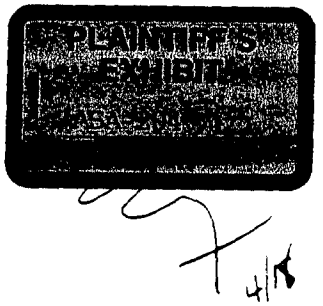
ASARCO

AMERICAN SMELTING AND REFINING COMPANY
CENTRAL RESEARCH LABORATORIES
SOUTH PLAINFIELD N J 07080

April 15, 1975
Re: 2137

Technical Call Report



Call: Capco, Birmingham, Alabama

By: H. McEvoy
J. C. Gifford
C. E. Stiefken

Date: April 7, 1975

Talked to: W. R. Bond, Chairman of the Board
A. E. Alpine, Vice President of Operations
S. D. Weaver, Director of Engineering

Because of the present labor difficulties in Canada, both Capco plants have been looking for fiber wherever they can find it. At the present rate of consumption, and using whatever fiber grades of chrysotile they have on hand, they anticipate running out around May 10.

To conserve white fiber they also have been running a very high percentage of blue in the Ragland mixes. Van Buren will receive some temporary relief in a shipment of 100 tons of 4T-30 fiber from Johns-Manville.

Bert Alpine likes Cassiar fiber, an expensive but excellent strength and filteration fiber. However it is, at the moment, in critically short supply at both the Cassiar and Clinton Creek properties. Bert also likes to work with blends of from 4 to 6 different fibers of different grades, depending on the size and class of pipe being made. He claims, and I tend to agree, that this gives better flexibility of operation by allowing him to manipulate the mix percentages more readily in the event of process difficulties. However this is dependant upon the constant availability of all fibers in the blends, since once the volume requirements of a fiber such as 4T-3 have been established it could be difficult to increase purchases at will.

Basically, the physical requirements of fiber in the process mix are high surface area combined with length and good filterability. JM satisfies its surface area and length in most plants with 4T-30 and some Cassiar plus blue for filtration. When JM had Monroe fiber available they used less or no Cassiar, but used more blue.

Capco has been told that Lake 4T alone is not the best of asbestos cement fibers, primarily because of poor filtration. Bill Bond has been looking at other fibers besides Cassiar for assistance in filtration. Blue fiber, which adds nothing to strength, but is added for filterability, is also becoming hard to get and is becoming expensive. They are checking sources of Russian P4, P5, and P6 and are talking of looking at Chinese fibers via the Philippines.

We discussed filtration assistance using the $Al_2(SO_4)_3$ process for adding alum to the asbestos cement slurries immediately before the cylinder vats. This would have to be checked on a laboratory basis at the plants.

Following discussions on the importance of particle size determinations of both cement and silica, Bert Alpine indicated that he would prefer to grind his own silica. He would require about a 2 tons per hour grinding plant using something like a Hardinge closed circuit ball mill-classifier unit.

C. E. Stiefken

CES:rg
orig: MJMessel
cc: EAFarrell ✓
RPGagnon
HMcEvoy