



DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY FIELD SUPPORT COMMAND
1 ROCK ISLAND ARSENAL
ROCK ISLAND, IL 61299-6500

REPLY TO
ATTENTION OF:

January 13, 2005

Safety/Rad Waste Directorate

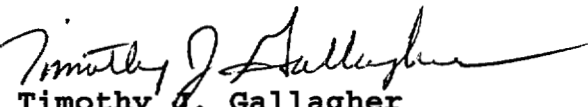
Mr. James Cameron
Nuclear Regulatory Commission
Region III
Decommissioning Branch
2443 Warrenville Road
Lisle, Illinois 60532-4352

Dear Mr. Cameron:

In accordance with Nuclear Regulatory Commission license number SUC-1380, we are providing water sample results from Lake City Army Ammunition Plant, Independence, Missouri. We took the samples on November 3, 2004. The U.S. Army Center for Health Promotion and Preventive Medicine analyzed the samples for uranium. None of the samples exceeded the limits set by Title 10, Code of Federal Regulations, part 20, appendix B.

The point of contact is Mr. Gary Buckrop, AMSFS-SF,
(309) 782-2969/0338/0880, electronic mail address
afsc-ofc-sf@afsc.army.mil.

Sincerely,


Timothy J. Gallagher
Acting Director, Safety/Rad
Waste Directorate

Enclosure

JAN 19 2005

U.S. Army Center for Health Promotion
and Preventive Medicine

17 DEC 2004

FINAL REPORT

DIRECTORATE OF LABORATORY SCIENCES (DLS)

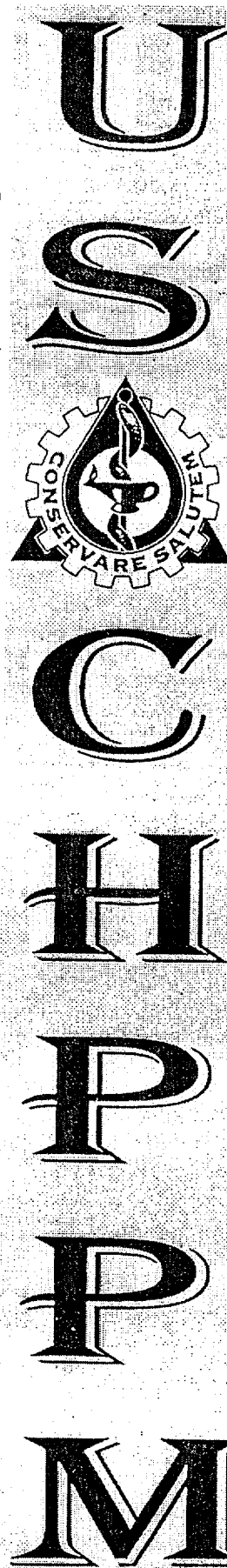
PROGRAM 79 - SUBJONO: 1236

REPORT SERIAL NO. 209012

DLS PROFILE #: 28831 - WORK ORDER #: 14363

LAKE CITY AAP

16-Dec-04



Readiness Thru Health



REPLY TO
ATTENTION OF

MCHB-TS-LRD (40-5F)

DEPARTMENT OF THE ARMY
U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
5158 BLACKHAWK ROAD
ABERDEEN PROVING GROUND, MARYLAND 21010-5403

DIRECTORATE OF LABORATORY SCIENCES (DLS)
RADIOLOGIC, CLASSIC & CLINICAL CHEMISTRY DIVISION
FINAL REPORT
16-Dec-04

CLIENT: Gary Buckrop
U.S. Army Operations Sup Cmd
1 Rock Island Arsenal

Rock Island IL 612996000
DSN: 793-2969/0338

PROJECT SITE: LAKE CITY AAP
PROGRAM 79 SUBJONO: 1236
DLS PROFILE #: 28831 DLS WORK ORDER #: 14363
REPORT SERIAL NUMBER: 209012

This report shall not be reproduced except in full without the written approval of DLS. The results relate only to the specific samples identified within the report.

REPORT RELEASE AUTHORIZATION:

Signature: 
Chief, RCCC

Date: 16 Dec 04



DLS HOLDS ACCREDITATION FROM AIHA, A2LA, NLLAP, AND COLA

Readiness thru Health

DLS Final Analytical Report, LAKE CITY AAP**Program 79, SUBJONO 1236, DLS WO# 14363, Report Serial No. 209012, 12/16/2004****CASE NARRATIVE**

1. Provided are the results of seven water samples from Lake City Army Ammunition Plant for uranium analysis. The samples were collected on 03 November 04 and were received in DLS on 08 November 04 in good condition. The sample was shipped on 09 November 04 and received in contract laboratory General Engineering Laboratories (GEL) on 10 November 04 in good condition.

