123

Hole No. 32 063 (W43)

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION	
Date	From	To	Core Recov.	From	To	Description	Core	Sample
1959						Mildly sheared fine-grained pale green coloured country rock.	595'	
		600'					600'	
	600'	601'	11"			Shearing 45° to axis	601'	
	601'							
		606'	4'11		606'			
	606'			606'		Massive milky-white vein quartz. — Quartz magnesite dolomite intergrowth	606'	
		610'	3'10					
	610'							
		615'	5'				615'	
	615'							
					621'			
				621'		Pale green siliceous country		
		624'	8'9		623'6	rock	624'	
	624'			623'6		Massive milky-white vein quartz		
		627'3	3'5			Quartz dolomite magnesite intergrowth.	627⅓'	
	627'3							
		634'	6'3					
	634'							
		639'	5'		639'		639'	

End of hole

Inclination of Bore Hole

15'	46½°
100	46°
200	44¼°
300	45°
400	45½°
500	47¼°

ASSAY RESULTS										
Sample No.	From	To	MgO	CaO	SiO_2	Al_2O_3	Fe_2O_3	Ign. Loss	MnO	TiO
	606'	620'	32.16	9.79	7.45	0.2	4.86	45.26	0.10	Nil
	624'	639	27.79	14.35	7.26	0.04	4.00	46.37	0.12	Nil

122

Hole No. 32 064 Q43

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION		ASSAY RESULTS			
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	
		545'			545'							
	545'			545'		No core						
		564'	Nil									
	564'				565'							
		567'		565'		Yellow & chocolate coloured clay pug.						
	567'											
		571'										
	571'											
		576'	Nil									
	576'											
		581'	0'8"									
	581'											
		591'	1'2"		591'							
	591'			591'								

542'
545'
564'
581'
591'
595'

Hole No. -10- 121 Q43

32 065

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION	
Date	From	To	Core Recov.	From	To	Description	Core	Sample
		488'9	4'11					
	488'9							
		493'	3'4					
	493'							
		498'	4'6		498'			
	498'			498'		Green f.gr.lig country rock.		
		503'	2'8					
	503'							
					508'			
		511'	1'4	508'		Bright yellow (highly oxidised) clayey, country rock.		
	511'							
		516'	2'6					
	516'							
		519'	0'10		519'			
	519'			519'		Soft white talc		
		525'			525'			
	525'			525'		No core		
		530'	Nil		530'			
	530'			530'		Fragments of composite magnetite and yellow clay		
		535'			535'			
	535'							
				535'		Yellow clay pug		

talcose alteration zone between amphibolite and weathered clay amphibolite.

talcose alteration zone between amphibolite & weathered clay amphibolite

ASSAY RESULTS											
Sample No.	From	To	Core Recovery	HCl Sol Fe %	SiO_2 %	TiO_2 %	Mn %	P_2O_5 %	S %	Al_2O_3 %
Comp 913	479'	498'	15'6		7.10	0.73 0.44	0.04	0.14 0.06	9.3	2.55
726	488'9	493'0	3'4	52.9						
727	493'	498'0	4'6	37.5						

120

32 066 Q43

Hole No.

