

InterOffice Memo

To: Mike Clark John Close Jon Godla
Tom Landels Steve Mauney Marsha Mellon
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From: Mike Toelle

Date: August 25, 1997

Subject: USP UPDATE

Status of USP production - Due to the development of the pillar levels; the Beaverhead Mine will produce USP ore on an ongoing basis each month until the mine is situated with an underhand level. At that time it is anticipated that the mine will be able to build the crude stockpiles so that USP crude can be campaigned during the summer months.

During the month of July, there was approximately 400 tons of USP crude produced.

During this period the following was utilized:

All crude was processed twice. The first pass was based on the following:

- 2 sorters
- screened out fines (approximately 50%)
- no water sprays
- preliminary clean-up of the sorted ore.
- material was crushed and transferred back to the crude slab.

The second pass was based on the following:

- 5 sorters
 - crude was screened again (approximately 20% fines)
 - material was washed with spray bars located at the start of the picking belt conveyor.
 - heavy picking by sorters for carbonates, dark material and pyrites
 - material was sampled every 15 minutes and composited every hour.
- Piles were quarantined every hour.



Assessment:

Even though all the samples were well within specification (0.5 to 1.0% Acid Solubles), processing was difficult due to the following:

- a) Material was difficult to sort to a coating of fines on the lumpy crude.
- b) Material was not washed properly due to lack of tumbling action and a good in process washing system.
- c) Inexperienced sorters with respect to Beaverhead crude.

Plan of Action:

- 1. Continue to utilize YST sorters to sort USP. (It would be ideal if we had personnel who have experience with Beaverhead Crude and also maintain consistency in getting the same operators each time we sort.)
- 2. Conceptualize an in-process system to enhance screening and washing ore during USP runs. Design and cost out. (Meeting set up with Terry Van Dyken and Nick Hoyrup (or alternate) on 8/25/97 at the Beaverhead Mine).
- 3. In process control for pass/fail on Acid Solubles needs to be implemented. Currently setting up to borrow LECO from GI and Microwave Asher from the YST Mine. Continuing to seek other alternatives. Continue to assess correlation between LOI and Acid Solubles.

cc: Jack Buettner