

MALACHITE RESOURCES NL

MT RAMSAY PROJECT

DRILL HOLE SUMMARY LOG

PROSPECT: NORTHERN EM CONDUCTORS
TENEMENT: EL 42/2002
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SURVEYED HOLE COLLAR POSITION			
CO-ORDINATES (AMG)			Dip/Az. (grid)
mE	mN	mRL	
372,437	5,395,125	660	-65 ⁰ /089 ⁰

RCP/CORE (m)		
From	To	Size
0.00	35.90	HQ2
35.90	317.60	NQ2
317.60	408.00	BQ2

HOLE No.: MRDD01
LOGGED BY: B. McKAY / B. WAKE / R. MEARES
SUMMARY BY: B. WAKE / B. McKAY
Drilling Co.: TASGOLD DRILLING SERVICES
Rig Type: MODIFIED RB37
Drilling Started: 9/07/2005
Drilling Finished: 3/09/2005
Logging Finished: 4/09/2005
Final Hole depth: 408m

OBJECTIVE OF HOLE						Depth Interval (m)			GEOLOGY SUMMARY										
						From	To	Length											
Testing the source(s) of a linear group of north-south-elongated, electromagnetic ("EM") anomalies located east of the Meredith Granite in metasedimentary rock sequences and a geological setting analogous to that of the Renison Bell, Mt Bischoff and Cleveland carbonate-replacement and greisen-hosted tin deposits. The hole also tests low-level anomalous rock chip anomalies of up to 106-ppm Sn, 0.39% Cu, 240-ppm Pb, 640-ppm Zn and 166-ppm As.						0.00	2.00	2.00	Possibly boulders of fresh siliceous-hornfelsed, siltstone-sandstone in soil (poor recovery) Weathered, saprolitised, siliceous-hornfelsed, siltstone-sandstone bedrock. Moderately strong limonite-stained until about 8.1-m down-hole, then bleached-pallid until about 9.7-m down-hole (possibly sheared?). Very hard, generally dark grey-black, siliceous-hornfelsed, massive to diffusely bedded siltstone, mudstone and fine-grained sandstone. Patches of dark brownish grey hornfels suggest the presence of metamorphic(?) biotite and rare "spotted" porphyroblastic texture (cordierite-biotite?) from 75.8 to 76.5-m down-hole. Patches of dark greenish grey hornfels between 42.3 and 65-m down-hole suggest an intermixture of mafic volcanoclastic material(?). Thin planar-bedded/laminated mudstone (and rare bluish grey chert) was intersected from 111.9-115.2 m, 119.4-120.3 m, 129.8-131.5 m, 151.1-153.1 m, 163-165.7 m down-hole (S ₀ at 30-60° TCA), showing minor deformation features including vergence(?) folds and mm-scale displacements of laminae across fractures. Softer, mottled light to medium brown, thin once-calcareous(?) beds intermixed with siliceous-hornfelsed siltstone were intersected from 122.9 to 123.8-m down-hole with contacts at 60-70° TCA. Highly altered sulphidic (po) breccia vein material with a distinct white colouration was intersected from 265.4 to 268.1-m and 330.4 to 332.4-m down-hole.										
						2.00	9.70	7.70											
						9.70	355.20	345.50											
REMARKS																			
The hole intersected a tectonic/hydrothermal breccia assemblage represented by a highly altered (white) and moderately to highly brecciated silica-biotite hornfelsed sediments from 355.2 to end of hole (408m). A number of narrower intersections of similar 'white', brecciated material was intersected from 265.4 to 268.1 and 330.4 to 332.4 down-hole. The breccia vein material has undergone multiple tectonic/hydrothermal events evidenced by multi-phase irregular veining and associated alteration. Clasts are often altered white, or may exhibit a weak to moderately altered core surrounded by a highly altered, white rim. The main breccia body does not have an obvious surface expression, however, may be represented by rock chip samples with weakly anomalous tin and copper values collected from the surface above the breccia intersection. It is assumed the main breccia interval from 355 m down-hole contains sufficient pyrrhotite-dominant sulphide mineralisation to be responsible for the airborne and ground EM anomalism. If the initial western ground EM conductor is representative of the western expression of breccia material, a s						355.20	408.00	52.80	Highly altered, generally white to mottled white-brown-grey, tectonic/hydrothermal breccia vein, variably developed breccia textures, numerous overprinting veining and brecciation