DRILL RECORD Date	From	To	Core Recov.	GEOLOGICAL LOG From	To	Description	GEOL. SECTION Core	Sample	ASSAY RESULTS Sample No.	From	To	Core Recovery	HCl sol Fe %	SiO_2 %	TiO_2 %	Mn %	P_2O_5 %	S %	Al_2O_3 %
1959															Ti		P2		
	431'9	431'9	2'11	428'9		Banded magnetite talc -			701	428'9	436'	6'3	38.7						
	431'9					chlorite rock the alternating rock													
		436'	3'4			types represent the trace of an old													
	436'					schistosity.			702	436'	441'0	2'3	24.1						
						Talc: Magnetite = 1:2 by volume approx													
		441'	2'3																
	441'								703'	441'	446'	2'2	41.1						
		446'	2'2																
	446'								704	446'	452'	2'8	49.9						
		449'	2'1		449'														
	449'			449'															
		452'	0'7						705	452'	454'	1'6	55.2						
	452'																		
		454'	1'6			Massive banded magnetite -			722	454'	460'6	2'8	56.4						
	454'					pyrite. Pyrite occupies													
		458'6	1'5"			1/3 by vol. of whole.			Comp 911	446'	460'6	6'10		4.29	0.99 0.59	0.04	0.05 0.02	6.3	2.00
	458'6	460'6	1'3"			High grade													
	460'6					Dip observations													
						460' = 80°													
						482' = 85°													
						487' = 75°													
		469'6	Nil			497' = 80°													
	469'6	470'9	0'5"			500' = 80°			723	460'6	476' (9?)	2'0	51.4						
	470'9																		
									Comp 912	460'6	479'0	2'		3.12	0.49 0.29	0.04	0.03 0.01	9.6	1.88
		476'	1'7"																
	476'																		
		479'	Nil																
	479'								724	479'0	483'9	2'9	47.8						
		480'9	0'1"																
	480'9	483'9	2'8"																
	483'9								725	483'9	488'9	4'11	43.6						

schistose, slivered ore (pale ore)

Hole No. - 8 - 119 32 067 Q43

DRILL RECORD

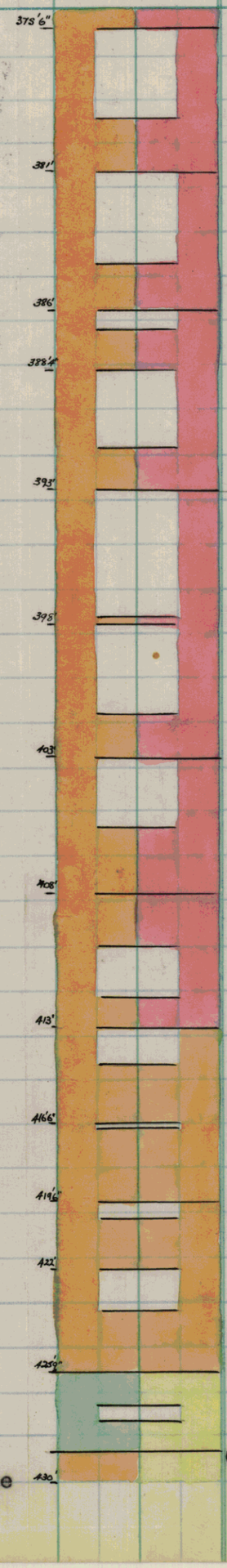
Date	From	To	Core Recov.
1959	375'6		
		381'	1'11
	381'		
		386'	1'9"
	386'	388'4	1'6"
	388'4		
		393'	1'10
	393'		
		398'	2"
	398'		
		403'	1'7
	403'		
		408'	2'5
	408'	410'	1'11
	410'		
		413'	1'2
	413'		
		416'6	2'4
	416'6		
		419'6	2'10
	419'6		
		422'	1'11
	422'		
		425'9	2'4
	425'9	428'9	2'6
	428'9		

GEOLOGICAL LOG

From	To	Description
		Observations on lineation are
		389' = 55°
		408' = 65°
		420' = 55°
		430' = 58°
		440' = 55°
425'9		Chloritic & Talcose country
		rock containing some irregular
428'9		seams & segregations of magnetite and pyrite.

GEOL. SECTION

Core Sample



ASSAY RESULTS

Sample No.	From	To	Core Recovery	Hcl Sol Fe %	SiO_2 %	TiO_2 %	Mn %	P_2O_5 %	S %	Al_2O_3 %
666	375'6	381'	1'11	54.6						
Comp 762	375'6	393'	7'0	56.1	5.28	0.95 0.57	0.06	0.03 0.01	3.06	2.09
667	381'	386'0	1'9	56.6						
694	386'	393'	3'4	56.9						
695	393'	403'	1'9	51.8						
Comp 763	393'	413'	7'3	53.0	7.53	1.24 0.74	0.08	0.01 0.004	2.66	2.62
696	403'	408'	2'5	55.5						
697	408'	413'	3'1	52.9						
698	413'	419'6	5'2	47.0						
Comp 764	413'	425'9	9'5"	49.5	8.73	1.12 0.67	0.09	0.04 0.02	3.74	1.96
699	419'6	425'9	4'3	52.1						
700	425'9	428'9	2'6	20.7						
Comp 765	425'9	446'0	13'2	33.0	17.89	0.93 0.55	0.07	0.15 0.07	5.24	3.30

