

December 4, 2009

David Sullivan  
TRC Solutions - Lowell  
650 Suffolk Street  
Lowell, MA 01852

Project Location: City Of NB (Walsh)  
Client Job Number:  
Project Number: 115058  
Laboratory Work Order Number: 09L0099

Enclosed are results of analyses for samples received by the laboratory on December 2, 2009. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley  
Project Manager

TRC Solutions - Lowell  
650 Suffolk Street  
Lowell, MA 01852  
ATTN: David Sullivan

REPORT DATE: 12/4/2009

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 115058

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 09L0099

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: City Of NB (Walsh)

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Stone-1	09L0099-01	Soil		SM 2540G SM2580 A SW-846 6010B SW-846 7196A SW-846 9045D	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 6010, only chromium requested and reported.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "M. Erickson", written in a cursive style.

Michael A. Erickson  
Laboratory Director

Project Location: City Of NB (Walsh)

Sample Description:

Work Order: 09L0099

Date Received: 12/2/2009

Sampled: 12/2/2009 13:30

Field Sample #: Stone-1

Sample ID: 09L0099-01

Sample Matrix: Soil

**Metals Analyses (Total)**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Chromium	76	0.53	mg/Kg dry	1		SW-846 6010B	12/3/09	12/4/09 10:18	KSH

Project Location: City Of NB (Walsh)

Sample Description:

Work Order: 09L0099

Date Received: 12/2/2009

Sampled: 12/2/2009 13:30

Field Sample #: Stone-1

Sample ID: 09L0099-01

Sample Matrix: Soil

**Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total)**

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.17	mg/Kg dry	1		SW-846 7196A	12/4/09	12/4/09 12:40	AED
Oxidation/Reduction Potential	73		mV	1		SM2580 A	12/3/09	12/3/09 9:10	LL
pH @20.6°C	9.2		pH Units	1		SW-846 9045D	12/3/09	12/3/09 9:05	LL
% Solids	93.4		% Wt	1		SM 2540G	12/3/09	12/3/09 14:53	FWD

**Sample Extraction Data**

**Prep Method: % Solids-SM 2540G**

Lab Number [Field ID]	Batch	Date
09L0099-01 [Stone-1]	B007967	12/03/09

**SM2580 A**

Lab Number [Field ID]	Batch	Initial [g]	Date
09L0099-01 [Stone-1]	B007990	10	12/03/09

**Prep Method: SW-846 3051-SW-846 6010B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
09L0099-01 [Stone-1]	B007969	1.0046	50	12/03/09

**SW-846 7196A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
09L0099-01 [Stone-1]	B008041	2.529	100	12/04/09

**SW-846 9045D**

Lab Number [Field ID]	Batch	Initial [g]	Date
09L0099-01 [Stone-1]	B007991	10	12/03/09

**QUALITY CONTROL**

**Metals Analyses (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B007969 - SW-846 3051</b>										
<b>Blank (B007969-BLK1)</b>										
Prepared & Analyzed: 12/03/09										
Chromium	ND	0.50	mg/Kg wet							
<b>LCS (B007969-BS1)</b>										
Prepared & Analyzed: 12/03/09										
Chromium	99.5	1.0	mg/Kg wet	89.4		111	78.8-120.7			
<b>LCS Dup (B007969-BSD1)</b>										
Prepared & Analyzed: 12/03/09										
Chromium	87.1	1.0	mg/Kg wet	89.4		97.4	78.8-120.7	13.4	30	

**QUALITY CONTROL**

**Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B007990 - SM2580 A</b>										
<b>Duplicate (B007990-DUP1)</b>		<b>Source: 09L0099-01</b>			Prepared & Analyzed: 12/03/09					
Oxidation/Reduction Potential	72.0		mV		73.0			1.38		
<b>Batch B007991 - SW-846 9045D</b>										
<b>Duplicate (B007991-DUP1)</b>		<b>Source: 09L0099-01</b>			Prepared & Analyzed: 12/03/09					
pH	9.2		pH Units		9.2			0.433	6.28	
<b>Batch B008041 - SW-846 7196A</b>										
<b>Blank (B008041-BLK1)</b>					Prepared & Analyzed: 12/04/09					
Hexavalent Chromium	ND	0.16	mg/Kg wet							
<b>LCS (B008041-BS1)</b>					Prepared & Analyzed: 12/04/09					
Hexavalent Chromium	33	1.6	mg/Kg wet	39.7		83.5	80-120			
<b>LCS Dup (B008041-BSD1)</b>					Prepared & Analyzed: 12/04/09					
Hexavalent Chromium	35	1.6	mg/Kg wet	39.4		89.7	80-120	6.62	35	
<b>Matrix Spike (B008041-MS1) Soluble MS</b>		<b>Source: 09L0099-01</b>			Prepared & Analyzed: 12/04/09					
Hexavalent Chromium	34	1.7	mg/Kg dry	42.3	ND	81.0	75-125			
<b>Matrix Spike (B008041-MS2) Insoluble MS</b>		<b>Source: 09L0099-01</b>			Prepared & Analyzed: 12/04/09					
Hexavalent Chromium	690	17	mg/Kg dry	681	ND	101	75-125			
<b>Matrix Spike Dup (B008041-MSD1) Soluble MS Dup</b>		<b>Source: 09L0099-01</b>			Prepared & Analyzed: 12/04/09					
Hexavalent Chromium	38	1.7	mg/Kg dry	42.5	ND	89.7	75-125	10.7		

