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Laboratory Report	No. NRC-J5402-01
Organization Requesting Data U. S. Nuclear Regulatory Commission	Date 05/17/02
Project Title Radiological Evaluation Assistance	
Contact person from Organization Requesting Data Laurie Peluso, NRC Region I	
Requesting Organization's Contract Number/Job Code J5402	

SAMPLES FOR ANALYSIS
5 - Soil Samples 3 - Well Water Samples
SAMPLE INFORMATION
NRC Shipped samples to EML 04/02/02 Samples received 04/03/02
ANAYLSIS REQUESTED

A-253

Soil analysis using gamma-ray spectroscopy, no nuclide specified. LLD of 1.0 pCi/g
Water analysis for Sr-90 with an LLD of 0.5 pCi/L

NRC requested that the samples be retained for possible re-analysis

DATA RESULTS

1. Soil analysis using gamma-ray spectroscopy (*Gamma Radioassay*):
The soil was scanned following EML Procedure GA-01-R and the only anthropogenic nuclide found was Cs-137. The results are summarized in the following table

Soil	
Sample number	Cs-137 (pCi/g) ^a
9526-0000-006	1.03 (0.06) ^b
9526-0000-016	0.84 (0.06)
9526-0000-021	0.68 (0.05)
9528-0000-008	0.65 (0.04)
9528-0000-011	0.82 (0.06)

2. Water analysis for Sr-90
The water was analyzed for Sr-90 following EML procedure RC-10. The results are summarized in the following table

Water	
Sample ID	Sr-90 (pCi/L)
NRC-HN-Screen House	0.15 (0.03)
NRC-HN-EOF	0.02 (0.03)
NRC-HN-Well B	0.12 (0.03)

Notes:

^a While it is EML's policy to use and report SI units, the results of this analysis will use the traditional unit of the Curie for reporting activity per the customer's preference or request.

^b When expressing the uncertainty, EML follows the recommendations of the Bureau International des Poids et Mesures (BIPM) and of the International Organization for the Standardization (ISO) as articulated in the "Guide to the Expression of Uncertainty in Measurement." Therefore, the uncertainty associated with these measurements is the combined standard uncertainty, i.e., 1σ.

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