



WESTON SOLUTIONS, INC.
205 CAMPUS DRIVE
EDISON, NEW JERSEY 08837
732-417-5800 • FAX: 732-417-5801

The Trusted Integrator for Sustainable Solutions

May 21, 2014

Mr. Andrew Fessler, Work Assignment Manager
U.S. Environmental Protection Agency
290 Broadway - 18th Floor
New York, NY 10007-1866

Document Control No.: 2222-2A-BLXP

**Subject: Sampling Trip Report – Sediment Sampling
Work Assignment No. 2222, Canadian Radium & Uranium Corp. Site
Reassessment
Contract No.: EP-S5-06-04, TDD No.: S05-0013-1307-009**

Dear Mr. Fessler:

Weston Solutions, Inc. (WESTON®) is pleased to submit the Sampling Trip Report for the sediment sampling associated with the Canadian Radium & Uranium Corp. Site. WESTON personnel collected sediment samples from locations along the surface water pathway on May 15, 2014. If you have any questions, please contact me at (732) 417-5814.

Very truly yours,

WESTON SOLUTIONS, INC.

A handwritten signature in black ink that reads "Denise Breen". The signature is written in a cursive style.

Denise Breen
Assistant Project Scientist

enclosure

cc:

C. Romano, EPA (w/o enclosure)
G. Gilliland, WESTON (w/o enclosure)
Site file

SAMPLING TRIP REPORT – SEDIMENT SAMPLING

SITE NAME: Canadian Radium & Uranium Corp. (CRU)
DCN: 2222-2A-BLXP
W.O.: 20405.012.013.2222.00
CLP Case No.: Not applicable

EPA I.D. NO.: N/A

SAMPLING DATES: May 15, 2014

1. Site Location: Refer to Figure 1
2. Site Map: Refer to Figure 2
2. Sample Locations: Refer to Figure 3
4. Laboratories Receiving Samples:

Analyses

Name and Address of Laboratory

Isotopic Uranium (IsoU), Isotopic Thorium (IsoTh), Radium-226, Radium-228 by alpha spectroscopy, radioisotopes by gamma spectroscopy, Target Analyte List (TAL) Inorganics (including mercury)

TestAmerica Inc.
13715 Rider North Trail
Earth City, MO 63045

Stable isotopic lead

Materials and Chemistry Laboratory, Inc.
2010 Tennessee 58 Scenic
Oak Ridge, TN 37830

5. Sample Dispatch Data:

- Six sediment samples and one aqueous rinsate blank for IsoU, IsoTh, Radium-226, and Radium-228 by alpha spectroscopy, and radioisotopes by gamma spectroscopy, TAL Inorganics (including mercury) analysis, and stable isotopic lead were collected on 5/15/2014 and shipped to the TestAmerica laboratory on 5/15/2014 under Federal Express Airbill No. 803786477258.

6. Sampling Personnel:

Name	Organization	Site Duties
Denise Breen	WESTON	Field Team Leader, Sample Management Officer (SMO), Sampler, Site Health and Safety Coordinator (SHSC)
Jeffrey Lynes	WESTON	Sampler, Global Positioning System (GPS) Data Collection

7. Additional Comments:

On May 15, 2014, WESTON personnel collected sediment samples as part of the Site Reassessment sampling event for the CRU site. A total of six sediment samples (including one environmental duplicate sample) were collected from five locations along the surface water pathway of the CRU site.

Sediment samples were collected from depositional locations using hand augers. The sediment was homogenized in dedicated, disposable aluminum trays with disposable polyethylene scoops prior to insertion into the sample containers. Potential release samples were collected near the outfall (i.e., at the probable point of entry [PPE]), downstream of the outfall within the perennial drainage ditch, and from Kisco River Tributary 8 at the confluence with the perennial drainage ditch. One background location was collected upstream from the PPE and another background location was collected from the tributary upstream of the confluence with the perennial drainage ditch. One sediment sample was designated as a matrix spike/matrix spike duplicate (MS/MSD) sample for quality assurance/quality control (QA/QC) purposes. One rinsate blank was collected to demonstrate adequate decontamination of non-dedicated sampling equipment (i.e., hand auger bucket).

The sediment samples were designated to be analyzed by TestAmerica laboratory for TAL metals analysis; IsoTh, IsoU, Radium-226, and Radium-228 by alpha spectroscopy; and radioisotopes by gamma spectroscopy. The sediment samples were also designated to be analyzed by Materials and Chemistry Laboratory, Inc. (MCL) for stable isotopic lead analysis.

WESTON logged sediment sample locations electronically using GPS equipment and performed post-processing differential correction of the GPS data in accordance with EPA Region 2 GPS Standard Operating Procedures. The processed GPS data for all samples has been transferred to the Sample Location Map (Figure 3) using Geographic Information Systems (GIS).

