

FINAL

**ENVIRONMENTAL CONDITION OF PROPERTY
REPORT**

**NIAGARA FALLS
U.S. ARMY RESERVE CENTER (NY046)
NIAGARA FALLS, NY 14304**

Prepared For:

**U.S. Army Corps of Engineers – Louisville District
Engineering Division – Environmental Engineering Branch
600 Dr. Martin Luther King, Jr. Place
Louisville, Kentucky 40202-2232**

JULY 2007

Certification

All information/documentation provided accurately reflects the environmental condition of the property. This ECP report is in general accordance with the U.S. Department of Defense (DoD) requirements for completion of an Environmental Condition of Property (ECP) report.

JOHN WOHRLE	DATE
Acting Facility Management Officer	
77th Regional Readiness Command, ARIM	

The undersigned certifies the contents of this report are in general accordance with DoD policies for the completion of an ECP report.

LENARD GUNNELL, P.G.	DATE
Project Geologist	
U.S. Army Corps of Engineers	

Executive Summary

CH2M HILL, under contract to the U.S. Army Corps of Engineers, Louisville District, has prepared this Environmental Condition of Property (ECP) report for the Niagara Falls U.S. Army Reserve (USAR) Center (Facility ID NY046), hereafter referred to as the "Property" or "USAR Center."

This ECP report was conducted in conformance with the Department of Defense's (DoD's) Base Redevelopment and Realignment Manual, DoD 4165.66-M (BRRM), Army Regulation 200-1, and the American Society for Testing and Materials (ASTM) Designation D6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys*.

This ECP report details the history of the Property including prior tenant use; however, the focus of this document is on USAR's use of the Property and the resulting environmental condition.

The USAR Center is on 19.5 acres of land in Niagara Falls, New York, and has 11 permanent structures and three parking/equipment storage areas. The Property is occupied mainly by the 277th Quartermaster Company (a refueling company), the 865th Combat Support Hospital (a medical group), a small presence of the 1982nd Forward Surgical Unit, and Area Maintenance Support Activity (AMSA) 76. A small presence is maintained by personnel of the Department of Public Works, Fort Drum, New York.

Based on a review of aerial photographs and U.S. Geological Survey (USGS) topographic maps dating back to 1899, development similar to the present appeared at least by 1948. Some of the buildings on the Property are depicted on the USGS topographic map of 1965.

Areas of potential environmental concern were reviewed, and CH2M HILL found the following relating to the environmental condition of the Property:

- Reports of a former landfill on the Property. A preliminary assessment (PA) report quoting previous studies at the Property states that the Property is known to have been a landfill. The PA cites other intrusive investigations on the Property, which did not conclude that a landfill existed at the location. The PA, however, states that "no additional documents could be located to confirm or deny the potential presence of a landfill" and recommended additional records reviews and subsurface sampling on the Property with the objective of determining whether a landfill was previously located at the Property.
- According to Property personnel, the hangar in Building 4 was formerly used to service Nike missiles having conventional warheads in support of other Nike missile batteries in New York. Several published reports on the Nike missile program indicate there is the potential for environmental effects related to Nike missile operations and maintenance.
- Three aircraft maintenance hangars: two former wooden hangars located on the east side of the Property, and one hangar within Building 4. According to the PA report, operations at the Building 4 hangar included daily inspections, engine repair, and

aircraft modifications. Building 4 also was used to service Nike missiles from batteries in the New York area. The hangars were in use as early as the 1930s, and no detailed information is available on storage and disposal of hazardous substances that were likely used. Drainage from the hangar reportedly flowed into storm drains for several decades before installation of the OWS near Building 4 in 1994. A PA performed in 1994 recommended sediment sampling in Cayuga Creek to evaluate discharges from building floor drains into the storm sewer. No information was available to indicate that such sampling had been performed.

In accordance with DoD policy defining the classifications (see Sherri Goodman memorandum dated 21 October 1996), the Property has been classified as Type 7. This classification does not include categorizing the property based on de minimis conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

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Abbreviations and Acronyms

The following is a comprehensive list of abbreviations and acronyms that are used throughout this report.

ACM	asbestos-containing material
AGV	alternative guidance value
AMSA	Area Maintenance Support Activity
AR	army regulation
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
bgs	below ground surface
BRAC	Base Realignment and Closure
BRRM	Base Redevelopment and Realignment Manual
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Act Information System
CFR	Code of Federal Regulations
CONEX	Container Express
CORRACTS	Resource Conservation and Recovery Act corrective action site
CSH	Combat Support Hospital
DoD	Department of Defense
DPW	Department of Public Works
ECP	Environmental Condition of Property
EDR	Environmental Data Resources, Inc.
ERNS	Emergency Response Notification System
FEMA	Federal Emergency Management Agency
kg	kilogram
LBP	lead-based paint
LUST	leaking underground storage tank

MEC	munitions and explosives of concern
MEK	methyl ethyl ketone
MEP	military equipment parking
msl	mean sea level
MVPA	military vehicle parking area
NETR	NETR Real Estate Research and Information
NFA	no further action
NFTA	Niagara Frontier Transportation Authority
NPL	National Priorities List
NRHP	National Register of Historic Places
NYARNG	New York Army National Guard
NYSDEC	New York State Department of Environmental Conservation
OMS	organizational maintenance shop
OWS	oil/water separator
PA	preliminary assessment
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
pCi/L	picoCuries per liter
POL	petroleum, oil, and lubricant
POV	privately owned vehicle
ppb	parts per billion
ppm	parts per million
PSG	Professional Services Group
QmC	Quartermaster Company
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Act Information System
RQ	reportable quantity
STARS	Spill Technology and Remediation Series
TAGM	Technical and Administrative Guidance Memorandum

TCA	trichloroethane
TCE	trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
TSD	treatment, storage, or disposal
TSI	thermal system insulation
USACE	United States Army Corps of Engineers
USAR	United States Army Reserve
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank

1 Introduction

CH2M HILL, under contract to the U.S. Army Corps of Engineers (USACE) Louisville District Engineering Division, was authorized to conduct an Environmental Condition of Property (ECP) report for the Niagara Falls U.S. Army Reserve (USAR) Center (NY046). The facility is located at 9400 Porter Road, Niagara Falls, Niagara County, New York 14304 (Figure 1, Appendix A) and is hereafter referred to as the "Property" or "USAR Center." CH2M HILL prepared this ECP report under Contract Number W912QR-04-D-0020, Task Order No. 0018, with the Louisville District USACE.

A visual non-intrusive reconnaissance of the Property was conducted on August 16 and 17, 2006, in support of the ECP. On April 12, 2007, Property personnel conducted a visual non-intrusive reconnaissance of some of the areas that were not accessible to CH2M HILL. The site reconnaissance purpose was to visually obtain information indicating the likelihood of recognized environmental conditions associated with the Property or adjacent properties.

In preparing this ECP report, CH2M HILL gathered information from the available records and previous work by others, interviews with individuals purporting to be familiar with the Property, and observations from the site reconnaissance. The accuracy of the information obtained from these sources was not verified by CH2M HILL. As such, CH2M HILL will make no warranty, expressed or implied, relative to the accuracy, completeness, or reliability of the information used to create the records and reports prepared by others.

1.1 Purpose of Environmental Condition of Property

This report meets the Department of Defense's (DoD's) requirement to prepare an ECP report under the provisions of the Base Redevelopment and Realignment Manual (BRRM) (DoD 4165.66-M, March 1, 2006) Section C8.3. The ECP was prepared for the following purposes:

- Provide the Army with information it may use to make disposal decisions
- Provide the public with information relative to the environmental condition of the Property
- Assist in community planning for the reuse of Base Realignment and Closure (BRAC) property
- Assist federal agencies during the property screening process
- Provide information for prospective buyers
- Assist prospective new owners in meeting the requirements under the U.S. Environmental Protection Agency (USEPA) "All Appropriate Inquiry" regulations when they become final
- Provide information about completed remedial and corrective actions at the property

- Assist in determining appropriate responsibilities, asset valuation, and liabilities with other parties to a transaction

This ECP report contains the information required to comply with the provisions of 40 Code of Federal Regulations (CFR) Part 373 that require a notice accompany contracts for the sale of, and deeds entered into for the transfer of federal property on which hazardous substances may have been stored, released, or disposed of. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the property for 1 year or more—specifically quantities exceeding (1) 1,000 kilograms (kg) or the reportable quantity (RQ), whichever is greater, of the substances specified in 40 CFR 302.4, or (2) 1 kg of acutely hazardous waste as defined in 40 CFR 261.30. A notice also is required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the RQ. Army Regulation (AR) 200-1 requires that the ECP report address asbestos, lead-based paint (LBP), radon, and other substances potentially hazardous to health.

This ECP report used the American Society for Testing and Materials (ASTM) Designation D6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys*, the BRRM, CERCLA §120, and AR 200-1.

1.2 Scope of Services

This ECP report covers the USAR Center located at 9400 Porter Road, Niagara Falls, New York (Figure 2, Appendix A). All site maps, figures, and aerial photographs referenced herein are provided in Appendix A, and Appendix B contains the photographs taken during the August 16 and 17, 2006, site reconnaissance. Appendix C contains the property warranty deeds and chain of title information. Relevant historical environmental documents and reports are provided in Appendix D, and Appendix E contains the Environmental Data Resources, Inc. (EDR) radius search reports commissioned for this effort.

This ECP report classifies the Property into one of seven DoD Environmental ECP categories as defined by the DoD policy defining the classifications (see Sherri Goodman memorandum dated 21 October 1996). The property classification categories are as follows:

- ECP Area Type 1—An area or parcel of real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred (including no migration of these substances from adjacent properties).
- ECP Area Type 2—An area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred.
- ECP Area Type 3—An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- ECP Area Type 4—An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and all

remedial actions necessary to protect human health and the environment have been taken.

- ECP Area Type 5— An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are underway, but all required actions have not yet been taken.
- ECP Area Type 6— An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- ECP Area Type 7— An area or parcel of real property that is unevaluated or requires additional evaluation.

2 Site Location and Physical Description

2.1 Site Location

The USAR Center is located in Niagara County, on the south side of Niagara Township, in Niagara Falls, New York, at 9400 Porter Road (Figure 1, Appendix A). The 19.5-acre parcel is located north of a main thoroughfare (Porter Road, also known as Route 182). Undeveloped, forested land is located south of Porter Road. The Property is bordered on the east, west, and north sides by wooded land and commercial development (Photographs 1 through 7, Appendix B).

2.2 Asset Information

Facility Name and Address:	Niagara Falls USAR Center 9400 Porter Road Niagara Falls, New York 14304
Property Owner:	U.S. Government
Date of Ownership:	The Army acquired the property in 1962 from the U.S. Navy. The U.S. Government acquired the Property in 1955.
Current Occupant:	U.S. Army Reserve: 277th Quartermaster Company (QmC), 865th Combat Support Hospital (CSH), 1982nd Surgical Unit, Area Maintenance Support Activity (AMSA) No. 76, Fort Drum Department of Public Works (DPW)
Zoning:	The Town of Niagara does not have jurisdiction here; surrounding properties are zoned LI – Light Industrial.
County, State:	Niagara, New York
USGS Quadrangle:	Tonawanda West, New York
Section/Township/Range:	This information was not available at the time of this ECP report preparation.
Latitude/longitude:	43°06'0.7"N; 78°57'17.6"W
Legal Description:	See below

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Niagara, County of Niagara and State of New York, being part of Lots 2 and 6, Township 13, Range 9 of the Holland Land Company's Survey, being more particularly bounded and described as follows:

BEGINNING AT A POINT in the northerly line of Porter Road, New York State Route 182 (being 100 feet wide), at the southwesterly corner of a parcel of land conveyed to The United States of America by a deed filed in the Niagara County Clerk's Office in Liber 1198 of Deeds at page 340, said point also being a distance of 176.25 feet northwesterly of the intersection of the west line of lot 2 and said northerly line of Porter Road, New York State Route 182;

Thence North 05°04'44" East along said lands conveyed to The United States of America, a distance of 155.91 feet to an angle point in the southerly line of lands conveyed to the Niagara Frontier Transportation Authority by a deed filed in the Niagara County Clerk's Office in Liber 1566 of Deeds at page 795;

Thence South 87°03'30" East along the southerly line of said lands conveyed to the Niagara Frontier Transportation Authority by Liber 1566 of Deeds at page 795, a distance of 149.79 feet to a point in the west line of lot 2 and the southeasterly corner of said parcel conveyed to the Niagara Frontier Transportation Authority;

Thence North 00°23'47" West along the west line of lot 2 and the easterly line of said lands conveyed to the Niagara Frontier Transportation Authority, a distance of 316.83 feet to the northwesterly corner of lands conveyed to The United States of America by a deed filed in the Niagara County Clerk's Office in Liber 674 of Deeds at page 492;

Thence North 89°36'10" East along a line parallel with the north line of lot 2 and along the northerly line of said lands conveyed to The United States of America by Liber 674 of Deeds at page 492, a distance of 1110.00 feet to the northeasterly corner of said lands conveyed to The United States of America by Liber 674 of Deeds at page 492;

Thence South 00°23'47" East along a line parallel with the west line of lot 2 and along the easterly line of said lands conveyed to The United States of America by Liber 674 of Deeds at page 492, a distance of 940.00 feet to a point in the northerly line of Porter Road, New York State Route 182 and the southeasterly corner of said lands conveyed to The United States of America by Liber 674 of Deeds at page 492;

Thence northwesterly along the northerly line of Porter Road, New York State Route 182, being a non-tangent curve, concave to the north, having a radius of 2815.00 feet, a central angle of 05°44'32" and a chord of 282.00 feet bearing North 72°15'01" West, a distance of 282.12 feet to the point of tangency;

Thence North 69°16'17" West continuing along the northerly line of Porter Road, New York State Route 182, a distance of 1078.94 feet to the POINT OF BEGINNING, containing 19.52 Acres of land, more or less.

Together with all the rights, title and interest in a 20 foot wide easement for purposes of ingress and egress as described in a deed filed in the Niagara County Clerk's Office in Liber 1566 of Deeds at page 795

2.3 Physical Description

The USAR Center has 11 permanent structures and three parking/equipment storage areas (Figure 2, Appendix A). In addition, a concrete guardhouse is located north of the entrance to the Property from Porter Road. A military equipment parking (MEP) area is located on the eastern side of the Property, and a military vehicle parking area (MVPA) is located west of the MEP. A privately owned vehicle (POV) parking area is located west of Building 4. Chain-link security fencing encloses the MEP area. Personnel indicated that the Property is used for vehicle maintenance; storage of equipment such as tents, clothing, boots, vests, and

other similar materials; minor medical supplies such as bactericide, sporicide, and fungicide; vehicle maintenance tools; petroleum, oil, and lubricant (POL) materials; paints; batteries; tires; and miscellaneous equipment such as heaters, compressors, furniture, hoses, and load testers, for the 865th CSH and the 277th QmC. The 865th CSH uses the Property one weekend each month for drill (classroom) training.

The Property is almost entirely covered by impervious surfaces, such as asphalt parking areas, driveways, and buildings. Small areas are grass covered (south-central area) or have a mix of grass and gravel, such as in the southwestern corner of the Property. Permanent structures on the Property are described below.

Building 4

Building 4 is an 85,500-square-foot building constructed in 1956 (Photograph 8, Appendix B). It is a large, metal-framed hangar having two-story brick buildings attached to the north (Building 4N) and south (Building 4S) sides. All roofs are rubber-coated.

The 865th CSH and the 277th QmC use the hangar and Buildings 4S and 4N to store equipment, such as tents, clothing, boots, vests, and other similar materials; and minor medical supplies such as bactericide, sporicide, fungicide, and tools; and for classroom training, readiness, and administrative purposes. The eastern part of Building 4S contains a battery room, reportedly empty and not in use (Fort Drum DPW, April 2007). A boiler room, having two natural gas-powered boilers is located in the southeastern part of the building. An electrical room in the northeastern corner of the first floor of Building 4S contains dry transformers and associated equipment. Other items stored in several rooms and metal cages in Building 4S on the first floor include kitchen and medical supplies, tools, clothing, and personal equipment, such as boots, vests, and other similar materials. Medical items included fungicide, bactericide, sporicide, activated dialdehyde solution, and acetone, all in quantities commensurate with training use at the facility.

The building also has administrative offices, a mailroom, bathrooms, a garage, and an air compressor room (operable but not in use). Oil stains were visible in the compressor room on the concrete pad on which the compressor was located (Photograph 11, Appendix B). The oil stains did not run off the edge of the pad, so there is no indication of a release to the environment. The second floor of Building 4S also has offices, classrooms, a conference room, a chapel/prayer room, a family support room, a computer server room, bathrooms, and a mechanical room having a natural gas-fired boiler.

According to personnel, part of the first floor of Building 4N is used by the 1982nd Forward Surgical Unit for supply/tool storage. The first floor of Building 4N has a functioning kitchen, a boiler/mechanical room, offices, an empty flight locker room, and equipment storage areas. Oil stains and corroding equipment were visible in the boiler room during the site reconnaissance. The oil stains did not run off the edge of the pad on which the boiler was located, so there is no indication of a release to the environment. The second floor of Building 4N consists mainly of classrooms, and some office rooms, a mechanical room, a janitorial room, and bathrooms. No access was available to CH2M HILL in most classrooms on the days of the site reconnaissance; however, as reported by Property personnel, these classrooms had only furniture associated with their use.

Building 17

Building 17 consists of a POL shed and an aboveground storage tank (AST). The POL shed is a concrete block building, having a metal roof, constructed in 1993. Supplies of POL and antifreeze are properly stored in this shed. Attached to the east side of the POL shed is an 18-inch-high concrete containment wall, having a metal roof. A 528-gallon steel waste oil AST is located inside this containment. The EDR report states this tank was installed in September 1999.

Building 18

Building 18 is an L-shaped, single-story, 9,720-square-foot structure, constructed in 1956 and expanded in the 1990s. It is a metal-framed and concrete block structure having metal and brick exterior. The southern part of the building, constructed in 1956, houses the 277th QmC Organizational Maintenance Shop (OMS). The shop is used for vehicle maintenance and for the storage of related equipment, tools, POL, and hazardous waste prior to offsite disposal by a licensed contractor. A trench drain, connected to the oil/water separator (OWS) located near the north end of Building 18, is located in the midsection of the shop floor. The OWS connects to the sanitary sewer. At the time of the site reconnaissance, the OMS building contained three storage cabinets for flammable materials. CH2M HILL did not have access to the interior of the cabinets during the site reconnaissance; however, the area around the cabinets did not show signs of any staining or corrosion.

Property personnel conducted a visual reconnaissance of the interior of these cabinets on April 12, 2007, and based on their visual inspection, the storage cabinets contain POL and spray paint (Fort Drum DPW, April 2007). Numerous other tools were visible inside a locked metal room near the compressor/boiler room. Property personnel indicate that this locked room contains only spray paint (Fort Drum DPW, April 2007). Another tool room on the north side of Building 18, not accessible to CH2M HILL during the site reconnaissance, was reported by Property personnel as containing tools for vehicle repair and vehicle parts (Fort Drum DPW, April 2007). No POL or hazardous substances are stored in this tool room. Photographs of the storage cabinets in Building 18 and the tool room on the west side of Building 18 are included in Appendix B.