textures, irregular clast size and shape, gradational upper and lower contacts often represented by diffuse veining, calc-silicate and phyllosilicate alteration assemblage from 100 % to 30% of rock volume, clasts of si-bi hornfelsed siltstone and pre-brecciation sulphide-calc-silicate material <u>Mineralisation:</u> Pervasively microfractured and locally crackle brecciated, healed by a low-volume (<5%) of irregular, wispy-discontinuous to planar-continuous, <1 to 5-mm wide, green-white-pinkish brown phyllosilicates(?), sulphides (pyrrhotite, pyrite, marcasite(?)) >> arsenopyrite, chalcopyrite), minor quartz, and rare carbonate veins intersected at variably low to high angle TCA. The sulphides show a disseminated to semi-massive distribution largely in veins and on fractures, but generally comprise less than 1-2% bulk-volume of the rock. Pyrrhotite is most prominent between about 10 and 90-m down-hole. Irregular, narrow, bluish grey, siliceous alteration haloes surround these veins. Fracture/vein density about 1-10 x <1-5 mm veins per metre throughout the intersection. From 355.20-m, sulphidic breccia material consists of Including, 85.1 - 86.1 m and 98.6 - 98.9m chlorite + phyllosilicate + pyrrhotite + chalcopyrite breccia vein with angular clasts of grey wallrock; UC at 50° and 50° TCA respectively, LC at 30° and 55° TCA respectively. Up to 25% po in breccia-vein matrix. 122.9 - 123.5 m Early pinkish brown-white phyllosilicate alteration of once-calcareous(?) bed at 70° TCA with chlorite + pyrrhotite veinlets, later brecciation and infill by sparry white carbonate. 183.8 - 183.9 m Crackle with irregular infill by early ghost-bladed chalcadonic(?) quartz, very finely disseminated opaques (cassiterite?) and later semi-massive pyrite (marcasite?), blebs of chalcopyrite & chlorite + phyllosilicate. at 203.3 m 10-15 mm wide massive fine-grained pyrite/marcasite vein at 30° TCA with late blebs of arsenopyrite 211.4 - 211.8 m Irregular, wispy chalcopyrite + brown biotite stringer zone containing veinlets <1-15 mm wide. 265.4 - 268.1 m and 330.4 highly altered, mottled white, breccia sulphide vein, multiple overprinting veins and breccia textures, up to 10% po over interval, locally up to 25% po. 355.2 - 408.0 m well developed breccia-vein material, as above, zones to 3.7 m width of silica-biotite hornfels, including from 394.9 m to EOH of weak brecciation/veining and pervasive, strata-controlled alteration, 5-10% po over interval										
						DOWN HOLE SURVEYS										Depth Interval (m)			BEST MINERALISED INTERSECTIONS
Method	Depth (m)	Dip°	Az° (mag)	Az° (grid)	Comment	From	To	Length			Sn	Cu	Zn	W0 ₃					
Eastman	30.0	-64°	075°	087°	HQ2	211.00	212.00	1.00	Zone of veinlet, refractured veinlet and blebby-style chalcopyrite in Si-Bi HN		20	3150	100	50					
Eastman	60.0	-64.5°	072.5°	084.5°	NQ2; spurious reading?	309.00	317.00	7.00	Po veinlets and veins in Si-Bi HN		109	38	40	44					
Eastman	90.0	-64°	079.5°	091.5°	NQ2	330.00	333.00	3.00	Sulphidic (Po) breccia vein material		143	40	37	63					
Eastman	120.0	-64°	080°	092°	NQ2	331.00	332.00	1.00	Sulphidic (Po) breccia vein material		180	20	40	80					
Eastman	150.0	-64°	080°	092°	NQ2	354.00	384.00	30.00	Sulphidic (Po) breccia vein material		117	52	49	50					
Eastman	183.0	-64.5	083.5°	095.5°	NQ2														
Eastman	210.0	-64°	083°	095°	NQ2														
Eastman	249.0	-64°	083°	095°	NQ2														
Eastman	336.0	-64°	050°	062°	BQ2, survey in barrel														
Eastman	384.0	-64	083°	095°	BQ2, survey in barrel														
Eastman	408.0	-63.5	083°	095°	BQ2, survey in barrel														
OTHER INFORMATION						COMMENTS						Dispatch No.		Job No.		ppm	ppm	ppm	ppm
Base of Oxidation:		9.7-m		Drilling progress was slow due to generally hard & abrasive ground. Drill hole deflection is considered minimal.		Lab: Burnie Research Lab				MR/01/05		JN 93							
Top of main water table:		N/A								MR/02/05		JN 93							
Equipment left in hole:		408m 40mm PVC pipe; 33m HQ drill rod								MR/03/05		JN 93							
Average Core Recovery:		94%																	