ADDENDUM 6
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
WORK PLAN

Lehigh Valley Railroad Derailment Superfund Site
LeRoy, New York
Index Number CERCLA-02-2006-2006

LEHIGH VALLEY RAILROAD COMPANY
CINCINNATI, OHIO 45202

Prepared By:

Unicorn Management Consultants, LLC
52 Federal Road, Suite 2C
Danbury, CT 06810

November 20, 2012

DOCUMENT AUTHORIZATION FORM
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AUTHORIZATIONS:

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Lehigh Valley Railroad Derailment Superfund Site

Reviewed by:

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Independent NYS Professional Engineer

Addendum 6

Tue 11/20/2012 4:42 PM

From: Joseph F. Atkinson
To: Francisco Trejo

Dear Francisco,
This note is to verify that I took part in the conference call on November 14 to discuss additional sampling at the Leroy site, as described in Addendum 6, completed earlier today.
Joe Atkinson

--
Joseph F. Atkinson
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TABLE OF CONTENTS

Page

1 INTRODUCTION 1

2 PROPOSED SURFACE WATER SAMPLING LOCATIONS 1

3 PROPOSED MONITORING WELL AND RESIDENTIAL WELL SAMPLING.....3

LIST OF FIGURES

FIGURE 3-3A PROPOSED PHASE I SEDIMENT SAMPLING LOCATIONS
FIGURE 2 SOIL GAS LOCATIONS AND PROPOSED WELL CLUSTERS
FIGURE DECEMBER 2012 PROPOSED SW SAMPLES

1 INTRODUCTION

This document, "Addendum 6 to the Remedial Investigation/Feasibility Study Work Plan", was prepared by Unicorn Management Consultants, LLC (UMC) on behalf of the Lehigh Valley Railroad Company (LVRR). LVRR is the respondent of the Settlement Agreement and Order on Consent for Pre-Remedial Design Investigations, Remedial Design, and Remedial Investigation/Feasibility Study, Index Number CERCLA-02-2006-2006 (hereinafter, "SA") for the Lehigh Valley Railroad Derailment Superfund Site located in Genesee, Monroe and Livingston Counties, near the Town of LeRoy, New York (hereinafter, the "Site"), which was issued by the United States Environmental Protection Agency (hereinafter, "EPA"), effective date October 6, 2006. The SA requires LVRR to conduct a Remedial Investigation/Feasibility Study (RI/FS) in accordance with the RI/FS Work Plan dated February 13, 2002 and addendum dated September 11, 2006, attached thereto as Appendix C.

UMC prepared four addenda for the project. Addendum 1 was included as an attachment to the Settlement Agreement and revised certain procedures in the RI/FS. Addendum 2[1] to the RI/FS Work Plan revised sampling locations, groundwater sampling methodology, and borehole geophysics. Addendum 3[2] to the RI/FS Work Plan amends the monitoring and FLUTe well installations. Addendum 4[3] to the RI/FS Work Plan revises the packer test intervals in the borings. All addenda were approved by EPA. Addendum 5[4] to the RI/FS Work Plan revises the groundwater investigation by expanding the monitoring well network to the north in the Spill Area and to the east in the Spring Creek area. This document is Addendum 6 to the RI/FS Work Plan and it includes the collection of surface water samples from Mud and Spring Creeks, a groundwater sample from LVRR-38C and a sample from a residential well at 5 Guthrie Road. Once approved by EPA, it will amend the RI/FS Work Plan.

2 PROPOSED SURFACE WATER SAMPLING LOCATIONS

[Amends Section 3.3.5.2 Spring/Seep and Surface Water/Sediment Sampling (Subtask 3.05.02)]

UMC proposes to collect surface water samples from Spring Creek and Mud Creek to obtain additional data regarding surface water quality with respect to the LVRR TCE plume. A spring water sample collected the falls on Mud Creek in January 2012 contained 57 µg/l of TCE. This location is above the Dintroff pond. Samples collected from below the pond dam during 2009 did not contain reportable concentrations of TCE. These two locations, LVRRSW-08 and LVRRSWW-55, will be sampled again to evaluate the current water quality and evaluate if the surface water quality has changed over time. The attached Figure 3-3a from the Reconnaissance

[1] Addendum 2 Remedial Investigation/Feasibility Study Work Plan, Lehigh Valley Railroad Derailment Superfund Site, LeRoy, New York, Unicorn Management Consultants, LLC, October 2009.

