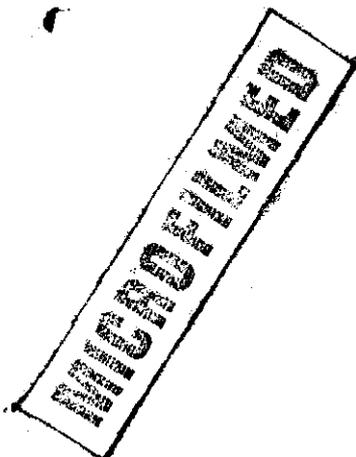


Annual Report
1983/84 E.L. 29/80

OPEN FILE

85-2409



EXPLORATION LICENCE 29/80

ANNUAL REPORT 1983/1984

D of M	A.O.	C.G.	E.O.	
D. DIR.	- 3 JUN 85			DEPT. OF MINES
REF. No. 5758/85				

Investigations during the 1983/1984 year were concentrated on the quartzite deposits of the Deep Creek area to the south-east of Smithton.

Numerous samples were collected and tested for various uses such as plate-glass, fibreglass, sodium silicate, silicon metal, cement(special), abrasives, fracturing sand, optical quartzite and fibre optics, paint and plastic fillers.

The tests were carried out by :

Cabot Corp; Hanna Nickel Smelting Co., Union Carbide Corp; Minnesota Mning and Manufacturing Co; B.J. Hughes Inc; Crystal Silica Co; Harborite Corp; Grefco Inc; Kaiser Refractories; Anthracite Carbon Filter Media Co; Turner Casting Corp; Wedron Silica Co; Kaiser Sand and Gravel Co; Nitco Materials Group; Siltec Corp; Research Powdered Metals CO; Remet Chemical Corp; B & B Refractories Inc.

Some encouraging results have been obtained and interest has been expressed for trial lots by a number of Companies.

In the meantime, Monier Ltd., has agreed to evaluate the market in Australia and U.S.A., Monier have inspected the area and obtained their own samples.

Drilling of some of the quartzite deposits was performed during the 1984/1985 year.

N.M. THOMAS
CHAIRMAN - MINERAL HOLDINGS AUSTRALIA PTY.LTD.

SMITHTON

19.2.1

Thirty four percussion holes were drilled in the Ballast Reserve and two within adjoining ground to the east where the D.M.R. have purchased a further 20 acres of land. As a follow-up to drilling three test pits were sited in virgin ground to obtain samples and assist interpretation of the drilling results.

As a rough guide, and in the absence of chemistry, it is probable that the Ballast reserve contains between 200000 and 260000 tonnes of white quartzite, of varying degrees of consolidation, to a depth of 4 to 5 metres on average. A further tonnage may be available to the east depending upon the chemistry.

The quartzite in the Reserve is extensively fractured, faulted and variably silicified. Combined, these features will have considerable influence upon the ultimate overall recovery of physically suitable project material. Two areas have however been identified wherein the quartzites drilled hard and to greater depths than the overall average. Together these two areas account for between 55% and 75% of the probable in-ground reserve of white quartzite to depths of 5 to 7metres, and occasionally 9 metres.

Where the white quartzite changes to cinnamon material it has been established that the Al_2O_3 content increases. However, it is probable that some of the cinnamon quartzite may be blended with the lower alumina material to upgrade the overall available tonnage. An assessment will be made when the chemistry becomes available.

29/80
↙

002

Within the Mineral Holdings E.L. area to the south of the Ballast Reserve
✓ nine percussion holes (TP1-9) were drilled to the east of the existing
quarry on land owned by K.Odgers and G.Frankcombe. Six holes were previously
drilled in this area during 1982. 49m total percussion drilling