Hole No. - 7 - 118 Q43 32 068

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION		ASSAY RESULTS											
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	Core recovery	HCl sol Fe %	SiO_2 %	TiO_2 %	Mn %	P_2O_5 %	S %	Al_2O_3 %
		321'	2'9			with thin slivers of talc, & pyrite	320'		657	321	328'7	6'8	47.8		T_1		P_2		
	321'					aligned in discontinuous linear													
		325'	3'7			bands. The linear arrangement could	325'		Comp 759	315'3	335'9	17'0	49.9	7.68	1.10 0.66	0.04	0.18 0.08	4.78	2.24
	325'					well be due to a prior schistosity													
		328'7	3'1			which localised the emplacement of	328'7"												
	328'7					the magnetite & pyrite. Observations			658	328'7	335'9	6'3	52.7						
		331'5	2'6			on schistosity are :	331'5"												
	331'5					321' = 47°													
		335'9	3'9			327½' = 55°													
						336' = 50°	335'9"												
	335'9					345' = 60°			659	335'9	340'9	3'4	48.8						
		340'9	3'4			350' = 60°													
						361' = 70°													
						369' = 10° to 0°													
						372' = 55°													
	340'9						340'9"												
									660	340'9	344'6	1'2	60.4						
		344'6	1'2																
	344'6						344'6"		661	344'6	350'0	2'8	54.5						
		348'0	1'8																
	348'						348'		Comp 760	335'9	355'	8'2	54.7	5.46	0.89 0.53	0.05	0.10 0.04	3.81	2.25
		350'	1'0				350'												
	350'								662	350'	355'	1'	56.7						
						From 381' to 393' the magnetite													
		355'	2'0			pyrite assemblage is massive & the	353'												
	355'					pyrite unoriented			663	355'	365'	3'1	50.4						
						N.B. Throughout the whole section an													
						asbestiform mineral in occasional													
						seams up to ¼" occur, paralleling the													
						general schistosity.													
		365'	3'1"			N.B. At 381½' a small drag fold	365'		664	365'	370'	2'1	55.7						
	365'					is reflected in several small pyrite													
						seams over 2" core length													
		370'	2'1				370'												
	370'								665	370'	375'6	2'3	55.2						
		373'	1'5																
	373'	375'6	0'10				375'6"		Comp 761	355'	375'6	7'5	53.0	7.33	1.05 0.63	0.07	0.07 0.03	2.39	2.[illegible]

