32513

249 043

DEPARTMENT OF MINES—TASMANIA

DIAMOND DRILL CORE RECORD

Hole No. 9

Drilled by Associated Diamond Drillers

Core Recovery

Geological Logging by— Hughes

Area of Operation Savage River

Location of Site 1600' W on A Traverse (Same as No 6)

Date Commenced 25.8.60

Date Completed

MINE COORDS 22,860 N 21,065 E

AMG Co-ords: 351195E 5405197N

Reduced Level of Site ~~1505~~ ? 1079.6, ~~1405~~ ~~1085~~

Bearing of Hole ~~275°~~ 268°

Dip of Hole 45° 32 171

Bore Depth 665'6"

Ref No 2038

DRILL RECORD

Date	From	To	Core Recov.
	0'	110'	1'
	110'	154'	9"
	154'	157'	1'
	157'	160'	2'
	160'	161'3"	1'2"
	161'3"	165'	2'3"
	165'	167'9"	1'
	167'9"	169'	1'
	169'	171	1'4"
	171	175'	1'9"
	175'	178'	8"
	178'	180'	6"
	180'	183'	1'7"
	183'	183'6"	3"
	183'6"	187'	2'4"
	187'	190'	2'10"
	190'	194'	2'7"
	194'	198'	2'3"
	198'	200'	2'
	200	204'6"	2'
	204'6"	209'3"	7"
	209'3"	210'6"	1'3"
	210'6"	215'6"	2'
	215'6"	219'	1'6"
	219'	221'	1'6"
	221'	223'	11"
	223'	226'	7"

GEOLOGICAL LOG

From	To	Description
0	110'	Only 1 foot of weathered magnetite
110	154'	Few inches of magnetite with little pyrite - few inches of schistose amphibolite
154'	157'	Massive amphib. - weathered with little magnetite
157'	160'	Harder amphib. with little magnetite pyrite and narrow albite veins.
160	161'3"	Sheared amphibolite
161'3"	164	Coarse grained massive amphibolite little weathered - much pyrite - little magnetite - large amphibole crystals
164	165	More weathered
165	178	Fine grained massive amphib. - solid little pyrite - sparse magnetite - jointing
178	191	Medium grade ore - some pyrite
191	194	Soft weathered amphib. - green clay
194	199	Medium grade ore
199'	200	Mottly amph. weathered to green clay
200	228	Medium grade ore - some pyrite very poor core recovery.

GEOLOGICAL SECTION 20' = 1" (Core, Sample)

ASSAY RESULTS No Core held

Sample No.	From	To	SiO_2	HCl Sol Fe	Al_2O_3	TiO_2 (Ti)	Mn	P_2O_5 (P_2)	S
1	0	154	19.08	50.3	1.83	0.42 / 0.25	0.05	0.13 / 0.06	1.88
			BIt			do with 75% magnetite			
2	154	178	39.58	7.0	13.19	0.89 / 0.53	0.18	0.20 / 0.09	2.52
			Grt			do with > 5% magnetite			
3	178	209'6"	4.49	53.0	2.15	0.56 / 0.34	0.07	0.12 / 0.05	5.54
4	209'6"	231	5.56	55.6	2.74	0.57 / 0.34	0.06	0.06 / 0.03	7.61

