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MONTHLY PROGRESS REPORT FOR JUNE ENVIRONMENTAL EFFECTS AND CONTROLS FOR COAL-WATER SYSTEMS

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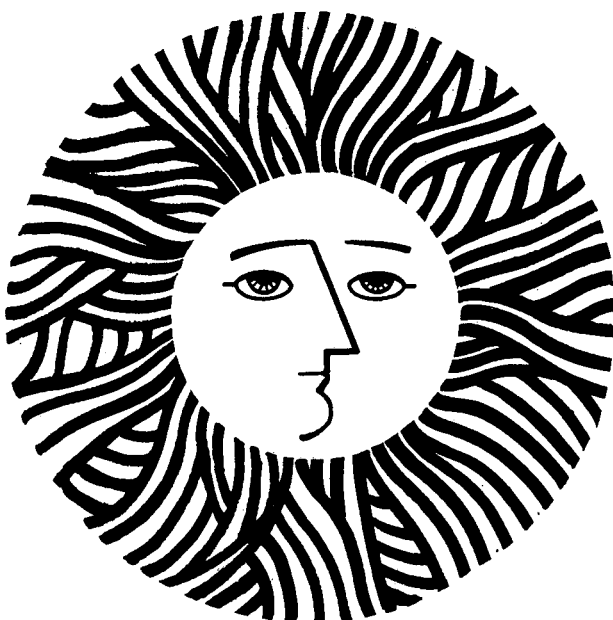


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July 27, 1981

TO: Charles Grua

FROM: Amos Newton

RE: Monthly Progress Report for June
Environmental Effects and Controls for Coal-Water Systems
LBID-424

Mohave Generating Station Waters

Through the kind offices of Mr. Dan Cobb, Engineer at the Mohave Generating Station, small samples of centrate water (water as it emerges from the centrifuges), clariflocculator overflow water and clariflocculator underflow sediment were obtained. The almost clear overflow and the black centrate were centrifuged. The overflow was clear. The black centrate water did not clarify and some fines were not removed by centrifuging 1.5 hrs at 7500 RPM. The fines in the Black Mesa Pipeline water are finer than those in the coal slurries prepared by us from the same type of coal.

We have measured total organics in the centrate and the overflow water, each after centrifugation at 7500 RPM. Two centrifuged samples of centrate (one darker than the other) showed 130 ppm and 185 ppm total organic carbon in the light and dark samples respectively. The clariflocculator overflow water centrifuged at 7500 RPM showed 10.5 ppm total organic carbon. This compares to a total organic carbon content of 18 ppm for centrifuged coal slurry water we prepared from Black Mesa coal.

Extractions of organics from these waters has been postponed owing to the difficulties with our GC/MS which has been in operation only spasmodically for the last two months. Two different parts failed at the same time. We found one (a bad cable soldering job) and corrected it but the second has been much more elusive because of its intermittent nature.

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