Broken shattered core

Hole No. 117 Q43

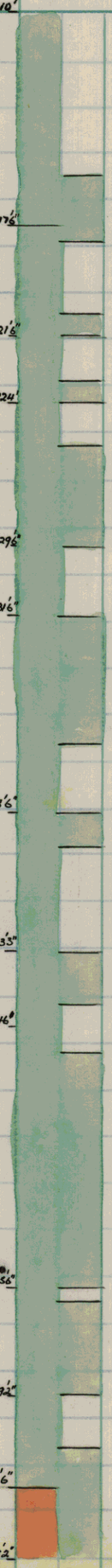
32 069

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION	
Date	From	To	Core Recov.	From	To	Description	Core	Sample
	265'2					seams of asbestiform serpentine & a little pyrite. Shear plane at start of magnetite (i.e.at 262'6) = 45° to core.	265'2"	
		268'4	2'5		268'4	Shearing at 267' = 70°	268'4"	
	268'4	270'3	1'4	268'4		Generally massive pale green country rock. The section throughout contains numerous random individual crystals of magnetite up to ½ mm size. It cannot be considered as "mineralised."		
	270'3							
		275'	2'9					
14/8	275'							
		279'6	3'8				279'6"	
	279'6							
		285'	5'2"			Mild shearing 284' - 296' = 80°	285'	
	285'	286'	8"				286'	
	286'	288'	2'					
	288'	291'0	1'7				291'	
	291'0							
		294'4	2'5				294'4"	
	294'4				296'			
		296'10	2'1	296'		Medium grade magnetite in highly schisted green serpentinous country rock. The numerous slivers of serpentine & talc rock are at 45° to core axis.	296'10"	
	296'10	298'4	1'7		298'4		298'4"	
	298'4			298'4		Suspect fault zone, highly schisted & Chloritized country rock.		
		301'11	3'0		299'4			
	301'11			299'4		Mildly sheared serpentinous country rocks containing random tiny crystals of magnetite.		
		306'6	2'8					
	306'6	309'10	3'4			Shearing 308' = 45° 312' = 45°		
	309'10							
		313'	3'2			Seam of magnetite occurs at 308'3" - 308'6"		
	313'							
			2'0"	2'0"	315'3		315'3"	
		317'	3'8	315'3		Medium grade magnetite mineralization.		
	317'					The magnetite has a pseudo-banding	320'	

ASSAY RESULTS										
Sample No.	From	To	Actual length of Sample	HCl Sol Fe %	SiO_2 %	TiO_2 %	Mn %	P_2O_5 %	S %	Al_2O_3 %
655	296	298'4	2'4	43.1						
656	315'3	321'	4'1	49.0						

Hole No. -5- 116 Q43 32 070

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION		ASSAY RESULTS			
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	
1959												
		217'6	4'11"		217'6							
	217'6			217'6		Green very f.gr. massive						
		219'6	6"			country rock. (amphibolite)						
	219'6	221'6	9"									
6/8	221'6	224'	9"									
7/8	224'											
		227'6	2'3									
	227'6	229'6	1'11									
	229'6											
		231'6	2'									
	231'6											
		238'6	4'6									
	238'6											
		243'3	1'3									
8/8	243'3											
		246'	2'0									
	246'											
		249'6	2'6									
	249'6	251'6	1'10			Bedding seen at 45° at 255'2.						
	251'6											
		255'6	4'0			Mild shearing at 254' = 60° to core.						
10/8	255'6					2" pyrite seam at 257'.						
		259'2	3'6									
	259'2											
					262'6	SPECIMEN thin section						
12/8		263'6	2'7	262'6		Medium grade magnetite						
13/8	263'6	265'2	1'8			rock containing occasional						



Hole No. 115

32 071 043

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION		ASSAY RESULTS			
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	
1959		157'	3'4"									
	157'											
		166'	4'									
	166'											
		175'	1'7		175'							
28/7	175'			175'	177'	Serpentine (2" core)						
				177		White friable siliceous rock.						
		180'	2'4"			Possibly an impure vein of quartz						
	180'											
		186'	1'10½"									
	186'											
		191'	2'6"	177	207	} White gritty Carb Qz rock.						
	191'											
		196'	4'2"									
	196'											
		201	3'2"									
	201											
		206'	4'5"									
	206'				207'	quartzo-felspathic rk? Vein.						
				207'		White clay pug & fragments of white silica.						

Hole No. 114 32 072 Q43

DRILL RECORD				GEOLOGICAL LOG		
Date	From	To	Core Recov.	From	To	Description
1959		101'6	7"	7"		
	101'6"	104'	2'6"			
	104'					
		107'4	1'10			
23/7	107'4					
		110'	2'4			
	110'					
		114	1'7			
	114				116	
		117	1'10	116		Decompos
24/7	117'					
		121'	3'6		120	
	121'			120		Low grade magnetite & pyrite banded
						with silica mag.& pyr.-40% of core.
		125'3	3'3		125'3	
	125'3			125'3		
		128'5	3'3			
	128'5					Decomposed gabbro
		133'5	5'			
	133'5					
		138'6	2'10			
	138'6					
		143'6	3'6			
	143'6					
		146'6	11"		146'6	
	146'6			146'6	148'6	Low grade banded magnetite & silica
		150'	2'	148'6		Green coloured, fine grained gabbroic
27/7	150'	151'	1'			country rock
	151'	152'4	1'4			
	152'4					

bleached, schistose, low grade ore. Probable chlorite alteration

Bleached schistose low grade ore. Probable chlorite alteration

f.gr. amphibolite ?

