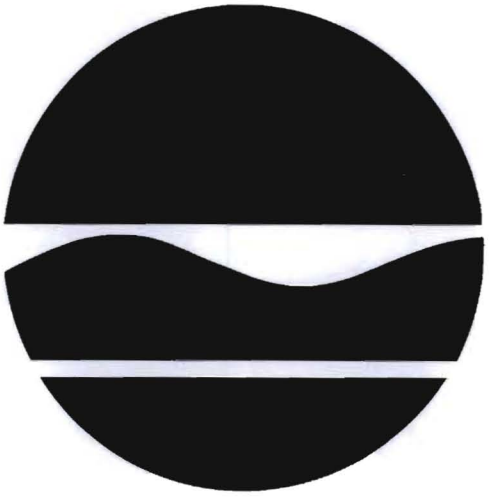
PROPOSED REMEDIAL ACTION PLAN
400 Upper Broadway Site
Environmental Restoration Project
Saranac Lake, Franklin County, New York
Site No. E517007

December 2009



Prepared by:

Division of Environmental Remediation
New York State Department of Environmental Conservation

A 1996 Clean Water/Clean Air Bond Act
Environmental Restoration Project
PROPOSED REMEDIAL ACTION PLAN

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the 400 Upper Broadway Site.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

As more fully described in Sections 3 and 5 of this document, commercial and manufacturing activities at the site resulted in the disposal of hazardous substances, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals. These hazardous substances contaminated the soil and groundwater at the site, and resulted in:

- a threat to human health associated with potential exposure to soils contaminated with VOCs, SVOCs, PCBs, and metals. Exposure pathways considered included direct contact, ingestion and inhalation.

- an environmental threat associated with VOCs, SVOCs, PCBs, and metal contaminants in the soil and the potential migration of these materials into the groundwater.

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the 400 Upper Broadway Site in response to the threats identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the site investigation (SI). The IRMs undertaken at this site included:

-the segregation, sampling and off-site disposal of several 55-gallon and 20-gallon drums and their contents.

-the sampling and off-site disposal of a 1,000 gallon aboveground storage tank and its contents.

Based on the implementation of the above IRMs, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is proposed as the remedy for this site.

The proposed remedy, discussed in detail in Section 6, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, criteria and guidance are hereafter called SCGs.

This Proposed Remedial Action Plan (PRAP) identifies the preferred remedy and discusses the reasons for this preference. The Department will select a final remedy for the site only after careful consideration of all comments received during the public comment period.

The Department has issued this PRAP as a component of the Citizen Participation Plan developed pursuant to the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375. This document is a summary of the information that can be found in greater detail in the January 2009 Site Investigation Report (SI) and other relevant documents. The public is encouraged to review the project documents, which are available at the following repositories:

Village Clerk's Office
Power and Light Building
3 Main Street, Suite 1
Saranac Lake, New York 12983
Telephone: 518-891-4150
Hours: M-F 8 AM to 4:30 PM

Saranac Lake Free Library
109 Main Street
Saranac Lake, New York 12983
Telephone: 518-891-4190
Hours: M-Sat 10 AM - 5:30 PM
Thursday 10 AM - 8 PM

NYSDEC-Region 5 Office
PO Box 296, Route 86
Ray Brook, New York 12977
Contact: Michael P. McLean
Telephone: (518) 897-1242
Hours: M-F 8 AM - 4 PM

The Department seeks input from the community on all PRAPs. A public comment period has been set from {dates} to provide an opportunity for public participation in the remedy selection process. A public meeting is scheduled for {date} at the {location} beginning at {time}.

At the meeting, the results of the SI/RAR and IRM will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP. Written comments may also be sent to Mr. McLean at the above address through {date comment period ends}.

The Department may modify the proposed remedy or select another based on new information or public comments. Therefore, the public is encouraged to review and comment on all of the alternatives identified here.

Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

SECTION 2: SITE LOCATION AND DESCRIPTION

The Site consists of two contiguous parcels of land that are addressed as 400 Upper Broadway in the Village of Saranac Lake, Franklin County, New York. The northern parcel is approximately 1.39 acres in size and is identified as Village of Saranac Lake Tax Map Parcel I.D. number 446.43, Block 2 Lot 3, (LOT 3) The southern parcel is approximately 1.22 acres in size and is identified as Village of Saranac Lake Tax Map Parcel I.D. number 446.43, Block 2 Lot 4 (LOT 4). The site as a whole comprises approximately 2.6 acres.

The site is currently vacant undeveloped land with last reported usage being in the 1960s for commercial purposes (utility company). The Site's southern parcel consists predominantly of mature trees, thickets and grasses with its western portions consisting of wetlands. The central and eastern portions of the northern parcel are lightly wooded and are at an elevation of approximately 3 to 4 feet above the southern parcel. Seasonal cedar wetlands also make up western portions of the site.

The project site is bordered to the north by the First Christian Church; to the east by residential dwellings and Upper Broadway; to the south by wooded, undeveloped land; and to the west by NYS Route 86 (Lake Colby Drive) followed by wooded, undeveloped land and southern portions of an automobile sales and repair facility.

Overall, the topography of the site slopes downward from east to west. A small intermittent creek transects the southeastern portions of the site. The creek is fed via a culvert pipe located along the western side of Upper Broadway. The creek flows into a seasonal wetlands that occupies the western portion of the site. The wetlands continue off-site in a general westerly direction and terminate at the shores of Lake Colby,

which is located approximately 2,000 feet west of the site. Refer to Figure 1-Site Location map and Figure 2-Site Features Map.

