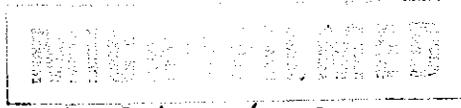


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NORTHWEST BAY CO. PTY. LTD.

Incorporated in Tasmania 1978 A.C.N 009 513 697

92-3397



MF 012608

folio 93

NORTHWEST BAY CO. PTY. LTD.

E.L. 14/88 MAYDENA

ANNUAL REPORT - YEAR 4

5th August 199¹ to 4th August 199²

M.C. Forster
Nov. 1992

MINES		
FILE REF.		
12 NOV 1992		
DOC. REF.		
OFFICER	POS. ACTION	DOB. INFL.
see folio 93		
for covering letter.		
REQUEST TO	DATE	

AMG REFERENCE POINTS ADDED

EL-MAYDA (1)

EL-MAYDA (9)

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TENEMENT INFORMATION

E.L.14/88 is located at Maydena and was originally held by Pioneer Silicon Industries Pty.Ltd. with an area of 81 sq.km.

P.S.I. ceased production of silicon metal at Electrona during August,1991 when exploration for high grade rock silica ceased.

The area of E.L. 14/88 was reduced to 25 sq.km and transferred to Northwest Bay Co.Pty.Ltd. on 13th April,1992.

Northwest Bay Co. proposed to explore for minerals other than hard rock silica such as limestone,dolomite and high grade silica sand.

At a meeting with the Mines Department in February,1992 (Hargraves,Burgess & Bacon) it was agreed that the D.O.M. would put a reserve over part of E.L. 14/88, for limestone only, in order to find a single high grade limestone deposit.

In view of this,it was also agreed at this meeting that a work programme for the current year would not be required.

Exploration Objectives

With the transfer of the Licence there were new objectives. These were for exploration for dolomite and limestone and finding a market for the high grade silica sand discovered by P.S.I. at Pine Hill.

There would seem to be no foreseeable future demand in Tasmania for high grade rock silica suitable for silicon or ferro-silicon, with the closure of the Electrona silicon plant and the proposed conversion of B.H.P.'s ferro-silicon No.5 furnace at Bell Bay to a silico-manganese smelter.

However there will be increased demand for dolomite for the silico-manganese smelting at Bell Bay to about 40,000 t.p.a.]

Part of this could be met from Maydena if suitable dolomite can be discovered.The fines from a crushing operation could supply agricultural dolomite to southern Tasmania as it is preferred to limestone for most applications.

At present the high cost of transport from Smithton restricts the use of dolomite in the southern part of the State.

Dolomite and limestone could be crushed by the same plant at the Maydena railhead.

Exploration Philosophy**DOLOMITE**

The high grade silica sand deposit on the eastern end of Pine Hill is composed of sand grains which are sharp silica crystals and with no heavy minerals present, the sand may be a dolomite replacement.

If this is so, then there may be dolomite in the area on an east - west strike line to the south of Pine Hill.
(The Pine Hill beds dip steeply to the north.)

LIMESTONE

Ordovician limestone outcrops have been identified on both sides of the John Bull Creek and it is proposed to extend the E.L. to cover this area if it becomes available from the present Crown reserve.

SILICA SAND

The sand reserves at the eastern end of Pine Hill should be further tested and markets for high grade silica sand should be investigated.

SUMMARY OF WORK COMPLETED TO 5th AUGUST, 1992**DOLOMITE PROSPECTING**

A small hill, less than 1km to the SW of Pine Hill, at co-ord^s 634462 (Maydena 1:25000) "Kallista Hill", was prospected for carbonate rocks to test the exploration philosophy, as above.

Three rock samples were taken from a small outcrop near the top southern face of "Kallisa Hill", and sent to Temco at Bell Bay for assay, with the following results returned on 02.07.92 :

SAMPLE	MnO	SiOs	Al2O3	CaO	MgO	BaO	Na2O	K2O	TiO2	P2O3
PC 1	.2	6.0	.6	29.3	19.9	-.1	-.1	.2	.03	.50
PC 2	.2	3.2	.3	30.4	20.3	-.1	-.1	.1	-.01	.10
PC 3	.1	70.8	5.0	7.1	8.8	-.1	-.1	1.6	.24	.77

These results proved the existence of dolomite, and also PC 3 shows a little phosphate, contained in a carbonaceous mudstone.

-3-

Very little outcrop was found on further prospecting but a small sink hole was found on the SW end of the hill.

A 20t excavator was used to expose rock on the top SE face of "Kallista Hill" from which chip samples were collected and again assayed by Temco at Bell Bay.

The chip samples were taken along a graded track cut down the upper part of the SE face of the hill.

The following assay results were received from Temco on 21/07/92:

SAMPLE	CaO	MgO	MnO	SiO2	Al2O3	BaO	Na2O	K2O	TiO2	P2O5
1-3m	12.5	12.2	.2	53.9	5.1	-.1	-.1	1.4	.26	* 1.67
3-6m	27.7	20.1	.2	10.7	.5	-.1	-.1	.2	.03	.26
6-9m	30.1	20.7	.1	3.5	.1	-.1	-.1	.1	.01	.14
10-15m	17.4	16.4	.1	40.7	1.5	-.1	-.1	.4	.10	.10
15-20m	27.6	20.5	-.1	10.2	.4	-.1	-.1	.1	.04	.06
20-25m	30.8	21.0	.1	1.3	-.1	-.1	-.1	-.1	.02	.09
25-30m	30.8	20.8	.3	1.0	-.1	-.1	-.1	-.1	.01	.02
30-35m	31.1	20.8	.1	.5	-.1	-.1	-.1	-.1	.01	.04
35-40m	30.7	20.5	.2	1.3	.2	-.1	-.1	-.1	.03	.04

These assays indicate that quite pure dolomite exists in the lower half of the sampled section, and again some phosphate is present in the upper carbonaceous mudstone, and may be worth following up!

On the very top of "Kallista Hill", above the dolomite and the thin section of black carbonaceous mudstone, there is a white banded chert. All beds dip steeply to the north.

Since the end of this reporting period, some drilling has been undertaken and the results prove that a high grade dolomite deposit with a vertical depth of greater than 40m exists at "Kallista Hill".

-4-

SILICA SAND EXPLORATION

During 1988 Pioneer Silicon Industries P/L prospected Pine Hill for hard rock silica and discovered a deposit of high grade silica sand on the eastern end of Pine Hill.

During this reporting period the deposit was further investigated to see if the sand could be suitable for A.G.M. in Hobart for tableware glass manufacture.

Test pits were put down with an excavator, and samples taken.

These were assayed by A.C.I., and also some grain size determinations were made.

The results proved that the sand would meet the A.C.I. Purchase Acceptance Standard No.P.A.S. 041-01 1.4.91 Tableware;

A.C.I. Specification-chemical composition :

(a)	SiO ₂	99.8 %	Min.
	Fe ₂ O ₃	0.014%	Max.
	Cr ₂ O ₃	0.0005%	Max.
	Al ₂ O ₃		Negotiable

(b) Physical Properties

Nominal Size of Aperture mm	BSS English	USBS American	ACI Standard Specification
1.000	+16	+18	NIL
0.660	+25	+30	2% Max.
0.415	+36	+40	10% Max.
0.105	-150	-140	1% Max.

-5-

PARTICLE SIZE DISTRIBUTION
PINE HILL SAND FROM EASTERN QUARRY PH65

by ACI Mineral Div. 22 May, 1992

	PH65 RAW %	PH65 PUMP WASHED %
19.0mm	Nil	
12.5	0.2	
9.5	0.4	
6.5	0.7	
4.75	1.2	
3.35	1.3	
2.36	1.4	
1.70	1.5	
1.18	1.6	
850 microns	1.4	Nil
600	2.3	Tr
500	2.1	2.6
425	1.8	3.3
300	6.7	11.1
212	10.3	18.2
150	11.9	20.8
106	13.4	24.4
75	12.1	18.1
53	9.2	Tr
Pan	19.9	1.3
APS No.		78.89
Dry Screened (before pump wash) +4.75mm		4.08%
Wet Screened (after pump wash)		
+ 600 microns		7.94%
- 600 + 75 micron		56.69%
- 75 microns		31.30%
		100.00%