2. Sample Preparation: The samples were analyzed under contract by General Engineering Laboratories (GEL). The samples were digested for uranium by ASTM D 5174 , (Total Uranium in Environmental Samples by Kinetic Phosphorescence) on 17 Nov 04. There is no separate preparation holding time requirement.

3. Sample Analysis:

a. The samples were analyzed under contract by General Engineering Laboratories (GEL). The samples were analyzed for uranium by ASTM D 5174 , (Total Uranium in Environmental Samples by Kinetic Phosphorescence) on 17 Nov 04. All required holding times were met.

b. The uranium results are in units of microgram per liter (ug/L).

4. Quality Control: All internal contractor quality control was within contractor's specifications.

5. For additional information on this report, please contact the laboratory at (410) 436-3983.

List of the report contents:

| Section | Number of Pages |
|-----------------------------|-----------------|
| Cover Sheet | 1 |
| Cover Letter | 1 |
| Case Narrative | 1 |
| Sample Summary | 1 |
| Analytical Data Report | 2 |
| Quality Control Data Report | |
| Raw Data | |
| Terminology/Abbreviations | 1 |

Report Point-of-Contact: Thomas Beegle *TEB*
Reviewer: TEB/RJS

List of all tests used:

| DLS Procedure | Count |
|---------------|-------|
| ASTM D 5174 | 7 |

Number of samples included in the report, by matrix:

| Matrix | Quantity |
|----------------------|----------|
| Water (Ground water) | 7 |

Analyst(s):

| Analyst Code | Analyst Name | Signature |
|--------------|--------------|------------|
| 0172 | GEL | <i>GEL</i> |

DLS Final Analytical Report, LAKE CITY AAP

Program 79, SUBJONO 1236, DLS WO# 14363, Report Serial No. 209012, 12/16/2004

SAMPLE SUMMARY

Sorted by DLS ID

| Field ID | DLS ID | Date Collected | Matrix |
|----------------|----------|----------------|----------------------|
| LC-2 (bldg 5) | 14363001 | 03-Nov-04 | Water (Ground water) |
| LC-3 (#10-5) | 14363002 | 03-Nov-04 | Water (Ground water) |
| LC-4 (area 10) | 14363003 | 03-Nov-04 | Water (Ground water) |
| LC-1 (#10-4) | 14363004 | 03-Nov-04 | Water (Ground water) |
| LC-5 (#10-2) | 14363005 | 03-Nov-04 | Water (Ground water) |
| LC-6 (#10-3) | 14363006 | 03-Nov-04 | Water (Ground water) |
| LC-5 (#27-5) | 14363007 | 03-Nov-04 | Water (Ground water) |

ANALYTICAL DATA REPORT

(FORMAT OPTION 1)

Sorted by DLS ID

FINAL REPORT

Field ID: LC-2 (bldg 5)

DLS ID: 14363001

| ANALYTE | RESULT/UNITS | METHOD REPORTING LIMIT | ANALYTICAL METHOD | ANALYST | DATE ANALYZED |
|---------|--------------|---------------------------|----------------------|---------|---------------|
| Uranium | 0.182 ug/L | 0.233 | ASTM D 5174 | 0172 | 17-Nov-04 |

Field ID: LC-3 (#10-5)

DLS ID: 14363002

| ANALYTE | RESULT/UNITS | METHOD REPORTING LIMIT | ANALYTICAL METHOD | ANALYST | DATE ANALYZED |
|---------|--------------|---------------------------|----------------------|---------|---------------|
| Uranium | 0 ug/L | 0.233 | ASTM D 5174 | 0172 | 17-Nov-04 |

Field ID: LC-4 (area 10)

DLS ID: 14363003

| ANALYTE | RESULT/UNITS | METHOD REPORTING LIMIT | ANALYTICAL METHOD | ANALYST | DATE ANALYZED |
|---------|--------------|---------------------------|----------------------|---------|---------------|
| Uranium | 0.201 ug/L | 0.233 | ASTM D 5174 | 0172 | 17-Nov-04 |