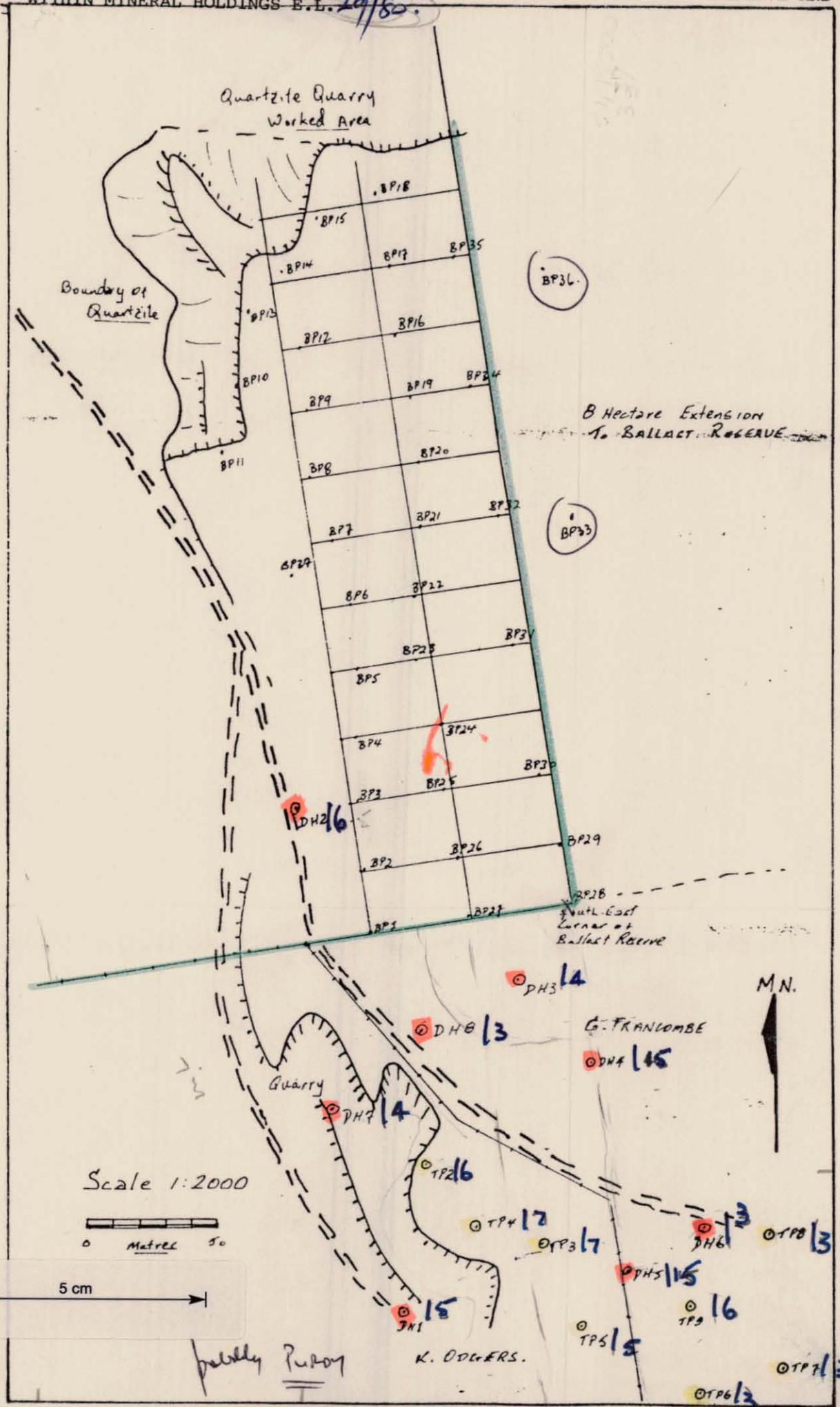
Based upon the drilling and analytical results it is estimated that the
area confines a probable recoverable reserve in the vicinity of 40000
tonnes of 0.1% Al_2O_3 quartzite suitable for smelting purposes. In
addition some 60000 tonnes of white sand and fine aggregate may be derived
from mining of the quartzite resource particularly within those areas
of predominantly friable quartzite and unconsolidated sand. More extensive
reserves may be available if the higher alumina, cinnamon coloured,
quartzite beneath the white leached zone is quarried.

