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OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

Docket No. 070-00734

April 3, 2007

Mr. Robert Evans

U.S. Nuclear Regulatory Commission

Region IV: DNMS: NMLB

Suite 400

611 Ryan Plaza Drive Arlington, TX 76011

SUBJECT:

ANALYTICAL RESULTS FOR SOIL AND SWIPE SAMPLES ASSOCIATED WITH GENERAL ATOMICS IN LaJOLLA, CALIFORNIA (INSPECTION REPORT #070-00734/07-001) [RFTA NO. 06-001]

Dear Mr. Evans:

The Oak Ridge Institute for Science and Education (ORISE) received six soil samples and five swipe samples associated with General Atomics in LaJolla, California on March 7, 2007. At your request, the soil samples were analyzed by gamma spectroscopy (GS) and the swipe samples were analyzed by low background alpha and beta counting. The analytical results for the swipes were all less than the removable release criteria of 1000 dpm per swipe for alpha and beta. The alpha minimum detectable concentration (MDC) was 8.9 dpm per swipe and the beta MDC was 15 dpm per swipe. The soil sample identifications are listed in Table 1. The GS data is presented in Table 2. The pertinent procedure references are provided in the tables.

ORISE's Quality Control (QC) requirements were met for these analyses. The QC files are available for your review upon request.

My contact information is listed below. You may also contact Wade Ivey at 865.576.9184 with any questions or comments.

Sincerely,

Dale Condra, Manager

Laboratory

RDC/WPI:km

Enclosures

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TABLE 1

SAMPLE IDENTIFICATIONS AND COLLECTION DATA GENERAL ATOMICS LaJOLLA, CALIFORNIA

ORISE Sample ID	NRC Region IV Sample ID	Collection Date	Collection Time
1738S0001	Soil-NRC-1	2/28/2007	14:26
1738S0002	Soil-NRC-2	2/28/2007	14:36
1738S0003	Soil-NRC-3	3/1/2007	8:38 .
1738S0004	Soil-NRC-4	3/1/2007	11:15
1738S0005	Soil-NRC-5	11/11/2003	NDP ^a
1738S0006	Soil-NRC-6	8/12/2003	NDP
1738R0001	Swipe 18	2/28/2007	11:25
1738R0001	Swipe 19	2/28/2007	11:30
1738R0001	Swipe 20	2/28/2007	12:25
1738R0001	Swipe 21	3/1/2007	9:00
1738R0001	Swipe 22	3/1/2007	9:10

[&]quot;No data provided.

TABLE 2

CONCENTRATIONS OF SELECTED GAMMA EMITTING RADIONUCLIDES BY GAMMA SPECTROSCOPY CP1, REVISION 15 La JOLLA, CALIFORNIA GENERAL ATOMICS IN SOIL SAMPLES

ORISE	NRC Region IV		Rad	Radionuclide Concentrations (pCi/g dry weight) ^a	ons (pCi/g dry weig	ht) ^a	
Sample ID	Sample ID	Co-60	Cs-137	U-235	U-238 by Th-234	Th-228 by Pb-212	Th-232 by Ac-228
1738S0001	Soil-NRC-1	0.01 ± 0.03^{b} , $0.05 0.04$		\pm 0.03 , 0.04 0.05 \pm 0.09 , 0.14 0.96 \pm 0.55 , 0.49 0.93 \pm 0.07 , 0.04 0.97 \pm 0.15 , 0.10	0.96 ± 0.55 , 0.49	0.93 ± 0.07 , 0.04	0.97 ± 0.15 , 0.10
1738S0002	Soil-NRC-2	-0.01 ± 0.03 , 0.05 0.33	$5 0.33 \pm 0.04 , 0.03$	\pm 0.04 , 0.03 0.17 \pm 0.15 , 0.16 1.20 \pm 0.65 , 0.58 0.97 \pm 0.08 , 0.04 0.89 \pm 0.20 , 0.12	1.20 ± 0.65 , 0.58	0.97 ± 0.08 , 0.04	0.89 ± 0.20 , 0.12
1738S0003	Soil-NRC-3	0.26 ± 0.04 , 0.03 1.17	$3 1.17 \pm 0.07$, 0.02	\pm 0.07 , 0.02 0.04 \pm 0.07 , 0.12 1.11 \pm 0.43 , 0.39 0.67 \pm 0.06 , 0.03 0.70 \pm 0.12 , 0.17	1.11 ± 0.43 , 0.39	0.67 ± 0.06 , 0.03	0.70 ± 0.12 , 0.17
1738S0004	Soil-NRC-4	-0.01 ± 0.03 , 0.06 0.01		\pm 0.02 , 0.04 \pm 0.09 , 0.16 0.78 \pm 0.52 , 0.55 0.84 \pm 0.07 , 0.04 1.07 \pm 0.17 , 0.13	0.78 ± 0.52 , 0.55	0.84 ± 0.07 , 0.04	1.07 ± 0.17 , 0.13
1738S0005	Soil-NRC-5	0.04 ± 0.04 , 0.07 -0.01		\pm 0.02 , 0.03 0.04 \pm 0.10 , 0.16 1.23 \pm 0.61 , 0.59 1.57 \pm 0.11 , 0.04 1.74 \pm 0.21 , 0.11	1.23 ± 0.61 , 0.59	1.57 ± 0.11 , 0.04	1.74 ± 0.21 , 0.11
1738S0006	Soil-NRC-6	0.03 ± 0.07 , 0.12 2.46	$2 2.46 \pm 0.15$, 0.06	\pm 0.15 , 0.06 0.12 \pm 0.14 , 0.25 1.11 \pm 0.89 , 0.86 1.30 \pm 0.12 , 0.08 1.54 \pm 0.30 , 0.17	1.11 ± 0.89 , 0.86	1.30 ± 0.12 , 0.08	1.54 ± 0.30 , 0.17

^aThe MDCs are after the comma.

^dUncertainties represent the 95% confidence level, based on total propagated uncertainties.

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	NMID CLINICI Coversion con	andin a to DIC 000F	204 (Dag 00 0005)			
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 Radioactive material (RAM), in any single location, < quantities in IAEA Category 3 <p>(Table 1, RIS 2005-31; see next page); for multiple isotopes, use the Unity Rule. </p> Do not check if the Exact location of RAM is given. 						
	RAM not listed in Table 1, RIS 2005-31					
X	Information on decommissioning or terminated materials sites (all radioactivity except diffuse contamination has been removed)					
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