542

R >50% HCl Sol Fe
O 40-50
PO 30-40
Y <30

250 Q43

32 172

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION 10'=1"		ASSAY RESULTS											
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	SiO_2	HCl Sol Fe.	Al_2O_3	TiO_2	Mn	P_2O_5	S
	226'	231'	4"				228 230											
	231'	233'5"	1'4"															
	233'5"	237'6"	1'	228	265	Amphibolite weathered to soft green clay - very little core recovery.									Ti		P2	
	237'6"	240'6"	Nil															
	240'6"	243'6"	7"															
	243'6"	246'6"	Nil															
	246'6"	250'	2'1"															
	250'	255'	1'9"															
	255	260	Nil															
	260	265	1'															
	265	268	4"	265	268	Sheared weathered amphibolite with some iron partings	265											
	268	273	5'2"				268		268.5	268	288	10.65	47.3	3.57	0.65 0.39	0.07	0.37 0.16	5.50
	273	277'3"	5'9"	268	276'1"	High grade iron ore with blotches of pyrite - weathered and altered amphibolite	276 277											
				276'1"	277'3"	Sheared green chloritic clay with occasional small pyrite cubes.	281											
	277'3"	278'6"	1'3" 100%	277'3"	281'3"	Fine grained weathered amphibolite, jointing nearly parallel to core	285											
	278'6"	281'3"	2'8"					288										
	281'3"	285'6"	8'10 26	281'3"	285'6"	Iron ore with pyrite. Patches of white material probably weathered and altered amphibolite.	293											
	285'6"	290'6"	5'0" 100%	285'6"	295'6"	Iron ore with pyrite and blotches of altered amphibolite.			6	288	308	5.13	54.0	1.33	0.57 0.34	0.07	0.18 0.08	6.02
	290'6"	295'6"	5'0"															
	295'6"	300'6"	5'0															
	300'6"	304'6"	4'0	295'6"	333	As above with amphibolite more altered between 297 and 298		308										
	304'6"	309'6"	5'0" 36						7	308	324	5.25	52.2	1.55	0.421 0.25	0.06	0.13 0.06	7.721
	309'6"	314'6"	5'0"			At 305': thin vein like mass of altered amphibolite.												
	314'6"	318'9"	4'0"															
	318'9	322'6"	8'6"			At 315': thin lens of altered amphibolite with slickensides			8	324	344	10.5	41.0	1.26 ~~10.15~~	0.34 ~~1.26~~ 0.20	0.06 ~~0.34~~	1.01 ~~0.06~~ 0.44	8.77
	322'6"	327'3"	4'9"					324										
	327'3"	332'3"	5'0"			At 329-30. rather more pyrite, shearing at 45° to core												
	332'3"	334'3	1'3"				333											
						331 - 331'6": lens of altered amphibolite												
						At 333: banding 45° to core.												
								344										