The remainder of the building, added in the 1990s, is of metal frame construction and houses AMSA 76. That part of Building 18 is used for vehicle maintenance, storage of related equipment, tools, used POL, other chemicals, and vehicle battery recharging (Photograph 12, Appendix B). The northwestern part of the AMSA contains a parts washer, a wash water recycling system (reportedly not functioning), and an oil filter crusher. Seven maintenance bays are used to service military vehicles. Trench drains connected to the OWS are located outside each of the seven maintenance bays. The OWS is connected to the sanitary sewer. During the site reconnaissance, two military vehicles were in the maintenance bays in the AMSA. Oil stains were visible on the concrete floor beneath one of the vehicles, and absorbent was spread over the oil stains. The concrete floor is, however, continuous to the building walls, so there is no suspected release to the environment.

A storage room inside the AMSA building contained a vehicle battery recharging station. The wooden bench on which batteries are placed was blackened and burnt on the surface, presumably because of acid burns, whereas the concrete floor of the room was observed to be corroded around the wooden bench, having white deposits on the floor (Photograph 12,

Appendix B). Because the corrosion did not appear to penetrate the full depth of the floor, there is no suspected release to the environment.

Building 19

Building 19 is a single-story, 1,600-square-foot storage structure built in 1956 of a concrete foundation and metal frame and roof. It is used to store equipment belonging to the 277th QmC. Equipment observed inside this building included a heater, tires, wires, a hydraulic press (reportedly not in use), an electric load tester, hoses, and a gas-fired furnace. Peeling paint, likely LBP, and roof water damage were observed in the southeastern part of the interior of the building.

Building 20

Building 20 is a single-story 2,133-square-foot structure constructed in 1956 of concrete and brick veneer and an asphalt-coated metal roof. It is used for storage of equipment for the 277th QmC, and has an electronics service room in the northern part of the building and an unused vehicle battery storage room at the south end of the building. More than 20 vehicle tires were observed inside the battery room. Items observed inside the central part of the building included a steam cleaner, a refrigerator, desktop computers, an oil drain tank (not used), and office supplies. A natural gas-fired boiler room is also located in this part of the building.

Building 21

Building 21 is a single-story 13,055-square-foot structure built in 1956 of concrete block and brick exterior and a shingled roof. The 277th QmC uses it to maintain vehicles, to store equipment, and for classroom training and administration. The vehicle maintenance areas, located in the eastern part of the building, have trench drains leading to an OWS located east of the building, which is connected to the sanitary sewer system. Building 21 also has a boiler room, classrooms, offices, bathrooms, and storage areas.

Two maintenance bays are located on the east side of the building, where equipment is stored and light vehicle maintenance is performed. During the site reconnaissance, two flammable materials cabinets were observed in the north maintenance area. A lawn mower and "bobcat" were stored along the north wall of this area. An overhead air compressor was located in the southwest corner of this area; workbenches and pipes were located along the west wall. The southeast corner of this area contained insulated water pipes and backflow prevention valves; this is the main point of entry for water supply to the Property. The pipes appeared to be insulated with foam. Damage to the insulation was apparent in small parts of the pipes. Other items observed in Building 21 during the site reconnaissance included a dry transformer in Room 104 and a paint storage cabinet in Room 123.

Building 22

Building 22 is a two-story, 20,703-square-foot structure constructed in 1956 of concrete block and brick veneer and a shingled, rubber-coated roof. The building is used for equipment storage of the 277th QmC, classroom training, and administrative tasks. The building also has a kitchen and dining hall for use during drill weekends (once a month). The second story consists of classrooms and office space, a room for storage of flight gear, and

bathrooms. An attic space is located along the southern edge of the building because of the pitch of the roofline.

Building 23

Building 23 is a single-story, 2,058-square-foot structure constructed in 1956 of metal frame and metal roof and siding. It is used for storage of equipment belonging to the 277th QmC. Equipment observed in the building on the first day of the site reconnaissance (August 16, 2006) included hoses, wooden boxes, floodlights, fuel pump and filters, accessories, tents, sandbags, and fire extinguishers.

Building 24

Building 24 is a single-story, 2,400-square-foot structure constructed in 1993 of metal frame and metal roof and siding. The 865th CSH uses it to store equipment and material. The building is supplied with electricity and heat but no plumbing. Equipment observed in the building on the first day of the site reconnaissance (August 16, 2006) included a modular field kitchen, a steel refrigerator, and food containers. Nine fluorescent overhead lamps, possibly containing mercury, were observed on the ceiling of the building.

Building 25

Building 25 is a single-story, 1,504-square-foot structure constructed in 1956 of concrete block and brick exterior and an asphalt-coated roof. It was formerly used as the heating plant for the Property and contained fuel oil USTs. Natural gas became the fuel source in the mid-1980s. Telephone and fiber optic cables are routed to the building from the supplier before branching out to the other buildings on the Property. Building 25 is now used to store equipment belonging mainly to the Fort Drum DPW. Equipment observed in the building on the day of the site reconnaissance included spill containment kits, convection ovens, a small container of an herbicide, and acrylic and enamel paints.

Building 26

Building 26 is a single-story, 2,150-square-foot structure constructed in 1960 of metal frame and metal siding and roof. It is primarily used to store equipment belonging to the 277th QmC. Equipment observed in the building on the day of the site reconnaissance included paints (some oil-based, containing xylenes), vinyl jackets for duct work, ceiling and floor tile, a 50-gallon water heater, parts of old boilers, and adhesives.

Wash Rack Outside Building 18

A concrete wash rack is located near the northwestern corner of the AMSA, adjacent to an OWS. The wash rack drains into the OWS, located south of the wash rack. The OWS is connected to the sanitary sewer. Rinse water generated by vehicle washing is recycled through a water recycling system inside the AMSA shop. AMSA personnel indicated that vehicle washing is now rarely performed at the facility, in part because of the malfunction of the water recycling system.

Oil/Water Separators

Three OWSs are located on the Property. One OWS, reportedly installed in 1994, is located near the southwestern corner of Building 4S (Photograph 9, Appendix B). A 1,000-gallon

underground storage tank (UST) associated with the OWS was removed in September 1999. Another OWS is located south of the vehicle wash rack near the northwest corner of Building 18 (Photograph 10, Appendix B). Property personnel indicated the wash rack and the OWS were installed between 1986 and 1988. A 550-gallon UST associated with the OWS was removed in September 1999. A third OWS, reportedly installed at the time of original building construction, is located adjacent to the east wall of Building 21. Personnel stated that a small (55-gallon) UST is associated with the OWS.

The OWS near Building 4S receives water from the hangar floor, where helicopter/ airplane cleaning and washing historically occurred and where Nike missiles were serviced. The OWS near Building 18 receives water from vehicle maintenance activities in the AMSA shop and OMS. The OWS adjacent to Building 21 receives water from occasional vehicle washing and maintenance activities inside Building 21. According to personnel, and a Storm Water Pollution Prevention Plan Update (Bowne AE&T Group, 2006) all OWSs are connected to the sanitary sewer.

Storage Sheds

Two metal storage sheds (6 feet by 8 feet by 8 feet tall) are located in the MEP northeast of Building 21. CH2M HILL did not have access to the interior of the two storage sheds in the MEP area. The outsides of the sheds indicated they contained flammable material; personnel confirmed they contained POL. Property personnel conducted a visual inspection of these sheds and observed four partially full 55-gallon drums, containing used motor oil and antifreeze. All drums were on secondary containment structures, and there was no indication of a spill or a release from these drums (Fort Drum DPW, April 2007). A photograph of the interior of one of these storage sheds is contained in Appendix B. Two similar storage sheds are located in the MVPA east of Building 18. In the MVPA, one shed contained oxygen gas cylinders; the other, acetylene gas cylinders. A third, larger shed (6 feet by 10 feet by 15 feet) contained POL (including waste oil, antifreeze, diesel, diesel waste, and parts cleaners). The large shed reportedly has been in use for about 2 years. The age of the other sheds could not be ascertained. The appearance of the ground around each shed was normal and did not indicate releases to the environment.

A wooden shed (6 feet by 10 feet by 15 feet) having glass windows is located north of Building 18. Property personnel performed a visual inspection and indicated the shed was empty (Fort Drum DPW, April 2007).

Two Container Express (CONEX)-type containers were observed between Buildings 4 and 18, on the north side of a fence. According to Property personnel, the containers store equipment for the 865th CSH. During a visual inspection by Property personnel, the CONEX containers were observed to hold items such as tents, shelving, and other mobile hospital supplies. No POL or hazardous substances were stored in these containers at the time of the inspection.

Switchyard

An electric switchyard is located in the south-central part of the Property. Personnel indicated there no transformers inside this structure at the time of the site reconnaissance. The switchgear and circuit breakers inside the structure are dry and do not contain polychlorinated biphenyls (PCBs), according to USAR Center personnel. Wet lead/calcium-

acid batteries were observed inside an enclosure in the area. The batteries are used as backup for the circuit breakers and switchgear.

2.4 Site Hydrology and Geology

Geologic and hydrogeologic information was obtained mainly from the final preliminary assessment (PA; Engineering Technologies Associates, 1994), which obtained related information from previously published U.S. Geological Survey (USGS) reports and from the United States Department of Agriculture (USDA) and Cornell University, New York. The Property is located in the Erie-Ontario Lowlands Physiographic Province. The region is characterized by relatively flat topography and is dissected by east-west trending escarpments. The Property is located about 5 miles south of the Niagara Escarpment.

The Niagara Falls area is underlain by glacial sediments consisting mainly of till and lacustrine silt and clay, 5 to 80 feet thick. The glacial deposits are underlain by weathered dolomite and limestone of the Lockport Group of the Niagaran Series of Middle Silurian age. The Lockport Group is underlain by about 100 feet of shale and limestone (Clinton Group), which is underlain by 110 feet of sandstone and shale (Medina Group).

2.4.1 Surface Water Characteristics

The USAR Center is on the USGS 7.5-minute Tonawanda West topographic map. As shown on this map (Figure 3, Appendix A), ground surface elevations at the USAR Center average 575 feet above mean sea level (msl). Topography at the site is nearly level; surface and stormwater drainage is to Cayuga Creek, located between 100 to 200 feet from the western boundary of the Property. Cayuga Creek is an intermittent tributary of the Niagara River. The drainage area of the Property is less than 50 acres.

Figure 4 in Appendix A depicts surface water, stormwater, and sanitary sewer lines on the Property. Several interior building areas drain directly or indirectly into the stormwater sewer system. Drainage from the Building 4 hangar reportedly flowed into storm drains for several decades before installation of the OWS (1994) near Building 4. A drainage ditch located along the eastern boundary of the Property flows south into a ditch along the north side of Porter Road, outside the Property. Four stormwater outfalls were identified during a stormwater pollution prevention survey (Bowne AE&T Group, 2006). Each outfall is associated with a local stormwater sewer line and a network of drain inlets. Property grading and the location of some of the inlets causes stormwater flow to bypass the inlets and flow directly into the drainage ditches (Bowne AE&T Group, 2006).

2.4.2 Hydrogeological Characteristics

The Property is underlain by two types of soil: the Lakemont silty clay loam and the Fonda mucky silt loam. Both soil types are described as fine- to moderately fine-textured, of low permeability, and a prolonged high water table at 0 to 0.5 foot below ground surface (bgs). These soils have high clay content and are subject to ponding. Permeability rates range from 0.2 to 0.6 inch per hour. According to personnel at the Property, the subsurface is underlain by clay of variable moisture. The material is locally known as "Gumbo clay." The water table is at a depth of less than 4 feet bgs.

The glacial deposits are underlain by weathered dolomite and limestone of Middle Silurian age in the Lockport Group of the Niagaran Series. The Lockport Group is underlain by about 100 feet of shale and limestone (Clinton Group), which is underlain by 110 feet of sandstone and shale (Medina Group).

The glacial deposits act as a confining unit for the weathered bedrock aquifers below. Groundwater flow in the glacial deposits generally is downward in recharge areas near topographic highs, and upward in discharge areas near streams and in other low-lying areas. The hydraulic properties in the Lockport dolomite and limestone are related to secondary porosity and permeability owing to the presence of fractures and solutioning. The main water-bearing zones in the Lockport Group are the weathered bedrock surface and horizontal fracture zones near stratigraphic contacts. The rock matrix transmits negligible amounts of groundwater because primary porosity is very low. Horizontal hydraulic conductivity of the weathered bedrock is estimated at 40 feet per day.

In the Lockport Group, groundwater flows from topographic highs near the Niagara Escarpment north toward the escarpment, and south and west toward the low-lying areas near the Niagara River and outcrop areas along the Niagara River Gorge. Recharge of groundwater into the Lockport Group is influenced by manmade structures such as reservoirs and unlined sewers.

2.5 Site Utilities

Water Service—The City of Niagara Falls provides potable water service to the Property.

Sanitary Sewer System—The Town of Niagara provides sanitary sewer service to the Property. The primary source of the wastewater directed to the sewer system includes nonprocess wastewater (bathrooms, sinks, etc.), the discharge from the OWSs, and vehicle washing and maintenance runoff.

Gas and Electric—National Fuel provides natural gas service to the Property; National Grid (formerly Niagara Mohawk) provides electric service.

2.6 Water Supply Wells and Septic Systems

Based on a review of available historical site and agency records and interviews with site personnel, neither a water supply well nor a septic system is or was located on the Property. Potable water is supplied by the City of Niagara Falls. The City of Niagara Falls has supplied potable water to the buildings since they were constructed.

3 Site History

3.1 History of Ownership

The chain of title for the Property (Appendix C) was obtained for this ECP from NETR Real Estate Research and Information (NETR). Information provided by NETR, which had records dating back to 1933, indicates the Property was owned by private individuals until 1955, when the warranty deed was transferred to the United States of America. This is inconsistent with information presented in the PA (Engineering Technologies Associates, 1994), which indicates the Property was developed in 1939 by the U.S. Navy as an air station. According to the PA (Engineering Technologies Associates, 1994), the U.S. Army acquired the Property in about 1962 as a sub-installation of Fort Drum, New York.

According to a city directory provided by EDR and dated July 24, 2006, the address of the USAR Center was first listed in the research source (Polk's City Directory) in 1975. City directory searches from 1995 to 2005 (Haines Criss-Cross Directory) do not list the Property. A copy of the city directory entry is included in Appendix E.

3.2 Past Uses and Operations

The PA for the Property (Engineering Technologies Associates, 1994) cites an unreferenced report as stating that the Property was "known to have been a landfill prior to the original construction of the Naval Air Station." Water lines at the Property were deteriorating because of the presence of corrosive soils. Soil chemical analyses indicated high sulfate concentration and low resistivity, along with the presence of non-uniform soils. A corrosion survey of the Property reportedly was performed in 1983. The corrosion survey concluded that that water line corrosion was likely due to mechanical reasons, and that corrosion was mainly due to "plug type graphitization resulting from the non-uniform backfill." The PA states that "no additional documents could be located to confirm or deny the potential presence of a landfill." The PA states that numerous excavations completed at the Property for upgrading utility lines and other similar objectives did not find evidence for a landfill. These excavations, however, were not carried out with the specific objective of proving or disproving the existence of a landfill at the Property. The PA recommended additional records reviews and subsurface sampling on the Property with the objective of determining whether a landfill was previously located at the Property. During preparation of this ECP report, a review of representative historical USGS topographic maps (dating back to 1899) and aerial photographs (dating back to 1963) for the Property did not provide evidence of surficial disturbance indicative of landfilling activities. The PA also recommended sediment sampling in Cayuga Creek to evaluate discharges from building floor drains into the storm sewer. No information was available to indicate that such sampling had been performed.

The U.S. Navy historically used the Property to service and maintain helicopters and airplanes. By 1956, it had constructed most of the buildings now on the Property. The 1948 USGS topographic map (Figure 5, Appendix A) shows what appears to be the former hangar/reservoir in the southeastern part of the Property. Although the chain of title for the

Property indicates the U.S. Government acquired the Property in 1955, it appears the Navy used the Property at least as early as 1948. This use is consistent with information in the PA (Engineering Technologies Associates, 1994), which indicates the Navy originally developed the Property in 1939. Aircraft maintenance was performed in the hangar at Building 4. According to personnel at the Property, there were two additional wooden hangars on the Property, in the approximate area occupied by Buildings 18 and 21, and east of Building 4, toward the east Property boundary. The wooden hangars were demolished at an unknown date, and personnel indicate the hangars burned down while demolition was in progress.

A structure consistent with the descriptions of the former hangars is visible in the eastern part of the Property on the aerial photograph of 1963 (Figure 6, Appendix A) but not on the aerial photograph of 1979 (Figure 7, Appendix A). Concrete pavement having markings and pads for helicopter parking were visible during the site reconnaissance, east of Buildings 4 and 18. A water reservoir provided as a backup water supply for firefighting, a concrete vault used for coal storage, two USTs (one 10,000-gallon, one 20,000-gallon), and a building (Building 2) reportedly were located on the eastern and southern parts of the Property. The structures reportedly were built during the original construction at the Property. According to personnel, the tanks and concrete vault were demolished in 1987 or 1988. The Property reportedly stopped using coal in 1955 or 1956. No evidence of outdoor coal storage is apparent in the aerial photographs reviewed by CH2M HILL. The reservoir and Building 2 were demolished sometime between 1995 and 1997. A water systems improvement map from 1993 confirms the presence of the reservoir and Building 2. The area formerly occupied by the reservoir and Building 2 is now part of the MVP, north of Building 26.

The U.S. Government acquired the Property in 1955 and has owned it since (NETR, Appendix C). Various units within the USAR have used the Property since that time, including the 277th QmC (a refueling unit), the 865th CSH (a field medical unit), and the 1982nd Forward Surgical Unit (a field surgical unit). Personnel from the Fort Drum DPW also are based at the Property in Building 21. Property personnel indicated the New York Army National Guard (NYARNG) was a tenant on the Property from about 1972 to 1995.

From about 1970 to 1975, the Property, specifically the Building 4 hangar, was used to service Nike missiles from missile batteries around the state of New York. Property personnel did not know of specific activities performed as part of Nike missile service at the USAR Center, nor was such information reasonably available from historical site-specific records. Based on common operations involved in the assembly and service operations for Nike Ajax missiles, as reported in a *Final Report, Nike Missile Battery, Environmental Conditions Assessment Guide, DERP-FUDS* (USACE-HTRW-CX, July 2003), Nike missiles were transported for servicing, disassembled, and packed in crates. Organizational maintenance consisted of lubrication, painting, periodic preventive maintenance services, troubleshooting, and specified maintenance of the missile and missile guidance system. The components of the missile system were repacked prior to shipment. According to Property personnel, only Nike missiles having conventional warheads were serviced at the Building 4 hangar.

