

Cleveland

Aux.

October 29, 1963

S. S. Coolidge, Jr.

Coffeyville Technical Progress
Weekly Report
Oct. 21 to Oct 25, 1963BARIUM CARBONATE - H₂S RECOVERY

The apparatus for counter-current precipitation of barium carbonate, which is expected to remove all the carbon dioxide from the reacting gas, leaving only nitrogen and hydrogen sulfide, is gradually nearing completion.

BARIUM CARBONATE - WET FREDIN.

No work performed this week, our efforts have been centered on lead-silico-chromate.

BARIUM CARBONATE - FILLETIZING

No work begun as yet.

LEAD-SILICO-CHROMATE

A quantity of silica-lead sulphide mix is being made up to be calcined in Chicago's small rotary calciner.

About eight pounds of finished lead-silico-chromate were sent to Mr. Gabbert for test purposes. The material analyzed:

Lead Chromate	- 23.35
Lead Sulfate	- 14.9
Lead Oxide	- 5.4
Silica	- 52.1
Zinc Oxide	- 2.3

The material was designated as CPP 2085.

BARIUM HYDRATE - REFRIGERATION

We are awaiting the receipt of a small single refrigeration leaf to be coated with Teflon. This is for the purpose of determining how effective Teflon is "in preventing frosting or icing on its surface when used to reduce the temperature of a barium hydroxide solution" thereby crystallizing the hydrate.

OZLO 12 - SOLUBLE SALTS

A quantity of plant produced Ozlo 12 will be made using the exact stoichiometric quantity of zinc sulfate and also possibly a lesser amount in attempts to lower the water soluble salts. This will be reported on when completed.

Laboratory work using the above amount of zinc sulfate resulted in an off-color, yellow product.

ZINC MOLYBDATE

The 4,000 pounds recently prepared have been shipped to Acme,etroit.

BASIC SULFATE OF WHITE LEAD

The laboratory prepared material analyses:

Lead Sulfate - 80.0%
Lead Oxide - 19.8%

Color - Better than New Jersey's
Basic Sulfate of white Lead

The process is relatively simple and is carried out in the wet at room temperature, with no calcination.

The economics of the process will be studied. Ogarik consumption for 1962-63 amounted to about 335 tons.

ZINC SULPHIDE

Several strikes of zinc sulphate and ammonium sulfide were made.

Four simultaneous strikes were made using ammonium sulphide of 30% SH and 50% SH, striking into an initial volume of water as well as into a "struck" slurry. All produced a glassy filtered and dried solid---not a pigment.

Three strikes are in the drying or aging stage. They represent material made with a 30% SH ammonium sulfide first strike and 42° Be zinc liquor; zinc sulfate first strike using 50% SH ammonium sulfide aging 24 hours; zinc sulfate first strike using weak (30°Be) zinc liquor and 50% SH ammonium sulfide and aging 48 hours.

ERH

V. A. Hornsby

cc: J. V. Hunn
T. Kirkpatrick
K. M. Wilkinson
G. F. Wynn
J. B. Becker
R. M. Kindrick