-6-

RESULTS OF ANALYSIS OF SCREENED FRACTIONS

PINE HILL SAND FROM TEST PITS

AS SUPPLIED BY MAC FORSTER TO ACI INDUSTRIAL MINERALS 19 MAY 1992

SCREENED BY ACI ON -0.6mm +0.075mm

TEST PIT LOCATION	SiO ₂	Na ₂ O	K ₂ O	CaO	MgO	Al ₂ O ₃	TiO ₃	Fe ₂ O ₃	Cr ₂ O ₃
50N200W	99.94	0.02	-0.01	0.02	-0.01	-0.01	-0.01	0.005	0.0001
00N200W	99.93	0.03	-0.01	0.02	-0.01	0.01	-0.01	0.006	0.0001
00N250W	99.94	0.03	-0.01	0.02	-0.01	-0.01	-0.01	0.004	0.0001
00N100W	99.90	0.03	-0.01	0.05	-0.01	0.01	-0.01	0.004	0.0002
00N 50W	99.93	0.03	-0.01	0.02	-0.01	0.01	-0.01	0.003	0.0001
00N 00W	99.94	0.02	-0.01	0.03	-0.01	-0.01	-0.01	0.005	0.0001
00N 50E	99.92	0.03	-0.01	0.02	-0.01	-0.01	0.02	0.004	0.0002
50S250W	99.93	0.03	-0.01	0.02	-0.01	-0.01	-0.01	0.005	0.0001
50S 00E	99.93	0.03	-0.01	0.02	-0.01	-0.01	0.01	0.004	0.0003
E.Q.Foor	99.97	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.003	0.0001
AVG.	99.93	0.03	-0.01	0.02	-0.01	0.01	-0.01	0.004	0.0001

CO-ORDINATES OF 00N 00W MAYDNA SHEET 66350E 63800N (See plan)

(7)

EL-MAYDA (8)

CONCLUSIONS & RECOMMENDATIONS**DOLOMITE**

Drilling since this reporting period has indicated that "Kallista Hill" contains a high grade dolomite deposit.

It is now proposed to make application for a Mining Lease to cover the deposit and to develop a mining plan.

SILICA SAND

Large reserves of high grade sand have been proven at Pine Hill and markets this are being investigated.

FUTURE EXPLORATION LIMESTONE

(1) It is proposed to explore for limestone within the E.L. area, and to extend this to include part of the present reserve in the John Bull Creek area when the reserve is lifted.

(2) Further exploration to extend the reserves of dolomite is proposed.

(3) Large reserves of silica sand have been proved up and no further exploration work for sand is proposed at this stage.