Building 4

The Navy used Building 4 since its construction (1956) to about 1970 to service and maintain helicopters and airplanes. From about 1970 until 1991, the Army used the building for

helicopter maintenance. Personnel indicated that the NYARNG used the hangar to park, service, and maintain two aviation companies, reduced to one aviation company of 21 UH-1 helicopters. Property personnel also indicated that from about 1970 to 1975, Building 4 served as a Nike missile support center, where missile warheads were serviced and maintained from locations in the state of New York. From the late 1970s to about 1994, the 42nd Aviation Battalion, part of NYARNG, used and serviced about 30 helicopters in the hangar. The 865th CSH, which includes hospital units, a petroleum company, and a drill sergeant unit, used the building to store equipment, and for administrative, educational, and logistical purposes. Reservists of the 865th CSH historically used Building 4 for drill activities on weekends throughout the year.

Review of previous reports (Appendix D) indicates aircraft service mechanics used Stoddard solvent, until about 1991, to clean aircraft parts. The USACE-HTRW-CX report on Nike missile batteries (July 2003) indicates the service and maintenance of Nike missiles routinely involved use of POL and hazardous substances, including trichloroethylene (TCE). Another report, prepared for the USACE Huntsville District (*Final Report, Investigation of Former Nike Missile Sites for Potential Toxic and hazardous Waste Contamination*, Law Engineering Testing Company, March 1986), indicates that waste disposal practices varied from one location to another, and could have included storage in drums as well as “unofficial” disposal to the ground and subsurface.

Drainage from the Building 4 hangar reportedly flowed into storm drains for several decades before installation of the OWS (1994) near Building 4. A PA performed in 1994 recommended sediment sampling in Cayuga Creek to evaluate discharges from building floor drains into the storm sewer. No information was available to indicate that such sampling had been performed.

277th QmC OMS Shop and AMSA No. 76, Building 18

The southern part of Building 18 houses the 277th QmC OMS. Activities inside the OMS building were limited to preventive maintenance checks, including checking and changing vehicle fluids such as motor oil, water, and antifreeze, and light maintenance activities. Associated equipment, tools, POL, and hazardous waste, were stored at the OMS prior to offsite disposal.

The northern part of the building has housed AMSA 76 since it was constructed in the 1990s. The AMSA performed vehicle maintenance for the units stationed at the Property, and storage of associated equipment, tools, used POL, and other chemicals, and vehicle battery recharging.

Building 19

The 277th QmC reportedly used Building 19 as a dining hall 15 to 20 years ago. Previous use could not be determined.

Building 21

The 277th QmC used Building 21 to maintain and service vehicles, to store equipment, and for classroom training and administration.

Oil/Water Separators

As stated in Section 2.3, three OWSs are located on the Property. The vehicle wash rack and OWS located near Building 18 were reportedly installed between 1986 and 1988. The OWS located near the southwestern corner of Building 4S was reportedly installed in 1994. The third OWS located adjacent to the east wall of Building 21 reportedly was installed at the time of original building construction.

Prior to installation of the OWS near Buildings 4 and 18, Property personnel indicated aircraft and vehicle service and wash water drained into the storm drains.

Chemical and Equipment Storage in Other Buildings

Several other buildings on the Property were used to store equipment and chemicals, many in reportedly de minimis quantities commensurate with use onsite. The buildings include Building 20 (lead acid batteries, tires, oil and enamel paints, POL), Building 22 (dry transformer, POL), Building 25 (acrylic and latex-based paints, empty spill containment drums), and Building 26 (oil and enamel paints). As stated in Section 2.3, the POL shed is the main storage area for new and unused POL supplies (inventory in Appendix C).

Historical aerial photographs and topographic maps were used as sources of information on the past use and operations at the Property. Figures 3, 6, 7, and 8 (Appendix A) provide USGS topographic maps and aerial photographs of the Property and surrounding areas.

The 1948 USGS topographic map (Figure 5, Appendix A) shows the Property and Niagara Falls International Airport (then known as Niagara Falls Municipal Airport). One large structure is depicted on this map in the approximate location of the former hangars, in the eastern part of the Property. Adjacent areas north and west appear undeveloped. Porter Road is depicted in roughly its current location. The adjacent area south of Porter Road appears forested or marshy.

The 1963 black and white aerial photograph (Figure 6, Appendix A) shows structures in the location of the former hangars, Building 4, and additional structures in the southern part of the Property, not clearly discernible. The northern half of the Property appears to be paved with concrete (light gray color). A road extending north about 1,200 feet from the location of Building 4 and then west is seen in the aerial photograph. Runways and taxiways of the Niagara Falls International Airport, which appears to have expanded west from 1948, are visible north and east of the Property.

The 1965 USGS topographic map (Figure 3, Appendix A) shows structures on the Property in the location of the former hangar, Building 4, Building 21, and four other structures south of Building 4. Adjacent properties appear similar to those depicted on the 1963 topographic map. More development is apparent in the surrounding area. The Niagara Falls Air Force Base is seen north of Niagara Falls International Airport. The 1979 aerial photograph (Figure 7, Appendix A) shows Buildings 4, 18, 22, and several smaller structures on the Property. A structure similar to a reservoir is apparent in the southeast corner of the Property. Several parked airplanes are visible in the adjacent property east. An asphalt paved area is visible east of Building 4.

The 1995 aerial photograph (Figure 8, Appendix A) is similar to the 1979 photograph, but additional development appears to have taken place west of Cayuga Creek. No evidence of

any recognized environmental conditions, including landfilling, is apparent on the aerial photographs reviewed.

3.3 Past Use, Storage, Disposal, and Release of Hazardous Substances

3.3.1 Past Use and Storage of Hazardous Substances

Information related to the past use and storage of hazardous substances at the Property was compiled through review of available site records, search of federal and state environmental databases, and interviews with USAR personnel at the Property. Chemicals formerly used and stored at the Property were associated with aircraft and vehicle maintenance, Nike missile servicing, and facility maintenance activities and janitorial services. Janitorial chemicals and products related to building maintenance were stored in the designated storage area within the janitorial closets located in several buildings on the Property. Vehicle maintenance products and POL products also were stored within designated areas within Building 18 (OMS and AMSA areas), Building 20, Building 21, and several outdoor storage sheds.

Although no specific records were reasonably available regarding hazardous substances used at the Property, aircraft maintenance and Nike missile servicing typically involved the use of several hazardous substances, including solvents (tetrachloroethylene [PCE], TCE, benzene, carbon tetrachloride, 1,1,1-trichloroethane [TCA], and 1,1,2-TCA), nitric acid, sodium dichromate, sulfuric acid, zinc chromate, and paint. Use and storage of these materials varied considerably (Law Engineering Testing Company, 1986). The solvents were used in cleaning, corrosion removal, painting, and preparation of parts. Sodium dichromate and zinc chromate were used in metal cleaning and paints, respectively. Sulfuric acid was used in lead acid batteries. Metallic selenium was used in rectifier parts. The Nike Ajax missiles used a 28-volt silver-cadmium battery that used potassium hydroxide as the electrolyte.

3.3.2 Past Disposal and Release of Hazardous Substances

Information related to past disposal and potential release of hazardous substances at the Property was compiled through review of available site records, search of federal and state environmental databases, and interviews with USAR personnel. Available records indicate that reportable quantity releases of hazardous substances have occurred at the Property.

USAR conducted a PA of the Property in 1994, in which a release of 120 gallons of transformer oil containing PCBs (250 parts per million) was identified (Engineering Technologies Associates, 1994). The release occurred in 1991. A transformer fell and broke over a storm sewer drain, east of Building 22. The PCB oil spilled on the pavement and into the drain. Surface paving materials, soils, and storm drain materials were remediated after the spill. On October 31, 1991, the New York State Department of Environmental Conservation (NYSDEC) indicated that the spill had been adequately remediated.

In September 1999, during removal of a 550-gallon UST associated with a wash rack outside Building 18, TCE was detected in soil at concentrations exceeding the NYSDEC allowable

soil concentration of 7 parts per billion (ppb) (<http://www.dec.state.ny.us/website/der/tagms/prtg4046b.html>). The concentration of TCE, however, was less than the NYSDEC recommended soil cleanup objective of 700 ppb, which was obtained by multiplying the allowable soil concentration by a correction factor of 100. The EDR report (Appendix E) indicates the spill was closed in February 2000, and a phone conversation with NYSDEC (January 22, 2007) indicated that this spill is no longer on the NYSDEC database. The NYSDEC further indicated that the tank was not required to be registered because it was associated with an OWS.

3.4 Past Presence of Bulk Petroleum Storage Tanks

Based on a review of available site records and a search of federal and state environmental databases, five bulk petroleum storage tanks located at the Property were removed between 1990 and 1999. The database also lists one 528-gallon AST for the Property. The AST is used to store used oil and is made of steel/carbon steel. It is listed as being located on stilts/saddles/legs/rack or cradle. The AST was observed during the site reconnaissance adjacent to the POL shed (Building 17). Table 1 summarizes AST/UST data for the Property from the EDR report and from Property personnel.

TABLE 1
 Storage Tank Information
 Niagara Falls USAR Center, Niagara Falls, New York

No.	Tank Description	Source	Date Removed/Closed	Removal Documented?	Remarks/Status
1	3,000-gallon unleaded gasoline UST	EDR	Removed July 1, 1990	Closed per EDR	Closed.
2	10,000-gallon No. 1, 2, or 4 fuel oil vaulted UST	EDR	Removed October 1, 1991	Closed per EDR	Closed.
3	20,000-gallon No. 1, 2, or 4 fuel oil vaulted UST	EDR	Removed October 1, 1991	Closed per EDR	Closed.
4	One 550-gallon waste oil UST located beneath concrete pad, adjacent to wash rack	EDR	Removed September 20, 1999	Closed per EDR	Closed.
5	One 1,000-gallon waste oil UST near OWS	EDR	Removed September 22, 1999	Closed per EDR	Closed.
6	One large gasoline UST near former building near Building 21	Property personnel	Removed 1984 or 1985	No	Not listed in EDR report or other studies. No additional information or documents are available.
7	One 250- or 400-gallon waste oil holding tank (UST)	Property personnel	Removed mid-1990s	Yes; appears same as No. 4	Closed. Records indicate a spill was registered during tank removal, and TCE

TABLE 1
 Storage Tank Information
 Niagara Falls USAR Center, Niagara Falls, New York

No.	Tank Description	Source	Date Removed/Closed	Removal Documented?	Remarks/Status
	near wash rack				detected in closure soil samples at concentrations less than the NYSDEC Recommended Soil Cleanup Objective (see Sections 3.5.2 and 5.2.5).
8	One 600-gallon waste oil UST near OWS by Building 4	Property personnel	Removed 1984 or 1985	Yes; appears same as No. 5	Closed. Records indicate a spill was registered during removal, and PAHs were detected in closure soil/groundwater at concentrations less than the NYSDEC Recommended Soil Cleanup Objective (see Section 3.5.2 and 5.2.5)
9	One 250-gallon fuel oil AST outside Building 19	Property personnel	1989 or 1990	No	Not listed in EDR report or other studies. No additional information available.
10	One 250-gallon fuel oil AST outside Building 23	Property personnel	1989 or 1990	No	Not listed in EDR report or other studies. No additional information available.
11	One 250-gallon fuel oil AST outside Building 26	Property personnel	1989 or 1990	No	Not listed in EDR report or other studies. No additional information available.
12	Two 20,000-gallon USTs associated with former hangars and reservoir	Property personnel	1987 or 1988	Yes; appears same as No. 2 and No. 3	Closed.
13	Two 25,000-gallon heating oil USTs, south and east of Building 25	Property personnel	1987 or 1988	No	Not listed in EDR report or other studies. No additional information available.
14	AST on cradle/rack/stilts	EDR	Not applicable—tank is in use	Same as AST (528-gallon) is in Building 17 (POL Shed)	Tank is in good condition, and no indications of a spill or a release.

PAH – polycyclic aromatic hydrocarbon

Based on a comparison of information in the EDR report and information provided by Property personnel, there is no reasonably available documentation on the removal of six tanks, including the three 250-gallon fuel oil tanks outside Buildings 19, 23, and 26; the one gasoline UST near former building near Building 21; and the two 25,000-gallon heating oil tanks located south and east of Building 25.

3.5 Review of Previous Environmental Reports

The following subsections briefly summarize the environmental reports. Copies of the reports, unless otherwise specified, are provided in Appendix D.

3.5.1 1994 Preliminary Assessment

The object of the PA, completed by Engineering Technologies Associates, Inc., was to review available information regarding past practices related to hazardous waste storage, handling, and disposal at the Property. No environmental sampling was performed. The PA report noted that the Property may have been built on a former landfill, which was significant, given the industrial and chemical manufacturing facilities nearby, including the former Love Canal Superfund site.

The PA further describes the subject of the landfill as follows. A document was prepared in support of a funding request for replacement of water lines at the Property. Although this document was unreferenced, it reportedly stated that the Property was “known to have been a landfill prior to the original construction of the Naval Air Station.” This document reported deterioration of water lines, high sulfate concentrations in soil, and low resistivity, and anticipated a “corrosion problem” of “severe magnitude.” A corrosion survey was conducted at the Property in June 1983 by Professional Services Group (PSG). The PSG study reportedly concluded that water line corrosion was likely due to mechanical reasons, and that corrosion was mainly due to “plug type graphitization resulting from the non-uniform backfill.” The PA stated that no further documents could be found to confirm or deny the presence of a landfill. The PA also referenced a study by Alexander (1983), which reportedly stated that several excavations had occurred since the Army acquired the Property. These excavations were performed for building foundations, remediation of a PCB spill, water line installations, and UST removals. None of these excavations found evidence for a landfill at the Property. Based on information reviewed, the PA recommended that chain-of-title, aerial photographs, and other Property records be reviewed to ascertain whether there was a landfill at the Property. The PA also recommended installing “at least a sufficient number of sample borings on the installation to attempt to confirm or refute the existence of subsurface landfill materials, allegedly placed prior to site acquisition by the U.S. Government.”

The PA noted that principal operations at the Property included aircraft and vehicle maintenance, and USAR personnel training. The PA describes aircraft cleaning operations, which were conducted inside the hangar in Building 4, or outside on an asphalt covered cement pad. Cleaning solutions used for cleaning included soap/detergent concentrates, and “small quantities” of methyl ethyl ketone (MEK) and “PD-680” used locally and sparingly. The principal pathway of potential contamination from the site was by floor drains that led to the storm sewer system, entering the surface water system at Cayuga Creek. The PA did not mention the service of Nike missiles.

3.5.2 1999 Underground Storage Tank Removals

Sverdrup Environmental, Inc. removed and closed two USTs located on the Property. One 550-gallon fiberglass tank (removed September 20, 1999), used to store waste oil, was located adjacent to the vehicle wash rack. A 1,000-gallon steel tank (removed September 14,

1999) was used to store waste oil from an OWS. (The report does not specify the location of the OWS.) Both tanks were in good condition when removed, but groundwater entered the 550-gallon UST during removal because it was demolished in the ground and removed in pieces, creating a visible sheen on the water. The spill was reported to NYSDEC. The contents of the 550-gallon UST and excavated soil were classified as hazardous based on Toxicity Characteristic Leaching Procedure (TCLP) analytical data for lead, cadmium, and selenium. Therefore, excavation soil samples also were sampled for hazardous material.

Soil sampling from the 550-gallon tank excavation indicated TCE at 42 ppb from an excavation sidewall composite sample and 6.6 ppb in an excavation floor composite sample. The concentration from the sidewall composite sample exceeded the current NYSDEC allowable soil concentration of 7 ppb (Technical and Administrative Guidance Memorandum [TAGM] 4046-VOCs Soil Cleanup Criteria Table 1). The concentration of TCE, however, was less than the NYSDEC recommended soil cleanup objective of 700 ppb, which is obtained by multiplying the allowable soil concentration by a correction factor of 100. The EDR report (Appendix E) indicates the spill was closed in February 2000. Sverdrup reported that no compounds were detected in the soil closure samples at concentrations exceeding the NYSDEC Spill Technology and Remediation Series (STARS) Memorandum 1 alternative guidance values (AGVs) for solids.

During removal of the 1,000-gallon UST, the tank was turned over in the excavation pit, allowing groundwater to flow into and out of the tank. Soil and water samples from the excavation indicated the presence of polycyclic aromatic hydrocarbons (PAHs) at concentrations exceeding the NYSDEC STARS Memorandum 1 AGVs and extraction guidance values, respectively, including some PAHs, which were reportedly detected at concentrations exceeding the human health guidance values and soil and water TCLP values. All detections of PAHs, however, were significantly less than the recommended soil cleanup objective (TAGM 4046 - SVOCs Soil Cleanup Criteria Table 2). Sverdrup noted that the probable source of the contamination (the tank and product piping) had been removed, and that it was possible that contaminants identified in the groundwater sample were due to mixing of residual tank contents and groundwater in the excavation.

The closure report recommended no further action (NFA) for both tanks because of “the lack of petroleum contamination in the soil surrounding the 550-gallon UST” and “the limited nature of the petroleum contamination in the soil surrounding the 1,000-gallon UST.” Information obtained as part of this ECP and information obtained from NYSDEC, Region 9, indicates that both spills areas were closed on February 22, 2000. Appendix D of this report indicates that 400 pounds of hazardous waste containing lead, cadmium, and selenium, and 6,000 pounds of nonhazardous waste were transported offsite in November 1999.

Property personnel indicated that the 550-gallon UST may be the same as the 250- or 400-gallon UST reportedly removed in the mid-1990s. Property personnel also indicated that the 1,000-gallon UST formerly located near an OWS may be the same as the 600-gallon waste oil UST removed from near the OWS by Building 4 in 1984 or 1985.

3.5.3 2004 Asbestos Inspection Report

Environmental Enterprise Group, Inc. conducted an inspection of the Property to identify asbestos-containing material (ACM) at the Property. Suspect ACM was sampled in accordance with Asbestos Hazard Emergency Response Act-style guidelines. The report noted that confirmed ACM was identified in Buildings 4, 19, 21, 22, 23, and 26, in floor tile, floor tile mastic, fire doors, piping thermal system insulation (TSI), vent ducts, and roofing mastic. ACM not removed from the Property was required to be documented in an operations and maintenance plan.

3.5.4 2006 Stormwater Pollution Prevention Plan Update

Bowne AE&T Group performed an update on the Stormwater Pollution Prevention Plan originally prepared by the USGS. The plan describes the drainage features in each building, surface water flow on the Property, and potentially polluting materials and their handling and storage.

4 Adjacent Properties

Adjacent property land uses are significant to the ECP process, as these current or past uses may have an environmental effect on the USAR Center. Adjacent properties were included in the EDR report review for this reason. Typically, adjacent properties within 0.25 mile of the USAR Center property boundaries are reviewed and visually surveyed. For the purposes of this ECP report, the adjacent property reconnaissance was performed from the USAR Center property boundaries and from public access points. Historical aerial photographs and topographic maps were reviewed for conditions or activities that may have had an environmental effect on the Property.

