



MEMORANDUM

cc: Mr. Roelofs -BBH
Mr. Jagocki -BBH

PLAINTIFF'S EXHIBIT

BIR-393

To Mr. Jackson -BBH

From Mr. McShea -BBH

Date May 4, 1982

Subject WASTE FINES; DRESSER MINERALS; MALVERN, ARK.

On 4/28/82, I spoke with Mr. Cowart at FG to gain some background information on the above material, previously submitted to BBH for evaluation as a filler. The fines, wet ground and probably wet laid, represent nearly 25 years of tailings accumulation from Dresser Minerals's underground barite operation in Malvern (approx. 40 miles east of FG).

The operation was discontinued in the early 1970's and a retired Dresser employee, James Starks, has since assumed responsibility for looking after the pile. All records regarding grading and chemical/mineralogical nature of the fines have long disappeared at Dresser's Houston Office, but Mr. Starks recalls routine gradings of approx. 90% pass 200 mesh. Additionally Mr. Starks remembers the material to have been approx. 80% free silica, as much as 10% barite and the remainder, secondary minerals such as Pyrite.

My initial investigation reported the following grading. (Dry U.S. sieves).

% retained on	40 mesh	1.7
"	50 "	1.8
"	70 "	2.0
"	80 "	1.2
"	100 "	1.3
"	200 "	6.1
"	325 "	21.5
"	PAN	64.4

It was noted that the material retained on the coarser screens was largely composed of agglomerates and not actual large individual fragments. This prompted a wet sieve analysis yielding the following results.

Waste Fines; Dresser Minerals; Malvern, Ark. - Cont.

(avg. of two trials)

% retained on	50 mesh	0.1
"	80 "	0.1
"	100 "	0.3
"	200 "	2.8
"	325 "	18.1
"	PAN	78.6

The following additional characteristics were determined via testing of the initial sample submitted.

Moisture content (as received):	16 - 20 %
Bulk density	fluff 72.4 #/cu. ft.
	tamp 101.8 #/cu. ft.
pH	7.95

Mr. Cowart has agreed to obtain 10 gallons of composited sample from the pile for further testing. The availability is reportedly, 2 million tons, a figure that should be verified in the future.

Price information is not available at this time. However, I would suggest that the final cost to Bird will depend heavily on our ability (or inability) to utilize the material in its present state, i.e. damp and agglomerated.

The necessity of thoroughly drying and milling the material would not only result in drastically increased processing costs but would also result in the institution of extremely tight dust control measures, due to the high free silica content of the material.

TDMcS/ac