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088001

D.256

RECEIVED	22 MAY 1980	Registrar
ANSWER:	DEPT OF MINES	E&IL
REF. No:		JN 3

file rebook

80-1439

COMMONWEALTH ALUMINIUM CORPORATION LIMITED

E.L. 7/74 - TASMANIA

UPDATE REPORT, SHEPHERD & MURPHY AREA

(Moina Sheet 1 area)

MICROFILMED

OPEN FILE

P.W. Askins.
20th May 1980.

001

This report merely compiles work done on beneficiation studies since the last report by Askins (1979) "E.L. 7/74 Moina, Areas covered by Moina Sheets 1,2,3. 1979 Update, and Moina Sheet A, report on all investigations to August 1979. Commonwealth Aluminium Corporation Limited, Unpubl. Report.

There has been no other geological or geophysical work done by the Commonwealth Aluminium Corporation Limited. All future work will be done and reported by the Shell Company of Australia Limited.

The attached data is self explanatory.

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M 1588

088003

EL7-4 MOINA
ANALYT GEN12-
v-

DEPARTMENT OF MINES—TASMANIA

LAUNCESTON OFFICES
287 WELLINGTON STREET
SOUTH LAUNCESTON 7250

TELEPHONES:

Metallurgical Research	} 44 2431-2 (2 lines)
Laboratory	
Mines Inspection	
Explosives & Inflammable Liquids	

19th July 1979

Comalco Exploration Ltd,
P.O. Box 691,
Devonport,
TASMANIA 7310

Attn Mr. Paul Askins.

R731, R745 & R758 - Moina, Wrigglite.

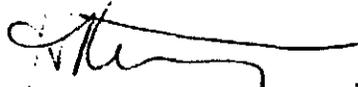
Dear Sir,

Please find enclosed the following samples of 'high' fluorite material from these projects. As we have not in any of these projects endeavoured to make a fluorite concentrate none of the samples is really high in fluorine.

			<u>WO₃</u>	<u>Sn</u>	<u>M/A</u>	<u>S.Fe</u>	<u>F</u>
R731	Grind B	N1 CFC	0.14	0.30	18.0		14.3
		N2 CFC	0.21	0.30	16.0		13.4
	Grind C	N1 CFC	0.17	0.29			11.0
		N2 CFC	0.18	0.27			12.3
R745	Primary - 53um		0.18	0.25		22.0	11.7
	-53um M/S 7N, T4T		0.11	0.27		7.3	11.1
R758	VT		0.13	0.25			11.4

M/A is Davis Tube magnetics.

Yours faithfully,


(H. K. Wellington)
Chief Chemist & Metallurgist.

Exploration Department,
P.O. Box 691,
DEVONPORT. TAS. 7310.

21st August, 1979.

Mr. H. Wellington,
Chief Chemist & Metallurgist,
Department of Mines,
287 Wellington Street,
LAUNCESTON. TAS. 7250.

Dear Mr. Wellington,

Attached are analyses by Amdel of the products
you sent me. If you wish any further analyses to be done please
do not hesitate to send me samples.

Your sincerely,

P.W. Askins.
Senior Geologist.

Encl.

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088005

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MOINA

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BENEF



The Australian
Mineral Development
Laboratories

amdel

NATA CERTIFICATE

Flemington Street, Frewville,
South Australia 5063
Phone Adelaide 79 1662
Telex AA 82520

AC 3/1/4/0 - 418/8

16 August 1979,

Please address all
correspondence to
P.O. Box 114 Eastwood
SA 5063
In reply quote:

Mr. P. Askins,
Commonwealth Aluminium Corporation
Limited.,
P.O. Box 691,
DEVONPORT TAS 7310

REPORT AC 418/80

YOUR REFERENCE:	Application dated 23 July 1979. Ref No: PA/T/MOINA R731.
IDENTIFICATION:	As listed.
DATE RECEIVED:	25 July 1979.
NOTE:	As the major rare earth elements have not been detected by emission spectroscopy, we have not proceeded with the others.

Enquiries quoting AC 418/80 to the Manager please

D. K. Rowley
Manager
Analytical Chemistry Division

for Norton Jackson
Managing Director

cc Mr. A.H. Bartlett,
95 Collins Street,
Melbourne Vic 3000

dg

Pilot Plant: Osman Place
Thebarton S.A.
Telephone 43 8053
Branch Laboratory: Perth



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MOINA
RICE

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AC 418/80
2.

SAMPLE MARK	ANALYSIS		%
	TIN Sn	TUNGSTEN W	
R731 Grind B N1 CFC	2 450	1 650	35.8
R731 Grind B N2 CFC	2 450	1 850	34.9
R731 Grind C N1 CFC	2 500	1 600	26.9
R731 Grind C N2 CFC	2 550	1 650	29.4
R745 Prim - 53µm	2 400	1 450	22.4
R745 Prim - 53µm m/s 7N T4T	2 300	760	23.0
R758 VT	2 300	150	21.4
METHOD:	-----B1-----		E3



DEPARTMENT OF MINES—TASMANIA

088008

TELEPHONES:

Metallurgical Research	} 44 2431-2 (2 lines)
Laboratory	
Mines Inspection	
Explosives & Inflammable Liquids	

LAUNCESTON OFFICES
287 WELLINGTON STREET
SOUTH LAUNCESTON 7250

28th August 1979

Comalco Exploration Ltd,
P.O. Box 691,
Devonport 7310
TASMANIA

Attn Mr. Paul Askins.

R782

Dear Sir,

We have done a series of flotation tests to concentrate the fluorite in the Vanner Tails (VT) from R758. and also a sizing to see if the fluorite is concentrated in any size fraction.

