



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
US ARMY CHEMICAL SCHOOL
FORT MCCLELLAN, ALABAMA 36205-5020

16 JUL 1998

ATZN-CMA-HP (385-11m)

MEMORANDUM FOR U.S. Nuclear Regulatory Commission, Region 2, Nuclear Material
Licensing Section, ATTN: Orysia Bailey, 101 Marietta Street
N.W., Suite 2900, Atlanta, Georgia 30323-0199

SUBJECT: Response to NRC Request for Additional Information for License Termination,
License Number 01-02861-04, Docket Number 030-14759

1. Reference NRC Inspection Report No. 01-02861-04/98-01. Samples were taken at the hot cell and surrounding areas for analysis. The samples were sent to Thermo Nutech for analysis.
2. Analysis of the cinder block and soil showed high levels of naturally occurring radioisotopes. A copy of the Report of Analysis and the diagram of sample locations is attached.
3. The chemical School point of contact is Mr. John W. May, Health Physics Manager at (256) 848-5737.

FOR THE COMMANDANT

A handwritten signature in black ink, reading "Daniel F. Uyesugi", is positioned above the printed name.

DANIEL F. UYESUGI
Colonel, U.S. Army
Assistant Commandant

Encls

CUSTOMER
ATTENTION
ADDRESS
CITY
W.O. NO.

US Army Chemical School
John W. May
Bldg. 241-C Attn. ATZN-CMA-HP
Fort McClennan, AL 36205
98-05-139

Thermo NUtech

7021 Pan American Highway, N.E.
Albuquerque, New Mexico 87109
Phone (505) 345-3461
FAX (505) 761-5416

REPORT OF ANALYSIS

05/08/98

Cinder Block-Gamma Spectroscopy
Soil-Gamma Spectroscopy, Strontium 90

MATRIX/ANALYSIS

CUSTOMER ORDER NUMBER

SAMPLES RECEIVED

Customer Identification	Date Collected	Type of Analysis	Sample Wt. Wet/Dry(g)	pci/g (dry)	Analysis Date
SAMPLE #1 (CINDER BLOCK)	05/06/98	Gamma	956.5/936.9		05/06/98
		Cs137		<0.07	
		Co60		<0.05	
		Th232		0.94±0.39	
		Ra228		0.94±0.39	
		Ac228		0.94±0.39	
		Th228		0.78±0.27	
		Tl208		0.72±0.25	
		Ra226		1.93±0.19	
		U238		2.81±1.30	
		K40		3.08±0.83	
		U235		0.19±0.11	
SAMPLE #2 (CINDER BLOCK)	05/06/98	Gamma	604.1/598.4		05/06/98
		Cs137		<0.07	
		Co60		<0.06	
		Th232		2.50±0.46	
		Ra228		2.50±0.46	
		Ac228		2.50±0.46	
		Th228		2.46±0.41	
		Pb212		2.38±0.18	
		Bi214		2.68±1.24	
		Tl208		2.28±0.38	
		Ra226		3.62±0.30	
		Pb214		4.50±0.29	
		Bi214		3.73±0.31	
		U238		3.20±1.53	
		K40		8.12±1.28	
		U235		0.24±0.11	

The results relate only to the sample(s) tested.
This report should not be reproduced except in full.

☐ REPORTED VIA TELEPHONE
☒ FAX *7/2/98*
Mary Kamoss, Data Analyst

Kathy Burnham, Quality Assurance

REPORTED BY: *Mary Kamoss*

DATE: *07/02/98*

APPROVED BY: *Kathy Burnham* DATE: *7-2-98*

Thermo NUtech

7021 Pan American Highway, N.E.
Albuquerque, New Mexico 87109
Phone (505) 345-3461
FAX (505) 761-5416

REPORT OF ANALYSIS

05/08/98

CUSTOMER US Army Chemical School
ATTENTION John W. May
ADDRESS Bldg. 241-C Attn. ATZN-CMA-HP
CITY Fort McClennan, AL 36205
W.O. NO. 98-05-139

