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ANALYSIS OF SOIL SAMPLES

Y. M. S.
Chemical
Co.

INSTRUMENTATION:

Canberra Model 8180

Detector: EG&G ORTEC 8000 Series Coaxial Ce(Li)
Model Number GLI-20215

Limit of Detection: 40 μg of natural uranium or 115 μg
natural thorium for 4000-second
counting time.

RESULTS:

All soil samples weighed in excess of 50 grams (description of sample site attached). No sample counted different than background. Based on limit of detection and sample size, the amount of material present, if any, is less than 0.8 micrograms, or 0.5 pCi uranium per gram of soil, and 0.8 micrograms, or 0.2 pCi thorium per gram of soil.

CONCLUSIONS:

1. Uranium or thorium concentrations, if present, do not constitute a personnel exposure potential.
2. Maximum uranium level of .5 pCi per gram of soil is 20 times less than the burial limit for natural uranium proposed by the Nuclear Regulatory Commission (Federal Register Vol. 46, p. 52061, October 23, 1981).
3. Maximum thorium level of .5 pCi per gram of soil is 50 times less than the burial limit for natural thorium proposed by the Nuclear Regulatory Commission (Federal Register Vol. 46, p. 52061, October 23, 1981).

L. Max Scott, Ph.D., C.H.P

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PDR FOIA
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