251 Q43

32 173

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION 10'=1"		ASSAY RESULTS										
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	SiO_2	HCl Sol Fe.	Al_2O_3	TiO_2	MnO	P_2O_5	S.
							330								Ti		P	
				333'0"	334'3	Decomposed and iron stained amphibolite with a little pyrite.													
334'3	334'3"	339'3	2'3"	334'3"	339'3"	Lower grade iron ore - much white material,	339'3												
	339'3"	343'0"	3'9"			probably altered amphibolite, banding and		344											
	343'0"	346'3"	3'3"			shearing at 45° to core			9	344	364	4·06	52·1	1·65	0·98	0·13	0·40	8·15	
	346'3"	350'0"	3'9"	339'3"	374'6"	Iron ore with pyrite - from 343 jointing at 68									0·59		0·17		
	350'0"	355'0"	5'0"			at 364: altered vein													
	355'0"	358'0"	3'0"	374'6"	376'0"	Lower grade iron with more altered amphibolite													
	358'0"	363'0"	5'0"	376'0"	377'0"	Low grade iron with blotches of white													
	363'0"	367'0"	4'0"			weathered material and veins of same		384	10	364	384	5·95	48·4	1·73	1·23	0·14	0·24	6·91	
	367'0"	372'0"	2'0"			parallel to core									0·74		0·10		
	372'0"	377'0"	5'0"																
	377'0"	382'0"	5'0"	377'0"	401'0"	Iron ore with pyrite and blotches of white													
	382'0"	387'0"	5'0"			weathered amphibolite	374 376 378		11	384	404	6·5	48·2	1·99	1·39	0·19	0·51	7·43	
	387'0"	392'0"	4'6"			400-401 more altered amphibolite									0·83		0·22		
	392'0"	397'0"	4'8"					404											
	397'0"	401'0"	3'10"																
	401'0"	405'0"	4'0"	401'0"	405'0"	Lower grade iron ore, sheared and altered			12	404	424	13·76	37·8	2·11	1·07	0·18	0·31	6·11	
	405	409'6"	4'6"			amphibolite from 405 to 404									0·64		0·14		
	409'6"	413'0"	3'4"	405'0"	416'6"	Low grade iron ore with much altered													
	413'0"	418'0"	5'0" 16			amphibolite	401 405												
				416'6"	418'0"	Highly sheared, weathered and talcose amphibolite		404											
						with specks of iron ore.													
	418'0"	420'3"	1'8"	418'0"	423'0"	Low grade iron ore with blotches of													
	420'3"	424'0"	2'9"			altered amphibolite. Amphibolite and													
						pyrite both rather friable	416 418												
				423'0"	423'9"	Altered amphibolite - pyrite													
				423'9"	424'0"	Low grade iron ore as above	423												
	424'0"	428'0"	4'0"	424'0"	427'0"	Low grade iron ore with much altered	427		13	424	444	10·12	40·9	1·73	1·11	0·19	0·16	9·30	
	428'0"	430'0"	2'0"			amphibolite and pyrite.	428								0·67		0·07		
	430'0"	433'0"	3'0"	427'0"	428'0"	Highly pyritic and weathered low	433												
	433'0"	435'0"	2'0"			grade iron ore													
				428'0"	433'9"	Iron ore with nodules of pyrite and													
						altered amphibolite.													
						At 431'9" vein of altered material.		444											

252 Q43

32 174

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION		ASSAY RESULTS										
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	SiO_2	HCl Sol Fe.	Al_2O_3	TiO_2	MnO	P_2O_5	S.
	435'0"	438'3"	2'6"	433'9"	435'0"	Schistous and talcose altered amphibolite									T_1		P_2	
	438'3"	442'3"	1'9"	435'0"	442'3"	Broken, sheared and talcous altered amphibolite with patches of iron	433'9"											
						441-442: iron patches become less.												
	442'3	445'0"	2'9"	442'3	450'6"	Iron ore with pyrite - occasional patches of altered amphibolite.	442'3		14	444	464	6·23	52·9	1·81	1·70	0·26	0·09	5·04
	445'0"	448'0"	1'9"					444							1·02		0·04	
	448'0"	451'0"	2'4"			445-448 broken.												
	451'0"	453'0"	1'2"	450'6"	451'0"	Much altered amphibolite with iron ore and pyrite	450 451											
				451'0"	453'0"	Iron ore - more altered amphibolite over last 6"												
	453'0"	455'3"	1'6"	453'0"	456'0"	Iron ore with pyrite and altered amphibolite	460'3"											
	455'3	459'0"	3'4"	456'0"	457'0"	White altered amphibolite with iron ore		464										
	459'0"			457'0"	459'0"	Iron ore with pyrite												
	459'0"	461'9"	2'6"	459'0"	461'9"	Iron ore with small patches of pyrite and altered amphibolite												
						At 459: sheared and altered seam of amphibolite												
	461'9"	464'3"	2'2"	461'9"	468'6"	Iron ore with small patches of white material (prob. alt. amph.)	482		15	464	489	12·25	42·3	3·52	1·62	0·23	0·06	4·71
	464'3"	468'0"	3'9"												0·97		0'03	
	468'0"	468'6"	0'6"	468'6"	473'0"	As above but with more amphibolite and lower grade iron ore.	489	489										
	468'6"	473'0"	4'0"															
	473'0"	476'0"	2'10"	473'0"	481	Low grade iron ore with small patches of altered amphibolite; broken from 478'3"												
	476'0"	478'3	1'4"															
	478'3	481'0"	1'7"															
	481'0"	483'9"	2'6"	481'0"	482'0"	Very broken low grade iron ore.												
				482'0"	483'9"	Fine grained amphibolite with pyrite.												
	483'9"	487'6"	3'0"	483'9"	484'4"	Broken amphibolite												
				484'4"	485'6"	Low grade iron ore												
				485'6"	487'6"	Fine grained amphibolite with iron ore veins at 487'0"												
	487'6"	489'0"	1'6"	487'6"	488'6"	Broken, fine grained amphibolite, sheared and altered with a little pyrite												
				488'6"	489'0"	Low grade iron ore with altered amphibolite.												