Based on a review of the Surficial Geologic Map of New York, Adirondack Sheet, the surficial geology in the vicinity of the site is defined as till that was deposited beneath glacial ice. The bedrock in the vicinity of the site is mapped as undivided metasedimentary rock and related migmatite. The site's northern parcel is overlain by fill material generally consisting of sand with varying percentages of cobbles, boulders, wood, brick, C&D debris and organic matter with the exception of the northernmost portion of the site where bedrock was encountered at the site's surface at two locations The fill material is approximately 1 to 8 feet thick and is underlain by a layer of dark brown and black fine sand, silt, organic matter, or bedrock. Bedrock and/or large boulders were encountered at several locations thorough out the site. Groundwater flow is generally in a west-southwesterly direction into the wetlands comprising the western portions of the site.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site has historically been affiliated with commercial and manufacturing activities that predominantly took place on its eastern adjoining (off-site) property. Beginning in the late 1920s Gladd Brothers began the operation of a small automotive repair facility. As the business expanded into an automobile dealership and repair facility, a two-story structure measuring approximately 150 feet long by 50 feet wide was built. Boat repair was also performed at the facility during this time period.

At the onset of World War II, operations at the site were redirected for the manufacturing of war related items reportedly involving aircraft landing gear and land mine fuses. More than 300 people were reportedly employed during this time; an L-shaped structure and masonry oven were erected on the site at this time. The L-shaped structure was approximately 100 feet long and reportedly consisted of storage buildings atop concrete slabs. The masonry oven was reportedly used for the burning of parts packaging material. At the close of World War II until the 1960s, the site was again used in affiliation with automobile retail sales and repair. Petroleum fuels, solvents, PCBs and heavy metals may have been used in association with past automotive sales and repair and World War II related aircraft parts manufacturing use of the site.

Paul Smith's Electric, and later Niagara Mohawk (who acquired Paul Smith's Electric), reportedly occupied the site's easterly adjoining building and the site's northern parcel in the 1960s. The building was reportedly utilized in connection with the storage of utility trucks and equipment, utility poles were reportedly stored on the site's northern parcel.

The site structures were reportedly demolished in the late 1960s. Thereafter, the site has been vacant and the northern parcel was reportedly utilized as a solid waste disposal area (dump) by various unknown entities for approximately 5 to 10 years before being prohibited.

3.2: Remedial History

No prior subsurface investigations evaluating soil, groundwater, or soil gas quality are known to have been performed at the site.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past owners and operators, waste generators, and haulers.

The PRPs for the site documented to date include former site owners and operators. Gladd Brothers owned and operated a automotive/boat repair in the 1920s which converted to the manufacturing of war related items in the 1940s. The property was sold in the early 1950's and continued to operate as an automotive and boat repair business. Paul Smith's Electric and later Niagara Mohawk utilized the eastern portion of the site in the 1960's. Site structures were demolished in the late 1960s, the site has been vacant since. The Village acquired the property in the early 1970s.

The Village of Saranac Lake will assist the state in their efforts by providing all information to the state which identifies PRPs. The Village will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 5: SITE CONTAMINATION

The Village of Saranac Lake has recently completed a site investigation (SI) to determine the nature and extent of any contamination by hazardous substances at this environmental restoration site.

5.1: Summary of the Site Investigation

The purpose of the SI was to define the nature and extent of any contamination resulting from previous activities at the site. The SI was conducted between April 2007 and December 2008. The field activities and findings of the investigation are described in the SI report.

The following activities were performed in the SI: a site survey, a private well survey, the collection of surface soil samples, surface water samples, the advancement of test trenches and test pits to examine the extent and composition of soil and fill materials and to aid in the collection of subsurface soil samples, the advancement of soil borings which were converted to monitoring wells to aid in the collection of soil and groundwater samples, and a Fish and Wildlife Impact Analysis. An off-site subsurface investigation was conducted on the site's east adjoining property and consisted of the advancement of soil borings and installation of monitoring wells to aid in the collection of soil and groundwater samples to discern if the off-site property was a potential source for site contaminants.

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the soil, groundwater, and surface water contains contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater, drinking water, and surface water SCGs are based on the Department's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.
- Soil SCGs are based on NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs effective December 14, 2006.

Based on the SI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation. These are summarized in Section 5.1.2. More complete information can be found in the SI report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

As described in the SI report, many soil, groundwater, surface soil and sediment samples were collected to characterize the nature and extent of contamination. As summarized in Table 1, the main categories of contaminants that exceed their SCGs are volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and inorganics (metals). For comparison purposes, where applicable, SCGs are provided for each medium.

Chemical concentrations are reported in parts per billion (ppb) for water and parts per million (ppm) for soil and sediment. Table 1 summarizes the degree of contamination for the contaminants of concern in surface soils, subsurface soils, groundwater, and surface water and compares the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Waste Materials

A significant volume of waste materials were identified and removed from the site. Wastes included several

55-gallon and 20-gallon drums and their contents (predominantly sand, sludge, grease) and a 1,000 gallon aboveground tank containing hazardous (high lead content) tar-like sludge. All drums, the tank and the contents within were sampled, identified, and properly disposed of. These wastes identified during the SI were addressed during the interim remedial measures (IRMs) described in Section 5.2.

Surface Soil

Surface soil at this site is defined as soil less than two inches below the ground surface. Twenty four surface soil samples were collected at the site over the course of the SI. Analytes identified above unrestricted SCGs in the surface soil on site were six SVOCs (benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, chrysene, and benzo(k)fluoranthene), four pesticides (heptachlor, dieldrin, 4,4-DDD, and 4,4-DDT), one PCB (Arocolor 1260), and 10 metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, and zinc).

As the site is to be potentially used for a new fire hall or potentially sold for residential usage, contaminants identified above restricted residential SCGs are identified and discussed in the SI. Contaminants identified just above restricted residential guidance values included four SVOCs (benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene) and one PCB (Arocolor 1260). Five metals (arsenic, barium, cadmium, copper, and lead) were also identified above restricted residential guidance values. Lead was evident in four locations with concentrations detected of 2,410, 1,320, 960, and 469 ppm; the SCG for lead for restricted residential is 400 ppm. The contaminants of concern are located on LOT 3, except for one slightly elevated lead level in Surface Soil Sample SS-3, located on the boundary between LOT 3 and LOT 4. Refer to Figure 3 - Surface Soil Contaminants Above Restricted Residential SCGs for detailed concentrations and locations.