[2] Addendum 3 Remedial Investigation/Feasibility Study Work Plan, Lehigh Valley Railroad Derailment Superfund Site, LeRoy, New York, Unicorn Management Consultants, LLC, July 2010

[3] Addendum 4 Remedial Investigation/Feasibility Study Work Plan, Lehigh Valley Railroad Derailment Superfund Site, LeRoy, New York, Unicorn Management Consultants, LLC, September 2010

[4] Addendum 5 Remedial Investigation/Feasibility Study Work Plan, Lehigh Valley Railroad Derailment Superfund Site, LeRoy, New York, Unicorn Management Consultants, LLC, April 2012

Investigation Report shows the sampling locations. The spring water samples were collected in the same locations as the sediment samples. Surface water sample LVRRSW-08 was collected at the same location as LVRRSD-08.

UMC collected surface water samples along Spring Creek during 2009 and again during January of 2012. UMC proposes to collect 12 surface water samples along Spring Creek, 7 of which will be from locations where surface water samples were previously collected. The 5 new locations will be located west of LVRR-24 for a distance of approximately 3000 feet. The samples will be collected at 500-foot intervals to provide data on the water quality and identify if any springs may be contributing dissolved TCE to the stream. The attached map of Spring Creek shows the surface water sampling locations.

The following table lists the sampling locations by sampling event and relates them to each event.

2009 Reconn	Jan. 2012	Dec 2012 Proposed
Mud Creek		
LVRRSW-08	NS	LVRRSW-08
LVRRSW-55	NS	LVRRSW-55
Spring Creek		
LVRRSW-14	Spring UPS SW-01	LVRRSW-14
LVRRSW-18	NS	LVRRSW-18
	Oatka UPS-01	Oatka UPS-01
	Confluence-01	Confluence-01
	Spring C SW-01	Spring C SW-01
	Mill St. SW-01	Mill St. SW-01
	MacKay SW-01	
	MacKay SW-02	MacKay SW-02
		Spring C SW-02
		Spring C SW-03
		Spring C SW-04
		Spring C SW-05
		Spring C SW-06
		Spring C SW-07
		Spring C SW-08

Surface water samples will be collected using the same method employed during the 2009 and 2012 sampling events. The sample is collected by inserting a disposable sampling container into the water and then pouring the sample into VOA vials. All samples will be analyzed for volatile organic compounds according to EPA Method 8260.

3 PROPOSED MONITORING WELL AND RESIDENTIAL WELL SAMPLING

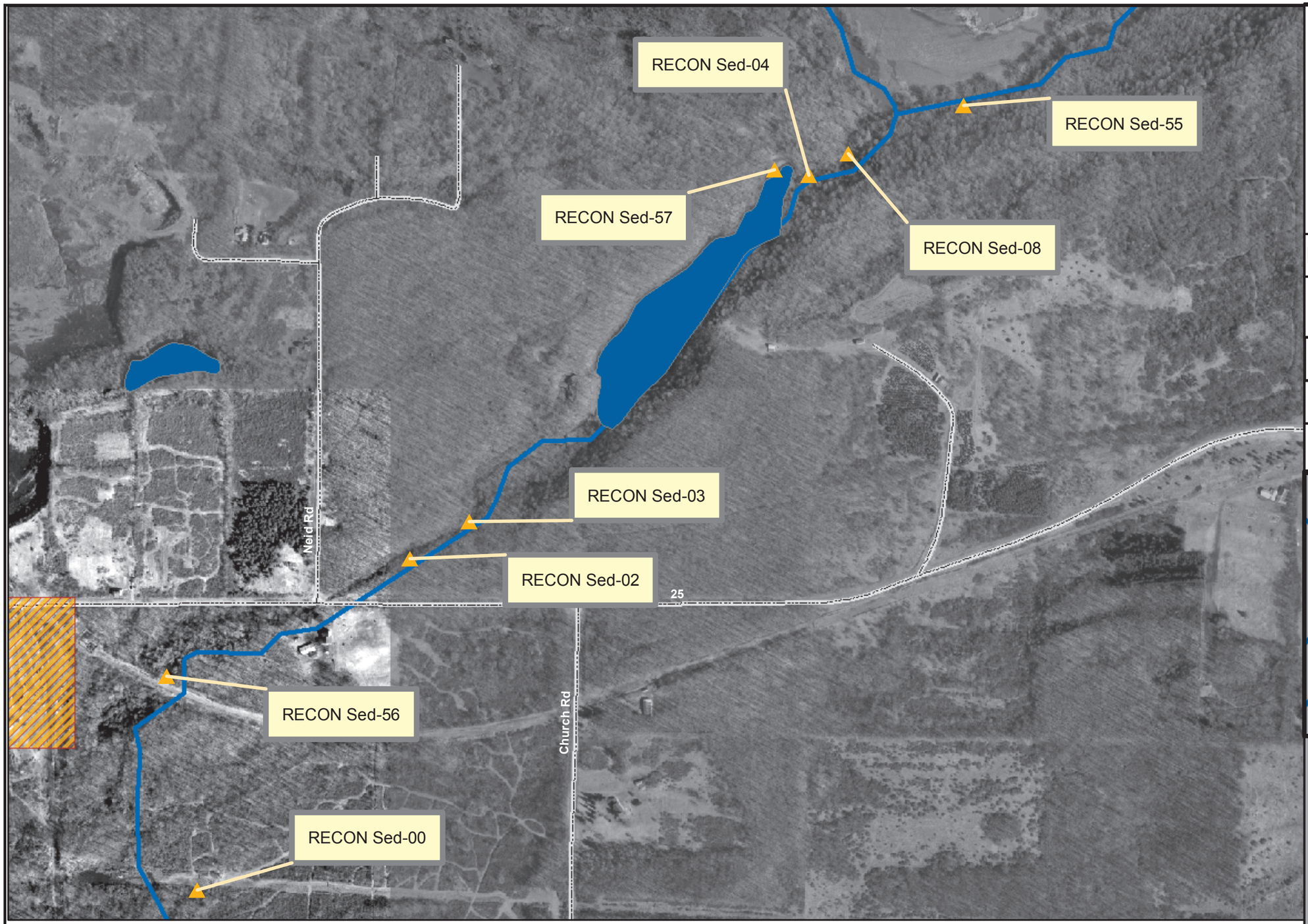
[Amends Section 3.3.5.1 Monitoring Well Groundwater Sampling (Subtask 3.05.01) and Section 3.3.1.5 Existing Well Sampling (Subtask 3.01.05)]

