#### ARKANSAS LIMESTONE COMPANY - MYERSVILLE OPERATION

Superintendent - Mr. E. R. Nelson

Number of Employees - 27

Product - High Grade Chemical Limestone

Mining Method - Underground (room and pillar method)

Size - The underground operation is now approximately 1200° X 1200° at the widest points. 50° X 50° X 29° pillars are left for support and 45° X 45° X 29° rooms are taken. The pillars are all on line.

Operations - In blasting a V-cut drill face is used. Each face is

45° X 29° and has 72 holes drilled in it. Each hole is loaded with 20 sticks of powder. Both faces are blasted at once resulting in approximately 850 tons of limestone per blast. The limestone is then loaded into trucks by diesel operated shovels and hauled out of the mine to the crusher where it is dumped and crushed to specifications.

Approximate Tonnage Production per day - 1,700 tons.

History - Started in 1948 as an open pit quarry then went underground because of overburden to obtain a purer product.

Geology - Working the lower 29° of the Fernvale limestone and flooring on the Kimmswick limestone. Plan to take the Kimmswick at later date.

Uses of Product - (1) Mainly used for flux by the Reynolds Mining Company, Bauxite, Arkansas.

(2) Some used as an agricultural lime

June 12, 1958

Philip //. Sterling

Mr. David White
Geological Department
Alcoa Mining Co.
Bauxite, Arkansas.

Dear Dave:

Enclosed is a copy of our assay results of the
limestone core you furnished us. We have a
split of the core on file at our laboratory here
in Little Rock in case you should wish to refer
to it.

Thanks again for assisting with Dr. Chowdbury's tour.

Sincerely,

Drew F. Holbrook Geologist

DFH/mlc Encl. Mr. Drew F. Holbrook White River Limestone Project

July 21, 1958

Analysis: Cores from Drill Hole No. C-303 Alcoa Limestone Property

#### ANALYSIS

SAMPLE		DEP	TH									
NO.	FORMATION	FROM	то	THICKNESS	CaC03	MgCO <sub>3</sub>	SiO <sub>2</sub>	A1203	Fe <sub>2</sub> 0 <sub>3</sub>			
1	Lafferty	35	40	5	53.8	12.12	24.6	6.89	.83			
2	Lafferty	40	45	5	65.5	8.16	19.0	5.55	.53			
3	Lafferty	45	50	5	56.6	9.28	24.0	7.46	.74			
4	St. Clair	50	55	5	76.6	6.04	13.2	2.73	1.27			
5	St. Clair	55	60	5	84.5	3.93	9.0	1.70	1.14			
6	St. Clair	60	65	5	92.0	2.50	4.2	1.25	.55			
7	St. Clair	65	70	5	95.5	1.99	1.9	.88	.44			
8	St. Clair	70	78	8	94.8	1.93	1.6	.06	1.42			

Date completed 6/26/58

# MICROSCOPIC DESCRIPTION (10X) OF ALCOA DRILL HOLE # C-303

## (Head of Love Hollow Quarry)

Sample Int.	Description
28 - 30	Chert breccia, grey-white, with purple frag. incl. and pyrite throughout, scat. (St. Peter type) grounded and frosted sand grains, medium to coarse, with calcite filling veins, spherical green inclusions 1/2" in diameter (glau.?), decrease in sand, pyrite and glau. at 30°. (Penters-Lafferty cont. at 30°)
30 - 34	Limestone, grey-white, very sil. with scattered foss. at 32°, numerous at 33°.
34 - 35	as above with 3° of chert breccia dark grey and black, calc.
35 - 40	Limestone, grey-white, very sil.
40 - 49	Limestone, grey-tan, more calc.
49 - 50	Limestone, buff, calc., very foss. (Lafferty-St. Clair contact at 50')
50 - 54	Limestone, grey-tan, cypto, crystn.
54 - 58	Limestone, tan, crystn. with scattered foss., slightly sil.
58 - 64	Limestone, grey, crystn., matrix with scattered pink frag. and foss.
64 - 66	as above with incr. foss.
66 - 73	Limestone, tan, foss., and frag. with yellow argil. partings.
73 - 77	Limestone, grey, very fn. to fn. crysten. matrix, many foss. and frag.
77 - 78	as above with scat. foss. and frag. (St. Clair-Cason cont. 78°)
78 - 83	Shale, grey-green, and mot. with red, calc.
83 - 84	Shale, green, with many phos. nod. and trace glauc.
84 - 85	Micro. breccia chert, phos., and glauc.
85 - 86	Shale, green, grey, red. (Cason-Fernvale cont. 86°)
86 - 87	Limestone, pink and green, coarsely frag. and (?foss.)

End of Survey's portion of core

## RECORD OF MINERAL ANALYSIS

Sample No. 2059
Date 6/2/58
From: Drew F. Holbrook Report to DFH
- White River Limestone Project
Letter Accompanying: Yes No File Under
Location: County Sec. Twp. Rge. 1/11
Cores from Drill Hole No. C-303 Alcoa Limestone Property
Mineral Suspected By Sender: Chemical Limestone
Kind of Material: Infforty and St. Clair Linestones
Test Recommended For: Run complete analysis only on those samples
98% or more carbonate.

### ANALYSIS

SAMPLE NO.	FORMATION	FROM	The state of the s	THICKNESS	CaCO <sub>3</sub>	MgCO <sub>3</sub>	SiO <sub>2</sub>	1203	Fe <sub>2</sub> 0 <sub>3</sub>	(mO	P	S
1	Lafferty	35	140	1 5	53.8	12.12	24.6	6.89	. 83			
2	Lafferty	40	45	1 5	65.5	8.16	19.0	5.55	.53	44		
3	Lafferty	45	50	5	56.6	9.28	24.0	7,46	.74			
4	St. Clair	50	55		76.6	6.04	13.2	2.73	1,27	CONTRACTOR AND		
5	St. Clair	55	60	5	84.5	3,93	9.0	1.70	1.14			
6	St. Clair	660	65	5	92.0	2,50	4.2	1.25	.55			
7	St. Clair	65	70	5	95.5	1.99	1.9	. 88	,44			
8	St. Clair	70	78	S	94.8	1.93	1.6	,06	1.42			

Analysis By:

Date Completed:

Remarks: