



89 Crawford Street  
Leominster, Massachusetts 01453  
Tel: 774.450.7177  
Fax: 888.835.0617  
www.lrt-llc.net

February 25, 2016

U.S. Environmental Protection Agency-Region 1  
5 Post Office Square, Suite 100  
Mail Code OEP06-4  
Boston, Massachusetts 02109-3912  
Attn.: Dewatering General Permit NOI Processing

**Reference:     Notice of Intent (NOI)**  
**Dewatering General Permit (DGP)**  
**Grafton Wastewater Treatment Plant Improvements**  
**9 Depot Street**  
**Grafton, Massachusetts**

To Whom It May Concern:

On behalf of Walsh Construction (Walsh), Lockwood Remediation Technologies, LLC (LRT) has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Dewatering General Permit (DGP) (MAG070000). This NOI was prepared in accordance with the general requirements of the NPDES and related guidance documentation provided by the US Environmental Protection Agency (EPA). The completed NOI form is provided in Appendix A.

### **Site Information**

This NOI has been prepared for the management of water generated during the construction improvements at the Grafton Wastewater Treatment Plant (WWTP) in Grafton, Massachusetts (the Site); please refer to Figure 1 for a locus map and an overview of the immediate area surrounding the Site. The work area, located at 9 Depot Street, is depicted in Figure 2 along with the proposed treated water discharge location.

### **Work Summary**

The work scope at the site includes the construction of new structures as well as upgrades to the existing WWTP. In order to complete portions of this work, dewatering is required. All water generated from the dewatering of the excavations will be pumped to a water treatment system, depicted in Figure 3, prior to discharge to the Blackstone River. To characterize water from the excavation, LRT collected a representative groundwater sample from an existing groundwater monitoring well on February 22, 2016. This sample was analyzed for the parameters in accordance with the NPDES DGP, Appendix VIII. Laboratory data reports for this sample are provided in Appendix B.

### **Discharge and Receiving Surface Water Information**

A groundwater sample collected by LRT on February 22, 2016 was submitted for the following analyses: total suspended solids (TSS), selected metals, hardness, pH and chloride. The results of this sampling indicated detectable concentrations of iron above discharge standards; however, these concentrations can be treated with an aeration unit and/or ion exchange resin in addition to bag filtration in order achieve concentrations below discharge standards. Refer to Figure 3 for the water treatment system layout.

### **Consultation with Federal Services**

LRT reviewed online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS), the Massachusetts Division of Fisheries and Wildlife (MassWildlife; Natural Heritage and Endangered Species Program), and the U.S. National Parks Service Natural Historic Places (NPS). Based on this review, neither the Site nor the point where the proposed discharge reaches the receiving surface water body are Areas of Critical Environmental Concern (ACEC), Habitats of Rare Wetland Wildlife, Habitats of Rare Species, Estimated Habitats of Rare Wildlife, or listed as a National Historic Place. In addition, the Grafton Wastewater Plant Improvements project has filed for a WPA Form 3 – Notice of Intent (Massachusetts Wetlands Protection Act) through the Massachusetts Department of Environmental Protection to confirm the protection of the habitat and its wildlife during construction.

### **Coverage under NPDES DGP**

It is our opinion that the proposed discharge is eligible for coverage under the NPDES DGP. On behalf of Walsh, we are requesting coverage under the NPDES DGP for the discharge of wastewater during construction activities to the Blackstone River.

The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services. For this project, Walsh is the operator that has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications.

Please feel free to contact us at 774-450-7177 or at [plockwood@lrt-llc.net](mailto:plockwood@lrt-llc.net) if you have any questions or if you require additional information.