Analyses and drill hole logs from the southern area are enclosed together
with a drill hole location map. ✓

003

158004

SOUTHERN PORTION OF BEACON HILLS QUARTZITE. BALLAST RESERVE AND AREA
WITHIN MINERAL HOLDINGS E.L. 29/80.



004

158005

TABLE 5.

These analyses relate to 1982 drilling and were reported in 83-1977

CHEMICAL ANALYSES, SMITHTON

Area to south of Ballast Reserve.

Drill Hole No./Depth(metres)

	DH1/1-3	DH1/3-5	DH4/1.8-3	DH4/3-6	DH4/6-9	DH4/12-15
TiO ₂	0.042	0.057	0.037	0.038	0.023	0.019
Al ₂ O ₃	0.050	0.040	0.029	0.032	0.294	0.310
Total Fe as						
Fe ₂ O ₃	0.012	0.009	0.010	0.009	0.013	0.023
MnO	0.001	0.001	0.001	0.001	0.001	0.001
MgO	0.004	0.003	0.003	0.003	0.016	0.022
CaO	0.006	0.006	0.006	0.007	0.006	0.014
Na ₂ O	0.006	0.004	0.006	0.007	0.005	0.008
K ₂ O	0.008	0.005	0.004	0.005	0.058	0.057
P ₂ O ₅	0.014	0.033	0.002	0.003	0.008	0.009
LOI	0.02	0.13	0.04	0.10	0.18	0.21
WC ⁺	0.073	0.063	0.162	0.151	0.071	0.135
CoO ⁺	0.009	0.008	0.022	0.019	0.009	0.018
SiO ₂	99.76	99.64	99.68	99.63	99.32	99.18
SiO ₂ by difference						

+ Contaminants introduced by sieving.

Hole TP1	Al ₂ O ₃ %	Hole TP9	Al ₂ O ₃ %
0-2 metres	0.13	1-2 metres	0.08
2-3	0.11	2-3	0.12
3-4	0.08	3-4	0.29
4-5	0.08	4-5	0.76
5-6	0.06	5-6	1.09
6-7	0.08		
7-8	0.07		
8-9	0.10		

These figures relate to the drilling reported here.

005

158006

DRILLHOLE LOG

HOLE No. TP1, 2

PAGE No. _____

PROJECT: Silica - Tasmania

PLAN REFERENCE: Refer Site Plan SM 2

FEATURE: Striped area above quarry

CO-ORDINATES: _____

LOCATION: Smithton - 5h 29/30

ANGLE FROM HORIZ: _____ DIRECTION: _____

FLUID BIT	DESCRIPTION	DRILL RATE Minuti./metre	LOG	DEPTH m	STRUCTURES/ANALYSES	CORRECTION	CASING	DEPTH m
	<u>TP1.</u>							
	Very hard, white quartzite		/	1	0.13			
	glassy, resolidified material	6/metre	/	2	_____			
			/	3	0.11			
	Softer white quartzite	4 ²⁰ /m	/	4	0.08			
		4 ³⁰ /metre	/	5	0.08			
	Hard to v. hard quartzite with minor softer bands.		/	6	0.06			
			/	7	0.08			
		7/metre	/	8	0.07			
			/	9	0.10			
	Hard cinnamon quartzite	5/metre	/	9				
	<u>TP2.</u>							
	Hard white & dense quartzite	4/metre	/	0				
			/	1				
	Soft band & fractured quartzite		/	2				
			/	3				
			/	4				
			/	5				
	Drill bogged. Abandoned.		/	6				

REMARKS: Hodges property
South of Ballist Reserve
In Quarry currently worked by Pungy.

