		879	
SBTRC003	5047064	74	76		783	
SBTRC003	5047065	76	78		796	
SBTRC003	5047066	78	80		666	
SBTRC003	5047067	80	82		791	
SBTRC003	5047068	82	84		1330	
SBTRC003	5047069	84	86		1180	
SBTRC003	5047070	86	88		809	
SBTRC003	5047071	88	90		917	
SBTRC003	5047072	90	92		1390	
SBTRC003	5047073	92	94		773	
SBTRC003	5047074	94	96		562	
SBTRC003	5047075	96	98		745	
SBTRC003	5047076	98	100	original	908	
SBTRC003	5047077	98	100	duplicate	1070	
SBTRC003	5047078	100	102		2760	
SBTRC003	5047079	102	104		579	
SBTRC003	5047080	104	106		497	
SBTRC003	5047081	106	108		730	
SBTRC003	5047082	108	110		847	
SBTRC003	5047083	110	112		1090	
SBTRC003	5047084	112	114		643	
SBTRC003	5047085	114	116		318	
SBTRC003	5047086	116	118		156	
SBTRC003	5047087	118	120		217	
SBTRC003	5047088	120	122		285	
SBTRC003	5047089	122	124		670	
SBTRC003	5047090	124	126		158	
SBTRC003	5047091	126	128		178	
SBTRC003	5047092	128	130		326	
SBTRC003	5047093	130	132		119	
SBTRC003	5047094	132	134		309	
SBTRC003	5047095	134	136		214	
SBTRC003	5047096	136	138		174	
SBTRC003	5047097	138	140		168	
SBTRC003	5047098	140	142		174	
SBTRC003	5047099	142	144		169	
SBTRC003	5047100	144	146		264	
SBTRC003	5047101	146	148		476	
SBTRC003	5047102	148	150		382	
SBTRC003	5047103	150	152		460	
SBTRC003	5047104	152	154		654	
SBTRC003	5047105	154	156		104	
SBTRC003	5047106	156	158		94	
SBTRC003	5047107	158	160		222	

Hole_ID	Sample No	From	To	Comments	ME-ICP41	ME-ICP41
					Cu ppm	Cu ppm Check
SBTRC003	5047108	160	162		603	
SBTRC003	5047109	162	164		154	
SBTRC003	5047110	164	166		407	
SBTRC003	5047111	166	168		317	
SBTRC003	5047112	168	170		674	
SBTRC003	5047113	170	172		514	
SBTRC003	5047114	172	174		2610	
SBTRC003	5047115	174	176		773	
SBTRC003	5047116	176	178		894	
SBTRC003	5047117	178	180		313	
SBTRC004	5046843	0	2		883	
SBTRC004	5046844	2	4		1780	
SBTRC004	5046845	4	6		1750	
SBTRC004	5046846	6	8		528	
SBTRC004	5046847	8	10		1540	
SBTRC004	5046848	10	12		1070	
SBTRC004	5046849	12	14		406	
SBTRC004	5046850	14	16		1180	
SBTRC004	5046851	16	18		851	
SBTRC004	5046852	18	20		453	
SBTRC004	5046853	20	22		537	
SBTRC004	5046854	22	24		439	
SBTRC004	5046855	24	26		248	
SBTRC004	5046856	26	28		161	
SBTRC004	5046857	28	30		602	
SBTRC004	5046858	30	32		1470	
SBTRC004	5046859	32	34		2120	
SBTRC004	5046860	34	36		1010	
SBTRC004	5046861	36	38		915	
SBTRC004	5046862	38	40		170	
SBTRC004	5046863	40	42		190	
SBTRC004	5046864	42	44		490	
SBTRC004	5046865	44	46		573	
SBTRC004	5046866	46	48		393	
SBTRC004	5046867	48	50		212	
SBTRC004	5046868	50	52		203	
SBTRC004	5046869	52	54		220	
SBTRC004	5046870	54	56		175	
SBTRC004	5046871	56	58		195	
SBTRC004	5046872	58	60		137	
SBTRC004	5046873	60	62		74	
SBTRC004	5046874	62	64		115	
SBTRC004	5046875	64	66		198	
SBTRC004	5046876	66	68		646	
SBTRC004	5046877	68	70		266	
SBTRC004	5046878	70	72		165	