No remedial alternatives report was completed for the site, the surface soil contaminants of concern would be addressed in the Site Management Plan upon development of the property. The cost to provide two feet of cover over the entire LOT 3 area is estimated at $70,000. Significant site clearing would also need to be conducted.

Subsurface Soil

Subsurface soil at the site is defined as soil greater than two inches below the ground surface, 38 subsurface soil samples were collected at the site over the course of the SI. Subsurface soil on the site consisted primarily of areas of fill material and/or glacial till over bedrock.

Analytes identified above unrestricted SCGs were two VOCs (acetone, xylene), seven SVOCs (benzo(a)anthracene, benzo(b)flouranthene, benzo(k)flouranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and chrysene), three pesticides (alpha-BHC, 4,4-DDD, and 4,4-DDT), one PCB (Aroclor 1260), and nine metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc).

As the site is to be potentially used for a new fire hall or potentially sold for residential usage, contaminants identified above restricted residential SCGs are identified and discussed in the SI. Analytes identified above restricted residential SCGs were five SVOCs (benzo(a)anthracene, benzo(b)flouranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene), one PCB (Aroclor 1260), and two metals (cadmium and copper). All contaminant levels were just slightly above restricted residential values and are located on LOT 3 only. Refer to Figure 4-Subsurface Soil Contaminants Above Restricted Residential Usage for detailed concentrations and locations.

No significant subsurface soil contamination of concern was identified during the SI. Therefore, no remedial alternatives need be evaluated for subsurface soil.

Groundwater

Groundwater samples were collected from twelve site monitoring wells in January of 2008. Contaminants identified above SCGs included two VOCs (benzene, 4-isopropyltoluene), five SVOCs (phenol, 2-

methylphenol, 4-methylphenol, pentachlorophenol, and bis(2-ethylhexyl)phthalate), one pesticide (alpha-chloridane), and four metals (iron, manganese, selenium, and sodium). Benzene and phenol were identified in an off-site and upgradient monitoring well, MW-9.

To confirm the VOCs and SVOCs contaminant levels, an additional round of sampling was collected from select monitoring wells on November 12, 2008. 4-methylphenol was identified in one monitoring well at 1.7 ppb, all other monitoring wells were non-detect for contaminants encountered in the January 2008 sampling event. Refer to Figure 5-Groundwater Contaminants.

A public water supply is utilized in the surrounding area, the closest private well supply is located on Moir Road approximately 2,000 feet northwest of the site. As no site-related groundwater contamination of concern was identified during the SI, no remedial alternatives need to be evaluated for groundwater.

Perched Surface Water

Surface water samples were collected from two locations on the eastern portion of the site where seasonal perched water may accumulate. Contaminants identified above SCGs were two metals, iron and thallium. These two metals are considered naturally occurring and not related to previous operations at the site. No remedial alternatives need to be evaluated for surface water.

Soil Vapor/Air

No soil vapor or air sampling was conducted at the location, as onsite conditions did not indicate a need for a soil vapor investigation. Low-level VOCs were identified in the soil and groundwater (See Table 1). Off-site structures are distant and upgradient of the site. No structures are present on the site.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the SI/RAR. The IRMs undertaken at this site included the segregation, sampling, and off-site disposal of several 55-gallon and 20-gallon drums and their contents (sand, sludge, grease); and the sampling and off-site disposal of a 1,000 gallon above ground storage tank and its contents, a tar-like sludge. The tar-like sludge was subsequently classified as hazardous waste due to the lead concentrations detected. The majority of the 55 gallon drums were used as a retaining wall between the two parcels (LOT 3 and LOT 4). Soil samples were collected from beneath the drums upon their removal to determine whether contamination was present.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Section 6.0 of the SI report.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

People using the site could come into contact with limited surface soil contamination. However, the site is currently a mature forest, so exposures are expected to be minimal. The remedy includes a site management plan to address the potential for exposures should the soil be disturbed. Public drinking water serves the area, so exposure to residual groundwater contamination is not expected.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site prior to the IRM. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

The Fish and Wildlife Impact Analysis, which is included in the SI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.
The following environmental exposure pathways and ecological risks have been identified:

- an environmental threat associated with VOCs, SVOCs, PCBs, and metal contaminants in the soil and the potential migration of these materials into the groundwater.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS, PROPOSED REMEDY, AND THE PROPOSED USE OF THE SITE

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous substances disposed at the site through the proper application of scientific and engineering principles.

Prior to the completion of the IRM described in Section 5.2, the remediation goals for this site were to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to VOCs, SVOCs, PCBs, and metals in surface soils, subsurface soils, surface water, and groundwater at the site;
- the release of contaminants from surface and subsurface soil into groundwater that may create exceedances of groundwater quality standards; and
- the release of contaminants from surface and subsurface soil into ambient air via wind borne dust.

The main SCGs applicable to this project are as follows:

- Groundwater and surface water SCGs are based on the Department's June 1998 "Ambient Water Quality Standards and Guidance values;
- Soil SCGs are based on the NYSDEC 6 NYCRR Part 375-6.8(b) Environmental Remediation Programs effective December 14, 2006;

The Department believes that the IRMs have accomplished the remediation goals and satisfied the SCGs for the site.

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation presented here, the Department is proposing No Further Action as the preferred alternative for the site. The Department believes that this alternative would be protective of human health and the

environment and would satisfy all SCGs as described above. Overall protectiveness is achieved through meeting the remediation goals listed above.

Therefore, the Department concludes that No Further Action is needed other than institutional controls. The elements of the IRM already completed and the institutional and engineering controls are listed below:

1. Elements of the IRMs that have been completed and comprise the remedy for the site include: (1) the segregation, sampling, and off-site disposal of several 55-gallon and 20-gallon drums and their contents, and (2) the sampling and off-site disposal of a 1,000 gallon above ground storage tank and its contents.

2. Imposition of an institutional control in the form of an environmental easement that would require: (a) limiting the use and development of the property to restricted residential use, which would also permit commercial or industrial uses; (b) compliance with the approved site management plan; and (c) the property owner to complete and submit to the Department a periodic certification of institutional controls.

3. Development of a site management plan which would include the following provisions for LOT 3 only: (a) any site disturbance and development would require two feet of soil be provided that does not exceed the SCOs for the site (i.e. soil with contaminant concentrations less than the 375-6 restricted residential values). As more specifically described in the site management plan, this may be achieved through excavation and disposal of contaminated surface soil, or importing soil to be used as cover (375-6.7(d)) ; (b) any excavated soils would be tested, properly handled to protect the health and safety of workers and the nearby community, and would be properly managed in a manner acceptable to the Department; (c) identification of any use restrictions on the site.

4. The property owner would provide a periodic certification of institutional controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal would: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the controls to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

The proposed future use for the 400 Upper Broadway Site is restricted-residential with potential usage being a fire hall or residential property.

TABLE 1
Nature and Extent of Contamination
June 2007-November 2008

SURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Semivolatile Organic Compounds (SVOCs)	Benzo(a)anthracene	ND[c] to 2	1	1 of 24
	Benzo(b)fluoranthene	ND to 3.1	1	1 of 24
	Benzo(a)pyrene	ND to 2	1	1 of 24
	Indeno(1,2,3-cd)pyrene	ND to 1.2	0.5	3 of 24
	Chrysene	ND to 2	1	1 of 24
	Benzo(k)fluoranthene	ND to .97	0.8	1 of 24
PCB/Pesticides	Heptachlor	ND to .14	.042	1 0f 24
	Dieldrin	ND to .07	.005	3 of 24
	4,4-DDD	ND to .026	.0033	3 of 24
	4,4-DDT	ND to 1.8	.0033	6 of 24
	Aroclor 1260 (PCB)	ND to 1.9	0.1	8 of 24
Inorganic Compounds	Arsenic	ND to 31.4	13	1 of 24
	Barium	10.4 to 886	350	1 of 24
	Cadmium	.065 to 12.0	2.5	4 of 24
	Chromium	1.4 to 65.9	30	4 of 24
	Copper	ND to 8,240	50	4 of 24
	Lead	4.2 to 2,410	63	12 of 24
	Mercury	ND to 0.5	0.18	7 of 24
	Nickel	0.41 to 65	30	2 of 24
	Selenium	ND to 4.5	3.9	1 of 24
	Zinc	13.5 to 2,450	109	13 of 24

TABLE 1, Continued

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds	Acetone	ND to 0.2	0.05	1 of 41
	Xylene	ND to 2.5	0.26	1 of 41
Semivolatile Organic Compounds (SVOCs)	Benzo(a)anthrcene	ND to 1.9	1	2 of 41
	Benzo(b)fluoreanthene	ND to 4.3	1	1 of 41
	Benzo(k)fluoranthene	ND to 1.5	0.8	1 of 41
	Benzo(a)pyrene	ND to 2	1	1 of 41
	Indeno(1,2,3-cd)pyrene	ND to 1.4	0.5	1 of 41
	Dibenzo(a,h)anthracene	ND to .37	0.33	1 of 41
	Chrysene	ND to 3.5	1	3 of 41
PCB/Pesticides	alpha-BHC	ND to .027	0.02	1 of 41
	4,4-DDD	ND to .045	.0033	2 of 41
	4,4-DDT	ND to 0.3	.0033	11 of 41
	Aroclor 1260 (PCB)	ND to 8.8	0.1	10 of 41
Inorganic Compounds	Arsenic	ND to 14.4	13	1 of 41
	Cadmium	.045 to 6	2.5	7 of 41
	Chromium	1.4 to 70.8	30	3 of 41
	Copper	ND to 294	50	3 of 41
	Lead	3.4 to 285	63	10 of 41
	Mercury	ND to 0.35	0.18	2 of 41
	Nickel	1.6 to 224	30	1 of 41
	Silver	ND to 15.9	2	10 of 41
	Zinc	34.9 to 430	109	15 of 41

TABLE 1, Continued

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND to 200 ND	1	1 of 12 (01/09/08) 0 of 1(11/12/08)
	4-Isopropyltoluene	ND to 7	5	1 of 12(01/09/08)
Semivolatile Organic Compounds (SVOCs)	Phenol	ND to 30 ND	1	4 of 12 (01/09/08) 0 of 5 (11/12/08)
	2-Methylphenol	ND to 31 ND	1	3 of 12 (01/09/08) 0 of 5 (11/12/08)
	4-Methylphenol	ND to 140 ND to 1.7	1	3 of 12 (01/09/08) 1 of 5 (11/12/08)
	Pentachlorophenol	ND to 5 ND	1	1 of 12 (01/09/08) 0 of 5 (11/12/08)
	Bis(2-Ethylhexyl)phthalate	ND to 7 ND	5	1 of 12 (01/09/08) 0 of 5 (11/12/08)
Inorganic Compounds	Iron	673 to 25,800	300	12 of 12
	Manganese	376 to 10,400	300	11 of 12
	Selenium	ND to 26.3	10	7 of 12
	Sodium	ND to 80,100	20,000	8 of 12

PERCHED SURFACE WATER	Contaminants of Concern	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)[a]	Frequency of Exceeding SCG
Inorganic Compounds	Iron	65,400 to 671,000	300	2 of 2
	Thallium	1.6 to 71	20	1 of 2

[a] ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
ug/m^3 = micrograms per cubic meter

[b] SCG = standards, criteria, and guidance values

[c] ND = No contaminants detected.

