406

043

DEPARTMENT OF MINES — TASMANIA

DIAMOND DRILL CORE RECORD

33 118

Hole No. 104

Drilled by ASSOCIATED DIAMOND DRILLERS

Core Recovery 81.26%

Geological Logging by —

D. J. PERKIN

Area of Operation SAVAGE RIVER, TASMANIA

Location of Site 736'E ALONG TRAV. A; 0'S

Date Commenced 31-10-64

Date Completed 5-12-64

MINE COORDS 22,824N 21,497E

Reduced Level of Site 1123.8'

Bearing of Hole 275°

Dip of Hole

0'	200'	400'	600'	800'	1000'	1140'
-45°	-44°	-44°	-43°	-42°	-43°	-40°

Bore Depth 1140.5'

D of M	S & A	CG	CC & M	ACIM & E
RECEIVED 24 JUN 1965				
ANSWERED DEPT. OF MINES				
REF. NO.				

AM66-ordo: 351350E 5405160N.

Ref N° 2079 No Core held.

A 22375

DRILL RECORD

Date 64	From	To	Core Recov.
31/10	0.0	40.0	25.4
1/11	40.0	64.0	21.2
2/11	64.0	124.0	53.1
3/11	124.0	171.5	46.4
4/11	171.5	246.0	69.3
5/11	246.0	263.0	8.9
6/11	263.0	304.0	37.1
7/11	304.0	316.8	11.6
9/11	316.8	385.8	56.8
10/11	385.8	428.0	37.5
11/11	428.0	480.0	49.9
12/11	480.0	537.0	44.4
13/11	537.0	567.0	27.5
14/11	567.0	583.0	13.4
16/11	583.0	652.0	65.9
17/11	652.0	705.5	52.1
18/11	705.5	794.0m	78.6
19/11	794.0	847.0	28.7
20/11	847.0	874.0	3.6
21/11	874.0	879.0	1.9
23/11	879.0	893.0	2.2
24/11	893.0	966.5	45.2
25/11	966.5	1001.0,	31.3
26/11	1001.0	1054.0	51.4
27/11	1054.0	1084.0	23.0
3/12	1084.0	1102.0	8.9
4/12	1102.0	1127.0	17.3

GEOLOGICAL LOG

From	To	Description
0.0	179.0	Amphibolite, medium grain to 96.7', fine - medium grain 96.7 - 179.0. Fairly oxidised amphibolite clay to 40.0', slightly oxidised to 69.0. Generally massive with minor epidote, pyrite, talc magnetite and tremolite - actinolite. Also minor epidote, hematite and quartzofeldspathic veinlets.
179.0	192.5	Magnetite (Lean) Fine - medium grain with fair amounts tremolite - actinolite, serpentine, pyrite, and dark iron silicates. Minor irregular banding.
192.5	265.1	Amphibolite, Fine - medium grain with minor epidote and pyrite. Minor hematite, quartzofeldspathic and epidote veinlets.
265.1	288.5	Magnetite (Medium) Fine - medium grain; irregularly banded (Delta Angle = 35 - 45°) Magnetite with moderate pyrite, tremolite actinolite, amphibolite, serpentine and epidote minerals.
288.5	316.8	Amphibolite, Fairly fine grain, massive with minor irregular carbonate and hematite veinlets.

GEOLOGICAL SECTION

ASSAY RESULTS

Sample No. From Ft.	Sample No. To Ft.	CRUDE %Fe	CRUDE %Ni*	CRUDE %TiO2*	CONCENTRATE (-325 Mesh) Wt Recovery	CONCENTRATE (-325 Mesh) % Fe	CONCENTRATE (-325 Mesh) %Ni*	CONCENTRATE (-325 Mesh) %TiO2*
102	119	28.61	0.007	0.52	28.03	70.96	0.035	0.057
119	179							
179	193	21.82	0.025	0.50	23.42	66.76	0.037	0.43
193	265							
265	277	23.11	0.024	0.68	22.65	69.99	0.034	0.35
277	289	34.43	0.059	0.32	43.70	70.31	0.081	0.22
289	317							
317	329	37.02	0.045	0.37	43.02	70.64	0.044	0.22
329	340	21.82	0.070	0.25	18.43	69.75	0.072	0.22
340	370							
370	378	26.99	0.034	0.63	27.02	69.34	0.040	0.58
378	503							
503	520	18.99	0.051	0.42	12.96	65.14	0.092	0.13
520	537	21.17	0.060	0.47	11.70	68.70	0.054	0.16
537	557	44.77	0.031	0.58	54.43	71.29	0.021	0.18
557	577	52.21	0.027	0.65	66.87	70.47	0.020	0.38
577	597	54.96	0.029	0.63	70.83	70.80	0.023	0.48
597	617	44.45	0.023	0.52	54.26	71.29	0.025	0.27

LEGEND

RICH	> 55%Fe	MED. LEAN	> 22%Fe
MED. RICH	> 44%Fe	LEAN	> 11%Fe
MEDIUM	> 33%Fe	AMPHIBOLITE	< 11%Fe
		ZONE OF OXIDATION	

617	637	35.88	0.033	0.65	39.77	70.64	0.034	0.28
637	657	48.81	0.031	0.63	62.17	70.15	0.032	0.22

D.D.H. 104 (Continued)

