TRIPLE/S DYNAMICS
LAB REPORT
[redacted]

CUSTOMER: [redacted]

DATE: [redacted]

REPORT BY: [redacted]

Two different samples of material were supplied by [redacted], with objectives and properties different for each.

Samples returned to customer are identified by the process used to achieve the customer objectives.

Identification	Material
Stoner	Tailings (insulation) from the air separators (combined-both tables) presently disposed as waste
Fines Floater	Fine copper fraction with dust contaminant discharged from 5'x 12' double deck vibrating screen.

STONER TEST:

Material: Tailings from customer's BXW-260 Separators

Equipment Used: Model S-22G Stoner equipped with exhaust hood and with #600 deck cover

Objective: To remove the small percentage of copper present within the sample. (Some of the copper present is still jacketed material.)

Procedure: The sample was fed to the stoner at an even rate from a bin with variable rate vibrating pan feeder. Adjustments were made to air and slope settings to achieve the desired separation.

Feed rate measured at 1800 lbs/hr.

Three products were collected, these being:

	Amount	Percentage of Feed
Aspirated Dust	14.5#	6%
Plastic Tailings	221.5#	86%
Copper	20.5#	8%

The deck load which remained in the stoner after completion of test was also bagged for return to customer.

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Summary: The results proved that this process is very successful in removing residual copper from the tailings fraction. Copper which is presently being disposed of was recovered. Also, if the customer chooses to recycle the plastic in some fashion, almost all of the copper present (which in this case represents a contaminant) was removed.

FINES FLOATER TEST:

Material: Fine copper fraction from 5 x 12 Vibrating Screen, contaminated by dust.

Equipment Used: Model 22FF Fines Floater with #2000 deck cover.

Objective: To remove the plastic and fiber dust from the copper.

Procedure: The sample was fed to the Fines Floater at an even rate from a bin with variable rate vibrating pan feeder. During adjustment of air flows it was determined that several levels of copper product purity could be achieved. When settings were made to achieve a pure copper product, some very fine metallic copper dust was aspirated with the fiber fraction. Conversely, by allowing some fiber contaminant to the copper product, copper dust aspiration was minimized. For this reason, the sample was split and two separate runs were performed with different air settings.

Test Run No. 1

	Amount	Percentage of Feed
Lights (fiber and plastic)	50.5#	41%
Heavy (copper)	72.0#	59%

Test Run No. 2

Lights (fiber and plastic)	87.0#	54%
Heavy (copper)	75.5#	46%

On both test runs, feed rate was measured at 1,100 lbs/hr.

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Summary: The results demonstrated that the Fines Floater is effective in cleaning the fines generated as a product from the vibrating screen. The air setting to be made is adjustable, depending upon customer objective regarding product purity in relation with aspiration of a very small percentage of metallic dust.

Note: A portion of each sample was retained at the lab for reference purposes in discussing process with customer. Balance returned to customer.

[redacted]

cc: [redacted] Tech File