575127

CRA Exploration Pty. Limited - Diamond drill core log				Hole No: DD97BC11
Tenement: EL 4/94, Tasmania			**Map Ref.:** SK 5503, Burnie	
Collar R.L.: 205m		Co-ordinates: 324402E, 5429412N	Hole Orientation: 55° towards 072	Logged by: TJG
From	**To**	**Geological Desciption**	**Special Features**	**Core Orientation**
3	7.3	Greenish weathered clay altered rock with a weak cleavage. Occasional pyrite veins.	Cleavage @ 35° to LCA.	
7.3	14.5	Slightly greyer clay-altered/weathered siltstone. Fine laminations becoming more obvious around 12.3m. Occasional pyrite clasts around 9.5m.		
14.5	16.5	Slightly laminated grey schist. Rare pyrite clasts. No younging apparent.	Lamination and cleavage @ 30° to LCA.	
16.5	21	Green laminated schist. Thin pyrite veinlets containing crystalline pyrite. No younging evidence apparent.		
21	25.4	Green, fairly monotonous unit. Soft and clay altered. Contact with unit above marked by a small breccia zone. Some fairly thin veinlets containing crystalline pyrite.		
25.4	31.4	Highly altered zone of green, often fragmented siltstone/mudstone (clay-altered). Laminated units interbanded with more monotonous units. Initially crystalline pyrite sparse, though increasing around 27.6m. 5mm quartz-pyrite vein @ 28.6m.		
31.4	64.5	Green interbedded laminated siltstone and mudstone. Fine porphyroblasts in monotonous units have stretch parallel to cleavage. Pyritic zones @ 51.5, 52 & 53.9m. Two cross-cutting cassiterite stringers contain translucent green mineral with round habit.	Lamination and sub-parallel cleavage initially @ 20° to LCA. Cleavage steepens to 0° to LCA around 56.1m.	
64.5	100.3	Grey laminated siltstone. Occasional Si veins deformed about cleavage. Elongate pyrite porphyroblasts common. Some minor chalcopyrite associated with an Si vein @ 68m.		
100.3	103	Initially unit green and chloritic grading to greyaround 102m. Pyrite (up to 2%) as veins and clasts throughout. Thin chlorite veins have soapy texture. Some 1cm Si veins contain dolomite. Conatct with unit above marked by pyritic clay-altered zone.	Cleavage variable, 0 to 25° to LCA.	

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103	111.4	Grey schistose unit (initialy green). Pyrite associated with sometimes rootless Si vens, as well as clasts within schist. Some 1cm Si-pyrite veins below 109m. Becoming very pyritic around 110.4m with numerous deformed Si-pyrite veins.	Cleavage variable due to original sedimentary structure. Generally between 0 to 20° to LCA.	
111.4	117.5	Chlorite-altered schist, bleached and fairly intensely dolomite veined. Initially pyritic (veins) before Si and dolomite veins dominate. Doloite dies off around 115m.	Cleavage @ 20° to LCA with dolomite veins sub-parallel.	
117.5	124.9	Very grey, graphitic schist. Most Si-dolomite-pyrite veins <5mm. Larger quartz veins (3cm) @ 118.1 and 118.3m. @ 118.3 vein contains vuggy dolomite and pyrite. 5cm dolomite vein @ 118.4m. 20cm zone of quartz and vuggy dolomite from 121.4m.	Cleavage @ 20° to LCA.	
124.9	130.15	Composite unit comprising altered green psammite, minor schist and intense quartz-dolomite veining. No pyrite evident. Dolomite often forms the selvage on Si veins. Si veins occasionally cross-cut earlier dolomite veins. Quartz zones up to 30cm.		
130.15	145.5	Grey fine-grained schist. 10cm quartz+dol zones. @ 133.5, 133.7, 137.5m (brecciated) & 140.5. Becoming pyritic @ 135cm. Pyrite in Si veins below 138m, with minor chalco @ 139m. Chalco @ 142.4 & 143.7m. Chalco in an intensely veined zone @ 145.1m.		
145.5	146.6	Fairly bleached grey schist. Fine Si + dolomite veining, containing pyrite and some chalcopyrite. @ 146.6m 20cm dolomite zone with minor quartz. Minor blebby pyrite and chalcopyrite in this zone.	Cleavage @ 20° to LCA with fine Si-dol veins sub-parallel.	
146.6	159.9	Zone of quartz-dolomite. Initially dominated by quartz with subordinate schist till 154.5m. Sparsely disseminated chalcopyrite above 148.5. More massive below this with 20cm zone from 150.6, 30cm from 151.9m, 20cm from 158.2. ?Chalcocite @ 150.3m.	Brecciated at base of this unit.	