All samples were collected from locations associated with the former CRU site under the Region V Superfund Technical Assessment and Response Team III (START III) contract. All samples were shipped via Federal Express to the TestAmerica laboratory for analysis; the samples designated for stable isotopic lead analysis were then forwarded by TestAmerica to MCL for

analysis. The Chain-of-Custody Records and Federal Express Airbill are presented in Attachment 1.

8. Report Prepared by:  Date: 5/21/2014
Denise Breen

9. Report Approved by:  Date: 5/21/2014
Gerald V. Gilliland, P.G.

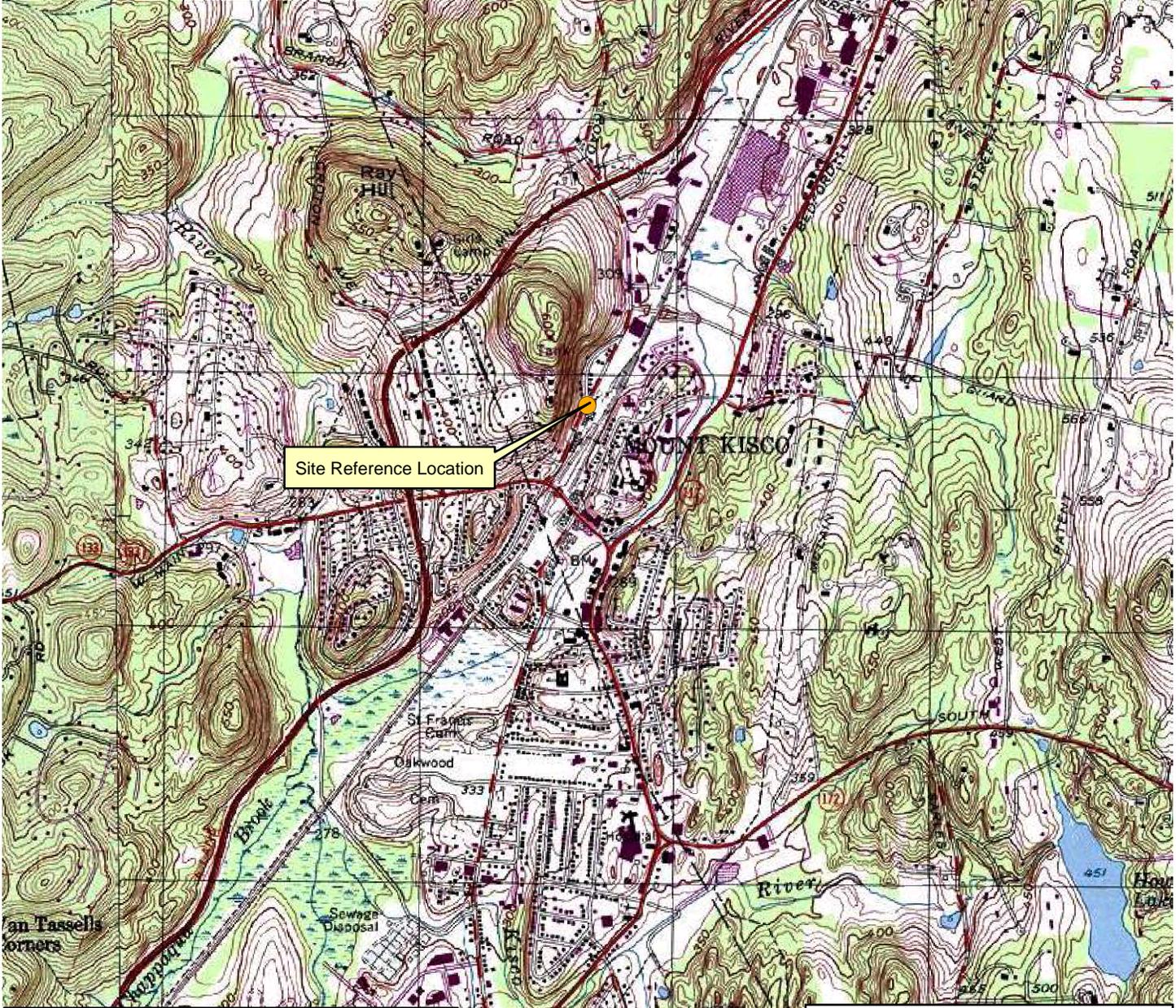
TABLE 1
SAMPLE DESCRIPTIONS – SEDIMENT SAMPLING
CANADIAN RADIUM & URANIUM CORP.
THE VILLAGE OF MOUNT KISCO, NEW YORK