Appendix 3: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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 handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 1 m samples from which 3 kg was pulverised to produce a 30 g 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.*	• Samples are obtained from reverse circulation (**RC**) drilling. • All samples are collected as drilled via a riffle splitter attached to the drill rig cyclone. • Drill holes are sampled and collected as 1m riffle split samples. All samples were passed through a cyclone and then through a 7/8th to 1/8th splitter. Bulk 1m samples were collected as the 7/8th split, whereas the 1/8th split was collected as an analytical sample over 2m. Analytical sample size was in the order of 2.5kg to 3kg. • All RC holes were drilled using a standard face sampling hammer with bit size of 114mm (Four & half inch). The drill bit sizes used in the drilling were consistent in size and are considered appropriate to indicate the degree and extent of mineralisation. • Sample intervals that lack metalliferous anomalism are not reported are not considered to be material. • The magnetic susceptibility of all samples was measured in the field. • Portable XRF analyses were systematically recorded in controlled environment at Terra Search offices in Townsville. • 1m representative samples of intervals with visible mineralisation were assayed for gold at ALS laboratories in Townsville. 2m representative samples of intervals without visible mineralisation, derived from compositing two samples from consecutive 1m intervals, were also assayed for gold at ALS laboratories in Townsville. Where gold mineralisation was detected in the 2m composite samples, 1m samples were submitted for further assaying. • 1m samples were also submitted for multi-element assaying using aqua regia digestion. • Assaying for gold was via fire assay of a 50 gram charge. • Sample preparation at ALS laboratories in Townsville for all samples is considered to be of industry standard procedure.
Drilling techniques	• *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,*	• Drilling from surface was performed using standard RC drilling techniques. • Drilling was conducted by Kelly Drilling using a Schramm 450WS with a 900cfm/350psi compressor and 700 psi on-board booster.

Criteria	JORC Code explanation	Commentary
	face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• All RC holes were drilled using a standard face sampling hammer with bit size of 114mm (Four & half inch). • All holes were surveyed using a Reflex Gyro north-seeking gyroscopic instrument to obtain accurate down-hole directional data.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Sample recovery was performed and monitored by Terra Search contractor and Superior Resources' representatives. • RC recovery as well as degree of cross-sample contamination were logged on a metre basis. Overall recoveries were excellent. RC samples were all dry. • The volume of sample collected for assay is considered to be representative of each 1m interval. • RC drill rod string delivered the sample to the rig-mounted cyclone which is sealed at the completion of each 1m interval. The riffle splitter is cleaned with compressed air at the end of each 1m interval and at the completion of each drill hole. • There is no apparent relationship between sample recovery and grade of mineralisation.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Geological logging was conducted during the drilling of each hole by a Terra Search geologist having sufficient qualification and experience for the mineralisation style expected and observed at each hole. • Geological logging data entered via a well-developed logging system designed to capture descriptive geology, coded geology and quantifiable geology. All logs were checked for consistency by the Terra Search Principal Geologist. Data captured through Excel spread sheets and Explorer 3 Relational Data Base Management System. • The logging of RC chips is both qualitative and quantitative. Alteration, weathering and mineralisation data contain both qualitative and quantitative fields. • All holes were logged in their entirety at 1m intervals. All logging data is digitally compiled and validated before entry into the Superior database. • The level of logging detail is considered appropriate for resource drilling. • Magnetic susceptibility data for each 1m sample interval was collected in the field. • The entire length of all drill holes has been geologically logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness*	• The sample collection methodology is considered appropriate for RC drilling and was conducted in accordance with best industry practice. • Split 1m samples are regarded as reliable and representative. • RC samples are split with a riffle splitter at 1m intervals as drilled. • Samples were collected as dry samples.

Criteria	JORC Code explanation	Commentary
	of the sample preparation technique. • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Quality Assurance (**QA**)/Quality Control (**QC**) protocols were instigated such that they conform to mineral industry standards and are compliant with the JORC code. • Terra Search's input into the (QA) process with respect to chemical analysis of mineral exploration samples includes the addition of blanks, standards and duplicates to each batch so that checks can be done after they are analysed. As part of the (QC) process, Terra Search checks the resultant assay data against known or previously determined assays to determine the quality of the analysed batch of samples. An assessment is made on the data and a report on the quality of the data is compiled. • Terra Search quality control included determinations of duplicate samples every 50 samples or so to check for representative samples. There was a conscious effort on behalf of the samplers to ensure consistent weights for each sample. Comparison of assays of duplicates shows good reproducibility of results. • The above techniques are considered to be of a high quality and appropriate for the nature of mineralisation anticipated. The 2-3kg sample size is appropriate for the rock being sampled. The sample sizes are considered to be appropriate to represent the style of the mineralisation, the thickness and consistency of the intersections. • Samples from high copper intervals with grades > 1% Cu were checked by repeat sampling of 1m bulk bags. These were re-split with riffle splitter, subsampled and submitted to ALS laboratories Townsville for crush, pulverising and re analysis. Results were then checked and found to be consistent with high precision.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• All samples were submitted to ALS laboratories in Townsville for gold and multi-element analysis. • Samples were crushed, pulverised to ensure a minimum of 85% pulp material passing through 75 microns, then analysed for gold by fire assay method Au-AA26 using a 50-gram sample. • A sub-sample of each was also subject to multi-element analysis using aqua regia digest and ICP emission spectroscopy technique for the following elements: Ag, As, Ba, Bi, Ca, Cd, Co, Cu, Fe, Mg, Mn, Mo, Ni, P, Pb, S, Sb, Zn (ALS code ME-ICP41). • The primary assay method used is designed to measure both the total gold in the sample as per classic fire assay as well as the total amount of economic metals tied up in sulphides and oxides such as Cu, Pb, Zn, Ag, As, Mo, Bi as per aqua regia digest ICP finish. • Some major elements which are present in silicates, such as K, Ca, Fe, Ti, Al and Mg are not liberated by aqua regia digest. In this sense, the aqua regia digest is a partial analytical technique for elements locked up in silicates.