Sincerely,  
Lockwood Remediation Technologies, LLC

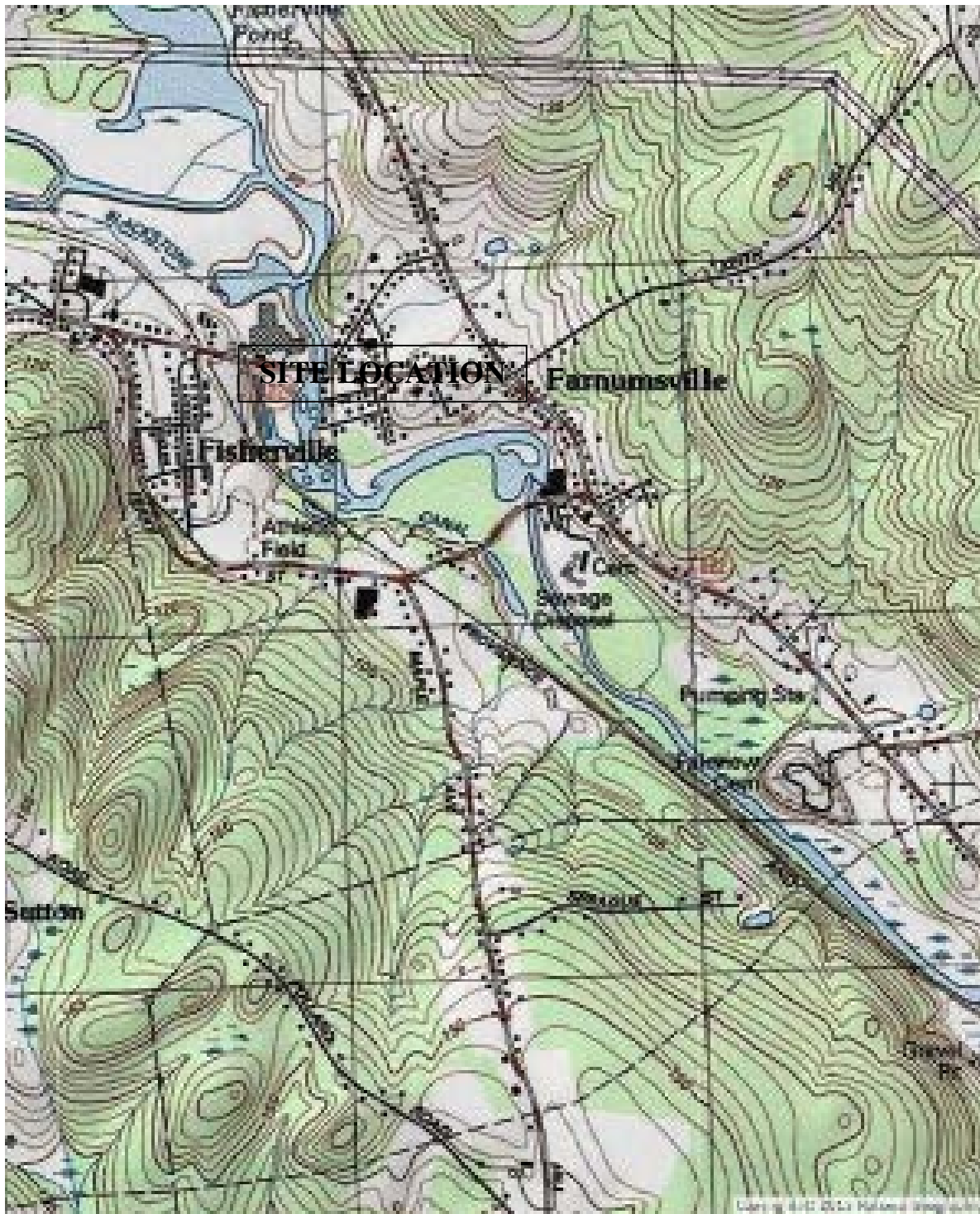
*Paul Lockwood*

Paul Lockwood  
President

**Attachments:**

Figure 1 Locus Plan  
Figure 2 Discharge Location  
Figure 3 Water Treatment System Layout  
Appendix A – NOI Form  
Appendix B – Laboratory Data  
Appendix C – Supplemental Information

## Figures



**Site Location:**

Latitude: 42.172061  
Longitude: -71.67872



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**Figure 1 Locus Map**  
Grafton Wastewater Treatment Plant  
9 Depot Street  
Grafton, Massachusetts





Source: Google Maps

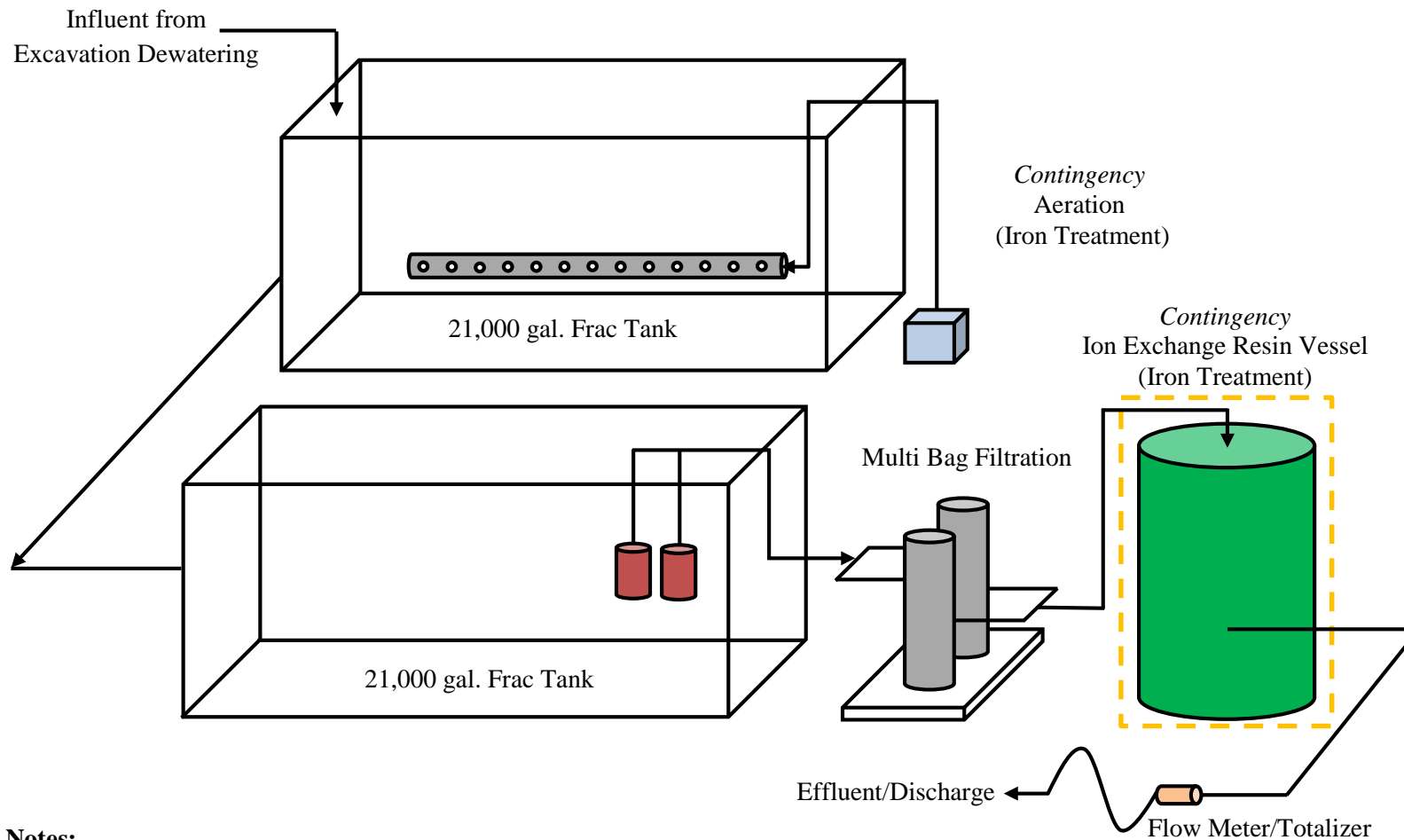
**KEY**

Discharge Location 



89 Crawford Street  
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**Figure 2 - Discharge Location**  
Grafton Wastewater Treatment Plant  
9 Depot Street  
Grafton, Massachusetts



**Notes:**

- 1.) Figure is not to scale.
- 2.) The water treatment system is rated for 500 gallons per minute.
- 3.) All dewatering effluent water shall be routed to the treatment system.



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**Figure 3 - Water Treatment System Layout**  
 Grafton Wastewater Treatment Plant  
 9 Depot Street  
 Grafton, Massachusetts

## **Appendix A – NOI Form**



## II. Suggested Notice of Intent (NOI) Format

1. General facility information. Please provide the following information about the facility.

a) Name of facility:		Mailing Address for the Facility:	
b) Location Address of the Facility (if different from mailing address):	Facility Location	Type of Business:	
	longitude: _____ latitude: _____	Facility SIC codes:	
c) Name of facility owner: _____ Owner's email: _____ Owner's Tel #: _____ Owner's Fax #: _____ Address of owner (if different from facility address) _____  Owner is (check one): 1. Federal _____ 2. State _____ 3. Private _____ 4. Other _____ (Describe) _____			
Legal name of Operator, if not owner: _____ Operator Contact Name: _____ Operator Tel Number: _____ Fax Number: _____ Operator's email: _____ Operator Address (if different from owner) _____			
d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? _____			
e) Check Yes or No for the following: 1. Has a prior NPDES permit been granted for the discharge? Yes _____ No _____ If Yes, Permit Number: _____ 2. Is the discharge a "new discharger" as defined by 40 CFR Section 122.2? Yes _____ No _____ 3. Is the facility covered by an individual NPDES permit? Yes _____ No _____ If Yes, Permit Number _____ 4. Is there a pending application on file with EPA for this discharge? Yes _____ No _____ If Yes, date of submittal: _____			

**2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)**

a) Name of receiving water into which discharge will occur: \_\_\_\_\_

State Water Quality Classification: \_\_\_\_\_ Freshwater: \_\_\_\_\_ Marine Water: \_\_\_\_\_

b) Describe the discharge activities for which the owner/applicant is seeking coverage:

1. Construction dewatering of groundwater intrusion and/or storm water accumulation.
2. Short-term or long-term dewatering of foundation sumps.
3. Other.

c) Number of outfalls \_\_\_\_\_

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow \_\_\_\_\_ GPD  
Average Monthly Flow \_\_\_\_\_ GPD

e.) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH \_\_\_\_\_ Min pH \_\_\_\_\_

f.) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit. groundwater

g.) What treatment does the wastewater receive prior to discharge? Bag filtration with an aeration unit and/or ion exchange resin to address the iron concentrations

h.) Is the discharge continuous? Yes \_\_\_\_\_ No \_\_\_\_\_ If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) \_\_\_\_\_

If (P), number of days or months per year of the discharge \_\_\_\_\_ and the specific months of discharge \_\_\_\_\_;

If (I), number of days/year there is a discharge \_\_\_\_\_

Is the discharge temporary? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, approximate start date of dewatering \_\_\_\_\_ approximate end date of dewatering \_\_\_\_\_

i.) Latitude and longitude of each discharge within 100 feet (See [http://www.epa.gov/tri/report/siting\\_tool](http://www.epa.gov/tri/report/siting_tool)): Outfall 1: long. \_\_\_\_\_ lat. \_\_\_\_\_; Outfall 2: long. \_\_\_\_\_ lat. \_\_\_\_\_; Outfall 3: long. \_\_\_\_\_ lat. \_\_\_\_\_.

j.) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations \_\_\_\_\_ cfs

(See Appendix VII for equations and additional information)

<p><b>MASSACHUSETTS FACILITIES:</b> See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):</p> <p>k.) Does the discharge occur in an ACEC? Yes _____ No _____          If yes, provide the name of the ACEC: _____</p>

**3. Contaminant Information**

<p>a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC<sub>50</sub> in percent for aquatic organism(s)).</p> <p>b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.</p>
--

**4. Determination of Endangered Species Act Eligibility:** Provide documentation of ESA eligibility as required at Part 3.4 and Appendix IV. In addition, respond to the following questions.

<p>a) Which of the three eligibility criteria listed in Appendix IV, Criterion (A, B, or C) have you met? _____</p> <p>b) Please attach documentation with your NOI supporting your response. Please see Appendix IV for acceptable documentation</p>
---

**5. Documentation of National Historic Preservation Act requirements:** Please respond to the following questions:

<p>a) See Screening Process in Appendix III and respond to questions regarding your site and any historic properties listed or eligible for listing on the National Register of Historic Places. Question 1: Yes _____ No _____ ; Question 2: No _____ Yes _____</p> <p>b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes _____ or No _____ If yes, attach the results of the consultation(s).</p> <p>c) Which of the three National Historic Preservation Act eligibility criterion listed in Appendix III, Criterion (A, B, or C) have you met? _____</p> <p>d) Is the project located on property of religious or cultural significance to an Indian Tribe? Yes _____ or No _____ If yes, provide that name of the Indian Tribe associated with the property. _____</p>
---

**6. Supplemental Information:** Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

**7. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: GRAFTON WASTEWATER TREATMENT PLANT

Operator signature: B.M. COUTA

Print Full Name and Title: BRAD M COUTA PROJECT MANAGER

Date: 2-11-2016

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

## **Appendix B – Laboratory Data**

- ☒ Final Report  
☐ Re-Issued Report  
☐ Revised Report

Report Date:  
24-Feb-16 17:02

## Laboratory Report

Lockwood Remediation Technologies, LLC  
89 Crawford Street  
Leominster, MA 01453  
Attn: Michael Deso

Project: Grafton WWTP, MA  
Project #: 2-1329

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC18347-01	MW022216	Ground Water	22-Feb-16 09:45	22-Feb-16 16:35

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.  
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110  
Connecticut # PH-0777  
Florida # E87936  
Maine # MA138  
New Hampshire # 2538  
New Jersey # MA011  
New York # 11393  
Pennsylvania # 68-04426/68-02924  
Rhode Island # LAO00098  
USDA # S-51435



Authorized by:



June O'Connor  
Laboratory Director

Eurofins Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 11 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

*Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).*

*Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.*

## CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 2.5 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Analyses for Total Hardness, pH, and Total Residual Chlorine fall under the state of Pennsylvania code Chapter 252.6 accreditation by rule.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

## EPA 200.8

### Blanks:

1603123-BLK1

---

The method blank contains analyte at a concentration above the MRL, however no reportable concentration is present in the sample.