Sample No.	Date	Time	Comments
2222-SD01 (MS/MSD)	5/15/2014	08:25	Sediment sample collected from SD01 located in Tributary 8 downstream of the Probable Point of Entry (PPE). Depth: 0–6 inches. Matrix Spike/Matric Spike Duplicate (MS/MSD) for Quality Assurance/Quality Control (QA/QC) purposes.
2222-SD02	5/15/2014	09:45	Sediment sample collected from SD02, located within Tributary 8 upstream of SD02. Depth: 0–6 inches.
2222-SD03	5/15/2014	08:50	Sediment sample collected from SD03, located in the perennial drainage ditch downstream of the PPE. Depth: 0–6 inches.
2222-SD04	5/15/2014	09:05	Sediment sample collected from SD04, located at the PPE. Depth: 0–6 inches.
2222-SD05	5/15/2014	09:15	Sediment sample collected from SD05, located in the drainage ditch upstream of the PPE. Depth: 0–6 inches.
2222-SD06	5/15/2014	08:45	Duplicate of 2222-SD03.
2222-RIN01	5/15/2014	08:10	Rinsate blank sample collected from the decontaminated hand auger bucket.

FIGURE 1 – SITE LOCATION MAP

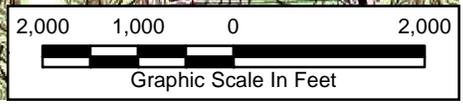
FIGURE 2 – SITE MAP

FIGURE 3 – SAMPLE LOCATION MAP



Site Reference Location

Sources:
1. National Geographic TOPO! U.S. Geologic Survey (USGS). 7.5 Minute Series (Topographic) Quadrangles: Croten Falls, NY, 1981; Mohegan Lake, NY, 1991; Mount Kisco, NY, 2000; and Ossining, NY, 1979.



LEGEND:
● Site Reference Location

PROJECT:
Canadian Radium & Uranium Corp.

CLIENT NAME:
EPA

TITLE:
Facility Location Map
Canadian Radium & Uranium Corp.
105 Kisco Avenue
Mount Kisco, NY 10549



DATE:
May 2014

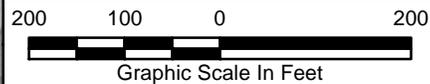
FIGURE #:
1

P:\SAT\2013 NY RAD Sites\Canadian_Radium_Uranium\WDX\15111_CRU_TR2_Site.mxd



Approximate Footprint of the Former Canadian Radium & Uranium Corp. Property

- Sources:
1. NYS Division of Homeland Security and Emergency Services - Office of Cyber Security. Niagara County 12 Inch Ortho (4bd). <http://www.orthos.dhSES.ny.gov/?id=974130>. November 2011.
 2. NYS Division of Homeland Security and Emergency Services - Office of Cyber Security. Erie County 12 Inch Ortho (4bd). <http://www.orthos.dhSES.ny.gov/?id=974130>. November 2011.



LEGEND:

 Approximate Footprint of the Former Canadian Radium & Uranium Corp. Property

TITLE:

Site Map
Canadian Radium & Uranium Corp.
105 Kisco Avenue
Mount Kisco, NY 10549

PROJECT:

Canadian Radium & Uranium Corp.

CLIENT NAME:

EPA

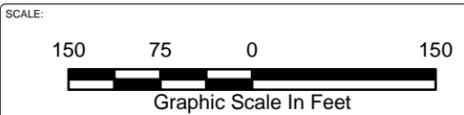


DATE:

May 2014

FIGURE #:

2



PROJECT:
Canadian Radium & Uranium Corp.

CLIENT NAME:
EPA

TITLE:
Sediment Sample Location Map
 Canadian Radium & Uranium Corp.
 103/105 Kisco Avenue
 Mount Kisco, NY 10549

WESTON SOLUTIONS

DRAWING NUMBER:
15083

FIGURE #:
3

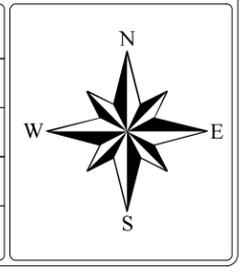
DRAWN BY:
J. Lynes

REVIEWED BY:
D. Breen

PROJECT MANAGER:
D. Breen

SCALE:
1" = 150'

DATE:
May 2014



ATTACHMENT 1
CHAIN OF CUSTODY RECORDS and AIRBILL

USEPA CLP COC (LAB COPY)

CHAIN OF CUSTODY RECORD

No: 2-051514-121625-0003

DateShipped: 05/15/14

Lab: TestAmerica Inc.