MAP REFERENCE
United States Geological Survey
15 Minute Series Topographic Map
Quadrangle: Saranac, NY
Date: 1955

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W
E

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FIGURE 1 - SITE LOCATION MAP

400 Broadway ERP Site
Upper Broadway

VILLAGE OF SARANAC LAKE	FRANKLIN COUNTY, NY
SCALE: 1"=2,000'	
DRAFTER: SHB	
PROJECT No. 07.1092	

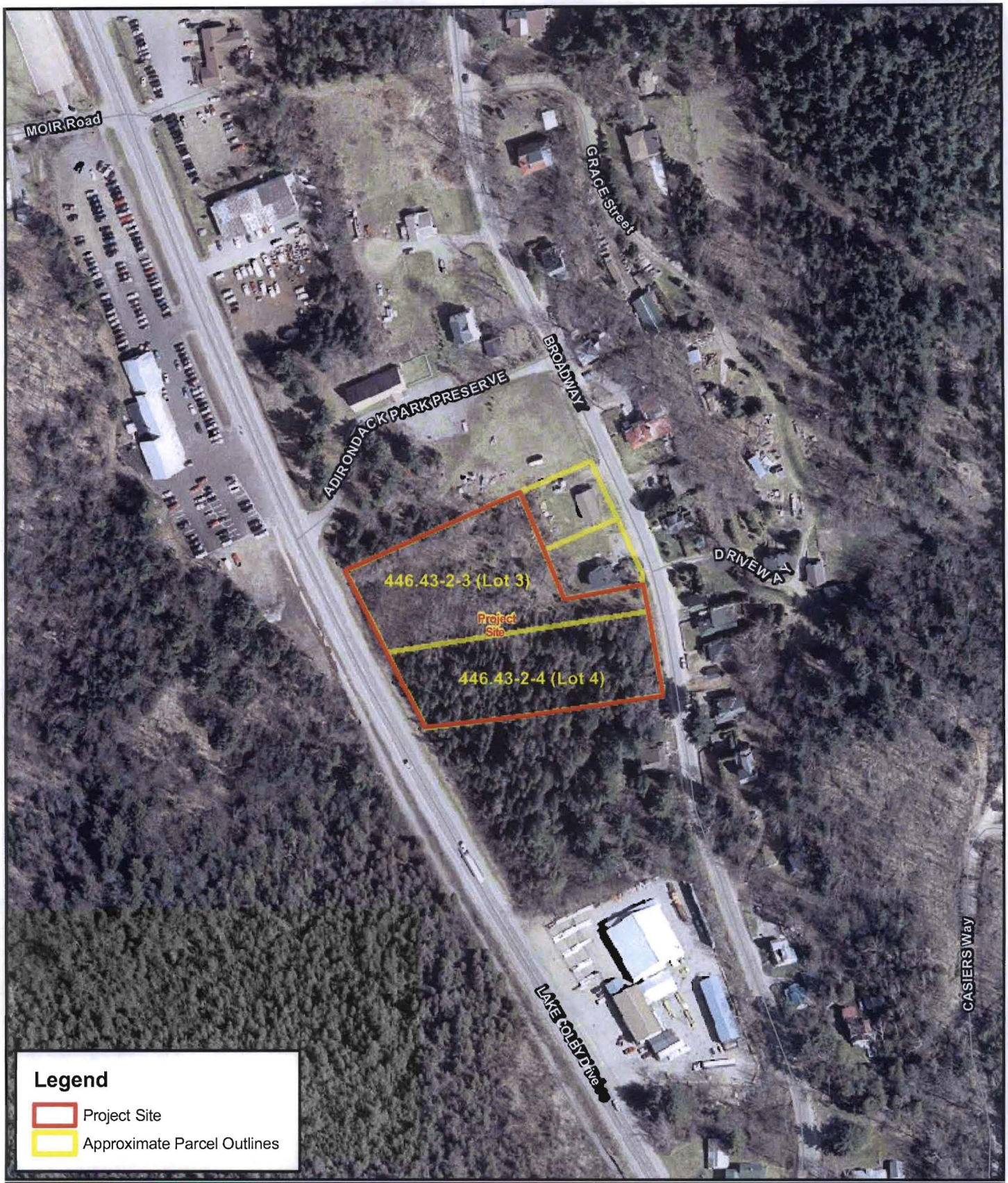

Figure 2: Site Features Map, 2003 Aerial Photography

Town of Harrietstown — **Franklin County, New York**

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Engineering ' Land Surveying ' Architecture ' Landscape Architecture
Environmental Services ' Geographic Information Services