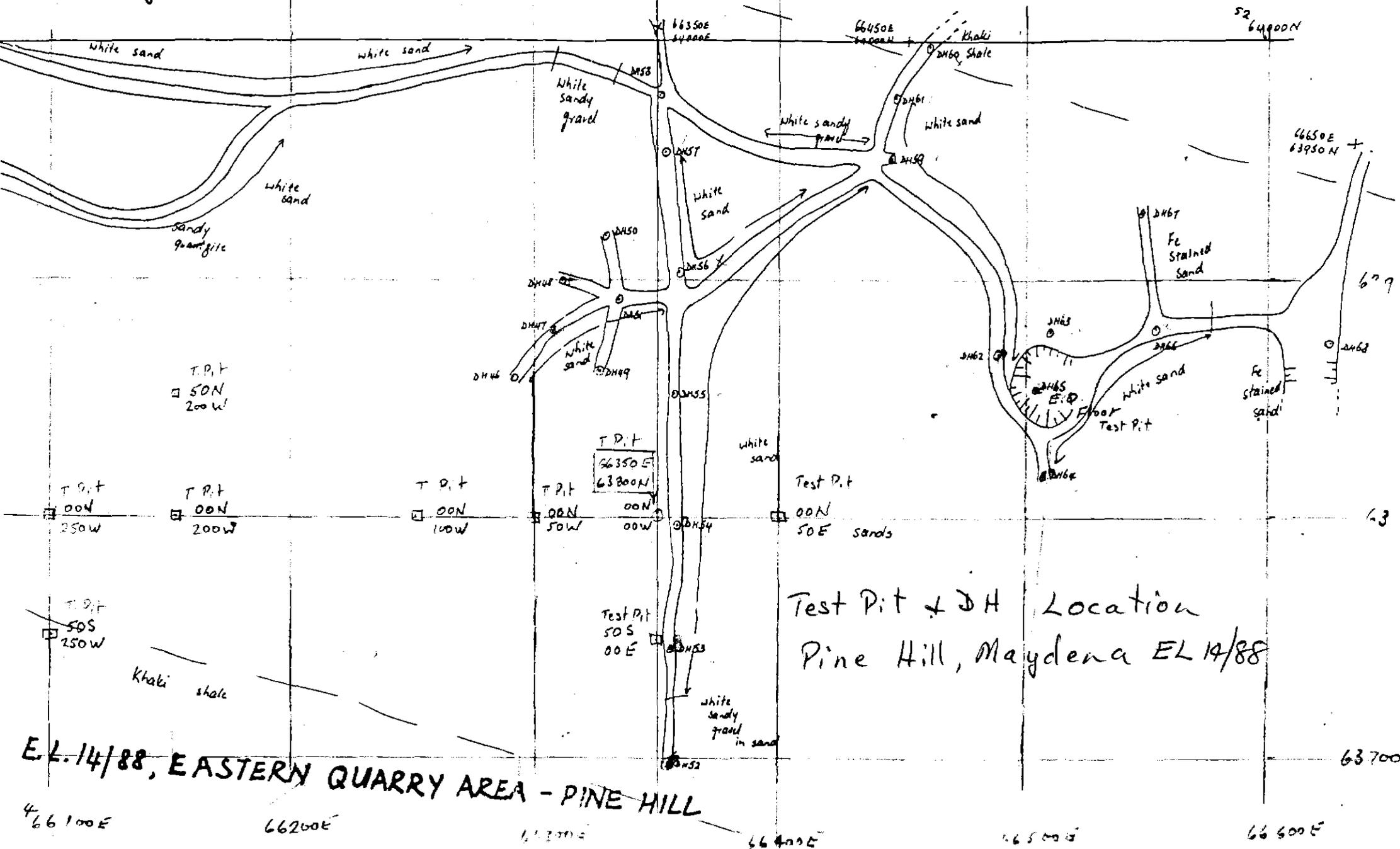


M.I.E.M.S. (Asst)