253 043

32 175

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION 10'=1"		ASSAY RESULTS			
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	
	489'0"	492'3"	1'10"	489'0"	497'0"	Medium/low grade iron ore with pyrite, altered amphibolite, talc and serpentine blob veinlets.						
	492'3"	495'0"	2'3"									
	495'0"	498'6"	3'6"									
				497'0"	498'6"	Altered fine grained amphibolite with serpentinite and talc						
	498'6"	502'6"	2'6"	498'6"	499'6"	Altered amphibolite, serpentinized with a little pyrite and some magnetite						
				499'6"	502'6"	Amphibolite almost completely altered to serpentine and talcose material, very fine ramifying veinlets of magnetite and some pyrite nodules. Core very broken.						
	502'6"	504'9"	2'3"	502'6"	504'9"	Broken, altered, talcose amphibolite with some serpentine veins and blobs of pyrite also fine veins and blobs of magnetite.						
	504'9"	507'3"	2'3"	504'9"	507'3"	Broken, altered amphibolite with serpentine veinlets also very fine magnetite veinlets, pyrite veins and blobs. Some pieces of core appear to be a breccia recemented by magnetite and pyrite with talcose serpentine veinlets						
	507'3"	511'6"	3'6"	507'3"	511'6"	Sheared and decomposed amphibolite altered to white talcose serpentine material with very fine veins and blobs of magnetite and pyrite.						
	511'6"	515'3"	3'9"	511'6"	514'0"	Fine grained, altered amphibolite with magnetite and pyrite veins along joints						
				514'0"	515'8"	Decomposed and altered amphibolite; broken and recemented alteration "veins" around the fragments consist of pyrite, magnetite, talc and serpentine. Also fine ramifying veinlets of magnetite.						

254 OA3

32 176

DRILL RECORD

Date	From	To	Core Recov.
	515'3"	519'0"	1'2"
	519'0"	521'0"	1'4"
	521'0"	524'0"	3'0"
	524'0"	525'6"	0'8"
	525'6"	527'3"	-?
	527'3"	532'3"	1'4"
	532'3"	535'0"	1'4"
	535'0"	536'6"	1'6"
	536'6"	540'0"	3'6"
	540'0"	541'4"	1'2"
	541'4"	544'4"	1'4"
	544'4"	548'0"	0'2"
	548'0"	552'3"	0'7"
	552'3"	555'0"	0'9"
	555'0"	557'0"	nil
	557'0"	559'0"	0'9"
	559'0"	561'0"	1'0"
	561'0"	563'0"	1'1"
	563'0"	565'0"	0'4"
	565'0"	567'0"	1'6"
	567'0"	569'0"	0'4"
	569'0"	571'0"	0'3"
	571'0"	573'0"	0'5½
	573'0"	574'6"	1'0"
	574'6"	576'0"	1'3"
	576'0"	578'0"	1'3"
	578'0"	579'0"	nil
	579'0"	581'0"	0'2"
	581'0"	583'0"	1'2"
	583'0"	585'0"	1'0"
	585'0"	586'0"	1'0"
	586'0"	588'0"	0'10"
	588'0"	590'0"	0'7"