4.1 Land Uses

Land use south of the USAR Center is County right-of-way for a highway. The highway is Porter Road, Route 182, and is undivided. Undeveloped, wooded land is located directly south of the highway.

The land north of the Property is used as an airport by the Niagara Frontier Transportation Authority (NFTA). The land immediately north of the Property is part of the Niagara Falls International Airport.

Land east of the Property appears to be used as a storage area, with numerous small sheds located immediately east of, and parallel to, the Property fence. The land is owned by NFTA.

Land west of the Property is grass-covered and appears to be unused. The concrete top of an apparently unused fuel UST owned by the NFTA is visible from the Property. Personnel indicated there were originally two such tanks adjacent to each other, but one was removed at an unknown date. No information regarding spills or leaks from these tanks was reported in the EDR report, which includes a search of the state database.

West of the NFTA land is Cayuga Creek. West of the creek is a strip mall having a nursery, an eyeglass shop, and numerous small businesses.

4.2 Findings

The EDR database search results were reviewed for any evidence that adjacent properties may have past or present environmental issues that would affect the Property.

The Niagara Falls Airport/ Air Force Base with a listed address of 9400 Porter Road (same as the Property) was listed as having had one spill of 50 gallons of jet fuel on December 2, 1999. The spill was caused because an automatic shutoff system did not function while the truck was being refueled. The spilled fuel and contaminated material were disposed of offsite. The spill was closed on March 28, 2000.

Niagara Mohawk Pole, with a listed address of 9401 Porter Road, less than 0.125 mile west of the Property, was reported as having a spill of 3 gallons of transformer oil on May 19, 1999. Three gallons of oil were reported as "recovered," and the spill was closed on the same date. The cause of the spill was reported as a possible lightning strike.

Cecos International, Inc., located less than 0.125 mile east-northeast of the Property, with an address of Box 340 L PO, Niagara Falls, is listed in the UST and AST database. One 2,000-gallon UST and one 6,000-gallon diesel UST were removed and closed at the site before April 1991. Four ASTs, either 250-gallon or 300-gallon capacity, are located on the site. The tanks reportedly are unregulated because they are less than 1,101 gallons in capacity.

Water well databases at the federal and state level were reviewed to identify any water supply source near the Property. Two locations were identified in a USGS database within 0.25 mile of the Property. USGS 2242961 is located less than 0.125 mile north-northwest of the Property, and is topographically higher than the Property. USGS 2242955 is located less than 0.25 mile east of the Property and also is topographically higher than the Property. Both wells are listed as "test holes"; that is, no well was completed at either location. No public water supply system or other state-registered well was identified in the database within a 1-mile radius of the Property.

Land use at adjacent properties does not appear to have changed substantially over the years, based on a review of available aerial photographs (1963, 1979, and 1995).

5 Review of Regulatory Information

An essential component of an ECP is the review of records and databases containing information on the Property and adjacent properties. The review includes reasonably obtainable federal, state, and local government records and is intended to identify a release or likely release of any hazardous substance or any petroleum product that is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product to the Property.

Most of the regulatory information for this ECP was obtained from EDR on July 13, 2006. EDR provides a regulatory database summary that consolidates standard federal, state, local, and tribal environmental record sources based on ASTM D6008-recommended minimum search distances from the Property.

All findings reported in Sections 5.1, 5.2, and 5.3 are from the EDR report unless otherwise noted. A copy of the complete EDR report is included in Appendix E.

5.1 Federal Environmental Records

5.1.1 Federal National Priorities List Sites within 1 Mile

USEPA maintains a record of the nation's worst uncontrolled or abandoned hazardous waste sites, known as the National Priorities List (NPL). Sites on the NPL undergo long-term remedial action under CERCLA. The USAR Center is not an NPL site, nor was any such site located within 1 mile of the Property.

5.1.2 CERCLA Information Systems Sites within 0.5 Mile

The CERCLA Information System (CERCLIS) contains data on potentially hazardous waste sites that have been reported to USEPA by states, municipalities, private companies, and private persons, pursuant to Section 103 of the Act. CERCLIS contains sites that either are proposed to be or are on the NPL, and sites that are in the screening and assessment phase for possible inclusion on the NPL. The USAR Center is not a CERCLIS site, and no CERCLIS sites are located within 0.5 mile of the Property.

5.1.3 Resource Conservation and Recovery Act Corrective Action Sites within 1 Mile

Resource Conservation and Recovery Act (RCRA) corrective action sites (CORRACTS) represent facilities that have generated or managed hazardous wastes and require corrective action. The USAR Center is not a CORRACTS, nor was any such site identified within 1 mile of the Property.

5.1.4 RCRA Treatment, Storage, and/or Disposal Sites within 0.5 Mile

RCRA defines and regulates sites that generate, transport, store, or provide treatment, storage, or disposal (TSD) of hazardous wastes. The RCRA Information System (RCRIS)

includes selective information on these sites. The USAR Center is not an RCRA TSD site, and no such sites are located within 0.5 mile of the USAR Center.

5.1.5 Federal RCRA Small and Large Quantity Generators within 0.25 Mile

Conditionally exempt small quantity generators are defined as facilities generating less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. RCRA small quantity generators are defined as facilities generating between 100 and 1,000 kg of hazardous waste per month. A facility generating more than 1,000 kg of hazardous waste or more than 1 kg of acutely hazardous waste per month is defined as a large quantity generator.

The USAR Center is listed as an RCRA registered small quantity generator. No RCRA violations are associated with the USAR Center. No adjacent property owner is a RCRA registered small quantity generator. No large quantity generators are located within 0.25 mile of the USAR Center.

5.1.6 Federal Emergency Response Notification System List

The Federal Emergency Response Notification System (ERNS) List maintains information on reported releases of oil and hazardous substances. The Property is on this list because of the PCB spill in 1991 (see Section 3.3.2).

5.2 State and Local Environmental Records

Most of the information presented in this subsection was obtained from the EDR report. Additional information was obtained from online database searches of the State of New York's Web site.

5.2.1 State Lists of Hazardous Waste Sites within 1 Mile

The USAR Center is not on the state list of hazardous waste sites. No adjacent properties within 1 mile of the Property were listed as having a hazardous waste site.

5.2.2 State-Registered Landfills or Solid Waste Disposal Sites within 0.5 Mile

The USAR Center does not have a solid waste landfill, incinerator, or transfer station within the Property boundaries. No adjacent properties within 0.5 mile of the Property have a solid waste landfill, incinerator, or transfer station.

5.2.3 State-Registered Leaking UST Sites within 0.5 Mile

In addition to information obtained from the EDR report, the New York Division of Underground Storage Tanks maintains a comprehensive database of leaking underground storage tank (LUST) sites. The USAR Center is not listed in the state LUST database.

Seven LUST sites were identified within 0.5 mile of the Property. Table 2 summarizes information relative to the USAR Center and provides the status of corrective actions. All seven sites have been closed and have NFA status, indicating they do not pose a threat to human health and the environment and, thus, no environmental effect on the Property.

TABLE 2
 Leaking Underground Storage Tank Sites
Near Niagara Falls USAR Center, Niagara, New York

Company/Site	Address	Distance and Direction from Property	Regulatory Status	Elevation Relative to Property
Cayuga Village	512 B Street, Niagara Falls, NY	Approx. 1,473 feet south-southwest	Closed	Lower
Rausmann Residence	431 A Street, Niagara Falls, NY	Approx. 1,573 feet south	Closed	Lower
Dunn Tire	9540 Niagara Falls Boulevard, Niagara Falls, NY	Approx. 1,761 feet south-southeast	Closed	Lower
Cayuga Village	640 C Street, Niagara Falls, NY	Approx. 1,785 feet southwest	Closed	Lower
Cayuga Village Mobile Park	Niagara Falls Boulevard, Niagara Falls, NY	Approx. 1,957 feet south	Closed	Lower
Rainbow Tire	9340 Niagara Falls Boulevard, Niagara Falls, NY	Approx. 2,053 feet south	Closed	Lower
Maria Healey (home)	9200 Niagara Falls Boulevard, Niagara Falls, NY	Approx. 2,309 feet south-southwest	Closed	Lower

5.2.4 State-Registered UST Sites and AST Sites within 0.5 Mile

Based on a review of the EDR report and the State of New York's UST and AST database, one UST site and one AST site were identified within 0.25 mile of the Property. The Property also is listed in the state UST and AST database.

A 3,000-gallon UST used for unleaded gasoline storage was properly removed from the Property on July 1, 1990. The UST was installed on June 1, 1966. A 10,000-gallon UST and a 20,000-gallon UST, used to store No. 1, 2, or 4 fuel oil, were properly removed from the Property on October 1, 1991. Both USTs were installed on June 1, 1965. In addition, the database lists one 528-gallon AST for the Property. The AST is used to store used oil. It is listed as being located on stilts/saddles/legs/rack or cradle and was last inspected on July 9, 1990, and having an expiration date of January 19, 2001. This tank was observed during the site reconnaissance adjacent to the POL shed (Building 17).

USTs and ASTs were located on the Cecos International, Inc. property. One 2,000-gallon UST and one 6,000-gallon diesel UST were removed from the Cecos property before April 1991. Four ASTs, either 250-gallon or 300-gallon capacity, are located on the Cecos property. The ASTs are reportedly unregulated because they are less than 1,101 gallons in capacity. The Cecos property is located topographically higher than and less than 0.125 mile from the USAR Center.

The two USTs on the adjacent west NFTA property (one of which was removed from the ground, according to Property personnel) were not listed in the state's UST or AST database. It is not known whether these USTs have leaked.

5.2.5 State Spills Incidents

The USAR Center is listed on the New York State petroleum spill list. There were two spill incidents at the Property; both spill incidents are classified “closed.” The incidents are described below.

- A release of an unknown quantity of waste/fuel oil was recorded on September 21, 1999. Two 550-gallon waste oil tanks associated with an OWS were scheduled to be removed. While removing the tanks and associated piping, one of the tanks cracked. A “small amount” of groundwater entered the tank and then spilled out from the tank, producing a sheen on the water. The water was pumped into 55-gallon drums and disposed of. No affected soil was observed. The spill was closed on February 22, 2000.

Based on information provided by personnel and information in historical documents, the “two 550-gallon waste oil tanks” consisted in reality of one 550-gallon UST by the wash rack and associated OWS, and one 1,000-gallon UST by the OWS near Building 4. As indicated in Table 1, these tanks and the associated spills have been closed by NYSDEC (Sections 3.4 and 3.5.2).

- On October 18, 1991, 200 gallons of No. 2 fuel oil were released while a UST was being removed. The tank contents were stored in a concrete vault, and sorbents were used to hold the spill. The sorbents were later disposed of, and no further action was required. The spill was closed on March 6, 1992.

No corresponding information about this spill or tank could be determined from interviews with Property personnel.

One additional property located less than 0.125 mile from the USAR Center is listed in the spills database. The Niagara Falls Airport/ Air Force Base, with a listed address of 9400 Porter Road (same as the Property), was listed as having had one spill of 50 gallons of jet fuel on December 2, 1999. The spill was caused because an automatic shutoff system did not function while the truck was being refueled. The spilled fuel and contaminated material were disposed of offsite. The spill was closed on March 28, 2000.

5.2.6 Records of Contaminated Public Wells

The City of Niagara Falls does not own or operate any municipal water supply wells within 0.5 mile of the USAR Center.

5.2.7 Voluntary Remediation Program Sites within 0.5 Mile

The USAR Center is not listed in New York’s Brownfield Program (the successor to the Voluntary Cleanup Program). No sites located within 0.5 mile of the USAR Center are listed as being in the Brownfield Program.

5.2.8 State-Registered Bulk Fertilizer and Pesticide Storage Facilities within 0.25 Mile

The USAR Center is not registered with the state as a bulk fertilizer and pesticide storage facility. No adjacent properties within 0.25 mile were registered as one of these facilities.

5.3 Unmapped Sites

Some sites within the databases EDR searches have the same zip code as the USAR Center but no street address. These sites, known as unmapped or orphan sites, cannot be mapped from the EDR results alone. Additional efforts were made to locate these sites and to assess their environmental importance to the USAR Center.

Using the mapping utility provided at maps.google.com, an attempt was made to identify and map the locations of the orphan sites. None of the identifiable sites was located within corresponding ASTM search radius distances.

5.4 Summary of Properties Evaluated to Determine Risk to the Property

To summarize, 29 properties near or adjacent to the USAR Center were evaluated for potential risk to the Property. Based on information obtained during area reconnaissance, interviews, and regulatory database searches, the adjacent west NFTA property exhibits potential environmental conditions that have the potential to adversely affect the environmental conditions at the Property.

One UST was removed from the NFTA property, which is located close to the west boundary of the USAR Center. It is not known when the UST was removed. The top of another UST that is reportedly empty was visible on the NFTA property during the site reconnaissance. The former uses and contents of both tanks are unknown. There is no record of these tanks with NYSDEC; furthermore, NYSDEC has no records that indicate a spill occurred from either tank.

6 Site Investigation and Review of Hazards

Findings documented in the following subsections are based on the August 16 and 17, 2006, site reconnaissance, a review of available site records, and information obtained from USAR personnel.

6.1 USTs/ASTs

A 528-gallon waste oil AST installed around 1990 is located near the northeastern corner of the Property. The AST is located within a concrete containment structure and receives used oil from the AMSA shop and OMS.

6.2 Inventory of Chemicals/Hazardous Substances

Records pertaining to hazardous substances including hazardous materials, chemical bulk storage, and hazardous waste, and records pertaining to petroleum products and petroleum waste were reviewed, along with interviews and site reconnaissance conducted to develop the inventory for the Property. Available records indicate that hazardous materials and POLs are stored, and had been stored, at the Property. These materials include batteries, acids, paints, methanol, fuel oil, lubricating oil, gear oil, waste oil, rifle bore cleaner, transmission fluid, antifreeze, motor oil, gasoline, diesel, and acetylene and oxygen gas cylinders. AMSA employees said that AMSA generates, on average, 50 gallons of used engine oil, 10 gallons of antifreeze, 5 gallons of hydraulic fluid, and 5 gallons of waste diesel every month. Activities in Building 21 reportedly generate a minimal quantity of used oil each month.

Building 17

During the site reconnaissance, the shed (Building 17) contained lubricating oil, antifreeze, grease (including aircraft grease), diesel, and hydraulic fluid. An inventory of the items stored inside the shed at the time of the site reconnaissance was reviewed, and indicates that POL products, such as engine oil (240 pounds), grease (600 pounds), diesel (35 gallons), gasoline (5 gallons), windshield washer fluid (20 cases), and antifreeze (75 gallons), are stored in containers ranging from 55-gallon drums to 5-gallon containers. Empty containers for kerosene also are in Building 17.

Building 18

The OMS is used to perform vehicle maintenance and to store related equipment, tools, POL, and hazardous waste prior to offsite disposal by a licensed contractor. At the time of the site reconnaissance, the OMS shop contained three flammable storage cabinets, one 55-gallon drum of used oil, and one 55-gallon drum of engine oil on the main bay floor, and degreasing solvent cans containing TCE and PCE as components.

An inventory of the chemicals stored in flammable storage cabinets in the AMSA indicates that degreasers, brake cleaning fluid, penetrating grease, lubricant sprays, adhesives,

fiberglass resin, paint, insect killer and repellent, primer, isopropyl alcohol, denatured alcohol, coolant cleaner, floor cleaners, and methanol, are stored in numerous small containers for a total approximate quantity of several tens of pounds.

During the site reconnaissance, additional chemical and equipment storage was observed in the AMSA. Additional storage included 55-gallon drums and 5-gallon containers containing used oil, new engine oil, lubricants, paints, rust prevention sprays, spill kits, gasoline, diesel, vehicle batteries, crushed oil filters, a parts washer, a water recycling system (not used because of malfunction), nonpetroleum-based soap, and a drum containing used rags. The substances appeared to be properly stored, and no indication of a release to the environment.

Building 20

An inventory of the items stored in the battery room at the time of the site reconnaissance indicated that fifty 1-gallon acid batteries, five boxes of washer fluid each containing seven bottles, and twelve 1-gallon hydraulic oil containers were stored inside the battery room.

Building 21

Two maintenance bays are located on the east side of the building, where equipment is stored and light vehicle maintenance is performed. During the site reconnaissance, two cabinets of flammable material were observed in the north maintenance area. These cabinets contained engine oil, diesel, lubricant oil, and gasoline in cans and small containers. Two 55-gallon drums containing waste oil also were observed in this area along with a spill kit, and oxygen and acetylene cylinders. The second, larger, maintenance bay had several (more than 15) spent or "expired" fire extinguishers awaiting recharge or disposal.

Building 22

The first floor of the building had two flammable storage cabinets. Visual observation and an inventory of the items stored inside these cabinets at the time of the site reconnaissance was reviewed, and indicates that they contained several small containers of assorted cans of spray paint, rifle bore cleaner, glass cleaner, bleach, pine oil disinfectant, floor wax, and an assortment of other household cleaners.

Storage Sheds

Several storage sheds were observed on the Property during the site reconnaissance. Two metal storage sheds (6 feet by 8 feet by 8 feet tall) are located in the MEP area northeast of Building 21. CH2M HILL did not have access to the interior of the sheds in the MEP on the day of the site reconnaissance. Property personnel performed a visual inspection of these two sheds on April 12, 2007. Both sheds contained a total of four partially full 55-gallon drums containing used motor oil and antifreeze. The total quantity of used motor oil was approximately 75 gallons. The total quantity of antifreeze was between 5 and 10 gallons. Two similar storage sheds are located in the MVPA east of Building 18. In the MVPA, one shed contained oxygen gas cylinders; another, acetylene gas cylinders. A third, larger shed (6 feet by 10 feet by 17 feet) contained POL, including waste oil, antifreeze, diesel, diesel waste, and parts cleaners.

Several other buildings on the Property are and were used to store hazardous equipment and chemicals, most in de minimis quantities commensurate with use onsite. These buildings include Building 20 (an inventory of the items stored in the battery room at the time of the site reconnaissance was available and listed fifty 1-gallon acid batteries, five boxes of washer fluid each containing seven bottles, and twelve 1-gallon hydraulic oil containers were stored inside this room); Building 22 (dry transformer, POL); Building 25 (acrylic and latex-based paints, empty spill containment drums); and Building 26 (oil and enamel paints).

Other than the assumed routine household and yard use of pesticides and herbicides, no evidence of pesticide/herbicide use (empty containers, dead or stressed vegetation) was observed during the site reconnaissance.

In all areas of POL and hazardous material storage, there was no indication of improper storage that is likely to indicate a release to the environment.

6.3 Waste Disposal Sites

Available records indicate that the Property may have been a landfill before it was used by the U.S. Government (see Section 3.5.1 for more specific discussion). There is no evidence of onsite waste disposal, other than through storm drains (as discussed in Section 2.4.1), related to the U.S. Navy or the USAR activities on the Property. No waste disposal sites were observed during the site reconnaissance, nor were any signs observed of past onsite waste disposal (such as stressed vegetation or suspicious depressions in the landscape).