M.C. Forster
Exploration Manager
Nov. 1992

66100E 66200E 66300E 66400E 66500E 66600E

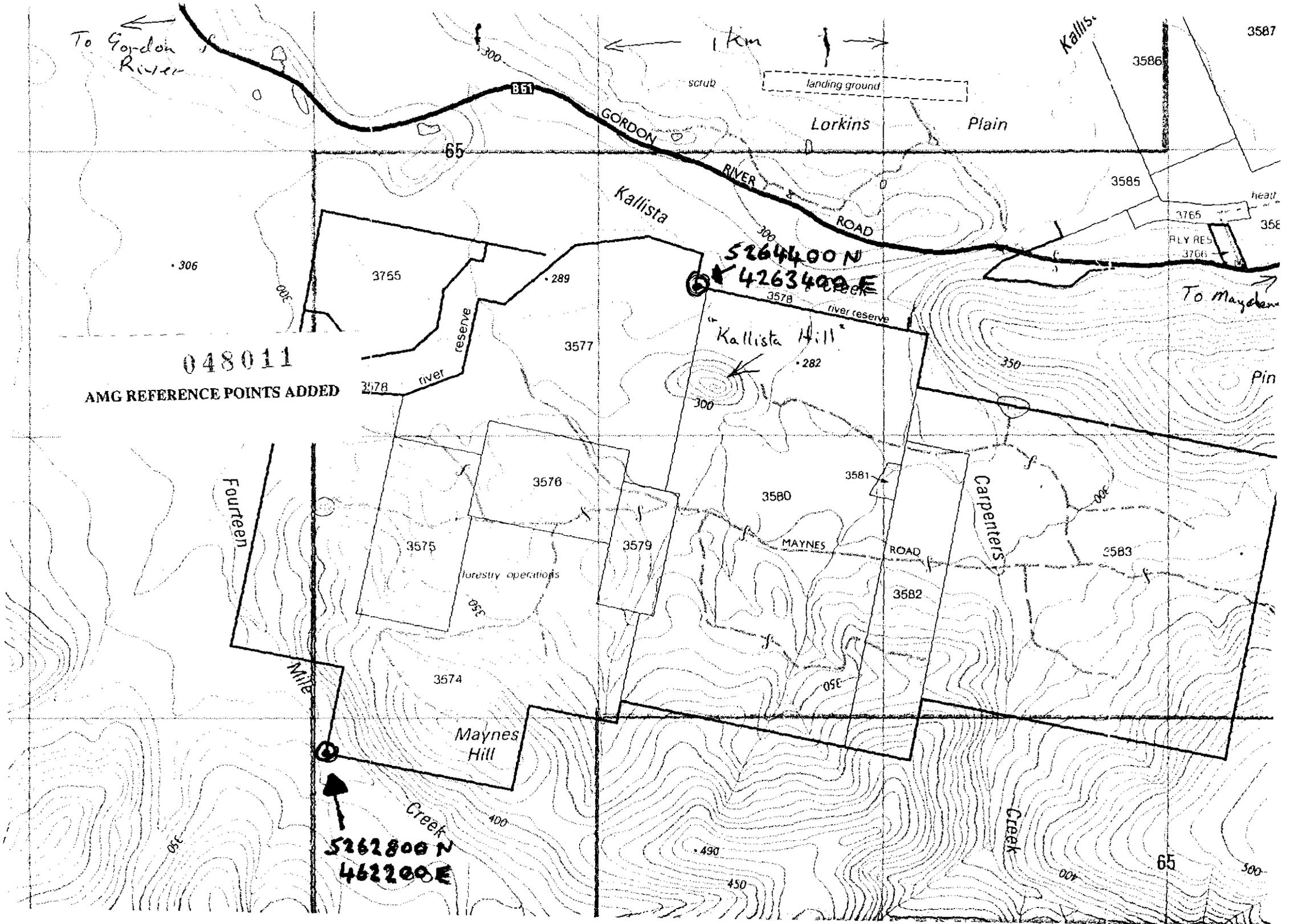
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E.L. 14/88, EASTERN QUARRY AREA - PINE HILL