Field ID: LC-1 (#10-4)

DLS ID: 14363004

| ANALYTE | RESULT/UNITS | METHOD REPORTING LIMIT | ANALYTICAL METHOD | ANALYST | DATE ANALYZED |
|---------|--------------|---------------------------|----------------------|---------|---------------|
| Uranium | 1.56 ug/L | 0.233 | ASTM D 5174 | 0172 | 17-Nov-04 |

Field ID: LC-5 (#10-2)

DLS ID: 14363005

| ANALYTE | RESULT/UNITS | METHOD REPORTING LIMIT | ANALYTICAL METHOD | ANALYST | DATE ANALYZED |
|---------|--------------|---------------------------|----------------------|---------|---------------|
| Uranium | 0 ug/L | 0.233 | ASTM D 5174 | 0172 | 17-Nov-04 |

Field ID: LC-6 (#10-3)

DLS ID: 14363006

| ANALYTE | RESULT/UNITS | METHOD REPORTING LIMIT | ANALYTICAL METHOD | ANALYST | DATE ANALYZED |
|---------|--------------|---------------------------|----------------------|---------|---------------|
| Uranium | 0.0740 ug/L | 0.233 | ASTM D 5174 | 0172 | 17-Nov-04 |

FINAL REPORT

Field ID: LC-5 (#27-5)

DLS ID: 14363007

| ANALYTE | RESULT/UNITS | METHOD REPORTING LIMIT | ANALYTICAL METHOD | ANALYST | DATE ANALYZED |
|---------|--------------|---------------------------|----------------------|---------|---------------|
| Uranium | 1.46 ug/L | 0.233 | ASTM D 5174 | 0172 | 17-Nov-04 |

TERMINOLOGY/ABBREVIATIONS

| Term | Description |
|----------|--|
| ASTM | American Society for Testing and Materials |
| A2LA | American Association for Laboratory Accreditation |
| CFR | Code of Federal Regulations |
| OSHA | Occupational Safety and Health Administration |
| NIOSH | National Institute of Occupational Safety and Health |
| ACCURACY | A measure of how close a measured value is to a known true value. Accuracy is assessed by means of reference samples and percent recoveries of spiked samples. |



DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY FIELD SUPPORT COMMAND
1 ROCK ISLAND ARSENAL
ROCK ISLAND, IL 61299-6500

REPLY TO
ATTENTION OF:

AMSFS-SF

3 November 2004

MEMORANDUM FOR US Army Center for Health Promotion and Preventive Medicine (MCHB-TS-LLC/Mr. Morrow), 5158 Black Hawk Road, Aberdeen Proving Ground, MD 21010-5403

SUBJECT: Water Samples from Lake City Army Ammunition Plant (AAP)

1. We are forwarding water samples for analysis. The samples are from seven locations on Lake City AAP, Independence, MO. The locations sampled are (see enclosed map):

- a. LC-1 is from well number 10-4.
- b. LC-2 is drinking water from building 5.
- c. LC-3 is from well number 10-5.
- d. LC-4 is from the pond near the area 10 sandpile.
- e. LC-5 is from well number 10-2.
- f. LC-6 is from well number 10-3.
- g. LC-5 is from well number 27-5.

2. We used the sampling kit that the US Army Center for Health Promotion and Preventive Medicine (CHPPM) provided to collect and preserve (nitric acid) the samples on 3 November 2003.

3. Please analyze the water samples for the presence of uranium (U238) and provide written results to us so that we can forward them to the Nuclear Regulatory Commission.

AMSFS-SF

SUBJECT: Water Samples from Lake City Army Ammunition Plant
(AAP)

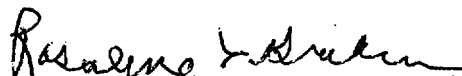
4. Lake City AAP personnel will use the FedEx airbill form that came with the sampling kit to ship the water samples to your laboratory. The following address and phone number were on the FedEx form:

USACHPPM
Building E2100
5158 Black Hawk Road, Bldg E 2100
Aberdeen Proving Ground, MD 21010-5403

Commercial telephone is (410) 436-7154 or 2208.

5. The POC is Mr. Gary Buckrop, AMSFS-SF, DSN 793-2969 or (309) 782-2969, E-mail afsc-ofc-sf@afsc.army.mil.

SIGNED



ROSALENE E. GRAHAM
Director, Safety/Rad Waste
Directorate

Encl