Antimony

1603179-BLK1

---

The method blank contains analyte at a concentration above the MRL, however no reportable concentration is present in the sample.

Zinc

### Laboratory Control Samples:

1603123 BS

---

Antimony percent recovery 83 (85-115) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW022216

### Duplicates:

1603123-DUP1      *Source: SC18347-01*

---

Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Arsenic

Lead

1603179-DUP1      *Source: SC18347-01*

---

Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Zinc

MRL raised to correlate to batch QC reporting limits.

Zinc

### Samples:

## **EPA 200.8**

### **Samples:**

SC18347-01                      *MW022216*

---

MRL raised to correlate to batch QC reporting limits.

Zinc

## **EPA 300.0**

### **Samples:**

SC18347-01                      *MW022216*

---

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

## **SM3500-Cr-B/7196A**

### **Spikes:**

1603108-MS1                      *Source: SC18347-01*

---

The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

Hexavalent Chromium

1603108-MSD1                      *Source: SC18347-01*

---

The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

Hexavalent Chromium



## Sample Acceptance Check Form

Client: Lockwood Remediation Technologies, LLC - MA  
Project: Grafton WWTP, MA / 2-1329  
Work Order: SC18347  
Sample(s) received on: 2/22/2016

*The following outlines the condition of samples for the attached Chain of Custody upon receipt.*

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples refrigerated upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Summary of Hits

**Lab ID:** SC18347-01

**Client ID:** MW022216

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Calcium	19.5		0.200	mg/l	EPA 200.7
Iron	7.76		0.0300	mg/l	EPA 200.7
Magnesium	1.62		0.0200	mg/l	EPA 200.7
Chromium	0.00033		0.00025	mg/l	EPA 200.8
Nickel	0.00066		0.00025	mg/l	EPA 200.8
Selenium	0.00053		0.00025	mg/l	EPA 200.8
Chloride	674	D, GS128.0		mg/l	EPA 300.0
Hardness	55.3		0.582	mg/l CaCO3	SM 2340B

*Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order*

Sample Identification

MW022216

SC18347-01

Client Project #

2-1329

Matrix

Ground Water

Collection Date/Time

22-Feb-16 09:45

Received

22-Feb-16

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
<b>Total Metals by EPA 200/6000 Series Methods</b>													
	Preservation	Field Preserved		N/A			1	EPA 200/6000 methods			JS	1603088	
<b>Total Metals by EPA 200 Series Methods</b>													
7440-38-2	Arsenic	< 0.00025		mg/l	0.00025	0.00004	1	EPA 200.8	23-Feb-16	23-Feb-16	edt	1603123	X
7440-70-2	Calcium	19.5		mg/l	0.200	0.128	1	EPA 200.7	"	24-Feb-16	bjw	1603124	X
7440-43-9	Cadmium	< 0.00020		mg/l	0.00020	0.00003	1	EPA 200.8	"	23-Feb-16	edt	1603123	X
7440-47-3	Chromium	0.00033		mg/l	0.00025	0.00013	1	"	"	"	"	"	X
7439-89-6	Iron	7.76		mg/l	0.0300	0.0180	1	EPA 200.7	"	23-Feb-16	EDT	1603124	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00009	1	EPA 245.1/7470A	"	24-Feb-16	TBC	1603125	X
7439-95-4	Magnesium	1.62		mg/l	0.0200	0.0075	1	EPA 200.7	"	23-Feb-16	EDT	1603124	X
7440-02-0	Nickel	0.00066		mg/l	0.00025	0.00005	1	EPA 200.8	"	23-Feb-16	edt	1603123	X
7439-92-1	Lead	< 0.00025		mg/l	0.00025	0.00002	1	"	"	"	"	"	X
7440-36-0	Antimony	< 0.00025		mg/l	0.00025	0.00016	1	"	"	"	"	"	X
7782-49-2	Selenium	0.00053		mg/l	0.00025	0.00011	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.00360	R06	mg/l	0.00360	0.00072	1	"	23-Feb-16	23-Feb-16	"	1603179	X
<b>General Chemistry Parameters</b>													
	Hardness	55.3	HD	mg/l CaCO3	0.582	0.351	1	SM 2340B	23-Feb-16	24-Feb-16	EDT	[CALC]	
16887-00-6	Chloride	674	D, GS1	mg/l	28.0	2.20	28	EPA 300.0	22-Feb-16	23-Feb-16	MJL	1603105	X
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.002	1	SM3500-Cr-B/71 96A	22-Feb-16 19:10	22-Feb-16 19:19	TDD	1603108	
	Total Suspended Solids	< 5.0		mg/l	5.0	2.8	1	SM2540D	23-Feb-16	24-Feb-16	CMB	1603136	X

This laboratory report is not valid without an authorized signature on the cover page

# Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1603123 - EPA 200 Series</b>										
<b><u>Blank (1603123-BLK1)</u></b>					<u>Prepared &amp; Analyzed: 23-Feb-16</u>					
Lead	< 0.00025		mg/l	0.00025						
Antimony	<b>0.00066</b>	QB2	mg/l	0.00025						
Selenium	< 0.00025		mg/l	0.00025						
Cadmium	< 0.00020		mg/l	0.00020						
Chromium	< 0.00025		mg/l	0.00025						
Nickel	< 0.00025		mg/l	0.00025						
Arsenic	< 0.00025		mg/l	0.00025						
<b><u>LCS (1603123-BS1)</u></b>					<u>Prepared &amp; Analyzed: 23-Feb-16</u>					
Selenium	<b>0.264</b>	D	mg/l	0.00250	0.250		106	85-115		
Antimony	<b>0.0416</b>	QC3, D	mg/l	0.00250	0.0500		83	85-115		
Lead	<b>0.0523</b>	D	mg/l	0.00250	0.0500		105	85-115		
Cadmium	<b>0.0521</b>	D	mg/l	0.00200	0.0500		104	85-115		
Arsenic	<b>0.0552</b>	D	mg/l	0.00250	0.0500		110	85-115		
Chromium	<b>0.0505</b>	D	mg/l	0.00250	0.0500		101	85-115		
Nickel	<b>0.0509</b>	D	mg/l	0.00250	0.0500		102	85-115		
<b><u>Duplicate (1603123-DUP1)</u></b>					<u>Source: SC18347-01</u>		<u>Prepared &amp; Analyzed: 23-Feb-16</u>			
Selenium	<b>0.00047</b>		mg/l	0.00025		0.00053			11	20
Lead	<b>0.00006</b>	J,QR8	mg/l	0.00025		0.00009			39	20
Antimony	< 0.00025		mg/l	0.00025		0.00022				20
Nickel	<b>0.00068</b>		mg/l	0.00025		0.00066			3	20
Arsenic	<b>0.00014</b>	J,QR8	mg/l	0.00025		0.00018			23	20
Cadmium	<b>0.00011</b>	J	mg/l	0.00020		0.00010			6	20
Chromium	<b>0.00034</b>		mg/l	0.00025		0.00033			2	20
<b><u>Matrix Spike (1603123-MS1)</u></b>					<u>Source: SC18347-01</u>		<u>Prepared &amp; Analyzed: 23-Feb-16</u>			
Antimony	<b>0.0516</b>	D	mg/l	0.00250	0.0500	0.00022	103	70-130		
Lead	<b>0.0479</b>	D	mg/l	0.00250	0.0500	0.00009	96	70-130		
Selenium	<b>0.246</b>	D	mg/l	0.00250	0.250	0.00053	98	70-130		
Arsenic	<b>0.0526</b>	D	mg/l	0.00250	0.0500	0.00018	105	70-130		
Cadmium	<b>0.0492</b>	D	mg/l	0.00200	0.0500	0.00010	98	70-130		
Nickel	<b>0.0466</b>	D	mg/l	0.00250	0.0500	0.00066	92	70-130		
Chromium	<b>0.0448</b>	D	mg/l	0.00250	0.0500	0.00033	89	70-130		
<b><u>Post Spike (1603123-PS1)</u></b>					<u>Source: SC18347-01</u>		<u>Prepared &amp; Analyzed: 23-Feb-16</u>			
Selenium	<b>0.252</b>	D	mg/l	0.00250	0.250	0.00053	101	85-115		
Antimony	<b>0.0534</b>	D	mg/l	0.00250	0.0500	0.00022	106	85-115		
Lead	<b>0.0492</b>	D	mg/l	0.00250	0.0500	0.00009	98	85-115		
Cadmium	<b>0.0503</b>	D	mg/l	0.00200	0.0500	0.00010	100	85-115		
Arsenic	<b>0.0538</b>	D	mg/l	0.00250	0.0500	0.00018	107	85-115		
Chromium	<b>0.0462</b>	D	mg/l	0.00250	0.0500	0.00033	92	85-115		
Nickel	<b>0.0485</b>	D	mg/l	0.00250	0.0500	0.00066	96	85-115		
<b>Batch 1603124 - EPA 200 Series</b>										
<b><u>Blank (1603124-BLK1)</u></b>					<u>Prepared &amp; Analyzed: 23-Feb-16</u>					
Iron	< 0.0300		mg/l	0.0300						
Magnesium	< 0.0200		mg/l	0.0200						
Calcium	< 0.200		mg/l	0.200						
<b><u>LCS (1603124-BS1)</u></b>					<u>Prepared &amp; Analyzed: 23-Feb-16</u>					
Magnesium	<b>2.50</b>		mg/l	0.0200	2.50		100	85-115		
Iron	<b>2.46</b>		mg/l	0.0300	2.50		98	85-115		
Calcium	<b>13.0</b>		mg/l	0.200	12.5		104	85-115		
<b><u>Duplicate (1603124-DUP1)</u></b>					<u>Source: SC18347-01</u>		<u>Prepared &amp; Analyzed: 23-Feb-16</u>			
Magnesium	<b>1.65</b>		mg/l	0.0200		1.62			2	20
Iron	<b>7.87</b>		mg/l	0.0300		7.76			1	20

*This laboratory report is not valid without an authorized signature on the cover page*