f.gr. amphibolite

GEOL. SECTION

Core Sample

100' 107'4" 110 114' 114" 117' 120' 121' 125'3" 128'5" 133'3" 135'6" 143'6" 146'6" 148'6" 155'

ASSAY RESULTS				
Sample No.	From	To	Actual length of sample	HCl Sol. Fe%
621	99'9	110	8'4"	57.3
622	110	116	2'10"	57.5

Hole No. - 2 - 113 32 073 Q43

DRILL RECORD				GEOLOGICAL LOG			GEOL. SECTION		ASSAY RESULTS												
Date	From	To	Core Recov.	From	To	Description	Core	Sample	Sample No.	From	To	Actual length of sample	HCl sol Fe %	SiO_2 %	TiO_2 % Ti.	Mn %	P_2O_5 % P	S %	Al_2O_3 %
		64'	2'2"																		
	64'																				
		80'	2'8"		79				616	79	80	10"	54.7								
	80'		/	79	80	Primary massive magnetite rock cont. flecks of pale green talc. High grade															
		82'	1'7"	80	81'6	Pale green f/g.country rock	81'6"		617	80	81'6"	1'6"	28.7								
	82'			81'6"		Massive magnetite containing occasion-			618	81'6	87'	3'8"	58.5								
						al flecks of green talc and a trace															
		87'	3'7"			of pyrite in irregular small masses.	87'														
	87'					The whole section is broken & con-			619	87	89'4"	5"	58.6								
		89'4"	5"			tains some secondary limonite and	89'4"		620	89'4"	99'9"	3'7"	58.2								
	89'4"					some serpentine.															
		94'9"	1'4"				94'9"		Comp 758	79	116	21'2	56.6	6.07	1.54 0.92	0.09	0.08 0.35	1.64	2.36		
22/7	94'9"					High grade Fe															
22/7	High																				
		99'9"	1'4"				99'2"														

112 Q43

32 074

DIAMOND DRILL CORE RECORD

Hole No. D.D. R.T.A.E. No. 1

Drilled by Associated Diamond Drillers

Core Recovery 312'5" = 48.9%

Geological Logging by —

D. McKenna

AREA OF OPERATION R.T.A.E. Deposit - Savage River

Location of Site 10384E Cross Section C'-C (Plan T.96)

Date Commenced 17th July, 1959.

Date Completed 15th Sept., 1959.

Reduced Level of Site 905'

Bearing of Hole Due S

Dip of Hole 45°

Bore Depth 639'

AM6 Co-ords: 347930E 5397000N.

Ref No 2031.

No core held.

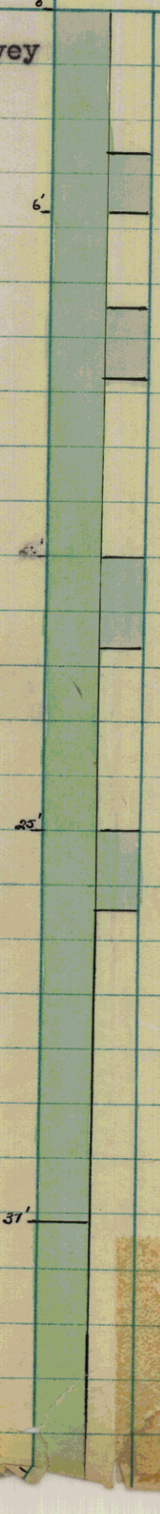
DRILL RECORD

Date	From	To	Core Recov.
1959 17th July	0'		
		6'	1'8"
18/7	6'		
		15'	2'1"
	15'		
		20'	2'9"
	20'		
20/7			
		37'	2'5"
	37'		

GEOLOGICAL LOG

From	To	Description
0		Orange coloured, fine-grained clayey weathered country rock
		Wthrd Amph fgr.
	37	Pale green, fine-grained weathered country rock containing a little serpentine. Fgr amph

GEOL. SECTION



ASSAY RESULTS

Sample No.	From	To

Country rock

Less than 40% HCl Sol Fe

Ore { 40%-50% HCl Sol Fe

Ore { > 50% HCl Sol Fe