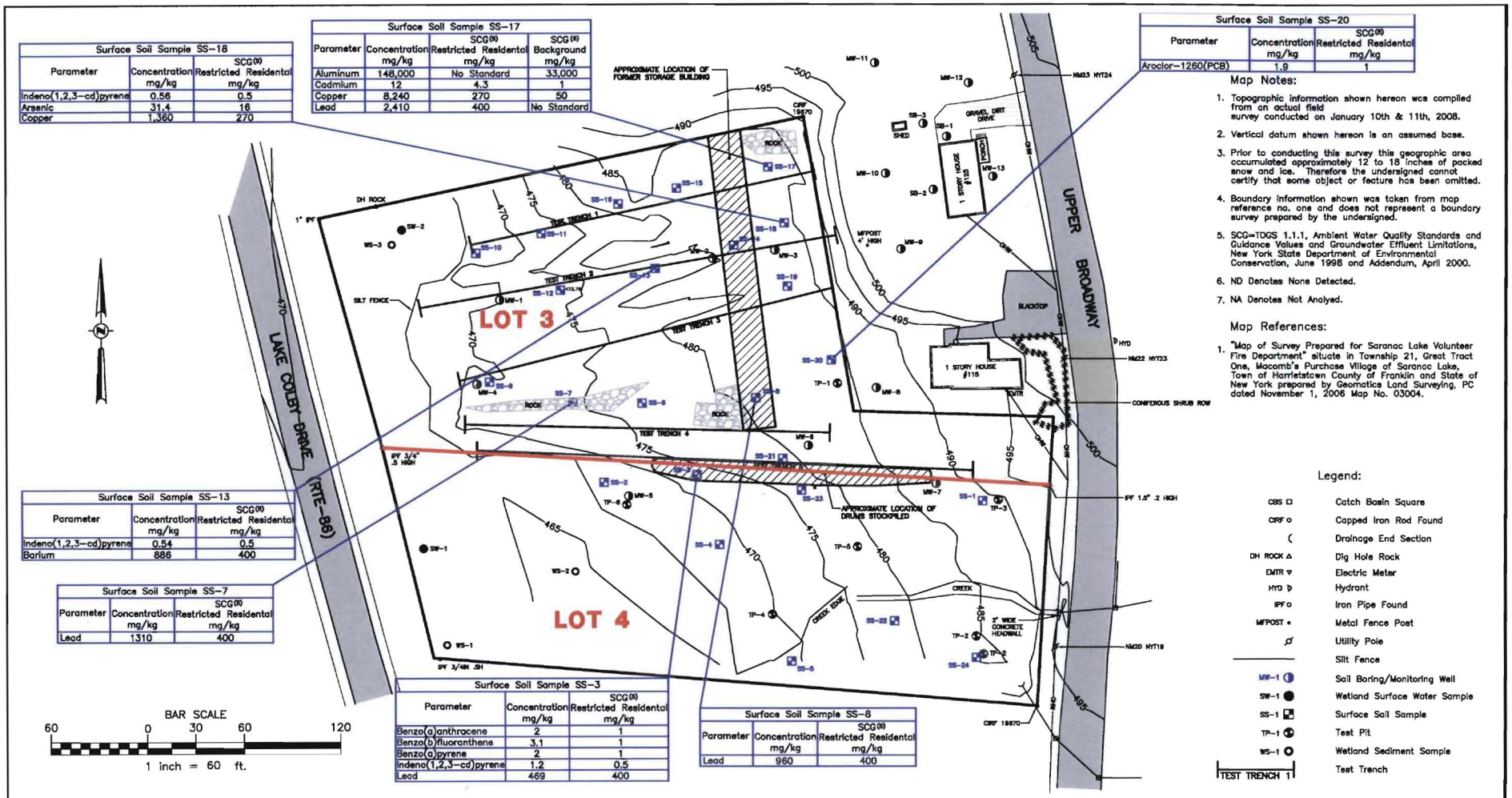
Scale: 1 inch = 204 feet

Project Number: 07.1092
Data Source: NYSGIS Clearinghouse
Projection: SP NAD83 NYE Ft.

Map Notes:
Full Color Aerial Photography flown April, 2003.
Photo Resolution: 1 ft./pixel.
Horizontal Photo Accuracy: +/- 4 ft.

NORTH

Date: June 19, 2009
User Name: CH
File Name: SaranacSite2003.mxd



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DRAFTED : S.WUNSCH
CHECKED : S.BIEBER
PROJ. NO: 07.1092
SCALE : 1"=60'
DATE : JAN. 28, 2009

FIGURE 3: SURFACE SOIL CONTAMINANTS ABOVE RESTRICTED RESIDENTIAL SCGs

400 BROADWAY ERP SITE

VILLAGE OF SARANAC LAKE — FRANKLIN COUNTY, NEW YORK

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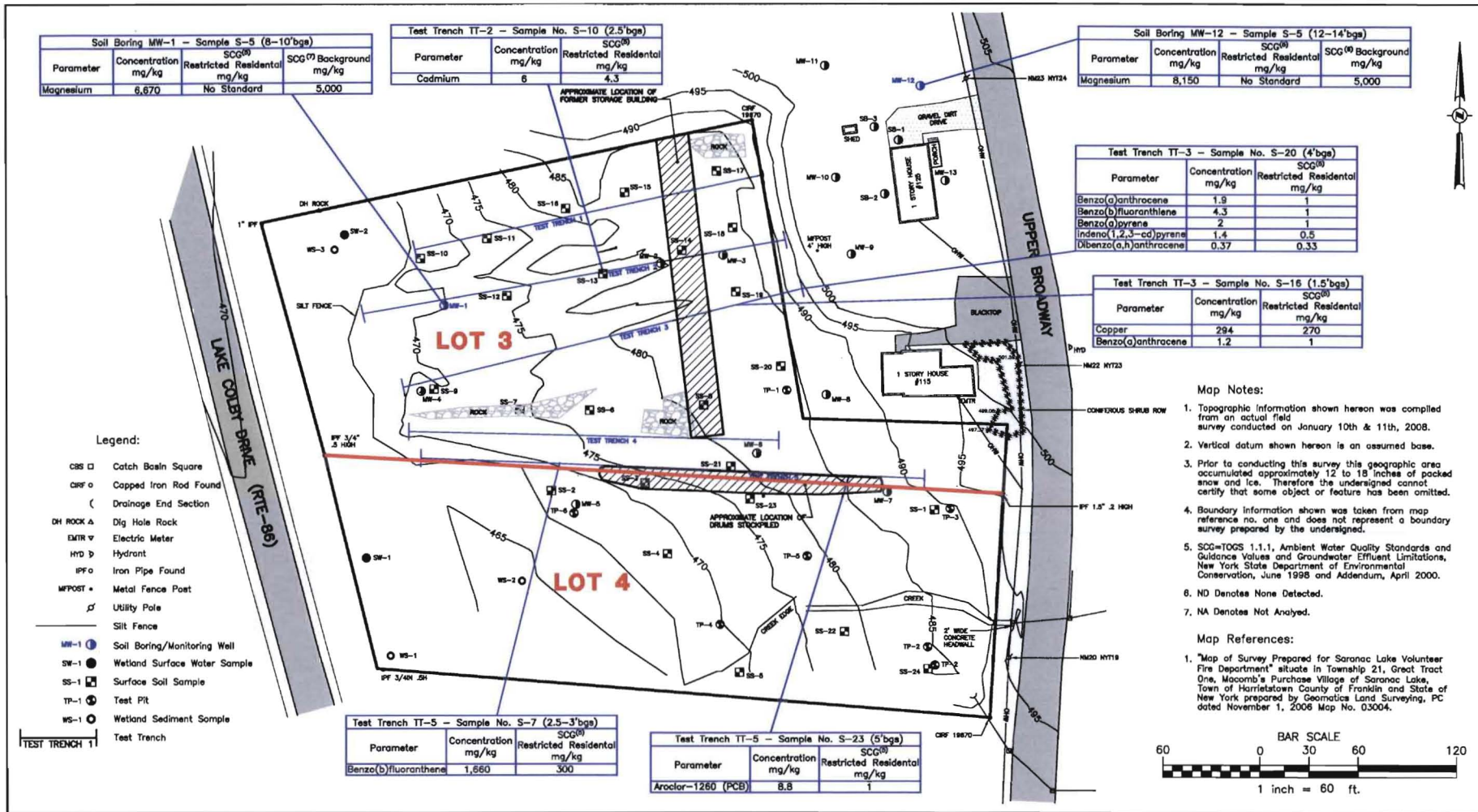
FIG-3
SHEET 1 OF 1
DWG. NO: 09-0135