CarrierName: FedEx

Case #:

Lab Contact: Erika Gish

AirbillNo: 803786477258

Cooler #: 1

Lab Phone: 314-298-8566

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
2222- SD01		Sediment/ Weston	Grab	Stable Isotopic Lead, TAL Metals + Hg, Radioisotopes by gamma spec, Iso Th and Iso U by alpha spec	A (4 C), B (4 C), C (4 C), D (4 C) (4)	SD01	05/15/2014 08:25	
2222-SD02		Sediment/ Weston	Grab	Stable Isotopic Lead, TAL Metals + Hg, Radioisotopes by gamma spec, Iso Th and Iso U by alpha spec	A (4 C), B (4 C), C (4 C), D (4 C) (4)	SD02	05/15/2014 09:45	
2222-SD03		Sediment/ Weston	Grab	Stable Isotopic Lead, TAL Metals + Hg, Radioisotopes by gamma spec, Iso Th and Iso U by alpha spec	A (4 C), B (4 C), C (4 C), D (4 C) (4)	SD03	05/15/2014 08:50	
2222-SD04		Sediment/ Weston	Grab	Stable Isotopic Lead, TAL Metals + Hg, Radioisotopes by gamma spec, Iso Th and Iso U by alpha spec	A (4 C), B (4 C), C (4 C), D (4 C) (4)	SD04	05/15/2014 09:05	

Sample(s) to be used for Lab QC: 2222- SD01 Tag A, 2222- SD01 Tag B, 2222- SD01 Tag C, 2222- SD01 Tag D - Special Instructions: 10-day TAT Sample 2222-SD01 MS/MSD	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #

Analysis Key

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Sampling	Denise Brown (Weston)	5/15/14 13:00	FedEx		

USEPA CLP COC (LAB COPY)

DateShipped: 05/15/14
 CarrierName: FedEx
 AirbillNo: 803786477258

CHAIN OF CUSTODY RECORD

Case #:
 Cooler #: 1

No: 2-051514-121625-0003

Lab: TestAmerica Inc.
 Lab Contact: Erika Gish
 Lab Phone: 314-298-8566

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
2222-SD05		Sediment/ Weston	Grab	Stable Isotopic Lead, TAL Metals + Hg, Radioisotopes by gamma spec, Iso Th and Iso U by alpha spec	A (4 C), B (4 C), C (4 C), D (4 C) (4)	SD05	05/15/2014 09:15	
2222-SD06		Sediment/ Weston	Grab	Stable Isotopic Lead, TAL Metals + Hg, Radioisotopes by gamma spec, Iso Th and Iso U by alpha spec	A (4 C), B (4 C), C (4 C), D (4 C) (4)	SD06	05/15/2014 08:45	

Special Instructions: 10-day TAT Sample 2222-SD01 MS/MSD	Shipment for Case Complete? N
	Samples Transferred From Chain of Custody #
Analysis Key	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Sampling	Denise Green (Weston)	5/15/14 13:00	FedEx		



NEW Package
US Airbill

FedEx Tracking Number **8037 8647 7258**

1 From P. *print and press hard.*
 Date **5/15/2014** Sender's FedEx Account Number **SENDER'S FEDEX ACCOUNT NUMBER ONLY**

Sender's Name **Denise Breen** Phone **(732) 417-5814**

Company **Weston Solutions, Inc.**

Address **205 Campus Drive** Dept./Floor/Suite/Room _____

City **Edison** State **NJ** ZIP **08837**

2 Your Internal Billing Reference First 24 characters will appear on invoice. **OPTIONAL**

3 To Recipient's Name **Erika Gish** Phone **(314) 298-8566**

Company **TestAmerica, Inc.**

Address **13715 Rider North Trail** FedEx location address REQUIRED. NOT available for FedEx First Overnight. **HOLD Weekday**
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room _____ **HOLD Saturday**
Use this line for the HOLD location address or for continuation of your shipping address. **Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.**

City **Earth City** State **MO** ZIP **63045**

Easy new Peel-and-Stick airbill. No pouch needed.
 Apply airbill directly to your package. See directions on back.

Form ID No. **0200**

Sender's Copy

4 Express Package Service * To most locations.
 NOTE: Service order has changed. Please select carefully. **Packages up to 150 lbs.**
 For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

FedEx First Overnight
 Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Priority Overnight
 Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Standard Overnight
 Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

FedEx 2Day A.M.
 Second business morning.* Saturday Delivery NOT available.

FedEx 2Day
 Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Express Saver
 Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit \$500.

FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery
 NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required
 Package may be left without obtaining a signature for delivery.

Direct Signature
 Someone at recipient's address may sign for delivery. Fee applies.

Indirect Signature
 If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?
 One box must be checked.

No **Yes** As per attached Shipper's Declaration. **Yes** Shipper's Declaration not required. **Dry Ice** Dry Ice, 9 UN 1845 _____ x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. **Cargo Aircraft Only**

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

Sender Acct. No. in Section 1 will be billed. **Recipient** **Third Party** **Credit Card** **Cash/Check**

FedEx Acct. No. _____ Exp. Date _____
 Credit Card No. _____

Total Packages **2** Total Weight _____ lbs. Total Declared Value* \$ _____ .00

*Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

644

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.