GEOLOGICAL LOG

From	To	Description
515'3"	534'0"	Very broken core - altered amphibolite with pyrite and fine magnetite veinlets. Occ. serpentine veins.
534'0"	535'0"	Soft clayey decomposed amphibolite.
535'0"	545'0"	Serpentined amphibolite with magnetite and pyrite and probably low grade iron ore, poor recovery.
545'0"	548'0"(?)	Iron ore: magnetite and pyrite
548'0"(?)	581'0"	Very broken core - fragments of altered amphibolite, magnetite and pyrite. 563-566 soft green decomposed peg.
581'0"	586'0"	Iron ore and broken decomposed amphibolite
586'0"	603'0"	Broken fine grained amphibolite foggy 586-588, 590-591'6" & 603-604

GEOLOGICAL SECTION

Core	Sample
515'3"	
545	
548	
581	
586	
603	

ASSAY RESULTS

Sample No.	From	To	SiO_2	Al_2O_3	TiO_2	MnO	P_2O_5	S.
					Ti		P	
16	542	548	12·65	3·48	1·73	0·16	0·03	2·46
					1·04		0·01	
	562'6"	563						
	582	586						
	603	611						

255 043

32 177

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION		ASSAY RESULTS		
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To
	590'0"	591'6"	0'8"			585'-604': core badly broken and					
	591'6"	592'0"	0'8"			decomposed. a probable	603				
	593'0"	595'0"	0'8"			zone of fracture.					
	595'0"	597'0"	nil								
	597'0"	599'0"	nil								
	599'0"	600'0"	nil								
	600'0"	601'0"	nil								
	601'0"	603'0"	—								
	603'0"	604'0"	0'8"								
	604'0"	606'0"	0'9"	603'0"	604'0"	Very broken iron ore and decomposed amphibolite.				603	611
	606'0"	608'0"	0'10"								
	608'0"	609'0"	0'9"	604'0"	608'0"	Very broken iron ore with pyrite					
	609'0"	611'0"	1'2"	608'0"	609'0"	3" iron ore, 6" fine grained sheared amphibolite.					
	611'0"	612'6"	0'10"								
				609'0"	611'0"	extremely broken iron ore with pyrite.					
				611'0"	612'6"	broken weathered fine grained and					
						amphibolite and pyritic magnetite ore.	651				
	612'6"	614'0"	0'9"	612'6"	617'0"	as above with very small amount of ore.					
	617'0"	618'3"	nil	617'0"	618'3"	—					
	618'3"	620'0"	1'2"	618'3"	622'0"	Fine grained amphibolite, pyrite and					
	620'0"	622'0"	1'8"			serpentine along joints. Very broken 620-622	665	Schist			
	622'0"	626'0"	3'8"	622'0"	642'0"	Amphibolite with blocches of pyrite,					
	626'0"	630'0"	1'9"			jointing at 20° to core.					
	630'0"	632'0"	0'6"								
	632'0"	634'0"	0'3"								
	634'0"	638'0"	1'1"								
	638'0"	642'0"	0'11"								
	642'0"	644'6"	0'6"	642'0"	651'0"	Very broken, fine grained amphibolite					
	644'6"	647'6"	1'2"								
	647'6"	649'0"	0'3"								
	649'0"	651'0"	0'1"								
	651'0"	653'0"	1'6"	651'0"	653'0"	Weathered sericite chlorite schist					
	653'0"	654'0"	0'9"	653'0"	663'6"	As above with small amount					
	654'0"	656'0"	1'0"			of fine grained, schistose					
						amphibolite					

256

Q43

32 178

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION		ASSAY RESULTS			
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	
	656'0"	657'6"	1'6"									
	657'6"	660'0"	0'8"									
	660'0"	662'0"	1'6"									
	662'0"	663'6"	1'0"									
	663'6"	665'6"	1'3"	663'6"	665'6"	Very broken, soft fuggy weathered schist.						
	665'											
						End of Hole 665'6"