

OFFICE MEMORANDUM

TO : Margaret Ann Rogers, H-8
Merlin Wheeler, H-8

DATE: Oct. 29, 1973

FROM : J. Nyhan, H-8

JWN

SUBJECT : PARTIAL CHARACTERIZATION OF SOIL SAMPLE TAKEN IN DP DISPOSAL
SHAFT.

SYMBOL : H8-73-247

0878 TA-21

I have performed particle size distribution, particle density, bulk density and pH analyses on the soil sample you took in the DP disposal shaft (upper 20-25 feet).

The sample contained .24, 5.65, 43.45, 49.84, .80, and .02% of its particles in the greater than 2000-micron, 1000-2000, 500-1000, 105-500, 53-105, and less than 53 micron size fractions. Thus, this soil seems to be an extremely well-sorted material, with over 93% of its particles in the 105-1000 micron fraction.

The soil exhibited a pH of 8.25 in a 2:1 (distilled water: soil) mixture, a bulk density of 1.1 g/cm³ and a particle density of 2.3 g/cm³.

I will perform an organic matter determination on this soil as soon as we are equipped to do this analysis, as well as a cation exchange capacity determination (if you so desire).

JN:mar

MARJ

9.4% moisture content in sample
mostly qtz. (~95%) with scattered obsidian, rock fragments (latite?)
and occasional pumice grains.
all particles very angular.

[Taken from shaft which bottomed out in boulders at a depth of .28
Area T Shaft # 51

Analyzed for gross α β - sample # 584