Soil Boring MW-1 – Sample S-5 (8-10'bgs)

Parameter	Concentration mg/kg	SCG[5] Restricted Residental mg/kg	SCG[7] Background mg/kg
Magnesium	6,670	No Standard	5,000

Test Trench TT-2 – Sample No. S-10 (2.5'bgs)

Parameter	Concentration mg/kg	SCG[5] Restricted Residental mg/kg
Cadmium	6	4.3

Soil Boring MW-12 – Sample S-5 (12-14'bgs)

Parameter	Concentration mg/kg	SCG[5] Restricted Residental mg/kg	SCG[6] Background mg/kg
Magnesium	8,150	No Standard	5,000

Test Trench TT-3 – Sample No. S-20 (4'bgs)

Parameter	Concentration mg/kg	SCG[5] Restricted Residental mg/kg
Benzo(a)anthrocene	1.9	1
Benzo(b)fluoranthlene	4.3	1
Benzo(a)pyrene	2	1
Indeno(1,2,3-cd)pyrene	1.4	0.5
Dibenzo(a,h)anthracene	0.37	0.33

Test Trench TT-3 – Sample No. S-16 (1.5'bgs)

Parameter	Concentration mg/kg	SCG[5] Restricted Residental mg/kg
Copper	294	270
Benzo(a)anthracene	1.2	1

Test Trench TT-5 – Sample No. S-7 (2.5-3'bgs)

Parameter	Concentration mg/kg	SCG[5] Restricted Residental mg/kg
Benzo(b)fluoranthene	1,660	300

Test Trench TT-5 – Sample No. S-23 (5'bgs)

Parameter	Concentration mg/kg	SCG[5] Restricted Residental mg/kg
Aroclor-1260 (PCB)	8.8	1

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CHECKED : S.BIEBER
PROJ. NO: 07.1092
SCALE : 1"=60'
DATE : JAN. 28, 2009