LOGGED BY: M. Ware
 DATE LOGGED: _____
 DRILLER: A. G. Pulling
 DRILL: Roc 601 Down the Hole H. minor.
 DATE STARTED: 28.10.84
 DATE FINISHED: _____

006

158007

DRILLHOLE LOG

HOLE No. TP3, TP4

PAGE No. _____

PROJECT: Selia - TasmaniaPLAN REFERENCE Refer Site Plan 5112

FEATURE: _____

CO-ORDINATES: _____

LOCATION: Southton EL 29/80

ANGLE FROM HORIZ.: _____

DIRECTION: _____

FLUID	BIT	DESCRIPTION	LOG	DEPTH m	STRUCTURES/ANALYSES	CORE LOSS	CASING	DEPTH m
		<u>TP3</u>						
		<u>Top Soil</u>						
		Hard, white quartzite dense & well schiefed in upper section	5/metre 3 ⁴⁰ /metre	1 2 3				
			4 ²⁰ /metre	4				
		Hard, cinnamon quartzite	4/metre	5				
		Slightly darker & softer quartzite	3 ¹⁰ /metre	6				
				7				
		<u>TP4</u>						
		Hard white quartzite	5/metre	0 1				
			4 ²⁰ /metre	2				
			5 ²⁰ /metre	3				
		Hard greyish quartzite fractured from 5 metres & becoming more heavily fractured.	2 ⁰⁵ /metre	4 5 6				
		Bozzed at 7 metres & abandoned		7				

REMARKS: New machine & bit. (112mm button bit)LOGGED BY: J. WARE

DATE LOGGED: _____

DRILLER: G & G DrillingDRILL: RDC 601DATE STARTED: 29.10.84

DATE FINISHED: _____

CORE STORED: _____

007

158008

DRILLHOLE LOG

HOLE No. TP5, 6, 7, 8

PAGE No. _____

PROJECT Selma - Tinianan

PLAN REFERENCE: Refer Site Plan - S112

FEATURE _____

CO-ORDINATES: _____

LOCATION: Smithton - E.L. 29/80

ANGLE FROM HORIZ.: _____ DIRECTION: _____

FLUID BIT	DESCRIPTION	LOG	DEPTH m	STRUCTURES/ANALYSES	CORE	LOSS	CASING	DEPTH m
	<u>TP5</u>							
	Top Soil + fractured quartzite		1					
	Mod/hard, white fractured quartzite		2					
			3					
	Soft & sandy white quartzite		4					
	Cinnamon to brown quartzite		5					
	<u>TP6</u>							
	Top Soil		0					
	Medium hard white quartzite		1					
			2					
			3					
	<u>TP7</u>							
	Top Soil		0					
	Soft to hard white quartzite		1					
			2					
	Cinnamon to black quartzite		3					
	<u>TP8</u>							
	Top Soil		0					
	Soft to medium hard white quartzite		1					
			2					
	Dark brown quartzite - water		3					

REMARKS:

LOGGED BY: M. Ulane
 DATE LOGGED: 28.10.84
 DRILLER: G.G. Drilling
 DRILL: ROC 601
 DATE STARTED: 28.10.84
 DATE FINISHED: _____
 CORE STORED: _____

DRN

TRACED

008

DRILLHOLE LOG

HOLE No. TP 9

PAGE No. _____

PROJECT: Silica - TASMANIA

PLAN REFERENCE: Rejer Site Plan. Sm2

FEATURE: _____

CO-ORDINATES: _____

LOCATION: SMITHTON - EL 29/80

ANGLE FROM HORIZ.: _____ DIRECTION: _____

FLUID BIT	DESCRIPTION	LOG	DEPTH m	STRUCTURES/ANALYSES	CORE LOSS	CABING	DEPTH m
	Top Soil + broken white quartzite	---	0	<u>Al₂O₃ %</u>			
	Hard, white fractured quartzite	---	1	<u>0.08</u>			
	As above with soft bands ^{3rd/metre} @ 2.6m.	---	2	<u>0.12</u>			
	change to cinnamon quartzite at 3.6m.	---	3	<u>0.29</u>			
	Cinnamon to darker quartzite	---	4	<u>0.76</u>			
	Light brown, dusty quartzite	---	5	<u>1.09</u>			
			6				

REMARKS: _____

LOGGED BY: m Ware

DATE LOGGED: _____

DRILLER: C & G Drilling

DRILL: RDC 601

DATE STARTED: 28.10.84

DATE FINISHED: _____

CORE STORED: _____