Cinder Block-Gamma Spectroscopy
Soil-Gamma Spectroscopy, Strontium 90

MATRIX/ANALYSIS

CUSTOMER ORDER NUMBER

SAMPLES RECEIVED

Customer Identification	Date Collected	Type of Analysis	Sample Wt. Wet/Dry(g)	pCi/g (dry)	Analysis Date
SAMPLE #3 (SOIL)	05/06/98	Sr90	578.8/532.9	<0.4	06/26/98
		Gamma			05/06/98
		Cs137		<0.10	
		Co60		<0.09	
		Th232		2.05±0.65	
		Ra228		2.05±0.65	
		Ac228		2.05±0.65	
		Th228		1.92±0.46	
		Pb212		1.79±0.11	
		Tl208		1.78±0.43	
		Ra226		1.41±0.28	
		Pb214		1.76±0.30	
		Bi214		1.45±0.29	
		U238		<2.97	
		K40		16.8±2.51	
U235		<0.22			
SAMPLE #4 (SOIL)	05/06/98	Sr90	802.6/761.2	<2.4	06/26/98
SAMPLE #5 (SOIL)	05/06/98	Sr90	790.7/790.5	<0.4	06/26/98
SAMPLE #6 (SOIL)	05/06/98	Sr90	852.7/846.6	<0.4	06/26/98

The results relate only to the sample(s) tested.
This report should not be reproduced except in full.

☐ REPORTED VIA TELEPHONE
Mary Kamoss, Data Analyst

Kathy Burnham, Quality Assurance

REPORTED BY:

DATE

07/02/98

APPROVED BY:

Kathy Burnham

DATE

7-2-98

CUSTOMER US Army Chemical School
ATTENTION John W. May
ADDRESS Bldg. 241-C Attn. ATZN-CMA-HP
CITY Fort McClennan, AL 36205
W.O. NO. 98-05-139

Thermo NUtech

7021 Pan American Highway, N.E.
Albuquerque, New Mexico 87109
Phone (505) 345-3461
FAX (505) 761-5416

REPORT OF ANALYSIS

05/08/98

Cinder Block-Gamma Spectroscopy
Soil-Gamma Spectroscopy, Strontium 90

MATRIX/ANALYSIS

CUSTOMER ORDER NUMBER

SAMPLES RECEIVED

Customer Identification	Date Collected	Type of Analysis	Sample Wt. Wet/Dry(g)	pCi/g (dry)	Analysis Date
SAMPLE #7 (SOIL)	05/06/98	Gamma	1515.4/1493.8		05/06/98
		Cs137		<0.07	
		Co60		<0.06	
		Th232		0.99±0.35	
		Ra228		0.99±0.35	
		Ac228		0.99±0.35	
		Th228		1.08±0.31	
		Pb212		0.70±0.12	
		Tl208		1.00±0.29	
		Ra226		0.83±0.23	
		Pb214		1.17±0.21	
		Bi214		0.86±0.24	
		U238		<0.99	
		K40		4.51±1.02	
		U235		<0.16	

The results relate only to the sample(s) tested.
This report should not be reproduced except in full.

☐ REPORTED VIA TELEPHONE
Mary Kamoss, Data Analyst

☒ FAX

Kathy Burnham, Quality Assurance

REPORTED BY

DATE

APPROVED BY:

DATE

7-2-98

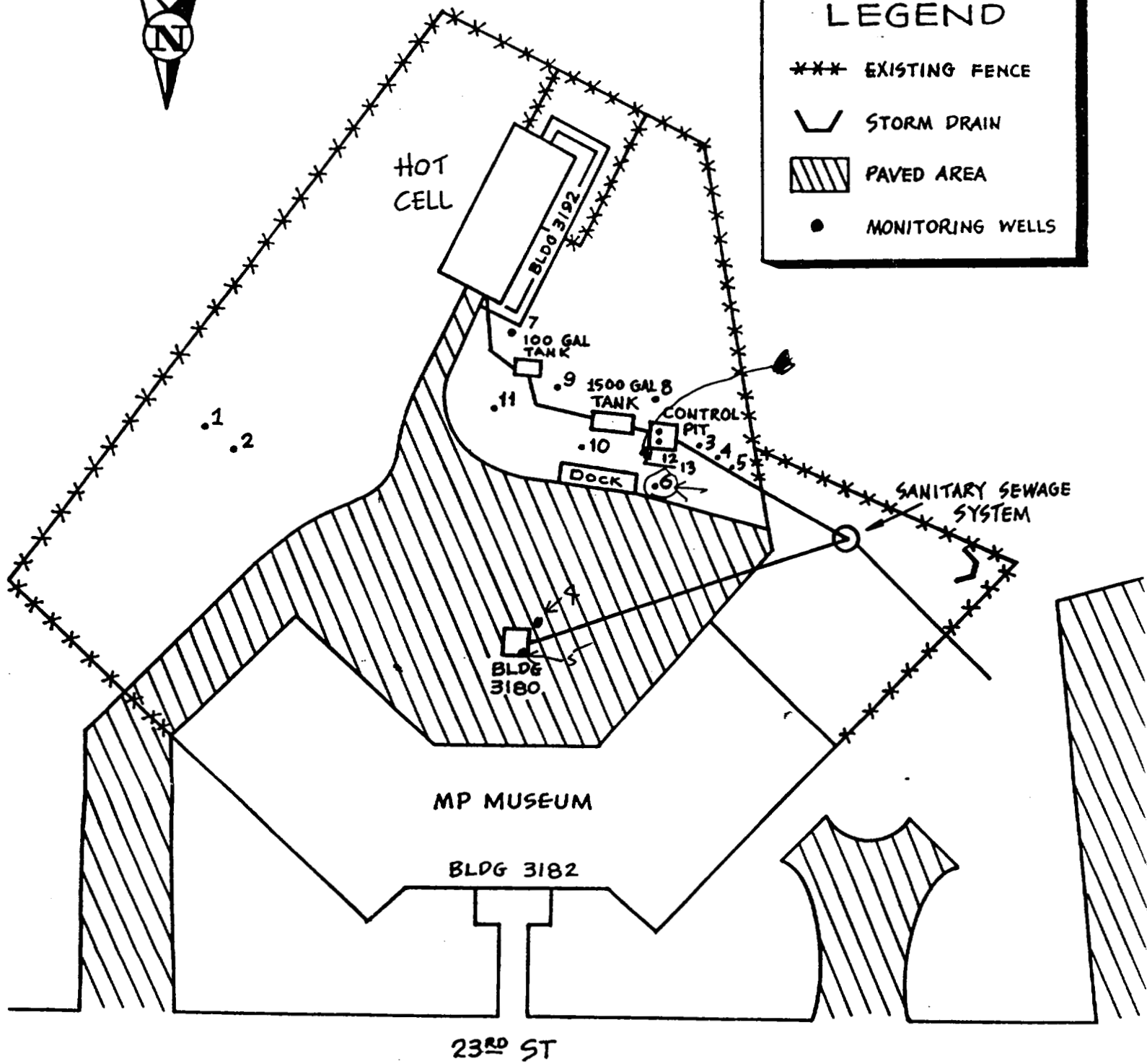
Samples collected from Fort McClellan and Pelham Range for radiological analysis.

<u>Sample #</u>	<u>Location</u>	<u>Requested Analysis</u>
1	Concrete cinder block from Building 3192 Classroom, west wall, 1 st block from corner top row.	Full gamma spectrum
2	Concrete cinder block from Building 3192 classroom North wall, 1 st block from corner, 6 th row from floor	Full gamma spectrum
3	Soil from Building 3192, inside foyer, edge of concrete, 24" deep.	Full gamma spectrum and Sr-90
4	Soil, southwest corner of Building 3180, outside, 36" deep.	Sr-90
5	Soil, inside northwest corner of Building 3180 36" deep.	Sr-90
6	Soil from south bank of ditch along concrete apron, Between control pit and apron. 40" deep @ 45° angle.	Sr-90
7	Soil from north bank of Cane Creek, Pelham Range, Coordinates FN91883144, on 1:25000 map of Pelham Range, Calhoun County, AL.	Full gamma spectrum



LEGEND

- *** EXISTING FENCE
- ∩ STORM DRAIN
- ▨ PAVED AREA
- MONITORING WELLS



HOT CELL BLDG 3192