Criteria	JORC Code explanation	Commentary
		• Magnetic susceptibility measurements utilising Exploranium KT10 instrument, zeroed between each measurement. • Certified geochemical standards and blank samples were inserted into the assay sample sequence. Laboratory assay results for these quality control samples are within 5% of accepted values.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The reported significant intersections have been verified by at least two Terra Search geologists against representative drill chips collected and the drill logs. • No holes were twinned. • No adjustments to assay data were undertaken. • All drill hole logging and sampling data continue to be uploaded and validated by Terra Search and Superior staff. Validation is checked by comparing assay results with logged mineralogy e.g. percent of metallic sulphides minerals in comparison to metal assays. • No drill holes were twinned. • Data is collected by qualified geologists and experienced field assistants and entered into excel spreadsheets. • Data is imported into Microsoft Access tables from the Excel spreadsheets with validation checks set on different fields. Data is then checked thoroughly by the Operations Geologist for errors. Accuracy of drilling data is then validated when imported into MapInfo. • Data is stored on a server in the Company's head office, with regular backups and archival copies of the database made. • No adjustments are made to the data. Data is imported into the database in its original raw format.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole collars have been recorded in the field using hand held GPS with three metre or better accuracy. • Current drill hole collar locations and topographic RL control were further defined using a Trimble Differential GPS (DGPS). Location accuracy is in the order of 0.15m X-Y and 0.3m in the Z direction. • Down hole surveys were conducted on all holes using a Reflex GYRO with surveys taken inside the RC rods and recorded every 5m. The instrument measures to within 1/100 degree of inclination and magnetic azimuth • The area is located within UTM Zone 55, GDA94 datum.
Data spacing and	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to*	• Only 4 holes were drilled, testing specific targets and not systematically drilled along section lines at a planned spacing interval.

Criteria	JORC Code explanation	Commentary
distribution	*establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Further drilling is necessary to establish a Mineral Resource. • Samples were composited over 2m. Higher grade copper samples greater than 1% were resubmitted as 1m samples, re-split from 1m bulk sample.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• The majority of holes have been designed to drill normal to interpreted mineralisation trends. However, there has been insufficient drilling and geological interpretation to determine if there is a bias to sampling as a result of drilling oblique to or downdip on mineralised structures. • No orientation sample bias has been identified at this stage.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody was managed by Terra Search Pty Ltd. Samples were transferred by them to ALS.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of the sampling techniques and data have been undertaken at this time.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• The areas reported on lie within Exploration Permit for Minerals 26165 which was granted on 30 January 2017 and held 100% by Superior. Superior holds much of the surrounding area under granted exploration permits. • Superior has agreements or other appropriate arrangements in place with landholders and native title parties with respect to work in the area. • No regulatory impediments affect the relevant tenements or the ability of Superior to operate on the tenements.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• All of the historical work reported or used in this report has been completed and reported in accordance with the current regulatory regime. • Previous work on the prospect has been completed by Pancontinental Mining. • Historic drilling at the prospect has returned drill intercepts in the order of 52m @

Criteria	JORC Code explanation	Commentary
		0.35% Cu, 64m @ 0.32% Cu and 45m @ 0.27% Cu.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Bottletree Prospect is hosted in Lower Palaeozoic deformed mafic meta-volcanics, volcaniclastics and metasediments. • Mineralisation style is disseminated sulphide of probable magmatic origin. • Although there is mineralisation of volcanic hosted and porphyry style in the region, the actual nature and geometry of the mineralisation at the Bottletree Prospect is still open to interpretation. More geological, geochemical and drill data is required to fully understand the mineralisation setting.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		• Drill hole collar tables with significant intersections are included in the main body of the announcement. These tables include information relevant to an understanding of the results reported.

Data aggregation methods	• *In reporting Exploration Results, weighting 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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• In the intervals quoted a cut-off grade of 1000 ppm Cu is applied. Some intercepts incorporate 2m where Cu grade is in the 500ppm to 1000ppm Cu range. In the 154m intercept in hole SBTRC001, there is a 6m interval gap where samples ae in the 500ppm to 1000ppm Cu range. • No metal equivalent values are reported.
Relationship between mineralisation	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill*	• Downhole length, true width not known. • Drill sections not available at this stage.

Criteria	JORC Code explanation	Commentary
widths and intercept lengths	*hole angle is known, its nature should be reported.* • *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').*	• Only significant intercepts reported.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Drill sections not available at this stage.
Balanced reporting	• *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.*	• Only significant intercepts reported.
Other substantive exploration data	• *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 contaminating substances.*	• Not applicable.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further detailed drilling is required for the targets to establish continuity, thickness and grade and extensions to mineralisation. • Proposed further work is outlined in the report and includes further drilling and geophysical surveying. • Insufficient information currently exists to evaluate the geometry of mineralisation.