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<b>SW-846 6010B in Soil</b>	
Chromium	CT,NH,NY
<b>SW-846 7196A in Soil</b>	
Hexavalent Chromium	NY,CT,NH
<b>SW-846 9045D in Soil</b>	
pH	CT

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2012
MA	Massachusetts DEP	M-MA100	06/30/2010
CT	Connecticut Department of Public Health	PH-0567	09/30/2011
NY	New York State Department of Health	10899 NELAP	04/1/2010
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2010
RI	Rhode Island Department of Health	LAO00112	12/30/2009
NC	North Carolina Div. of Water Quality	652	12/31/2009
NJ	New Jersey DEP	MA007 NELAP	06/30/2010
FL	Florida Department of Health	E871027 NELAP	06/30/2010
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2010
WA	State of Washington Department of Ecology	C2065	03/23/2010



### Sample Receipt Checklist

CLIENT NAME: TRE RECEIVED BY: JDP DATE: 12/12/09

- 1) Was the chain(s) of custody relinquished and signed?  Yes  No
- 2) Does the chain agree with the samples?  Yes  No  
If not, explain:
- 3) Are all the samples in good condition?  Yes  No  
If not, explain:

4) How were the samples received:

On Ice  Direct from Sampling  Ambient  In Cooler(s)

Were the samples received in Temperature Compliance of (2-6°C)?  Yes  No

Temperature °C by Temp blank 5°C Temperature °C by Temp gun \_\_\_\_\_

5) Are there Dissolved samples for the lab to filter?  Yes  No

Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

6) Are there any samples "On Hold"?  Yes  No Stored where:

7) Are there any RUSH or SHORT HOLDING TIME samples?  Yes  No  
Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

8) Location where samples are stored:

Permission to subcontract samples? Yes  No   
(Walk-in clients only) if not already approved  
Client Signature: \_\_\_\_\_

### Containers sent in to Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz clear jar	
500 mL Amber		4 oz clear jar	
250 mL Amber (8oz amber)	2	2 oz clear jar	
1 Liter Plastic		Other glass jar	
500 mL Plastic		Plastic Bag / Ziploc	
250 mL plastic		Air Cassette	
40 mL Vial - type listed below		Brass Sleeves	
Colisure / bacteria bottle		Tubes	
Dissolved Oxygen bottle		Summa Cans	
Flashpoint bottle		Regulators	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl \_\_\_\_\_ # Methanol \_\_\_\_\_  
# Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
# Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

Time and Date Frozen: \_\_\_\_\_

Do all samples have the proper pH: Yes No N/A

**MADEP MCP Analytical Method Report Certification Form**

Laboratory Name: Con-Test Analytical Laboratory	Project #: 09L0099
Project Location: City Of NB (Walsh)	MADEP RTN1 <sup>1</sup> :

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]  
 09L0099-01

Sample Matrices: Soil

MCP SW-846 Methods Used	8260B ( )	8151A ( )	8330 ( )	6010B (X)	7470A/1A ( )
	8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M <sup>2</sup> ( )
As specified in MADEP Compendium of Analytical Methods. (check all that apply)	8082 ( )	8021B ( )	EPH ( )	7000 S <sup>3</sup> ( )	7196A (X)
1 List Release Tracking Number (RTN), if known 2 M -- SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method 3 S -- SW-846 Methods 7000 Series List individual method and analyte					

**An affirmative response to questions A, B, C and D is required for "Presumptive Certainty" status**

<b>A</b>	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>B</b>	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>C</b>	Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>D</b>	VPH and EPH Methods only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>

**A response to questions E and F below is required for "Presumptive Certainty" status**

<b>E</b>	Were all analytical QC performance standards and recommendations for the specified methods achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>
<b>F</b>	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>

<sup>1</sup>All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

***I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.***

Signature: 	Position: Laboratory Director
Printed Name: Michael A. Erickson	Date: 12/04/09