# **Total Metals by EPA 200 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1603124 - EPA 200 Series</b>										
<b><u>Duplicate (1603124-DUP1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u></b>				
Calcium	19.9		mg/l	0.200		19.5			2	20
<b><u>Matrix Spike (1603124-MS1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared &amp; Analyzed: 23-Feb-16</u></b>				
Iron	10.2		mg/l	0.0300	2.50	7.76	96	70-130		
Magnesium	4.03		mg/l	0.0200	2.50	1.62	97	70-130		
Calcium	32.8		mg/l	0.200	12.5	19.5	107	70-130		
<b><u>Post Spike (1603124-PS1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared &amp; Analyzed: 23-Feb-16</u></b>				
Magnesium	3.97		mg/l	0.0200	2.50	1.62	94	85-115		
Calcium	31.6		mg/l	0.200	12.5	19.5	97	85-115		
<b>Batch 1603125 - EPA200/SW7000 Series</b>										
<b><u>Blank (1603125-BLK1)</u></b>						<b><u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u></b>				
Mercury	< 0.00020		mg/l	0.00020						
<b><u>LCS (1603125-BS1)</u></b>						<b><u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u></b>				
Mercury	0.00511		mg/l	0.00020	0.00500		102	85-115		
<b><u>Duplicate (1603125-DUP1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u></b>				
Mercury	< 0.00020		mg/l	0.00020		BRL				20
<b><u>Matrix Spike (1603125-MS1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u></b>				
Mercury	0.00516		mg/l	0.00020	0.00500	BRL	103	80-120		
<b><u>Post Spike (1603125-PS1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u></b>				
Mercury	0.00547		mg/l	0.00020	0.00500	BRL	109	85-115		
<b>Batch 1603179 - EPA 200 Series</b>										
<b><u>Blank (1603179-BLK1)</u></b>						<b><u>Prepared &amp; Analyzed: 23-Feb-16</u></b>				
Zinc	0.00409	QB2	mg/l	0.00360						
<b><u>LCS (1603179-BS1)</u></b>						<b><u>Prepared &amp; Analyzed: 23-Feb-16</u></b>				
Zinc	0.0940	D	mg/l	0.0360	0.100		94	85-115		
<b><u>Duplicate (1603179-DUP1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared &amp; Analyzed: 23-Feb-16</u></b>				
Zinc	0.00238	J,QR8, R06	mg/l	0.00360		0.00350			38	20
<b><u>Matrix Spike (1603179-MS1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared &amp; Analyzed: 23-Feb-16</u></b>				
Zinc	0.0964	D	mg/l	0.0360	0.100	0.00350	93	70-130		
<b><u>Post Spike (1603179-PS1)</u></b>				<b><u>Source: SC18347-01</u></b>		<b><u>Prepared &amp; Analyzed: 23-Feb-16</u></b>				
Zinc	0.106	D	mg/l	0.0360	0.100	0.00350	103	85-115		

# General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1603105 - General Preparation</b>										
<b><u>Blank (1603105-BLK1)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	< 1.00		mg/l	1.00						
<b><u>LCS (1603105-BS1)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	20.8		mg/l	1.00	20.0		104	90-110		
<b><u>Calibration Blank (1603105-CCB1)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Chloride	0.510		mg/l							
<b><u>Calibration Blank (1603105-CCB2)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Chloride	0.513		mg/l							
<b><u>Calibration Blank (1603105-CCB3)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Chloride	0.508		mg/l							
<b><u>Calibration Blank (1603105-CCB4)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	0.510		mg/l							
<b><u>Calibration Blank (1603105-CCB5)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	0.509		mg/l							
<b><u>Calibration Blank (1603105-CCB6)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	0.508		mg/l							
<b><u>Calibration Blank (1603105-CCB7)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	0.506		mg/l							
<b><u>Calibration Blank (1603105-CCB8)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	0.511		mg/l							
<b><u>Calibration Check (1603105-CCV1)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Chloride	20.9		mg/l	1.00	20.0		105	90-110		
<b><u>Calibration Check (1603105-CCV2)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Chloride	21.0		mg/l	1.00	20.0		105	90-110		
<b><u>Calibration Check (1603105-CCV3)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Chloride	20.8		mg/l	1.00	20.0		104	90-110		
<b><u>Calibration Check (1603105-CCV4)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	20.8		mg/l	1.00	20.0		104	90-110		
<b><u>Calibration Check (1603105-CCV5)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	20.9		mg/l	1.00	20.0		104	90-110		
<b><u>Calibration Check (1603105-CCV6)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	20.9		mg/l	1.00	20.0		105	90-110		
<b><u>Calibration Check (1603105-CCV7)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	20.8		mg/l	1.00	20.0		104	90-110		
<b><u>Calibration Check (1603105-CCV8)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	20.8		mg/l	1.00	20.0		104	90-110		
<b><u>Reference (1603105-SRM1)</u></b>										<u>Prepared: 22-Feb-16 Analyzed: 23-Feb-16</u>
Chloride	26.8		mg/l	1.00	25.0		107	90-110		
<b>Batch 1603108 - General Preparation</b>										
<b><u>Blank (1603108-BLK1)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Hexavalent Chromium	< 0.005		mg/l	0.005						
<b><u>LCS (1603108-BS1)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	90-111		
<b><u>Calibration Blank (1603108-CCB1)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Hexavalent Chromium	0.0002		mg/l							
<b><u>Calibration Blank (1603108-CCB2)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Hexavalent Chromium	0.003		mg/l							
<b><u>Calibration Check (1603108-CCV1)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>
Hexavalent Chromium	0.052		mg/l	0.005	0.0500		104	90-110		
<b><u>Calibration Check (1603108-CCV2)</u></b>										<u>Prepared &amp; Analyzed: 22-Feb-16</u>

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## General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1603108 - General Preparation</b>										
<u><b>Calibration Check (1603108-CCV2)</b></u>								<u>Prepared &amp; Analyzed: 22-Feb-16</u>		
Hexavalent Chromium	0.048		mg/l	0.005	0.0500		96	90-110		
<u><b>Duplicate (1603108-DUP1)</b></u>				<u><b>Source: SC18347-01</b></u>				<u>Prepared &amp; Analyzed: 22-Feb-16</u>		
Hexavalent Chromium	< 0.005		mg/l	0.005		BRL				20
<u><b>Matrix Spike (1603108-MS1)</b></u>				<u><b>Source: SC18347-01</b></u>				<u>Prepared &amp; Analyzed: 22-Feb-16</u>		
Hexavalent Chromium	0.036	QM1	mg/l	0.005	0.0500	BRL	73	85-115		
<u><b>Matrix Spike Dup (1603108-MSD1)</b></u>				<u><b>Source: SC18347-01</b></u>				<u>Prepared &amp; Analyzed: 22-Feb-16</u>		
Hexavalent Chromium	0.041	QM1	mg/l	0.005	0.0500	BRL	81	85-115	11	20
<u><b>Reference (1603108-SRM1)</b></u>								<u>Prepared &amp; Analyzed: 22-Feb-16</u>		
Hexavalent Chromium	0.026		mg/l	0.005	0.0250		105	85-115		
<b>Batch 1603136 - General Preparation</b>										
<u><b>Blank (1603136-BLK1)</b></u>								<u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u>		
Total Suspended Solids	< 5.0		mg/l	5.0						
<u><b>LCS (1603136-BS1)</b></u>								<u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u>		
Total Suspended Solids	106		mg/l	10.0	100		106	90-110		
<u><b>Duplicate (1603136-DUP1)</b></u>				<u><b>Source: SC18347-01</b></u>				<u>Prepared: 23-Feb-16 Analyzed: 24-Feb-16</u>		
Total Suspended Solids	3.0	J	mg/l	5.0		3.0			0	5