I am enclosing samples:-

A 900 - A 905
A 919 - A 922
A 929 - A 931
A 935 - A 941

from these tests are being sent to you for CaF_2 assay.

We would expect A900-A905 to contain around 20% CaF_2 while A919, A921, A929, A935 & A938 to be greater than 20% CaF_2 . The remainder should be less than 20% CaF_2 .

Thank you for the results on the samples previously sent to you. We will send you the results of the present series of tests when we have them. It is difficult to judge how the flotation is going hence we will now have to wait for the results before planning further tests. Recently we have received some new reagents which have been used in these tests and we will be eager to see how they have behaved.

Yours faithfully,

(H. K. Wellington)
Chief Chemist & Metallurgist.

sent
~ 4.9.79

008

EL 7/74 MOINA 1R-
BENEFICIATION
088009

Exploration Department,
P.O. Box 691,
DEVONPORT. TAS. 7310.

15th October, 1979.

Mr. H. Wellington,
Chief Chemist & Metallurgist,
Mines Department,
Wellington Street,
LAUNCESTON. TAS. 7250.

Dear Mr. Wellington,

Attached are the analyses of pulps
from R782, analysed by Amdel. Please advise if you believe
any analyses are in error and I will have them queried.

Yours sincerely,

P.W. Askins.
Senior Geologist.

Encl.

309



The Australian
Mineral Development
Laboratories

Flemington Street, Frewville,
South Australia 5063
Phone Adelaide 79 1662
Telex AA 82520

Please address all
correspondence to
P.O. Box 114 Eastwood
SA 5063
In reply quote:

amdel

NATA CERTIFICATE

PART REPORT 1

Mr. P. Askins,
Commonwealth Aluminium Corporation Limited.,
P.O. Box 691,
DEVONPORT TAS 7310

E.L. 7/74
BENEFICIATION
088010

AC 3/1/4/0 - 1161/

5 October 1979,

REPORT AC 1161/80

YOUR REFERENCE:	Application dated 3 September 1979. Ref: R782.
IDENTIFICATION:	As listed.
DATE RECEIVED:	4 September 1979.

Enquiries quoting AC 1161/80 to the Manager please

D. K. Rowley
Manager
Analytical Chemistry Division

for Norton Jackson
Managing Director

cc Mr. A.H. Bartlett,
95 Collins Street,
Melbourne Vic 3000

dg

Pilot Plant: Osman Place
Thebarton S.A.
Telephone 43 8053
Branch Laboratory: Perth



This laboratory is registered by the National Association of Testing Authorities, Australia. The test(s) reported herein have been performed in accordance with its terms of registration. This document shall not be reproduced except in full.

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The Australian
Mineral Development
Laboratories

Flemington Street, Frewville,
South Australia 5063
Phone Adelaide 79 1662
Telex AA 82520

Please address all
correspondence to
P.O. Box 114 Eastwood
SA 5063
In reply quote:

088012.

amdel

NATA CERTIFICATE

AC 3/1/4/0 - 1161

12 October 1979,

REPORT COMPLETE

Mr. P. Askins,
Commonwealth Aluminium Corporation Limited.,
P.O. Box 691,
DEVONPORT TAS 7310

REPORT AC 1161/80

YOUR REFERENCE:	Application dated 3 September 1979. Ref: R782.
IDENTIFICATION:	As listed.
DATE RECEIVED:	4 September 1979.

Enquiries quoting AC 1161/80 to the Manager please

D. K. Rowley
Manager,
Analytical Chemistry Division

D. B. Boudrieux
for Norton Jackson
Managing Director

cc Mr. A.H. Bartlett,
95 Collins Street,
Melbourne Vic 3000

dg



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088013 .

AC 1161/80
page. 2.

ANALYSIS

3

SAMPLE MARK	CALCIUM FLUORIDE CaF ₂
A 900	23.1
901	12.7
902	22.8
903	25.1
904	26.7
905	23.6
919	26.8
920	20.1
921	27.4
922	20.9
929	60.4
930	22.6
931	13.6
935	46.6
936	13.1
937	8.35
938	61.4
939	25.5
940	10.9
941	8.15

METHOD: E3

013

M 1588

088014

EL 7/74

MOINA
BENEFICIATION



DEPARTMENT OF MINES—TASMANIA

LAUNCESTON OFFICES
287 WELLINGTON STREET
SOUTH LAUNCESTON 7250

TELEPHONES:
Metallurgical Research }
Laboratory } 44 2431-2
Mines Inspection } (2 lines)
Explosives & Inflammable Liquids }

18th October, 1979

Commonwealth Aluminium Corp. Ltd.,
Exploration Department,
P.O. Box 691,
DEVONPORT Tas. 7310

Attn: Mr Paul Askins

R782

Dear Mr Askins,

Thank you for the results contained in your letter dated 15th Oct. '79. While there are differences between individual results of up to about 2% between our and their results for individual samples in the use of both sets of results (six assays only in each) in a metallurgical balance the CaF₂ distribution from both sets is quite good hence within ²themselves each set would appear consistent and hence the metallurgical work can be appraised.

A brief summary of the current work shows:-

1. the CaF₂ in the head sample is uniformly distributed, that is ²mass and CaF₂ distributions are similar, although there is a ²little less CaF₂ in the +38µm material.
2. flotation testing to concentrate the fluorite have shown improving results as this initial batch of tests proceeded.

The last test N.13 shows the following:-

Rougher Conc.	F1C	82% of F in conc. assaying 40% CaF ₂
Cleaner Conc.	F2C	76% of F in conc. assaying 50% CaF ₂
Recleaner Conc.	F3C	64% of F in conc. assaying 61% CaF ₂

Yours sincerely,

(H. K. Wellington)
Chief Chemist & Metallurgist