6.4 Pits, Sumps, Drywells, and Catch Basins

Three OWSs are located on the Property. One OWS is located south of the vehicle wash rack near the northwest corner of Building 18. The interior of the OWS could not be inspected visually because of vehicular traffic. The wash rack had a 550-gallon UST associated with it to collect waste oil that drained from the OWS. The UST was removed in September 1999 (see Section 3.4 for details). Maintenance bays within the AMSA in Building 18 drain through a series of trench drains and this OWS into a branch of the sanitary sewer. Maintenance bays within the Building 18 OMS also drain into trench drains connected through a sump to a sanitary sewer line. The wash rack near Building 18 drains through a single inlet drain into this OWS.

Another OWS is located near the southwest corner of Building 4S. The unit consists of a 6-foot by 15-foot concrete vault that contains an OWS, a holding tank, and associated piping. The OWS is connected to floor drains in the hangar (Building 4) and drains into the sanitary sewer system. A 1,000-gallon waste oil UST associated with the OWS was removed in September 1999. No recognized environmental conditions were apparent during the visual inspection of the OWS. According to personnel, trench drains in Building 4 (hangar part) drain into this OWS, which drains into the local sanitary sewer system.

A third OWS is located adjacent to the east wall of Building 21. During the site reconnaissance, facility personnel were unaware of the OWS (it was identified during a subsequent phone interview), and it was not visually inspected. The OWS receives water

from vehicle washing and maintenance activities inside Building 21 and drains into the sanitary sewer system. A small tank, about the size of a 55-gallon drum, is associated with the OWS. According to personnel, trench drains in Building 21 drain into the OWS before it drains into the local sanitary sewer system.

Several interior building areas drain directly or indirectly into the stormwater sewer system.

6.5 Asbestos-containing Material

An ACM survey (Environmental Enterprise Group, Inc.) in 2004 identified several buildings that contained ACM. Confirmed ACM was identified in Buildings 4, 19, 21, 22, 23, and 26, in floor tile, floor tile mastic, fire doors, piping TSI, vent ducts, and roofing mastic. The survey did not indicate the subsequent removal of pipe insulation or tiles; therefore, the ACM survey is assumed to represent current conditions. According to personnel, no abatement activities have been performed since the time of the survey.

6.6 PCB-containing Equipment

One pad-mounted dry transformer was located in Building 22 along the first floor north wall. Another overhead dry transformer was located close to the northeast corner of the first floor of Building 22. Another pad-mounted dry transformer was located in an enclosed area within Room 104, Building 21. An electrical room, located in the northeast corner of the first floor of Building 4S, contains dry transformers and associated equipment. All transformers observed appeared to be in good condition and had no leaks. Personnel said that none of the transformers contained PCBs.

In 1991, a transformer fell and broke, releasing 120 gallons of transformer oil containing 250 parts per million (ppm) of PCB into a storm sewer drain located east of Building 22. Surface paving materials, soils, and storm drain materials were remediated after the spill. NYSDEC indicated that the spill had been adequately remediated that same year.

6.7 Lead-based Paint

Because Buildings 4, 18 through 23, 25, and 26 on the Property were constructed before 1981, there is potential for LBP. At the time of the site reconnaissance, the painted surfaces at this facility were in good condition, with the exception of the southeast interior of Building 19, where chipped paint was observed on the walls and floor, along with water damage on the ceiling.

6.8 Radon

Based on information provided by the USACE, a radon survey was conducted at the Property from August 5-11, 1998. The testing found radon levels between 0.1 and 0.2 picoCuries per liter (pCi/L). USEPA recommends 4 pCi/L as an action level for radon abatement. The radon concern is therefore considered low for the Property.

6.9 Munitions and Explosives of Concern

Based on a review of available records, the site reconnaissance, and interviews with USAR Center personnel, no munitions and explosives of concern (MEC) are present on the Property, although Nike missiles reportedly were serviced and maintained in the hangar part of Building 4. The principal munitions associated with Nike sites included the missiles themselves and propellants and fuels associated with the missile components. The exact components of the warheads serviced, missile propellants, and fuels used (if any) at the Property were not detailed in the reports reviewed in preparing this ECP report.

There are no firing ranges on the Property, and there is no evidence that a firing range was ever located on the Property.

6.10 Radioactive Materials

Based on available records review, interviews, and the site reconnaissance, there may be monitoring equipment on the Property which contains small amounts of sealed radioactive materials. The northern, enclosed section of Building 20, where electronic equipment is stored, had a "Radioactive" sticker on the door as abundant caution. Property personnel were unsure of the exact nature of the instruments in this room; the room reportedly contained Radiac meters, which are used to monitor radiation, and reportedly contain small amounts of radium in sealed units. However, an online search (<http://www.ornl.gov/ptp/collection/radiac/T1B.htm>) indicates these meters are similar to Geiger counters, and therefore may not have a radioactive source of their own. The Radiac meters at the Property are sent annually to the Tobyhanna Army Depot for calibration. Based on the above information, there is minimal likelihood of a release to the environment.

7 Review of Special Resources

7.1 Land Use

The building inspector for the town of Niagara has designated the area near the Property and surrounding properties as LI – Light Industrial. The Property is located in a commercial area.

7.2 Coastal Zone Management

NYSDEC is the lead agency for the New York Coastal Management Program. The Property is not included in the coastal zone management plan, nor is it in a coastal zone.

7.3 Wetlands

According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory map, no jurisdictional wetland areas are identified on the Property. The nearest wetlands are located less than 0.125 mile north and south of the Property. Figure 9 in Appendix A is a map of wetlands in the immediate vicinity of the Property.

7.4 100-year Floodplain

A review of the Federal Emergency Management Agency (FEMA) digital Flood Hazard Area map indicates that the Property lies within the 100-year floodplain of Cayuga Creek (Figure 10, Appendix A). Property personnel were not aware of any flood events on the Property.

7.5 Natural Resources

No natural resources surveys or mapping reports that included this Property and the adjacent properties were available for review. According to the PA for the Property (Engineering Technologies Associates, 1994), sensitive environments around the Property include wetlands, waterfowl nesting and wintering areas, and habitat for four New York State-listed threatened or endangered plant species.

7.6 Cultural Resources

A Section 110 cultural resources survey report for the Property has not been prepared. Because most buildings on the Property are at least 50 years old, the buildings may be eligible for nomination to the National Register of Historic Places (NRHP).

8 Conclusions

The following information was obtained after conducting an environmental record search, including records for adjacent properties, reviewing available historical information, conducting interviews with knowledgeable parties connected with the Property or with state and local agencies, and conducting a reconnaissance of the Property and adjacent properties.

8.1 Review of Findings

Hazardous Substances. CERCLA hazardous substances pursuant to CERCLA §101(14) (42 United States Code 960 (14)) were used and stored at the Property.

Historical reports indicate that the Property may have been used as a landfill prior to ownership by the U.S. Government. The historical PA report (Engineering Technologies Associates, 1994) states that “no additional documents could be located to confirm or deny the potential presence of a landfill,” and recommended additional records reviews and sampling to determine the potential for a landfill at the Property. During preparation of this ECP report, a review of representative historical USGS topographic maps (dating back to 1899) and aerial photographs (dating back to 1963) for the Property did not provide evidence of surficial disturbance indicative of landfilling activities.

Hazardous substance releases may have occurred as a result of historical aircraft maintenance activities and Nike missile service and maintenance in current and former hangars. No information was available to suggest potential releases from these activities have been investigated. Prior to installation of the OWSs, aircraft/vehicle service and wash water drained into storm drains. Drainage from the Building 4 hangar reportedly flowed into storm drains for several decades before installation of the OWS (1994) near Building 4. A historical PA report (Engineering Technologies Associates, 1994) recommended sediment sampling in Cayuga Creek to evaluate discharges from building floor drains into the storm sewer. No information was available to indicate that such sampling had been performed. There are three OWSs on the Property. No maintenance records were available for any of the OWSs on the Property.

In 1991, a transformer fell and broke, releasing 120 gallons of transformer oil containing 250 ppm of PCB into a storm sewer drain located east of Building 22. Surface paving materials, soils, and storm drain materials were remediated after the spill. NYSDEC indicated that the spill had been adequately remediated that same year.

USTs and ASTs. Available records do not indicate any USTs on the Property. One 528-gallon used oil AST is located on the Property in Building 17. During the site reconnaissance, the AST was observed adjacent to the POL shed (Building 17). Available records and information from Property personnel indicate that seven USTs and three ASTs were formerly located at the Property. All 10 tanks reportedly have been removed. Two USTs for waste oil (one 550-gallon, one 1,000-gallon) had documented spills, but both have received regulatory closure. In October 1991, 200 gallons of No. 2 fuel oil were released

while a UST was being removed. The tank contents were stored in a concrete vault, and sorbents were used to hold the spill. The sorbents were later disposed of, and no further action was required. The spill was closed in March 1992. Documented removals and closure are not available for six of the tanks.

Non-UST/AST Petroleum Storage. Petroleum storage other than in USTs or ASTs was observed on the Property in several buildings and storage sheds. Petroleum storage was observed in 55-gallon drums, in 5-gallon cans/containers, and in smaller containers, and no indications of any release to the environment. It is reasonable to assume that similar type non-UST/AST petroleum storage occurred historically, given the Property's history of aircraft and Nike missile servicing and maintenance.

PCBs. No surveys of PCB-containing equipment have been performed for the Property. One pad-mounted dry transformer is located in Building 22 along the first floor north wall. An overhead dry transformer is located close to the northeast corner of the first floor of Building 22. Another pad-mounted dry transformer is located in an enclosed area within Room 104, Building 21. An electrical room, located in the northeast corner of the first floor, Building 4S, contains dry transformers and associated equipment. All transformers observed appeared in good condition. Property personnel indicated that none of the transformers contained PCBs. A 1991 spill of PCB-containing dielectric fluid is discussed in the hazardous substances section above.

ACM. A 2004 ACM survey identified ACM in Buildings 4, 19, 21, 22, 23, and 26, in floor tile, floor tile mastic, fire doors, piping thermal system insulation, vent ducts, and roofing mastic. According to personnel, no abatement activities have been performed since the time of the survey. The onsite reconnaissance confirmed the presence of material that may be ACM in locations where reasonably visible.

LBP. No LBP surveys have been conducted at the Property. Facilities constructed before 1981 are likely to have LBP. Buildings 4, 18 through 23, 25, and 26 were constructed before 1981, and LBP may be present there. At the time of the site reconnaissance, painted surfaces were in good condition and had no chipped or peeling paint, except in the southeast interior of Building 19 where chipped paint was observed on the walls and floor, along with water damage. Buildings 17 and 24 were constructed after 1981.

Radiological Materials. Based on a review of available records, the site reconnaissance, and interviews with USAR Center personnel, there may be monitoring equipment on the Property, which contains small quantities of sealed radioactive material. The equipment is serviced offsite and this is minimal likelihood of a release to the environment. Based on available information, a radiological survey has not been performed for the Property.

Radon. Based on information provided by the USACE, a radon survey was conducted at the Property from August 5-11, 1998. The testing found radon levels between 0.1 and 0.2 pCi/L. USEPA recommends 4 pCi/L as an action level for radon abatement. The radon concern is therefore considered low for the Property.

MEC. Based on a review of available records, the site reconnaissance, and interviews with USAR Center personnel, no MEC is present on the Property.

Surrounding Properties. Potential environmental sites of concern located within the 1-mile ASTM search radius from the Property were evaluated through database review and site

reconnaissance. None of the adjacent properties evaluated exhibited documented environmental conditions that had or have the potential to adversely affect environmental conditions at the Property. According to Property personnel, one UST is located on the adjacent west property. This property had a second UST that was removed at an unknown date. It is not known whether either of these USTs have leaked.

Wetlands and Floodplain. According to online USFWS National Wetlands Inventory maps and visual observations, no wetlands were observed or appear to be present on the Property. The adjacent property to the south (south of Porter Road) is classified as freshwater forested/shrub wetland, and the adjacent property to the north (NFTA) is classified as freshwater emergent wetland.

According to the FEMA Flood Insurance Rate Map effective date June 15, 1994, the Property is located within the 100-year floodplain for Cayuga Creek. Property personnel were unaware of any flood events on the Property.

Threatened and Endangered Species. No natural resources surveys or mapping reports that included this Property and the adjacent properties were available for review. According to the PA report for the Property (Engineering Technologies Associates, 1994), however, sensitive environments around the Property include wetlands, waterfowl nesting and wintering areas, and habitat for four New York State-listed threatened or endangered plant species.

Archaeological and Historical Resources. Because all buildings on the Property were constructed in 1956, they may be eligible for listing on the NRHP.

8.2 Environmental Condition of Property

The findings presented in this ECP report were based on reasonably available environmental information; interviews with site and state and local personnel; and review of previous environmental studies, federal and state databases, and file information related to the storage, release, treatment, or disposal of hazardous substances or petroleum products. Results also were based on visual observations of the Property and adjacent properties.

In accordance with DoD policy defining the classifications (see Sherri Goodman memorandum dated 21 October 1996), the Property has been classified as Type 7. This classification does not include categorizing the property based on de minimis conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. The property type is based on the following major findings:

- Reports of a former landfill on the Property. A PA quoting previous studies at the Property states that the Property is known to have been a landfill. The PA cites other intrusive investigations on the Property, performed for other purposes, which did not demonstrate evidence of a landfill. The PA, however, states that “no additional documents could be located to confirm or deny the potential presence of a landfill” and recommended additional records reviews and sampling on the Property with the

objective of determining whether a landfill was previously located at the Property. Based on information available at the time of preparation of this report, no such sampling has been performed.

- According to Property personnel, Building 4 was formerly used to service Nike missiles having conventional warheads in support of other Nike missile batteries in New York. Several published reports on the Nike missile program indicate there is the potential for environmental effects related to Nike missile operations and maintenance. The floor drains in Building 4 and other buildings flowed to the storm sewer for several decades prior to 1994. A historical PA report (Engineering Technologies Associates, 1994) recommended sediment sampling in Cayuga Creek to evaluate discharges from building floor drains into the storm sewer. No information was available to indicate that such sampling had been performed
- Three aircraft maintenance hangars: two former wooden hangars located on the east side of the Property and one hangar within Building 4. According to the PA report, operations at the Building 4 hangar included daily inspections, engine repair, and aircraft modifications. As noted, Building 4 also was used to service Nike missiles from batteries in the New York area. The hangars were in use as early as the 1930s, and no detailed information is available on storage and disposal of hazardous substances that were likely used. Furthermore, drainage from the hangar reportedly flowed into storm drains for several decades before installation of the OWS near Building 4 in 1994. A historical PA report (Engineering Technologies Associates, 1994) recommended sediment sampling in Cayuga Creek to evaluate discharges from building floor drains into the storm sewer. No information was available to indicate that such sampling had been performed.

9 References

Persons Contacted

- Jon Pashong, Fort Drum Department of Public Works, Maintenance Mechanic, 315-523-0016, August 16 and 17, 2006.
- Patrick Patterson, Fort Drum Department of Public Works, Maintenance Mechanic, 716-297-7725, x 229, August 29, 2006; September 1, 6, 19; October 2, 2006; January 8 and 22, 2007; April 12, 2007.
- Charlie Page, AMSA 76, Supervisor, 716-297-7200, August 16 and 17, 2006.
- Joe D'Amico, AMSA 76 and 277th Quartermaster Company, Supply Technician, 716-297-7200, August 16 and 17, 2006.
- Glenn Seidel, AMSA 76 and 277th Quartermaster Company, Safety Officer, 716-297-7200, August 16 and 17, 2006.
- Sal Calandra, New York State Department of Environmental Conservation, Region 9, Buffalo, 716-851-7220, January 22 and 23, 2007.

Resources Consulted

- Aerial photographs provided by BBL, Inc., dated 1962, 1978, and 1995
- National Wild and Scenic Rivers, <http://www.nps.gov/rivers/wildriverslist.html#ny>
- USEPA Map of Radon Zones, <http://www.epa.gov/radon/zonemap.html>
- New York Coastal Zone Management, <http://www.nyswaterfronts.com/index.asp>
- FEMA Flood Hazard Insurance Map, <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView>
- Federal regulatory databases:

NPL: National Priority List

Last EDR Contact: 05/05/2006

Proposed NPL: Proposed National Priority List Sites

Last EDR Contact: 05/05/2006

DELISTED NPL: National Priority List Deletions

Last EDR Contact: 05/05/2006

NPL RECOVERY: Federal Superfund Liens

Last EDR Contact: 05/23/2006

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Last EDR Contact: 06/22/2006

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Last EDR Contact: 06/23/2006

CORRACTS: Corrective Action Report

Last EDR Contact: 05/21/2006

RCRA: Resource Conservation and Recovery Act Information

Last EDR Contact: 06/28/2006

ERNS: Emergency Response Notification System

Last EDR Contact: 04/26/2006

HMIRS: Hazardous Materials Information Reporting System

Last EDR Contact: 04/14/2006

US ENG CONTROLS: Engineering Controls Sites List

Last EDR Contact: 07/03/2006

US INST CONTROL: Sites with Institutional Controls

Last EDR Contact: 07/03/2006

DOD: Department of Defense Sites

Last EDR Contact: 05/12/2006

FUDS: Formerly Used Defense Sites

Last EDR Contact: 07/03/2006

US BROWNFIELDS: A Listing of Brownfields Sites

Last EDR Contact: 06/12/2006

CONSENT: Superfund (CERCLA) Consent Decrees

Last EDR Contact: 03/13/2006

UMTRA: Uranium Mill Tailings Sites

Last EDR Contact: 06/21/2006

ODI: Open Dump Inventory

Last EDR Contact: 06/09/2004

Last EDR Contact: 06/22/2006

TSCA: Toxic Substances Control Act

Last EDR Contact: 04/12/2006

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Last EDR Contact: 06/19/2006

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Last EDR Contact: 06/19/2006

SSTS: Section 7 Tracking Systems

Last EDR Contact: 03/06/2006

ICIS: Integrated Compliance Information System

Last EDR Contact: 04/11/2006

PADS: PCB Activity Database System

Last EDR Contact: 06/28/2006

MLTS: Material Licensing Tracking System

Last EDR Contact: 07/03/2006

MINES: Mines Master Index File

Last EDR Contact: 06/28/2006

FINDS: Facility Index System/Facility Registry System

Last EDR Contact: 04/03/2006

RAATS: RCRA Administrative Action Tracking System

Last EDR Contact: 06/05/2006

BRS: Biennial Reporting System

Last EDR Contact: 06/30/2006

- State and local records:

HSWDS: Hazardous Substance Waste Disposal Site Inventory

Last EDR Contact: 05/30/2006

SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Last EDR Contact: 06/15/2006

DEL SHWS: Delisted Registry Sites

Last EDR Contact: 06/15/2006

SWE/LF: Facility Register

Last EDR Contact: 05/01/2006

SWRCY: Registered Recycling Facility List

Last EDR Contact: 05/01/2006

SWTIRE: Registered Waste Tire Storage & Facility List

Last EDR Contact: 05/19/2006

LTANKS: Spills Information Database

Last EDR Contact: 06/22/2006

HIST LTANKS: Listing of Leaking Storage Tanks

Last EDR Contact: 07/07/2005

UST: Petroleum Bulk Storage (PBS) Database

Last EDR Contact: 06/02/2006

CBS UST: Chemical Bulk Storage Database

MOSF UST: Major Oil Storage Facilities Database

Last EDR Contact: 07/25/2005

AST: Petroleum Bulk Storage

Last EDR Contact: 06/02/2006

CBS AST: Chemical Bulk Storage Database

Last EDR Contact: 07/25/2005

MOSF AST: Major Oil Storage Facilities Database

Last EDR Contact: 07/25/2005

NY MANIFEST: Facility and Manifest Data

Last EDR Contact: 05/31/2006

SPILLS: Spills Information Database

Last EDR Contact: 06/22/2006

HIST SPILLS: SPILLS Database

Last EDR Contact: 07/07/2005

ENG CONTROLS: Registry of Engineering Controls

Last EDR Contact: 06/15/2006

INST CONTROL: Registry of Institutional Controls

Last EDR Contact: 06/15/2006

VCP: Voluntary Cleanup Agreements

Last EDR Contact: 06/15/2006

DRYCLEANERS: Registered Drycleaners

Last EDR Contact: 05/21/2004

BROWNFIELDS: Brownfield Site List

Last EDR Contact: 06/15/2006

SPDES: State Pollutant Discharge Elimination System

Last EDR Contact: 05/09/2006

AIRS: Air Emissions Data

Telephone: 518-402-8452

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

Last EDR Contact: 05/12/2006

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

Agencies Contacted

- Town of Niagara, New York

Works Cited

Bowne AE&T Group. 2006. *Stormwater Pollution Prevention Plan Update, Niagara Falls USARC – NY046 (Niagara Falls, NY)*. February.