## Notes and Definitions

D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QB2	The method blank contains analyte at a concentration above the MRL, however no reportable concentration is present in the sample.
QC3	The spike recovery is outside acceptable limits for the LCS. The batch was accepted based upon the MS and/or MSD meeting the LCS limits criteria.
QM1	The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.
R06	MRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
HD	Total Hardness is a calculation based on the reported values of Ca and Mg.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:  
Kimberly LaPlante  
Rebecca Merz





# APPENDIX VIII

## TEST METHODS AND MINIMUM LEVELS<sup>1</sup> FOR GROUNDWATER SOURCES

Parameters	Minimum Levels (ug/l) and Test Methods				
	CAS Numbers	ICP/AES <sup>2</sup> Methods 200.7,3010A/6010C	ICP/MS <sup>3</sup> ,200.8, 310A/6020A	GFAA <sup>4</sup> Method 200.9, 7010	Notes Digestion Methods No.
1. Antimony	7440360	10 ug/L	0.5 ug/L	3 ug/l	200
2. Arsenic	7440382	20 ug/l	1.0 ug/L	3 ug/l	206.5
3. Cadmium	7440439	10 ug/l	0.2 ug/L	0.5 ug/l	200
4. Chromium Total	7440473	15ug/l	1.0 ug/L	1 ug/l	200
5. Chromium VI	18540299				
6. Copper	7440508	15 ug/l	0.5 ug/L	3 ug/l	200
7. Lead	7439921	20 ug/l	0.2 ug/L	3 ug/l	200
8. Mercury	7439976				
9. Nickel	7440020	20 ug/l	0.2 ug/L	5 ug/l	200
10. Selenium	7782492	20 ug/l	2 ug/L	5 ug/l	200
11. Silver	7740224	10 ug/l	0.2 ug/L	1 ug/l	200
12. Zinc	7440666	15 ug/l	5 ug/L		200
13. Iron	7439896	20 ug/L	50 ug/L		200
14. Hardness					Approved Part 136 Methods <sup>2</sup>
15. Chloride	16887006				Approved Part 136 Methods <sup>2</sup>
16. pH					Approved Part 136 Methods <sup>2</sup>

1. Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence.
2. Inductively Couple Plasmas/ Atomic (optical) emissions Spectrometry
3. Inductively Couple Plasma/Mass Spectrometry
4. Graphite Furnace Atomic Absorption
5. Standard Method

## **Appendix C – Supplemental Information**

# Grafton WWTP Improvements

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## *IPaC Trust Resource Report*

Generated February 09, 2016 11:54 AM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

# IPaC Trust Resource Report



NAME

Grafton WWTP Improvements

LOCATION

Worcester County, Massachusetts

IPAC LINK

<https://ecos.fws.gov/ipac/project/HL63L-223QN-AVNI4-GUWQW-ETVIBA>



## U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

### **New England Ecological Services Field Office**

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

# Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

**This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.**

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

**A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.**

The list of species below are those that may occur or could potentially be affected by activities in this location:

## Mammals

**Northern Long-eared Bat** *Myotis septentrionalis* Threatened

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=A0JE](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=A0JE)

## Critical Habitats

**There are no critical habitats in this location**

# Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern  
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

The following species of migratory birds could potentially be affected by activities in this location:

<b>American Oystercatcher</b> <i>Haematopus palliatus</i>	Bird of conservation concern
Season: Breeding <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0G8">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0G8</a>	
<b>American Bittern</b> <i>Botaurus lentiginosus</i>	Bird of conservation concern
Season: Breeding <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0F3">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0F3</a>	
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i>	Bird of conservation concern
Year-round <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008</a>	
<b>Black-billed Cuckoo</b> <i>Coccyzus erythrophthalmus</i>	Bird of conservation concern
Season: Breeding <a href="https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HI">https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HI</a>	
<b>Blue-winged Warbler</b> <i>Vermivora pinus</i>	Bird of conservation concern
Season: Breeding	
<b>Canada Warbler</b> <i>Wilsonia canadensis</i>	Bird of conservation concern
Season: Breeding	
<b>Least Bittern</b> <i>Ixobrychus exilis</i>	Bird of conservation concern
Season: Breeding	

**Olive-sided Flycatcher** *Contopus cooperi*

Season: Breeding

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?scode=B0AN](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0AN)

Bird of conservation concern

**Peregrine Falcon** *Falco peregrinus*

Season: Breeding

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?scode=B0FU](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0FU)

Bird of conservation concern

**Pied-billed Grebe** *Podilymbus podiceps*

Year-round

Bird of conservation concern

**Prairie Warbler** *Dendroica discolor*

Season: Breeding

Bird of conservation concern

**Purple Sandpiper** *Calidris maritima*

Season: Wintering

Bird of conservation concern

**Short-eared Owl** *Asio flammeus*

Season: Wintering

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?scode=B0HD](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0HD)

Bird of conservation concern

**Upland Sandpiper** *Bartramia longicauda*

Season: Breeding

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?scode=B0HC](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0HC)

Bird of conservation concern

**Willow Flycatcher** *Empidonax traillii*

Season: Breeding

[https://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?scode=B0F6](https://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0F6)

Bird of conservation concern

**Wood Thrush** *Hylocichla mustelina*

Season: Breeding

Bird of conservation concern

**Worm Eating Warbler** *Helminthos vermivorum*

Season: Breeding

Bird of conservation concern



## Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

**There are no refuges in this location**

# Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

## DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

## DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

## DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This location overlaps all or part of the following wetlands:

## Freshwater Forested/shrub Wetland

[PFO1A](#)

0.616 acre

## Riverine

[R2UBH](#)

245.0 acres

A full description for each wetland code can be found at the National Wetlands Inventory website: <http://107.20.228.18/decoders/wetlands.aspx>



Lockwood Remediation Technologies, LLC  
89 Crawford Street  
Leominster, MA 01453

On February 9, 2016 LRT spoke with Maria Tur of the U.S. Fish & Wildlife Service and confirmed that there is no known hibernacula or roost trees in the vicinity of the site.