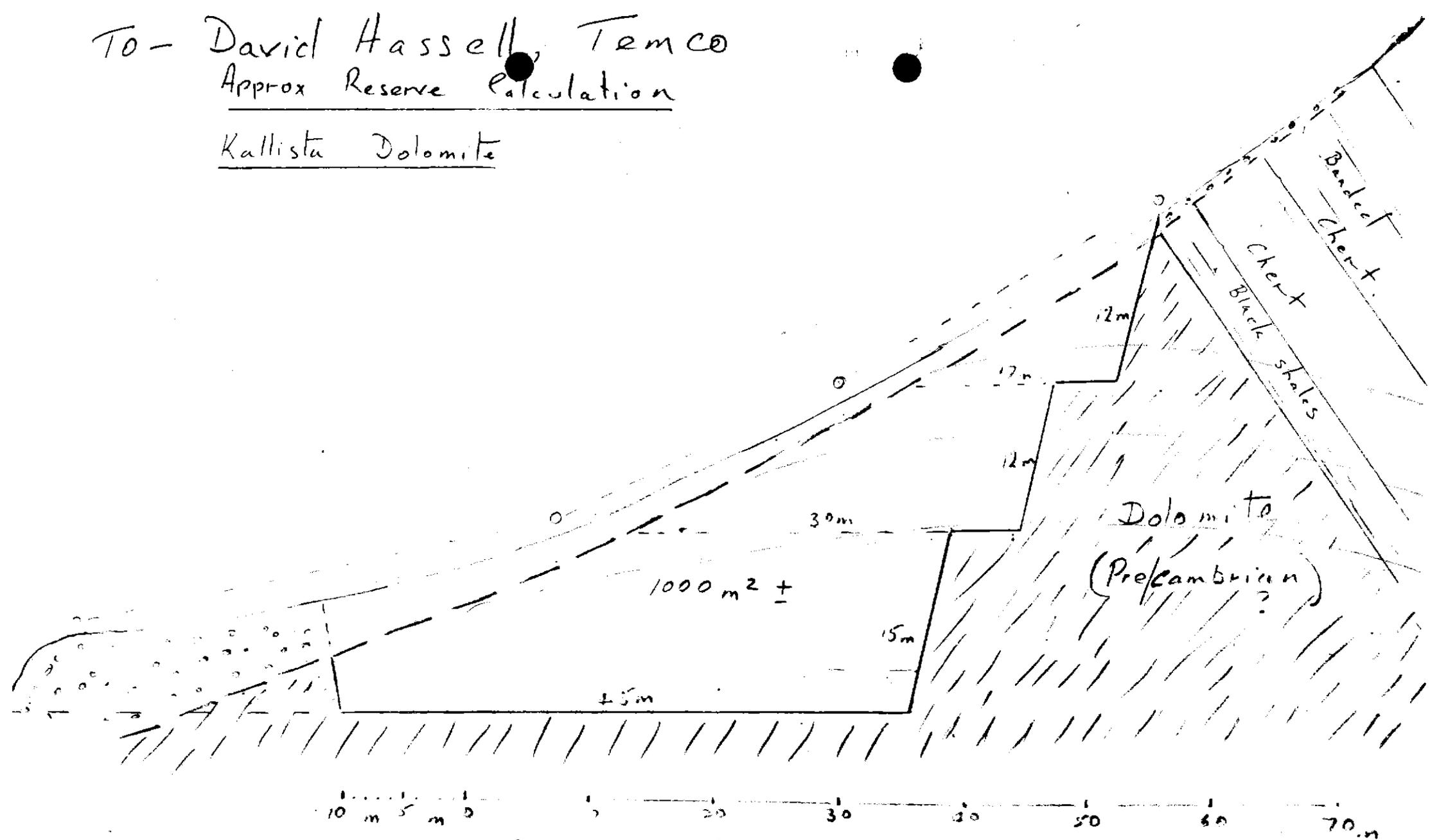
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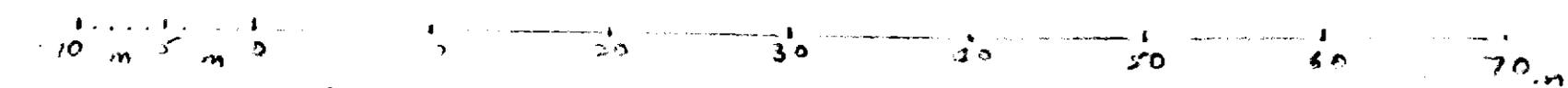
To - David Hassell, Temco
Approx Reserve Calculation

Kallista Dolomite



1000 m² ±

Dolomite
 (Precambrian?)



$1000 \text{ m}^2 \times 340 = 340,000 \text{ m}^3$

Open cut reserve = 29 x 34000 = 340,000 t

048012

LABORATORY REPORT:

DATE: 7.9.92

WORK NO:

MATERIAL: DOLOMITE (MAYDEWA)
 "Kallista Hill"