Engineering Technologies Associates, Inc. 1994. *Final Preliminary Assessment of Niagara Falls Armed Forces Reserve Center*. February.

Environmental Enterprise Group, Inc. 2004. *U.S. Armed Forces Reserve Center – Niagara Falls (NY046), Asbestos Inspection Report*. December.

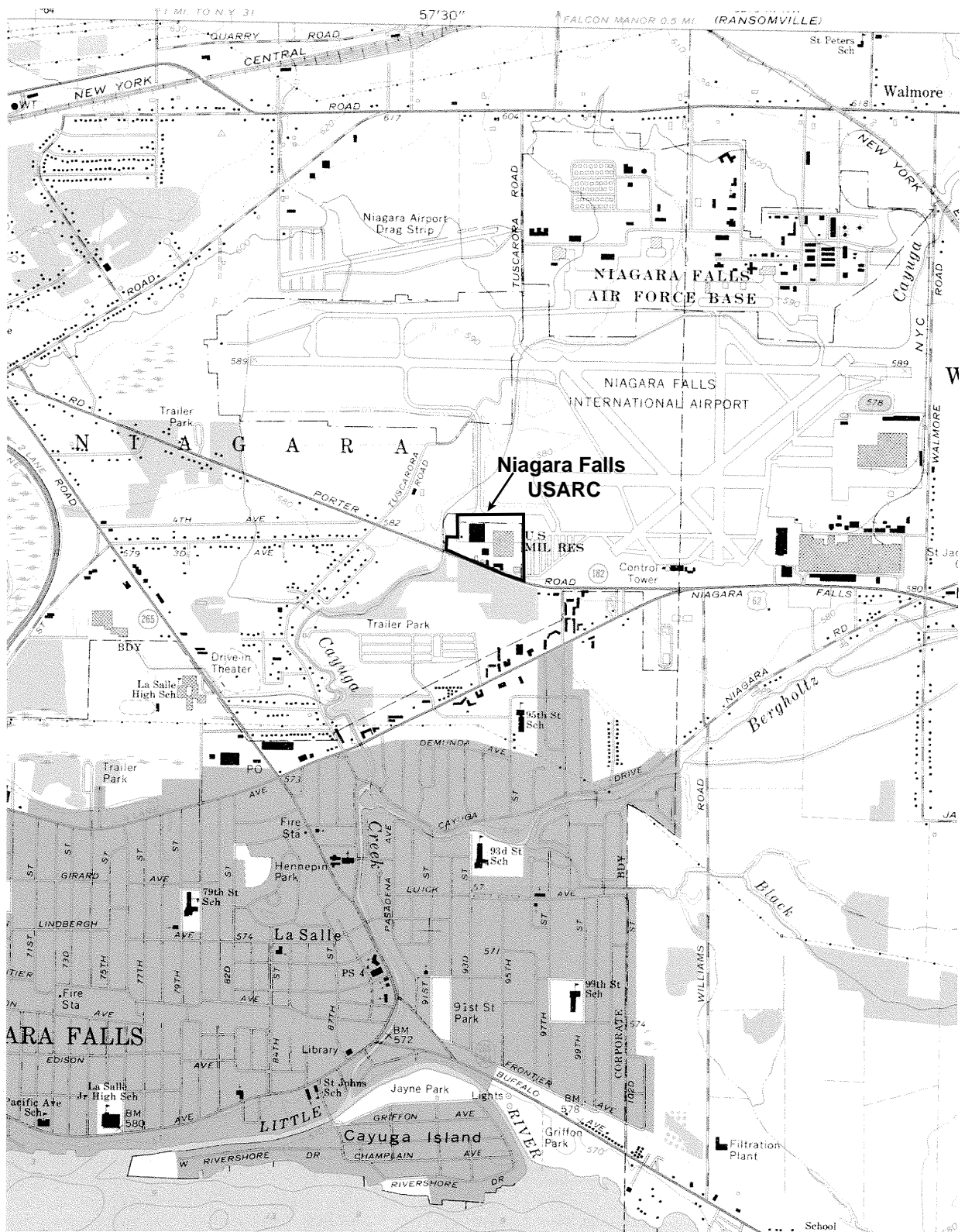
Law Engineering Testing Company. 1986. *Final Report, Investigation of Former Nike Missile Sites for Potential Toxic and Hazardous Waste Contamination*. March.

Sverdrup Environmental, Inc. 1999. *Closure Report, Underground Storage Tank Removals, Niagara Falls United States Army Reserve Center, 9400 Porter Road, Niagara Falls, NY 14304*. December.

U.S. Army Corps of Engineers (USACE) HTRW-CX. 2003. *Final Report, Nike Missile Battery Environmental Conditions Assessment Guide, Defense Environmental Restoration Program Formerly Used Defense Sites (DERP-FUDS)*. July.

Appendix A

Figures



N ^ EDR INQUIRY# 1714247.28 TARGET QUAD: TONAWANDAWEST YEAR: 1965 Series: 7.5' Scale: 1:24,000

FIGURE 3
1965 Topographic Map
Draft ECP Report
Niagara Falls USARC/AMSA #76

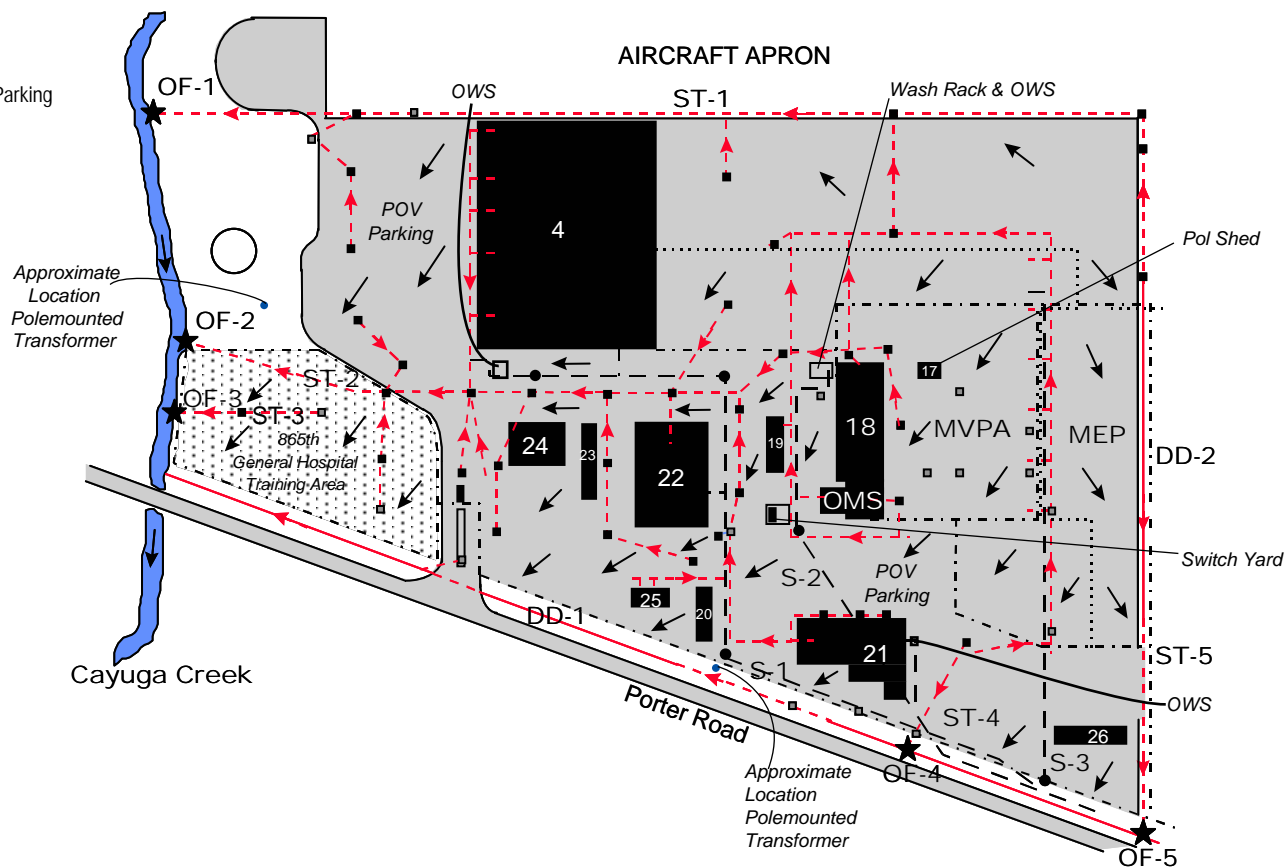
SOURCE: EDR, 2006

ES082006013MKE Niagara_Falls\Figure_3_1965_Topographic_Map_v6 9-27-06 cae

CH2MHILL

SITE MAP CODE GUIDE

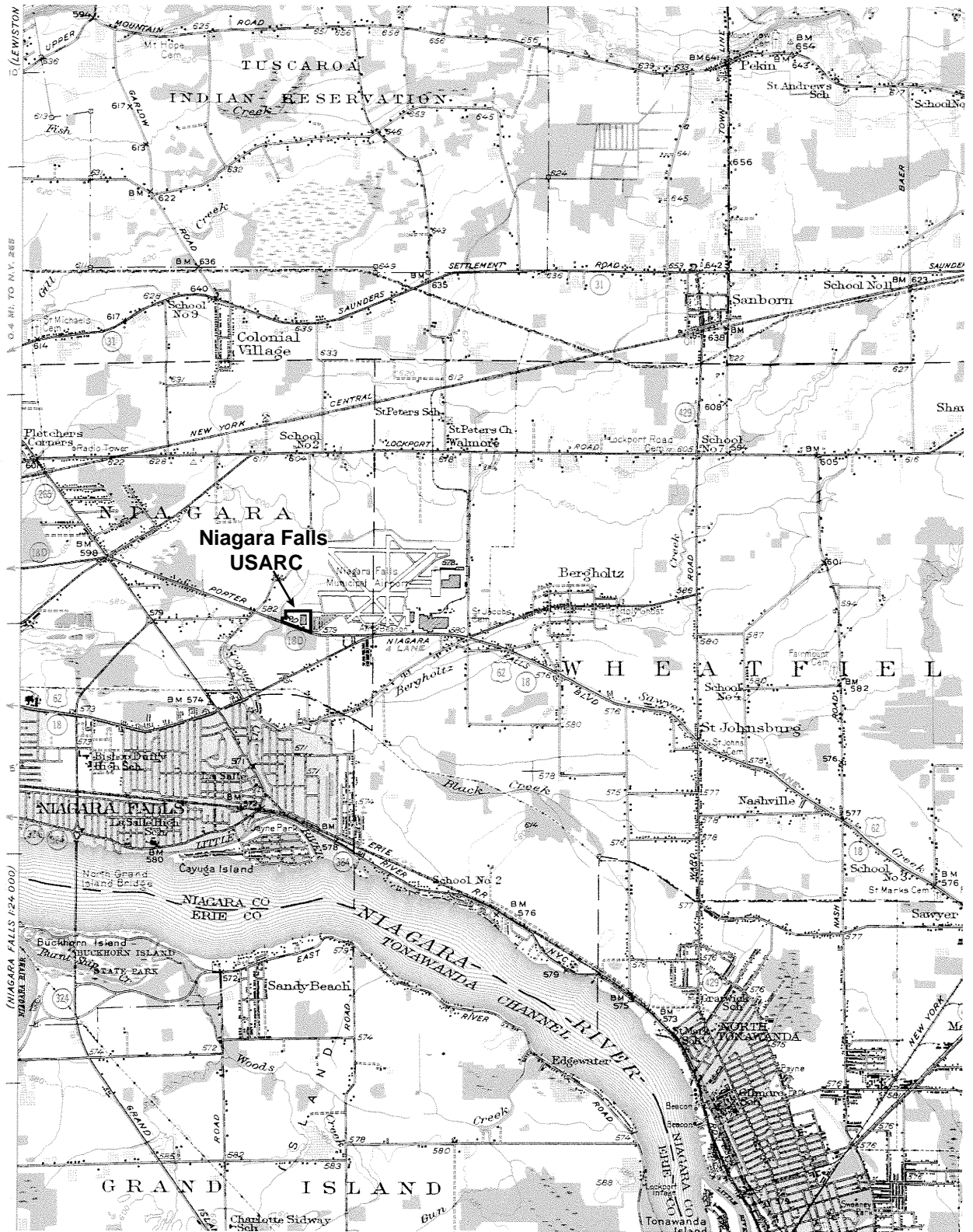
POV	Privately Operated Vehicle Parking
MEP	Military Equipment Parking
MVPA	Military Vehicle Parking Area
ST-1 thru ST-5	Stormwater sewer system
S-1 thru S-3	Sanitary sewer system
OF-1 thru OF-5	Outfall



KEY:	Outfall	★	Drain Inlet (Fac. Plans/Field Spec.)	■	NORTH ↑ Not to Scale
Runoff Flow Arrow	Sanitary Sewer	— — —	Building & No.	■ 19	
Drainage Divide	Ditch	→ → →	Paved Surface	■	
Security Fence	Stormwater Sewer	- - - - -	Gravel Surface	■	
				■	

FIGURE 4
Surface Water Drainage, Storm Water &
Sanitary Sewer Lines
Draft ECP Report
Niagara Falls USARC/AMSA #76

SOURCE: Bowne AE&T Group, 2006



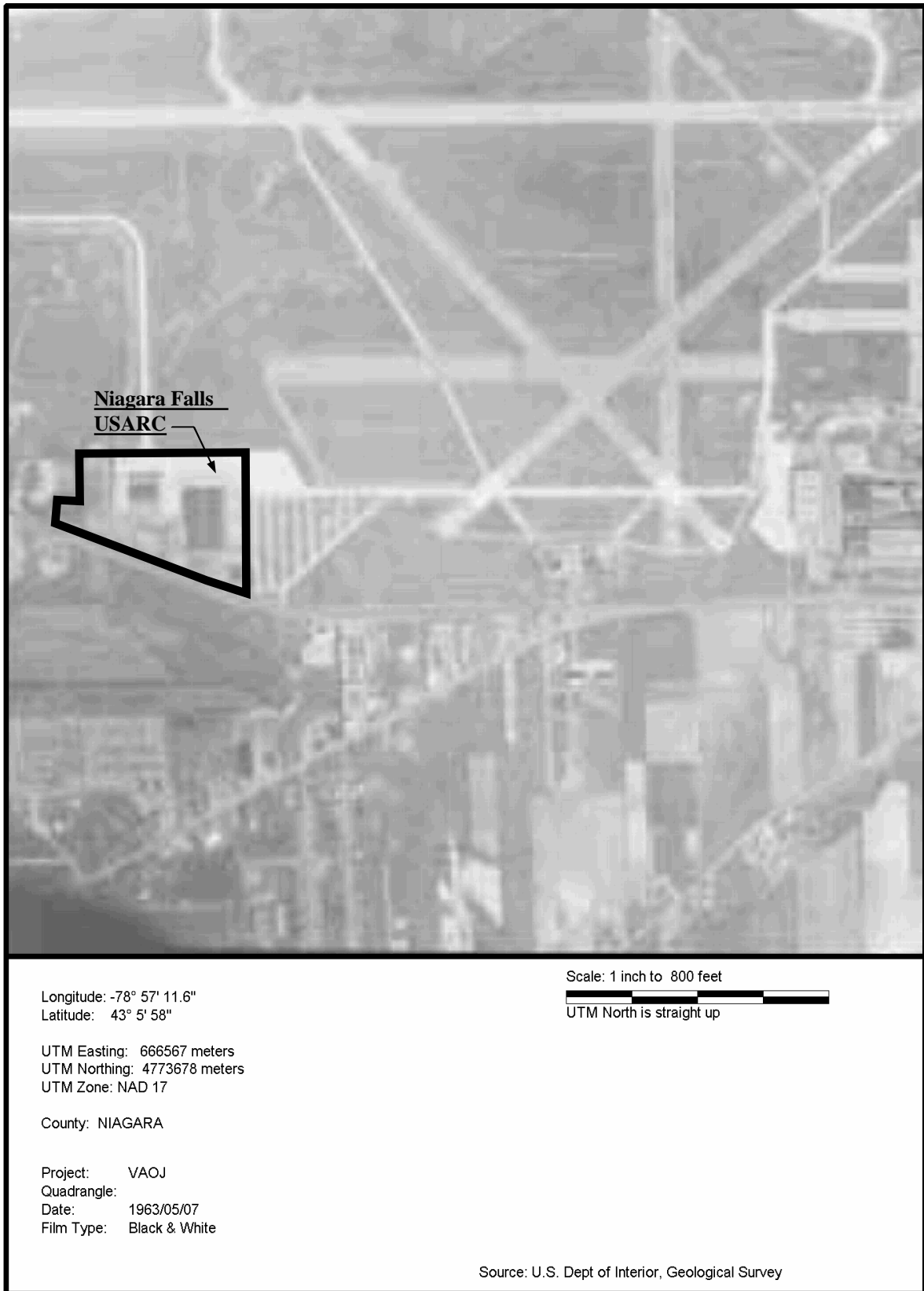
N ^ EDR INQUIRY# 1714247.28 TARGET QUAD: TONAWANDA YEAR: 1948 Series: 15' Scale: 1:62,500