UMC proposes to collect a supplemental groundwater sample from LVRR-38C and a sample from the residential well located at 5 Guthrie Road in Caledonia, NY. The groundwater sample from LVRR-38C contained an estimated concentration of TCE (0.27 µg/l). This well is in line with the wells at the NYSDEC Fish Hatchery (LVRR-25). The residential well at 5 Guthrie Road is located between LVRR-25 and LVRR-38. The attached Figure 2 for Addendum 5 shows the locations of the monitoring wells. The residential well is located south of LVRR-40 and west of LVRR-38. The estimated TCE detection at LVRR-38C may not be real or it may be the horizontal extent of the plume. To assist in evaluating this, and to determine the water quality of the drinking water well, LVRR-38C should be re-sampled and the water in the residential well at 5 Guthrie should be tested.

The sample from LVRR-38C will be collected using PDBs, in accordance with the sampling procedures established in previous sampling rounds and included in Addendums 2 and 5. The sample from the residential well will be collected by allowing the water to run for at least 10 minutes and collecting the sample from a location before any water treatment system that may be present. This method was followed during the 2008 Site Reconnaissance Investigation.

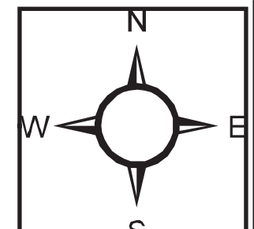
All samples will be analyzed for volatile organic compounds according to EPA Method 8260C.

FIGURES



500 250 0 500 1,000 Feet

Proposed Phase 1 Sediment Sampling Locations
Spill Area/Gorge Pond



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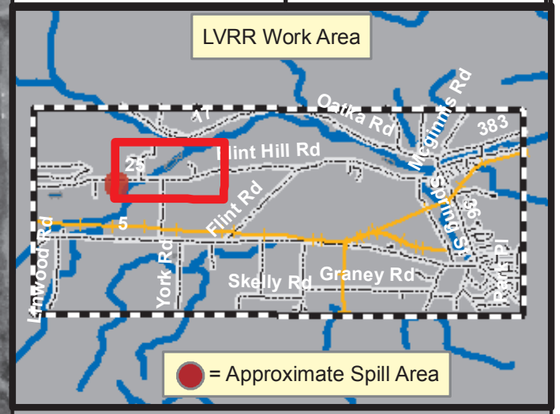
Project Name: Lehigh Valley Railroad Derailment Superfund Site

Figure 3-3a

Author: GPK	**Checked By:** KH
Project #: 2032	**Created:** 9/24/08
	Revised: 4/24/09
Scale: 1 in:500 ft	**File:** Fig3-3a.mxd



Legend

- Approximate Spill Area
- Sediment Sample Locations (8)
- Railroad
- Roads
- Rivers

0 550 1,100 2,200 Feet

Addendum 5-
Lehigh Valley Soil- Gas Locations and Proposed Well Clusters

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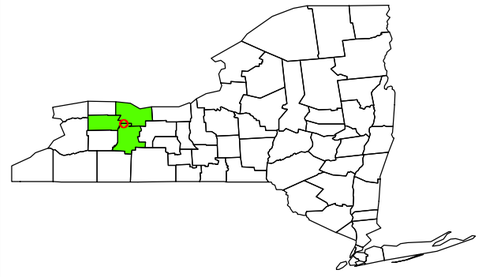
Project Name:	Lehigh Valley Railroad Derailment Superfund Site

FIGURE 2

Author: RTM	**Checked By:**
Project #: 2032	**Created:** 10/27/09 **Revised:** 9/13/12
Scale: 1 in:417 ft	**File:** Addendum5_LVRR_Soilgas_wells

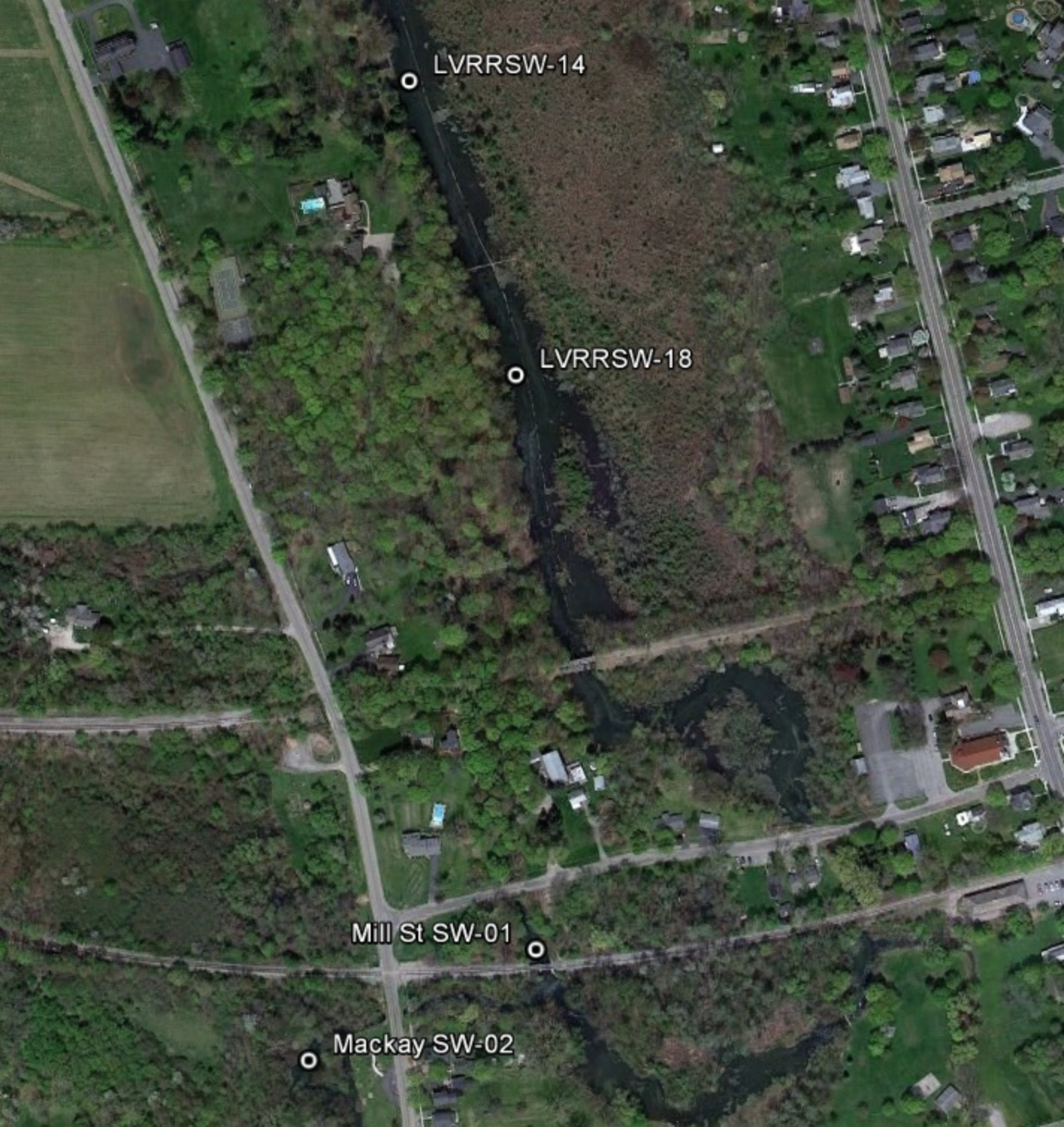
New York State



= Appoximate Site Location

Legend

- Soil- Gas Locations
- Proposed Well Cluster
- LVRR Monitoring Well
- DEC Well Clusters
- Major Transmission Line
- Streams
- Railroad


LVRRSW-14
LVRRSW-18
Mill St SW-01
Mackay SW-02


Oatka UPS-01
Confluence-01
Spring C SW-01
Spring C SW-02
Spring C SW-03
Spring C SW-04
Spring C SW-05
Spring C SW-06
Spring C SW-07
Spring C SW-08
LVRRSW-14
LVRRSW-18