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DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION	
Date	From	To	Core Recov.	From	To	Description	Core	Sample
				316.8	340.2	Magnetite (Lean) Fine - medium grain, fairly banded with magnetite disseminated in fairly regular bands containing moderate amounts of pyrite, tremolite - actinolite and talcose minerals, with carbonate, tremolite-actinolite and talcose zones in between, (Delta Angle = 40-50°)		
				340.2	503.0	Amphibolite fairly fine grain with minor epidote, quartzofeldspathic and hematite veinlets, very little pyrite and magnetite several chalcopyrite blebs. Generally massive, irregularly banded lean magnetite zone 368.9 - 375.1.		
				503.0	537.0	Magnetite (Lean) fine - medium grain, magnetite and pyrite occur in sub bands in fine grained amphibolite (Delta Angle = 30-50°) minor shear zones and some massive amphibolite zones.		
				537.0	567.0	Magnetite (Medium Lean) zones of medium rich magnetite alternate with zones of fine grained amphibolite.		
				567.0	583.0	Magnetite (Medium Rich) fine - medium grain, massive with moderate pyrite and minor serpentine and amphibolite minerals. Several amphibolite zones.		
				583.0	672.0	Magnetite (Medium) zones of medium rich magnetite alternate with zones of fine grained amphibolite.		

ASSAY RESULTS									
Sample No. From Ft.	To Ft.	CRUDE % Fe	%Ni*	%TiO2	CONCENTRATE Wt Recovery	%Fe	%Ni*	(-325) Mesh %TiO2
657	672	45.82	0.044	0.38	56.24	70.15	0.036	0.32
672	686	16.16	0.014	0.40	11.59	69.18	0.019	0.20
686	706	14.06	0.019	1.13	6.07	71.61	0.046	0.20
706	723	35.38			26.44	69.47	0.14	0.30
723	741	24.02			14.67	69.80	0.13	0.25
741	758	16.39			10.66	70.77	0.045	0.35
758	773	20.45			16.79	71.09	0.047	0.27
773	785	60.79			74.91	71.42	0.051	0.38
785	798	25.65			24.56	71.01	0.054	0.35
798	814	11.04			2.93			
814	834	42.04			48.57	71.26	0.071	0.53
834	854	22.81			19.78	70.53	0.057	0.80
854	874	54.86			72.71	71.09	0.018	0.62
874	894	30.52			34.04	71.09	0.015	0.37
894	914	34.99			40.60	71.34	0.016	0.38
914	931	55.11			71.26	71.58	0.025	0.25
931	941	11.28			4.87	-	-	-
941	1037				-	-	-	-
1037	1053	49.34			62.34	71.01	0.030	0.42
1053	1068	55.02			70.72	71.18	0.036	0.50
1068	1084	13.80			7.40	-	-	-

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION		ASSAY RESULTS 33 120		
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To
				672.0	705.5	Amphibolite, fairly fine grained with minor epidote, actinolite, magnetite and pyrite veinlets and blebs. Some quatrzofeldspathic veinlets.					
				705.5	740.5	Magnetite (Lean), fairly fine grained magnetite is in irregular masses and blebs with tendency to banding in a fine grained slightly altered amphibolite containing fair amounts pyrite, serpentine, talc and tremolite - actinolite(Delta Angle = 30-50°).					
				740.5	753.8	Amphibolite, fine grained, massive with epidote, hematite, quartzofeld-spathic and carbonate veinlets.					
				753.8	764.0	Magnetite (Lean) fairly fine grained magnetite occurs in irregular masses and blebs with tendency to banding in a fine grained slightly altered amphibolite containing fair amounts pyrite, serpentine, talc and tremolite - actinolite (Delta Angle= 30-50°)					
				764.0	773.0	Amphibolite, fine grained, massive with epidote veinlets and blebs - minor magnetite zones.					
				773.0	785.0	Magnetite (Rich) fine - med. grain, massive with moderate pyrite and minor tremolite-actinolite & serpentine.					
				785.0	813.0	Amphibolite, fine grain, massive with minor quartzofeldspathic and carbonate veinlets.					
				813.0	827.0	Magnetite (Medium) fine med. grain with moderate amounts pyrite, tremolite - actinolite, serpentine and minor talc. - minor amphibolite zones.					

DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION		ASSAY RESULTS									33 121
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To							
				827.0	874.0	Magnetite (Med. Rich) Medium - coarse grain with some voids. Moderate amounts interstitial talc with minor serpentine, tremolite - actinolite and pyrite. Friable - poor core recovery.												
				874.0	893.0	Amphibolite, fine grained, massive with several zones of medium grained talc rich magnetite. - Minor serpentine and epidote.												
				893.0	930.6	Magnetite (Medium), medium grained 'sugary' magnetite with fair amounts actinolite and minor talc with some voids. Some amphibolite zones.												
				930.6	1037.0	Amphibolite, fine grain and medium grain alternating. Massive with moderate epidote and dark iron silicates and minor pyrite and magnetite. Some quartzofeldspathic and hematite veinlets, several chalcopyrite blebs. Occasional carbonate veinlets.												
				1037.0	1068.2	Magnetite (Medium Rich) fine - medium grain with moderate tremolite, actinolite, and pyrite and minor talc and serpentine - several amphibolite zones.												
				1068.2	1084.0	Magnetite (Lean) medium grained magnetite occurs in fairly fine grained amphibolite containing moderate actinolite, tremolite and minor epidote and pyrite. - Minor carbonate veinlets.												
				1084.0	1140.5	Amphibolite, fine grain, massive												

D.D.H. 104 (Continued)

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DRILL RECORD				GEOLOGICAL LOG			GEOLOGICAL SECTION		ASSAY RESULTS		
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To
				(Continued)							
				1084.0	1140.5	with minor epidote, pyrite and black iron silicates (slight preferred orientation of small elongate grains - Delta Angle =35-50°) minor hematite, quartzofed-spathic and carbonate veinlets. Chlorite film along fracture plnes.					
						END OF HOLE.					