Additionally, Walsh Construction has filed a MASS DEP WPA Form 3 – Notice of Intent (Massachusetts Wetlands Act) for the Grafton Wastewater Treatment Plant Improvements project and identified that no portion of the project is located in Estimated Habitat of Rare Wildlife per the Natural Heritage and Endangered Species program.

Thank you,

Lockwood Remediation Technologies, LLC.

# MassDEP - Bureau of Waste Site Cleanup

## Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

### Site Information:

GRATON WWTP  
9 DEPOT STREET GRAFTON, MA

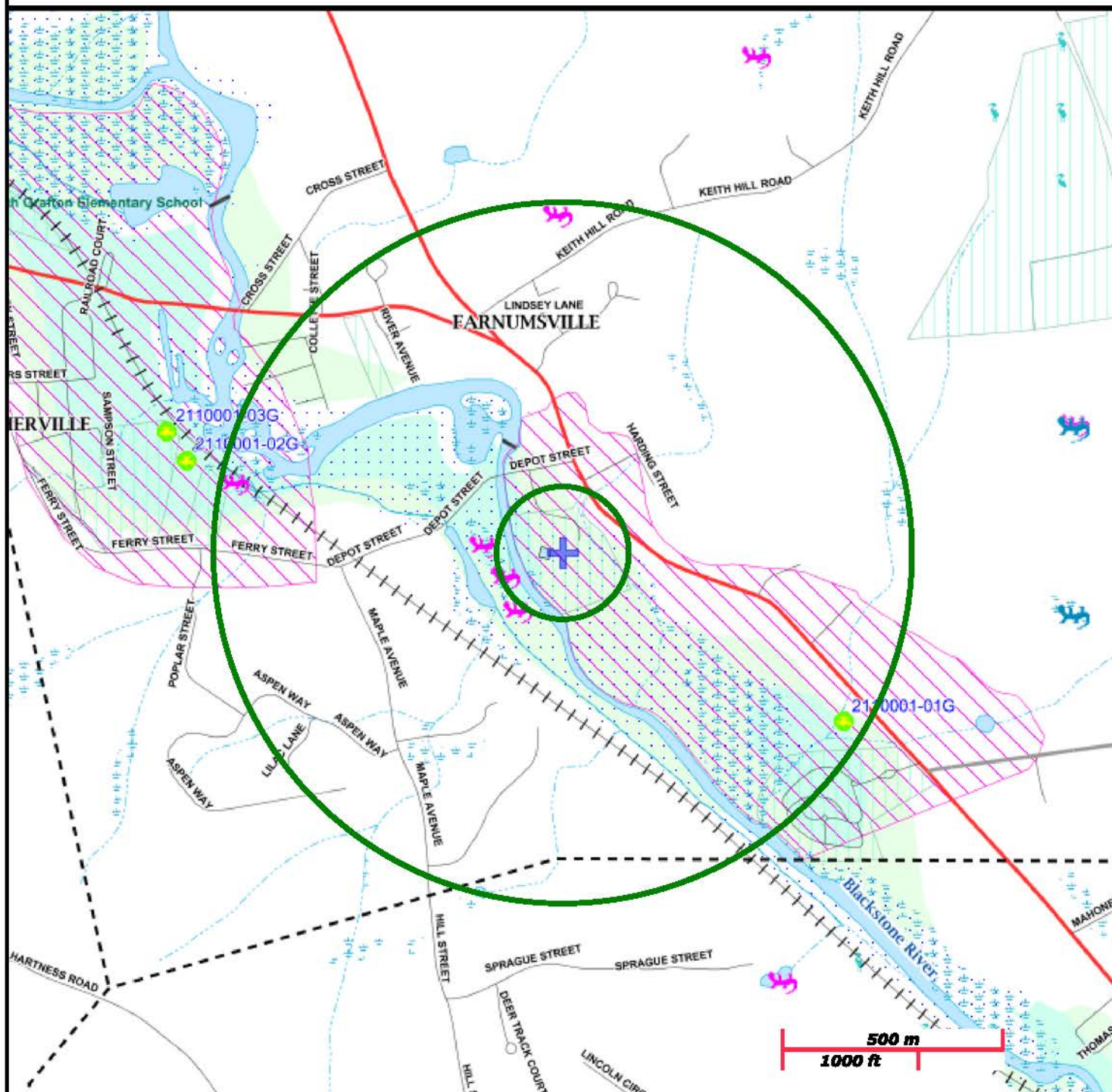
NAD83 UTM Meters:  
4672364mN, 278739mE (Zone: 18)  
February 11, 2016

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:  
<http://www.mass.gov/mgis/>



# MassDEP

Commonwealth of Massachusetts  
Department of Environmental Protection



500 m  
1000 ft

Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.



# Massachusetts Cultural Resource Information

## MACRIS

[MHC Home](#) | [MACRIS Home](#)

### Results

[Get Results in Report Format](#)☒ PDF☐ Spreadsheet

Below are the results of your search, using the following search criteria:

**Town(s):** Grafton

**Place:** Southwest Grafton

**Street No:** 9

**Street Name:** Depot St

**Resource Type(s):** Area, Building, Object, Structure

For more information about this page and how to use it, [click here](#)

No Results Found.

[New Search](#)[New Search — Same Town\(s\)](#)[Previous](#)[MHC Home](#)[MACRIS Home](#)