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CRA Exploration Pty. Limited - Diamond drill core log				Hole No: DD97BC01
Tenement: EL 4/94, Tasmania			**Map Ref.:** SK 5503, Burnie	
Collar R.L.: 205m		Co-ordinates: 324402E, 5429412N	Hole Orientation: 55° towards 072	Logged by: TJG
159.9	171	Greenish grey chloritic schist (minor Si-dolomite veining), becoming grey around 163m, then more chloritic around 166.9m associated with increased quartz veining. Some brecciation around 168.7m.	Lamination and sub-parallel cleavage variable 5 to 20° to LCA. Some boudinaged quartz veins below 167m, and fracturing due to slip on a steeper cleavage.	
171	172	Brecciated chloritic schist with pyrite & chalcopyrite. Chalcopyrite massive in steep poorly defined stringers (up to 5%).		
172	179	Greenish grey chloritic schist becoming increasingly quartz veined around 177m with a very pyritic (minor chalcopyrite) silicified zone @ 175.4m. Fine-grained pyrite on cleavage planes throughout unit.	Cleavage around 25° to LCA with cross-cutting veins @ 45°.	
179	185.5	Highly silicified and quartz-veined schist. @ 178.8m 20cm pyritic zone with red Fe stained silica (jasper). Minor disseminated chalcopyrite and possibly some greyish chalcocite. Similar zone @ 180.6m. Quartz veins contain minor patchy dolomite.	Cleavage variable @ 20 to 60° to LCA, before becoming unrecognisable. Quartz veining @ low angle to LCA.	
185.5	186.2	Soapy chloritic zone. Minor pyrite.	Cleavage @ 20° to LCA. 5mm quartz vein sub-parallel.	
186.2	187.2	Silicified schist now totally replaced by quartz. Dolomite veining evident and patchy in quartz. Occasional pyrite veining.		
187.2	187.8	Brecciated, soapy chloritic zone. Minor quartz veining and very rare pyrite.	Cleavage @ 20° to LCA.	
187.8	195.5	Silicified chloritic schist. Initially grey with quartz veins and fragments throughout. Minor orange/brown dolomite in quartz. Becoming chloritic and soapy around 188.8m. Some brecciation.		
195.5	204.8	Highly silicified schist (minor pyrite) grading into quartz. Blebby "caramel-coloured" dolomite @ 198.3m, with only thin veinlets above and below.		
204.8	206.4	Silicified soapy chloritic unit. Minor clay alteration.	Cleavage @ 15° to LCA.	

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Collar R.L.: 205m		Co-ordinates: 324402E, 5429412N	Hole Orientation: 55° towards 072	Logged by: TJG
206.4	209.5	Similar to unit above, but more silicified. Originally dark green silicified siltstone with no apparent cleavage. Contact with unit below marked by a 30cm quartz zone. Pyrite throughout.		
209.5	215.6	Grey laminated metasiltstone. Si veining throughout becoming silicified around 214.5m. Generally quite pyrite-rich and porphyroblastic. Slight wavy lamination and some strong sub-parallel shearing.	Cleavage/lamination @ 15° to LCA, but slightly variable.	
215.6	216.6	Intensely silicified schist, grading to quartz. Minor brownish dolomite veins.		
216.6	219.4	Greenish silicified schist. Porphyroidal and disseminated fine-grained pyrite throughout. Quartz veining common. Sharp contacts with grey laminated siltstone.		
219.4	220.3	Fragmented zone caused by abutting of greenish porphyroidal unit with grey laminated schist. Quartz veining evident with numerous cleavage parallel offsets. Contact parallel to LCA and marked by clay alteration.		
220.3	227.7	Greyish siltstone. Laminated in parts but overall dominated by thick monotonous units. Cleavage irregularities related to bedding. Numerous deformed Si veins.	Cleavage @ 15° to LCA.	
227.7	261.8	Grey laminated siltstone. Quartz and chlorite veining sub-parallel to lamination but varies slightly. Lighter layers often porphyroidal. Marked changes in bedding/cleavage angle often associated with small faults. Pyrite in Si-rich layers.	Cleavage variable orientation but generally 30° to LCA. Small faults @ 239 & 246m apparently normal. Some kink-banding evident. Cleavage steepens to 5° to LCA @ 250 and 255.5m. Highly defomed zone @ 254m with minor quartz-dolomite.	
261.8	268.7	Similar unit to above but greenish and slightly chloritic. @ 267m very pyritic in a more massive band. Large pyrite clasts in mudstone.		

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CRA Exploration Pty. Limited - Diamond drill core log				Hole No: DD97BC#1
Tenement: EL 4/94, Tasmania			**Map Ref.:** SK 5503, Burnie	
Collar R.L.: 205m		Co-ordinates: 324402E, 5429412N	Hole Orientation: 55° towards 072	Logged by: TJG
268.7	277.7	Brecciated zone, bleached, broken and marked by increased quartz veining + minor dolomite. Pyrite minor. Some chloritisation and clay alteration, especially in more brecciated parts.	Cleavage around 20° to LCA.	
277.7	317.3	Green-grey chloritic schist. Rare sulphides. Minor quartz-dolomite veining (some up to 10cm) but generaly contain no sulphides.	Foliation varies but generally @ 20° to LCA. Locally steepens to 0° to LCA. No younging evidence.	
317.3	322.4	As above but greener and slightly washed-out. Increased quartz veining. Brecciated @ 322m. Minor pyrite associated with quartz.		
322.4	325.8	Clay-altered puggy brecciated schist. Rare crystalline pyrite.		
325.8	356.3	Greenish schist, locally fragmented @ 331.9 - 332.1, 336.5 & 336.9m Possibly associated with a decrease in cleavage angle to 0° to LCA. Clay puggy zone 347.4 to 348.3m. Rare quartz-dolomite veins up to 10cm.	Generally cleavage @ 15 to 20° to LCA.	
356.3	375.7	As above but grey in colour. Increase in quartz-dolomite veining. Rare sulphides.	Cleavage @ 20° to LCA but locally steepens.	
375.7	463.1	Green chloritic schist. Infrequent quartz-dolomite veining, though sometimes complex. Sheared quartz veins the result of cleavage-parallel slip. Local clay-altered breccia zones between 398.2 & 400.2m; 418-419m; 438 -438.5m. Very rare sulphides.		
463.1	464.5	Washed-out clay altered light green schist.		
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