SAMPLE	CaO	MgO	SiO ₂	Fe ₂ O ₃	Al ₂ O ₃	TiO ₂	MnO	P ₂ O ₅	Na ₂ O	K ₂ O			SUM
K ₁ 6-9m	29.9	20.5	2.5	0.2	0.2	0.02	0.0	0.03	-	0.0			53.23
K ₁ 9-12m	30.3	20.7	2.1	0.2	0.1	0.02	0.0	0.00	-	0.0			53.07
12-15m	30.7	20.6	1.1	0.1	0.1	0.02	0.0	0.01	-	0.0			52.62
15-18m	29.6	20.1	4.4	0.1	0.2	0.01	0.1	0.02	-	0.0			54.39
3-6m	29.1	20.0	5.6	0.2	0.1	0.02	0.0	0.03	-	0.0			55.01
K ₂ 4.5-6m	30.4	20.5	1.4	0.2	0.2	0.02	0.1	0.03	-	0.0			52.85
6-7.5m	30.6	20.4	1.2	0.2	0.1	0.01	0.00	0.01	-	0.0			52.24
7.5-9m	30.6	20.7	1.4	0.2	0.2	0.02	0.0	0.03	-	0.0			53.19
9-10.5m	30.4	20.5	1.5	0.2	0.1	0.02	0.1	0.01	-	0.0			52.72
10.5-12.5m	31.0	20.8	1.0	0.2	0.2	0.02	0.0	0.03	0.0	0.0			53.28
12.5-15.5m	31.4	21.1	1.3	0.3	0.2	0.02	0.0	0.05	-	0.0			54.41
13.5-15.0m	30.8	20.9	1.0	0.2	0.1	0.02	0.0	0.05	-	0.0			53.04

COMMENTS:

N.B. - for Na₂O indicates negative result obtained

ANALYST:

CHEMIST:

LABORATORY REPORT:

DATE: 7, 9, 92

WORK NO:

MATERIAL:

DOLOMITE (MAYDENA)

"Kallista" Hill

SAMPLE	CaO	MgO	SiO ₂	Fe ₂ O ₃	Al ₂ O ₃	TiO ₂	MnO	P ₂ O ₅	NiO	K ₂ O		Sum		
K ₂ 5-16.5 m	30.5	20.3	1.9	0.2	0.3	0.03	0.0	0.24	-	0.1		53.55		
16.5-18 m	30.6	20.7	1.5	0.2	0.4	0.02	0.0	0.06	-	0.1		53.51		
18-19.5 m	29.6	20.3	3.3	0.2	0.2	0.02	0.0	0.04	-	0.1		53.67		
19.5-21 m	30.2	20.3	2.6	0.2	0.2	0.02	0.0	0.02	-	0.1		53.45		
K ₄ 3-6 m	3.4	0.3	82.2	2.2	4.7	0.17	0.1	0.86	-	1.0	silica above dolomite	94.70		
6-9 m	2.9	-	87.5	0.7	1.3	0.05	0.0	0.23	-	0.2		92.69		
9-12 m	3.4	0.3	85.2	1.6	1.2	0.05	0.0	0.21	-	0.2		92.14		
9-12 m 'A'	2.9	0.3	84.1	1.4	5.5	0.19	0.0	0.60	-	1.1		96.21		
K ₅ 4.5-6 m	30.6	20.5	1.5	0.1	0.2	0.02	0.1	0.02	-	0.0		52.78		
6-9 m	30.8	20.3	1.3	0.2	0.2	0.02	0.0	0.09	-	0.1		52.82		
9-12 m	30.9	20.5	1.7	0.2	0.2	0.02	0.0	0.14	-	0.1		53.46		
12-15 m	30.9	20.8	1.5	0.2	0.3	0.02	0.0	0.04	-	0.1		53.58		

COMMENTS:

ANALYST.

CHEMIST.

LABORATORY REPORT:

DATE: 7, 9, 92

WORK NO:

MATERIAL:

DOLOMITE (MAYDEN A)

'Kallista'

SAMPLE	CaO	MgO	SiO ₂	Fe ₂ O ₃	Al ₂ O ₃	TiO ₂	MnO	P ₂ O ₅	Na ₂ O	K ₂ O	SUM
K5 15-18 m	30.5	20.5	1.3	0.3	0.2	0.02	0.1	0.03	-	0.1	52.79
18-21 m	30.7	20.9	0.7	0.2	0.1	0.01	0.0	0.02	-	0.0	52.41
K6 ROCK SAMPLE	3.8	0.9	71.6	3.0	8.0	0.35	0.1	1.10	-	1.9	90.74
↑ (from above dolomite for phosphate)											

COMMENTS:

.....
ANALYST.

.....
CHEMIST.