FIGURE 5
1948 Topographic Map
Draft ECP Report
Niagara Falls USARC/AMSA #76

SOURCE: EDR, 2006

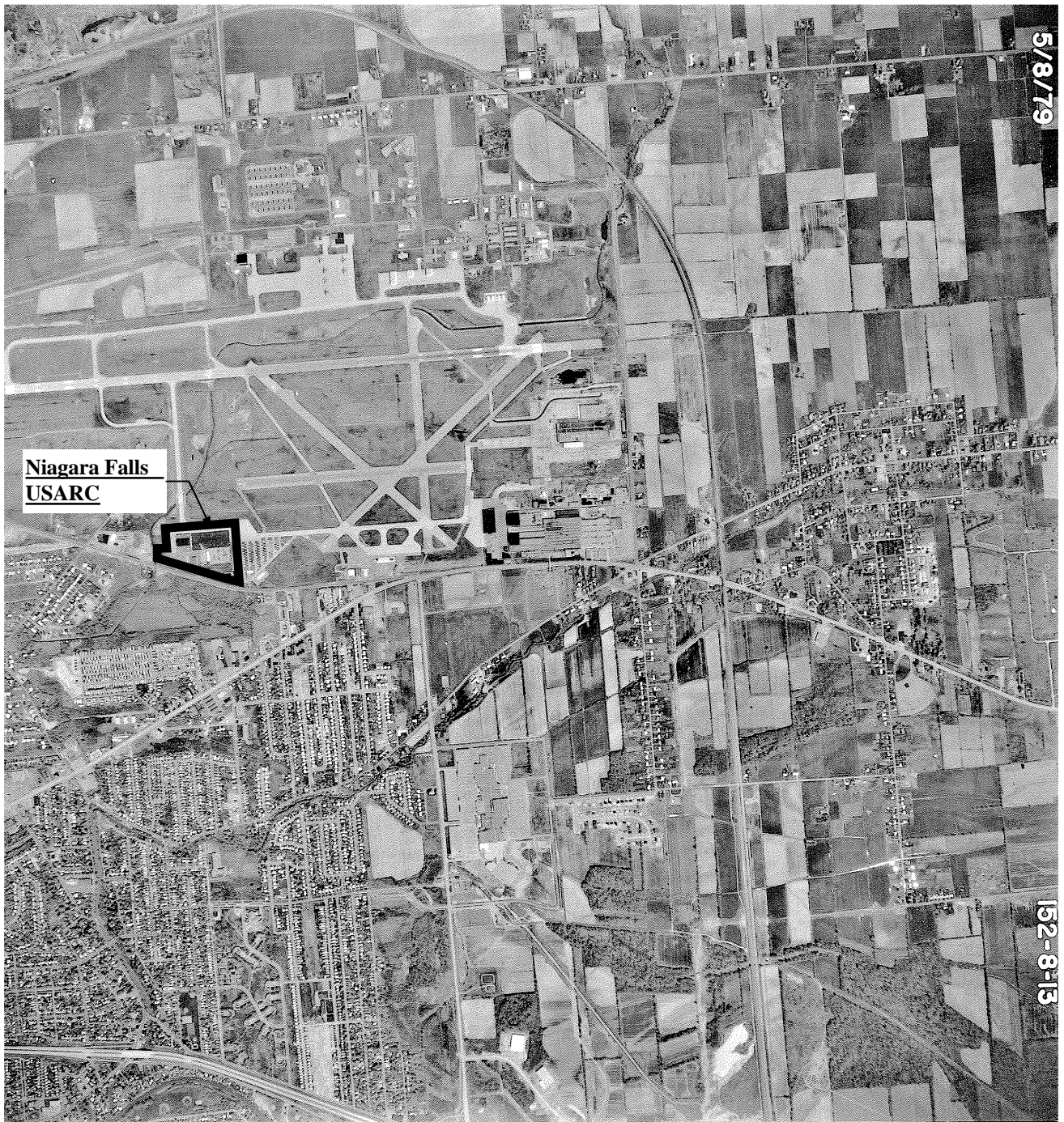
ES082006013MKE Niagara_Falls\Figure_5_1948_Topographic_Map_v5 9-26-06 cae

CH2MHILL



AERIAL PHOTOGRAPH OF THE VICINITY OF THE SUBJECT SITE LOCATED AT
9400 PORTER RD, NIAGARA FALLS

FIGURE 6
1963 Aerial Photograph
Draft ECP Report
Niagara Falls USARC/AMSA #76



PHOTOGRAPHY BY

McINTOSH & McINTOSH, INC.
P. O. BOX 490
LOCKPORT, N. Y. 14094
(716) 433-2535; (716) 625-8360

FLOWN 5-8-79

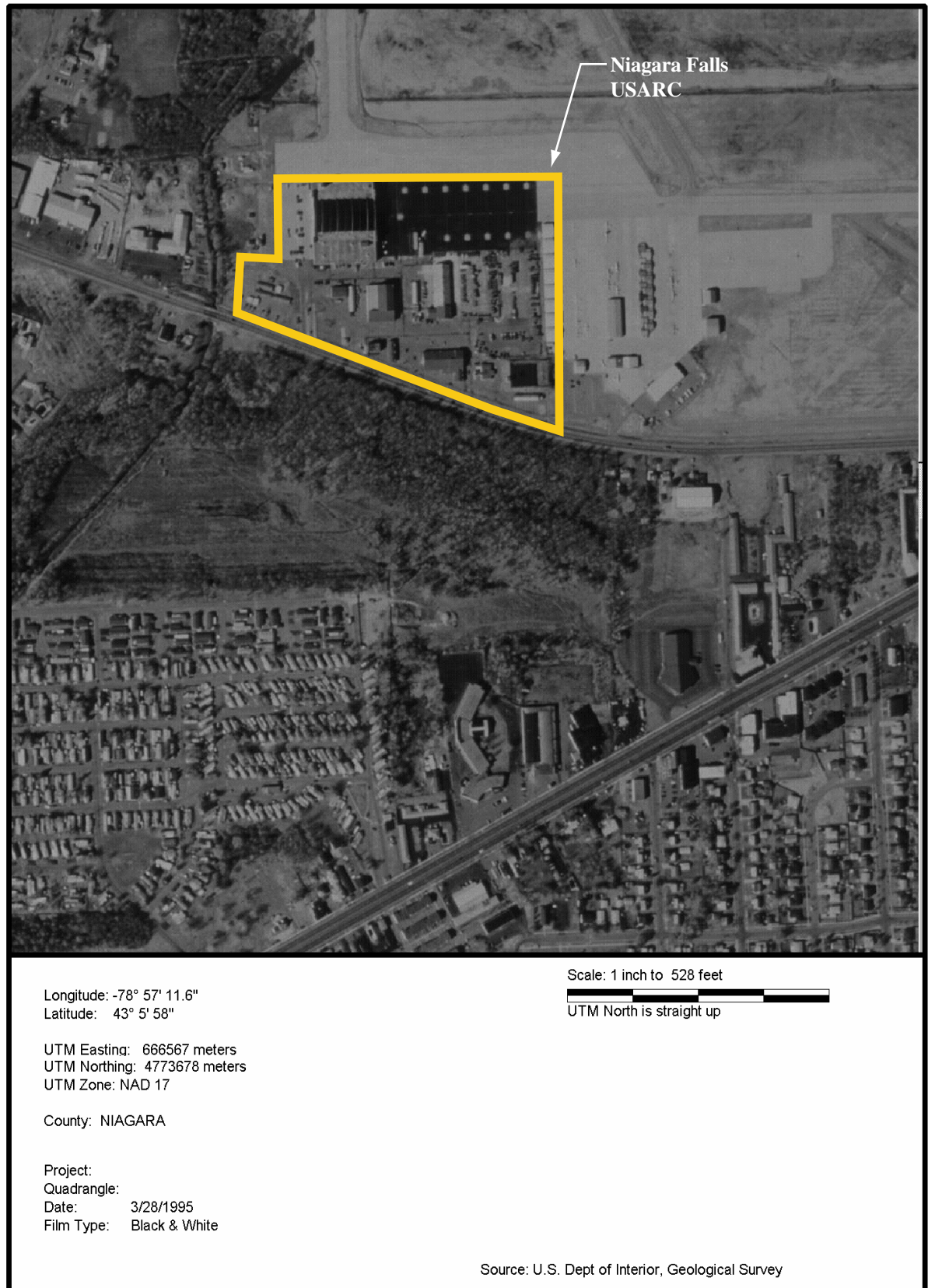
PHOTO NO. 152-08-13

JOB NO 3178

APPROXIMATE SCALE 1" = 2000'



FIGURE 7
1979 Aerial Photograph
Draft ECP Report
Niagara Falls USARC/AMSA #76



AERIAL PHOTOGRAPH OF THE VICINITY OF THE SUBJECT SITE LOCATED AT
9400 PORTER RD, NIAGARA FALLS

FIGURE 8
1995 Aerial Photograph
Draft ECP Report
Niagara Falls USARC/AMSA #76

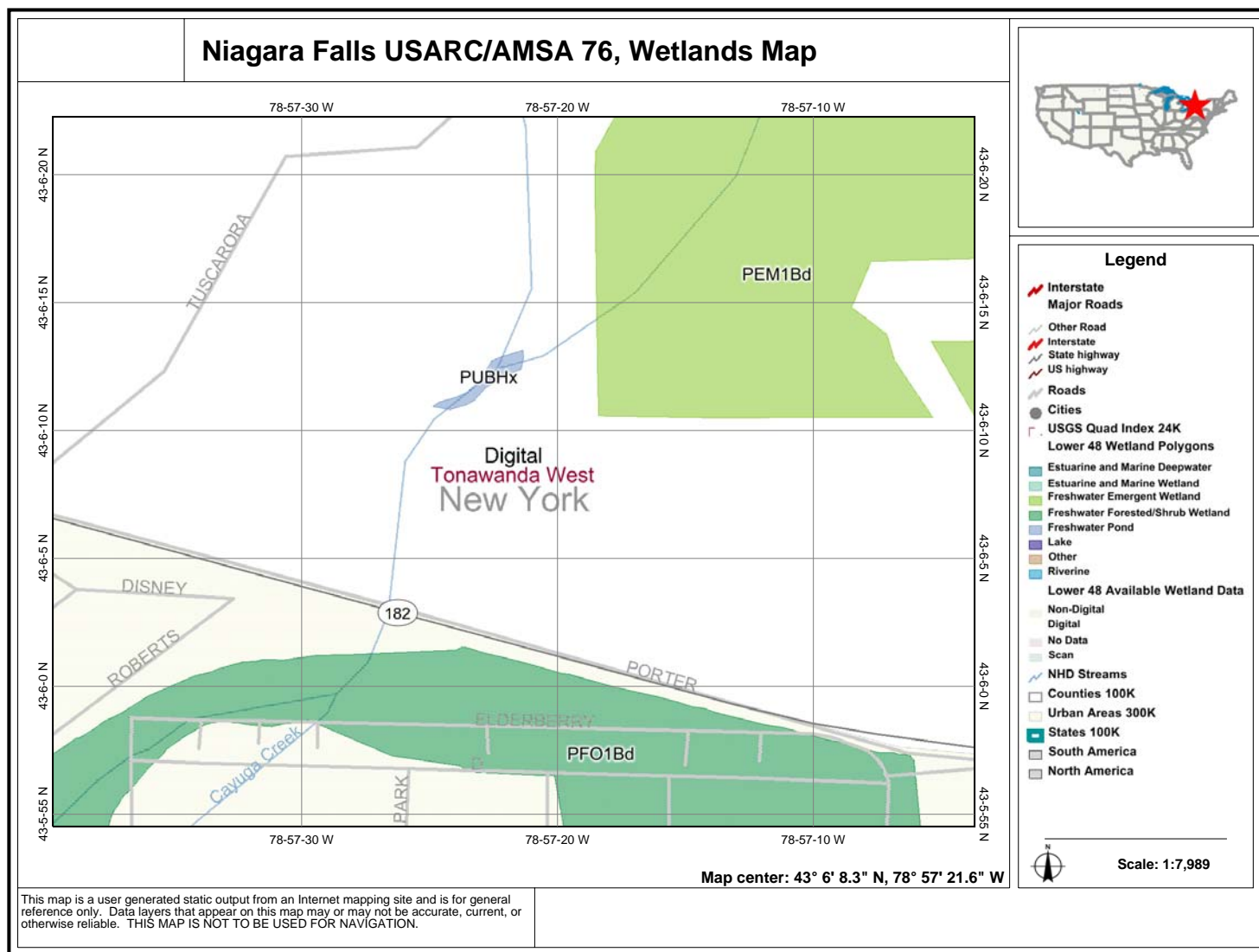
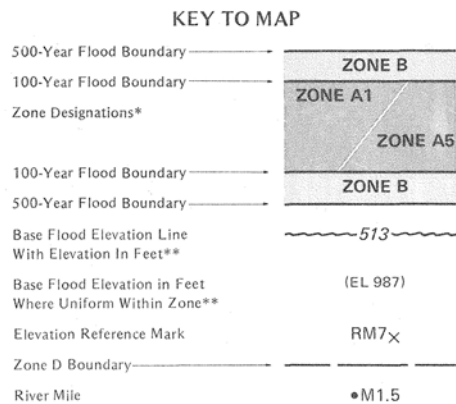


FIGURE 9
National Wetlands Inventory Map
Draft ECP Report
Niagara Falls USARC/AMSA #76

SOURCE: NRCS, 2006



**Referenced to the National Geodetic Vertical Datum of 1929

***EXPLANATION OF ZONE DESIGNATIONS**

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.

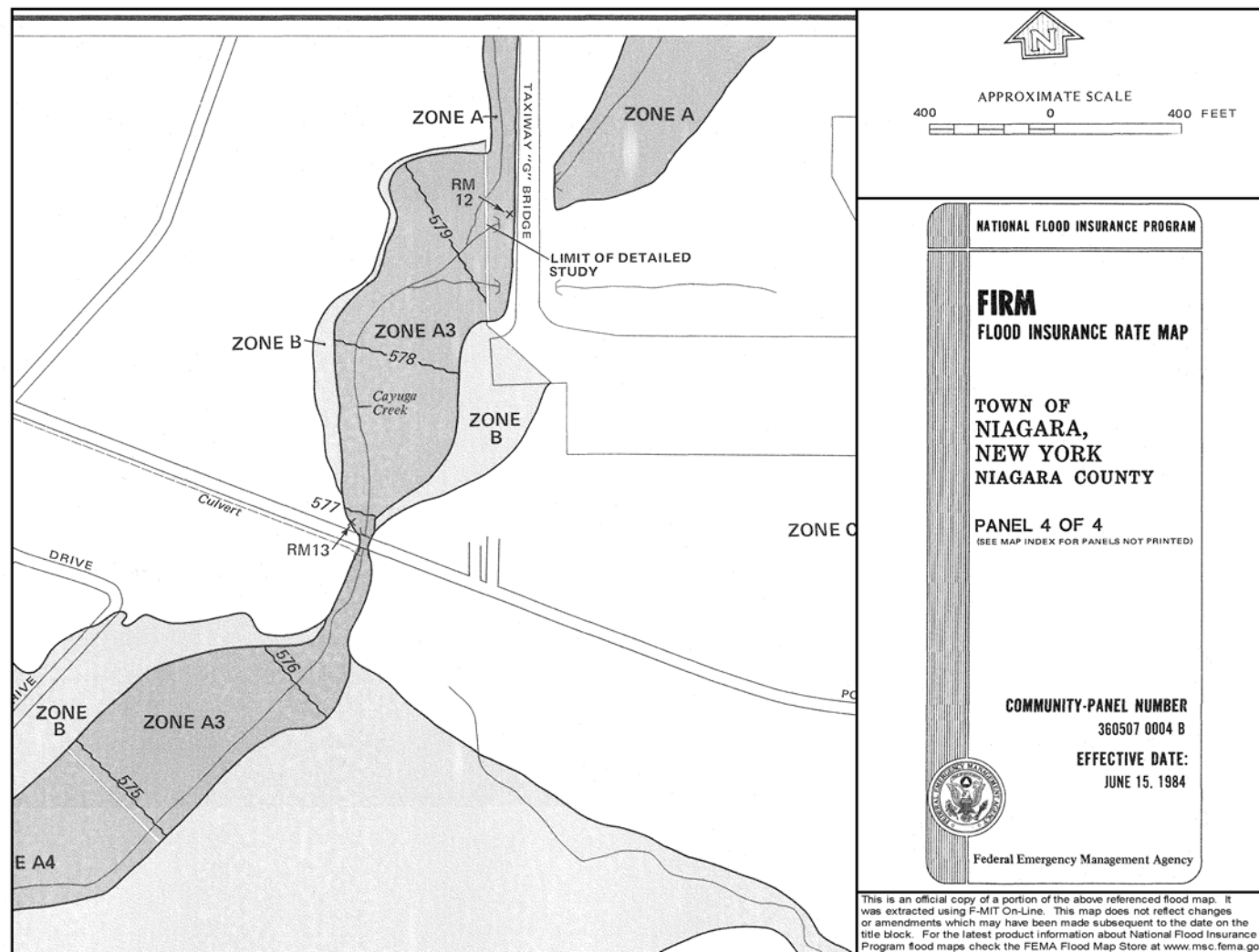


FIGURE 10
FEMA Flood Plain Map
Draft ECP Report
Niagara Falls USARC/AMSA #76

Appendix B

Site Reconnaissance Photographs

APPENDIX B

Site Reconnaissance Photographs



1. View south from near south border of Property. Entrance to Property from Porter Road. Note wooded adjacent property south.



2. View southwest, from southeast portion of Property. Porter Road and adjacent property south (beyond fence).



3. View north from near southeast corner of Property. Adjacent property east, Niagara Falls Transit Authority (airport).



4. View west from southwest portion of Property. Adjacent property west; top of mound corresponds to reported location of old, offsite, reportedly unused fuel oil UST.



5. View northwest from northeast portion of Property. Niagara Falls Transit Area (airport) property in background.



6. View northeast from northeast portion of Property. Structures on adjacent property east beyond Property fence.



7. View north/down, from Porter Road outside southwest Property boundary. Cayuga Creek and vegetated bank.



8. View east. Building 4, hangar. Building 4S to right and Building 4N to left.



9. View north, oil/water separator (OWS) pad south of Building 4S.



10. View northwest, vehicle wash rack and OWS.



11. View north, Building 4S, first floor, unused air compressor. Note oil staining and oil container on floor/pad. Potential lead-based paint on wall.



12. View west, Battery Room in Building 18, AMSA portion. Note charred wood bench and corrosion deposits on concrete floor.