FIGURE 4: SUBSURFACE SOIL CONTAMINANTS ABOVE RESTRICTED RESIDENTIAL SCGs

400 BROADWAY ERP SITE

VILLAGE OF SARANAC LAKE — FRANKLIN COUNTY, NEW YORK

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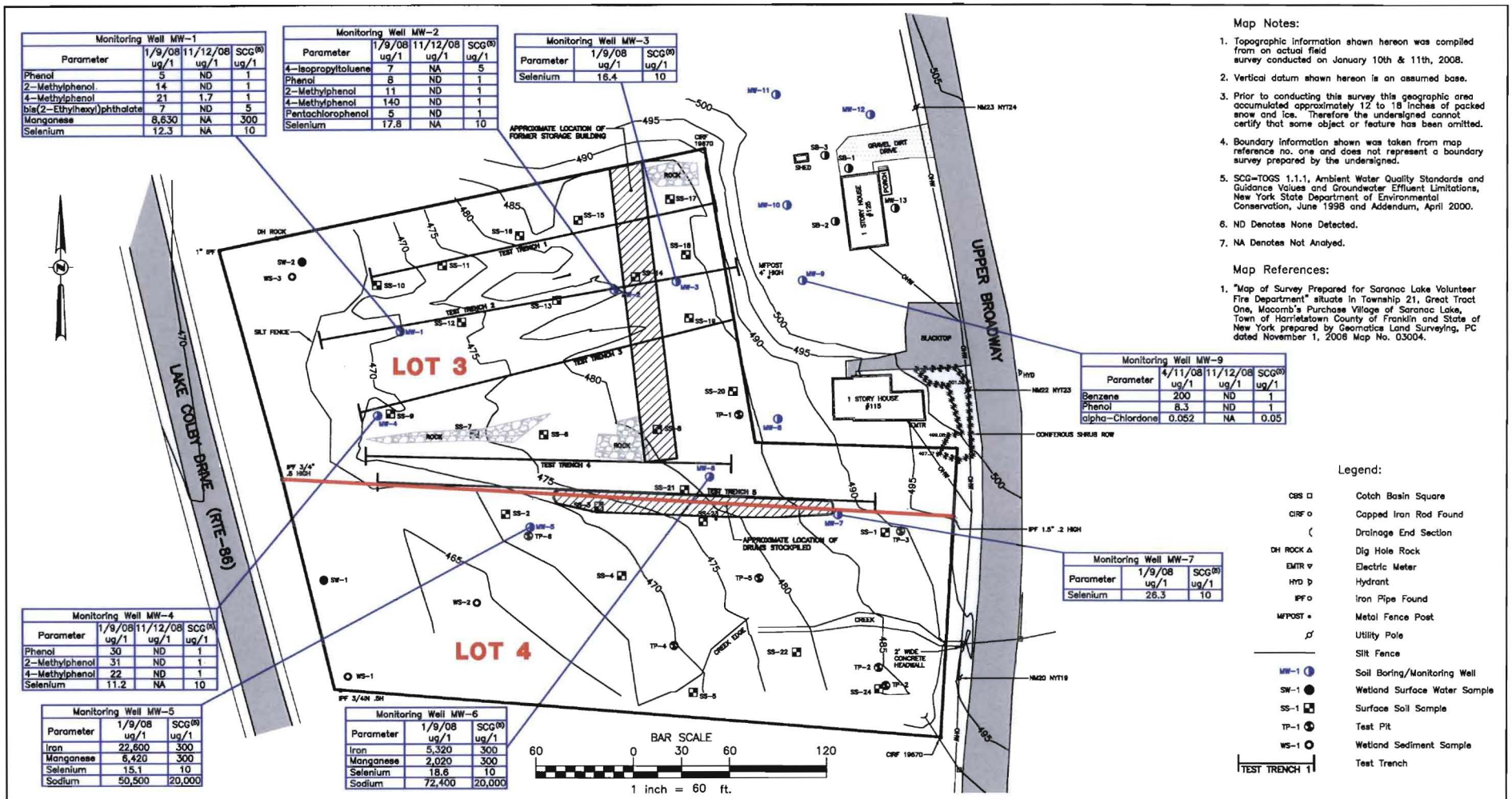
FIG-4
SHEET 1 OF 1
DWG. NO: 09-0136



Monitoring Well MW-1			
Parameter	1/9/08 ug/l	11/12/08 ug/l	SCG[6] ug/l
Phenol	5	ND	1
2-Methylphenol	14	ND	1
4-Methylphenol	21	1.7	1
bis(2-Ethylhexyl)phthalate	7	ND	5
Manganese	8,630	NA	300
Selenium	12.3	NA	10

Monitoring Well MW-2			
Parameter	1/9/08 ug/l	11/12/08 ug/l	SCG[6] ug/l
4-Isopropyltoluene	7	NA	5
Phenol	8	ND	1
2-Methylphenol	11	ND	1
4-Methylphenol	140	ND	1
Pentachlorophenol	5	ND	1
Selenium	17.8	NA	10

Monitoring Well MW-3		
Parameter	1/9/08 ug/l	SCG[6] ug/l
Selenium	16.4	10

Monitoring Well MW-4			
Parameter	1/9/08 ug/l	11/12/08 ug/l	SCG[6] ug/l
Phenol	30	ND	1
2-Methylphenol	31	ND	1
4-Methylphenol	22	ND	1
Selenium	11.2	NA	10

Monitoring Well MW-5		
Parameter	1/9/08 ug/l	SCG[6] ug/l
Iron	22,600	300
Manganese	6,420	300
Selenium	15.1	10
Sodium	50,500	20,000

Monitoring Well MW-6		
Parameter	1/9/08 ug/l	SCG[6] ug/l
Iron	5,320	300
Manganese	2,020	300
Selenium	18.6	10
Sodium	72,400	20,000

Monitoring Well MW-7		
Parameter	1/9/08 ug/l	SCG[6] ug/l
Selenium	26.3	10

Monitoring Well MW-9			
Parameter	4/11/08 ug/l	11/12/08 ug/l	SCG[6] ug/l
Benzene	200	ND	1
Phenol	8.3	ND	1
alpha-Chlordane	0.052	NA	0.05

Map Notes:

1. Topographic information shown hereon was compiled from on actual field survey conducted on January 10th & 11th, 2008.
2. Vertical datum shown hereon is an assumed base.
3. Prior to conducting this survey this geographic area accumulated approximately 12 to 18 inches of packed snow and ice. Therefore the undersigned cannot certify that some object or feature has been omitted.
4. Boundary information shown was taken from map reference no. one and does not represent a boundary survey prepared by the undersigned.
5. SCG=TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, New York State Department of Environmental Conservation, June 1998 and Addendum, April 2000.
6. ND Denotes None Detected.
7. NA Denotes Not Analyed.

Map References:

1. "Map of Survey Prepared for Saranac Lake Volunteer Fire Department" situate in Township 21, Great Tract One, Macomb's Purchase Village of Saranac Lake, Town of Harrietstown County of Franklin and State of New York prepared by Geomatica Land Surveying, PC dated November 1, 2008 Map No. 03004.

Legend:

CBS □	Catch Basin Square
CIRF ○	Capped Iron Rod Found
(	Drainage End Section
DH ROCK △	Dig Hole Rock
EMTR ▽	Electric Meter
HYD ▷	Hydrant
IPF ○	Iron Pipe Found
MFPOST •	Metal Fence Post
⌀	Utility Pole
———	Silt Fence
MW-1 ◑	Soil Boring/Monitoring Well
SW-1 ●	Wetland Surface Water Sample
SS-1 ■	Surface Soil Sample
TP-1 ◐	Test Pit
WS-1 ○	Wetland Sediment Sample
TEST TRENCH 1	Test Trench

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FIGURE: 5 GROUNDWATER CONTAMINANTS

400 BROADWAY ERP SITE

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FIG-5
SHEET 1 OF 1
DWG. NO: 09-0137