13. Waste oil shed, MEP Area. Two drums on right are empty.



14. POL storage, Building 18. Empty 5-gallon containers.



15. Storage cabinet, Building 18.



16. Storage cabinet, Building 18.



17. Parts room, Building 18.

Appendix C

**Property Acquisition Documents
and Chain of Title Report**



2055 East Rio Salado Parkway, Suite 201
Tempe, Arizona 85281
Phone: (480) 967-6752
Fax Number: (480) 966-9422
Web Site: www.netronline.com

HISTORICAL CHAIN OF TITLE REPORT

**NIAGARA FALLS USARC/AMSA 76 NY
9400 PORTER ROAD
NIAGARA FALLS, NEW YORK**

Submitted to:

**ENVIRONMENTAL DATA RESOURCES, INC.
C/O
CH2M HILL
1569 Stampmill Way
Lawrenceville, Georgia 30043
(770) 338-1589**

Attention: Mary Jacques

Project No. N06-5633

Wednesday, September 13, 2006

NETR- Real Estate Research & Information hereby submits the following ASTM historical chain-of-title to the land described below, subject to the leases/miscellaneous shown in Section 2. Title to the estate or interest covered by this report appears to be vested in:

UNITED STATES OF AMERICA

The following is the current property legal description:

Being that parcel or tract of land, situated and lying in Lot 6, Township 13, Range 9 of the Holland Land Purchase, in the Town and County of Niagara, State of New York

Assessor's Parcel No: 146.14-1-8

1. HISTORICAL CHAIN OF TITLE

1. DEED:

RECORDED: 08-29-1933
GRANTOR: Joseph F. Conway
GRANTEE: Francis H. McDonald
INSTRUMENT: Liber 592, Pg 241

2. EXECUTOR'S DEED:

RECORDED: 05-05-1954
GRANTOR: Joseph J. P. McDonald and Margaret C. McDonald,
Executors of James A. McDonald (heir of Francis H.
McDonald)
GRANTEE: Ivan Lozina
INSTRUMENT: Liber 1135, Pg 382

3. EXECUTOR'S DEED:

RECORDED: 05-05-1954
GRANTOR: Rose McCaffrey McDonald, Executrix of Joseph A.
McDonald (heir of Francis H. McDonald)
GRANTEE: Ivan Lozina
INSTRUMENT: Liber 1135, Pg 394

4. WARRANTY DEED:

RECORDED: 05-05-1954
GRANTOR: Hugh McDonald (heir of Francis H. McDonald)
GRANTEE: Ivan Lozina
INSTRUMENT: Liber 1135, Pg 401

5. DEED:

RECORDED: 05-05-1954
GRANTOR: Ivan Lozina
GRANTEE: John A. Juran & Kathryn Juron, his wife
INSTRUMENT: Liber 1135, Pg 386

6. DEED:

RECORDED: 05-05-1954
GRANTOR: Ivan Lozina
GRANTEE: Stanley Lozina
INSTRUMENT: Liber 1135, Pg 390

7. WARRANTY DEED:

RECORDED: 10-28-1955

GRANTOR: Ivan Lozina; Stanley Lozina; and John A. Juran &
Kathryn Juran, his wife

GRANTEE: The United States of America

INSTRUMENT: Liber 1198, Pg 340

2. LEASES AND MISCELLANEOUS

1. No environmental liens, institutional controls or engineering controls were found of record.

3. LIMITATION

This report was prepared for the use of Environmental Data Resources, Inc., and CH2M Hill, exclusively. This report is neither a guarantee of title, a commitment to insure, or a policy of title insurance. NETR- Real Estate Research & Information does not guarantee nor include any warranty of any kind whether expressed or implied, about the validity of all information included in this report since this information is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

Property Acquisition Documents and a Chain of Title/Deed information were not available at the time of report preparation. This information will be updated when it becomes available from the 77th RRC.

Appendix D
Previous Environmental
Site Assessment Reports



**U.S. Army
Environmental
Center**

FINAL

Preliminary Assessment

Of

Niagara Falls Armed Forces Reserve Center

Contract Number DACA31-93-P-1517

February 1994

Prepared by:

Engineering Technologies Associates, Inc.
165 S. Union Blvd. #710
Lakewood, CO 80228

and

3458 Ellicott Center Drive #101
Ellicott City, MD 21043

For the National Guard Bureau and U.S. Army Reserve

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE February 1994		3. REPORT TYPE AND DATES COVERED FINAL	
4. TITLE AND SUBTITLE Preliminary Assessment of the Niagara Falls Armed Forces Reserve Center				5. FUNDING NUMBERS DACA31-93-P-1517	
6. AUTHOR(S) Mr. K. Walters Mr. Robert Payne Mr. Edward Miles					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Engineering Technologies Associates, Inc. 3458 Ellicott Center Dr. #101 Ellicott City, MD 21043 165 S. Union Blvd. #710 Lakewood, CO 80228				8. PERFORMING ORGANIZATION REPORT NUMBER 93317.10	
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13. ABSTRACT (Maximum 200 words) Under contract with the U.S. Army Environmental Center (USAEC), Engineering Technologies Associates, Inc. (ETA) conducted a Preliminary Assessment (PA) of the Niagara Falls Armed Forces Reserve Center in the Town of Niagara, New York. The purpose of this investigation was to review all available information regarding past practices for hazardous waste storage and disposal and to assimilate that information into this report. This PA is the first investigation step initiated after the site was listed on the Federal Facility Compliance Docket.					
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EXECUTIVE SUMMARY

Engineering Technologies Associates, Inc. (ETA) performed a Preliminary Assessment (PA) of the Niagara Falls Armed Forces Reserve Center (NFAFRC), including a site visit and review of all available relevant documents. No environmental sampling was conducted as part of this investigation.

NFAFRC has been owned by the U.S. Government since 1939; it has been operated by the U.S. Army since the early 1960's as a reserve training installation. Several tenants, including the New York Army National Guard (NYARNG), occupy part of the installation. Principal operations conducted at the site include aircraft and vehicle maintenance, and reserve personnel training.

An unreferenced document located in the files reviewed during the site visit indicated that the site was constructed on a former landfill. No other documentation was available to confirm or refute that contention. The possible presence of a landfill in this region is significant, due to the degree and nature of industrial development nearby, including a number of chemical manufacturing facilities. Numerous landfills containing toxic substances have already been identified in the area, including the Love Canal Superfund site.

The principal pathway of potential contamination from the site is via floor drains and the storm sewer system, entering the surface water system at Cayuga Creek. Spills of hazardous materials can potentially enter floor drains, and from there would become point source pollutant discharges into the Creek. No groundwater, soil, or air contamination is suspected at the installation.

Sensitive environments that could be affected by contaminants entering the surface water system from the NFAFRC includes wetlands, waterfowl nesting and wintering areas, and habitat for four New York State-listed threatened or endangered plant species. In addition, a State Park and a National Park are within the 15-mile downstream study area.

1.0 INTRODUCTION

ETA under Contract No. DACA31-93-P-1517 with the U.S. Army Environmental Center, performed a PA of the NFAFRC in the Town of Niagara, New York, in response to NFAFRC being placed on the Federal Agency Hazardous Waste Compliance Docket as listed in the Federal Register dated 5 February 1994. This PA conforms to the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1981 and the Superfund Amendments and Re-authorization Act (SARA) of 1986.

The purpose of this investigation was to review all available information regarding past practices for hazardous waste storage, handling, and disposal at the site, and to assimilate that information into a report. A Hazard Ranking System (HRS) score will be computed by the appropriate regulatory agency, based on information contained and summarized in this PA report. Because this investigation included no environmental sampling, analytical data are limited; however, all available information was reviewed, and a site visit was conducted. Available information regarding petroleum products is included in the report, although petroleum products are not regulated under the jurisdiction of CERCLA.

The site visit was conducted between 18 October and 22 October 1993. On-site personnel included: Major Covino, Ms. Haslbeck, Mr. Walters, and Ms. McGowan. Representatives from the installation included Pat Paterson and John Rodgers.

The Potential Hazardous Waste Site Preliminary Assessment Forms were used to collect and assemble information for the PA. The completed forms are included as Appendix A.

2.0 SITE DESCRIPTION, OPERATIONAL HISTORY, AND WASTE CHARACTERISTICS

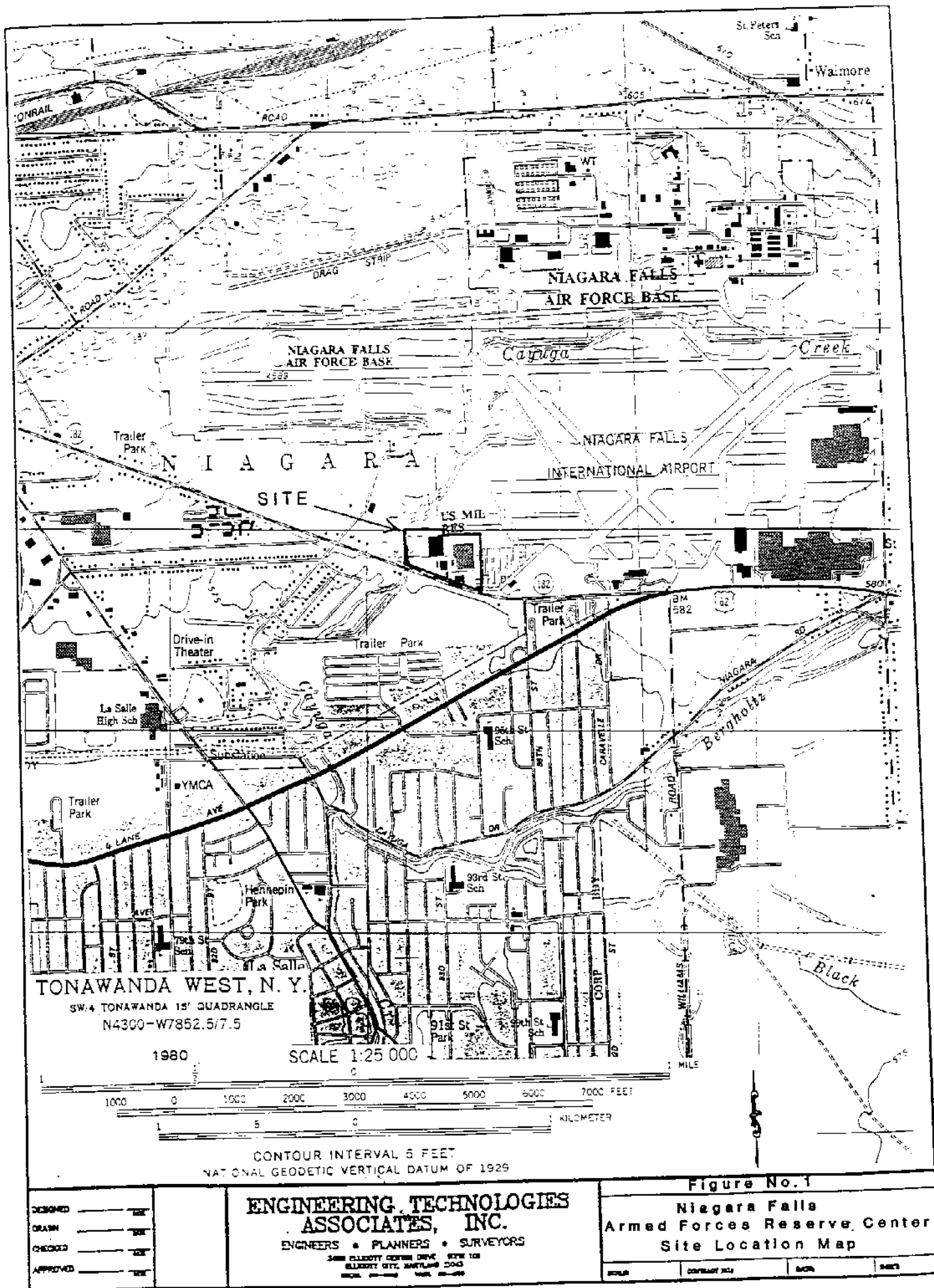
2.1 Location

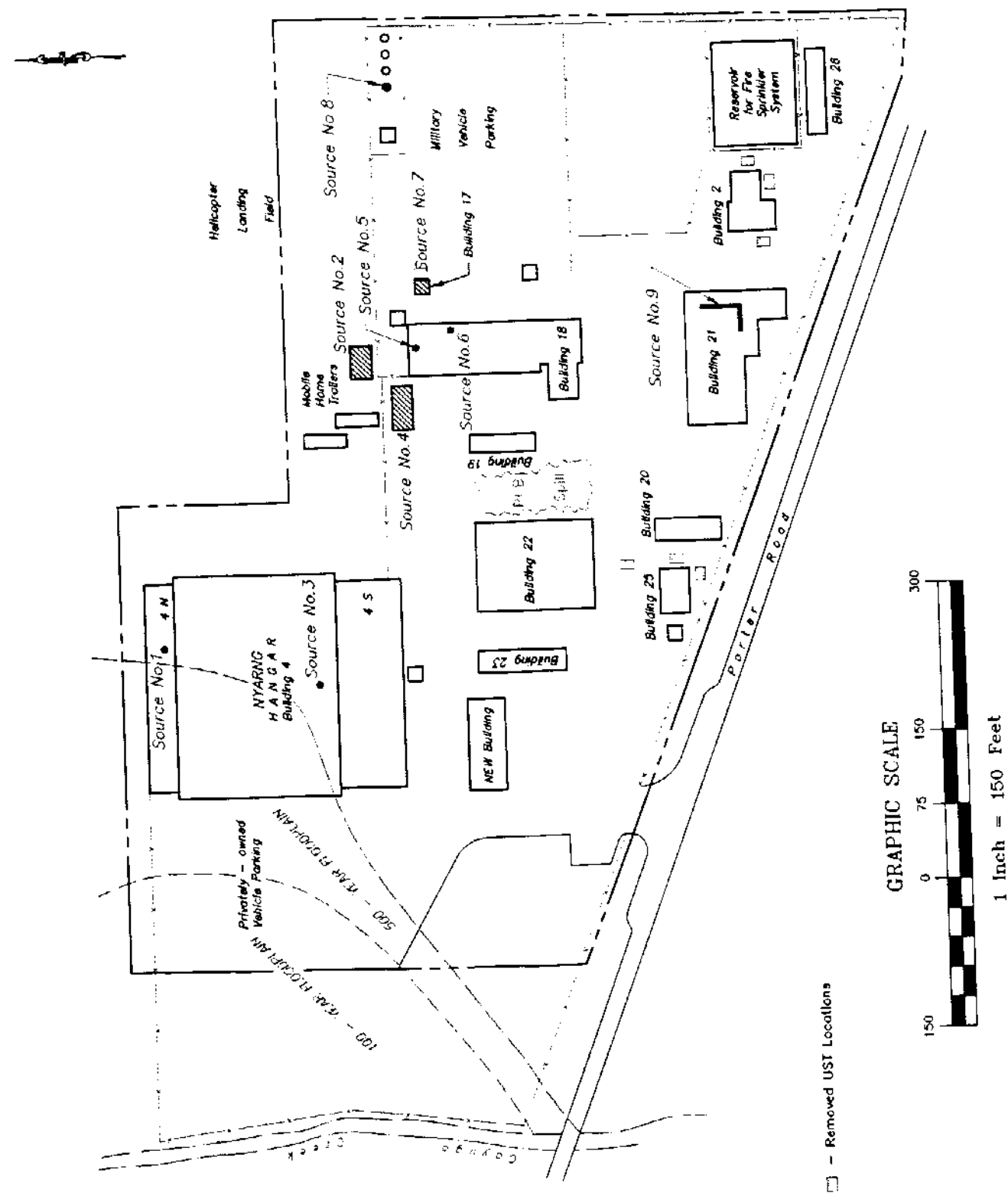
The NFAFRC is located at 9400 Porter Road, Niagara Falls County, Town of Niagara, NY 14304-0306 (see Photo No. 1). Figure 1 shows the location on a United States Geological Survey (USGS) 7.5 minute topographic map. The installation's coordinates are 43 degrees 6 minutes North latitude and 79 degrees 4 minutes West longitude (USATHAMA, 1989).

2.2 Site Description

The installation comprises approximately 20 acres, bordered by Porter Road on the south, and by Cayuga Creek on the west. Property boundaries on the north and east are shown on the site map (see Figure No. 2). According to Fort Drum personnel, the installation is owned by the United States Army Corps of Engineers, New York District, and is a sub-installation of Fort Drum (Tim Alexander, 1993). Site development includes 13 buildings and numerous small storage sheds and containers. The New York Army National Guard (NYARNG) is a tenant occupying a helicopter hangar, which represents approximately one-third of the site area, but about 50 percent of the developed floor space.

The NFAFRC is situated in a primarily industrial area, adjacent to the Niagara Falls Air Force Base and the Niagara Falls International Airport (see Figure No. 1). The installation lies in an area that has been extensively studied, due to the existence of numerous abandoned hazardous waste sites. The most notorious of these is the Love Canal Superfund site, less than one mile from the NFAFRC. During the site visit, on-site personnel also noted a groundwater remediation project under construction at a manufacturing plant approximately 0.5 miles east of the installation.





DESIGNED	K.W.	11/83
DRAWN	S.F.	11/83
CHECKED	K.W.	11/83
APPROVED	K.W.	11/83

ENGINEERING TECHNOLOGIES ASSOCIATES, INC.
 ENGINEERS • PLANNERS • SURVEYORS

3988 ELLICOTT CENTER DRIVE SUITE 101
 ELLICOTT CITY, MARYLAND 21043
 BALTO. MET-0882 WASH. DCI-0882

FIGURE NO. 2
NIAGARA FALLS ARMED FORCES RESERVE CENTER
 Site Plan & Source Locations

SCALE: N.T.S.	CONTRACT NO. 92307.50	DATE: 9/27/93	SHEET
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2.3 Operational History and Waste Characteristics

2.3.1 Property History

The NFAFRC site was originally developed in 1939 by the U.S. Navy as an airstation. A new hangar was constructed in 1957. About 1962, the land was conveyed to the U.S. Army as a sub-installation of Fort Drum, NY, and NYARNG has been a tenant at the installation since then.

An "Operational Necessity Statement" and "Economic Justification Summary" document (see Appendix B) was located which was apparently prepared in support of a funding request for replacement of water lines at NFAFRC. This document, although unreferenceed, states that the site is "known to have been a landfill prior to the original construction of the Naval Air Station". The document describes "constant deterioration of the existing water lines from corrosive soils", and references soil chemical analyses that showed "high sulfate concentrations and low resistivity leading to an anticipated corrosion activity of SEVERE magnitude" (emphasis transcribed as in original). Representatives from Fort Drum indicated that during remediation of a spill of PCB-containing oil in 1991, non-uniform soils were observed. A search of records revealed a corrosion survey conducted in June, 1983 (Professional Services Group, 1983). The study concluded that water line failures may have been due to mechanical reasons, and that corrosion was principally due to "plug type graphitization resulting from the non-uniform backfill". No additional documents could be located to confirm or deny the potential presence of a landfill.

Several excavation operations have occurred since Army occupancy of the installation. None of the excavations for building foundations, UST removals, the PCB spill cleanup or water line installations have revealed any evidence of this landfill (Alexander, 1993).

The facility receives its potable water supply from the City of Niagara Falls. No documentation was located to show that any wells have ever been completed on the property. Sanitary waste is transported off-site under contract through Fort Drum, and hazardous waste

(paint, solvents, automotive and aviation fluids, etc.) is stored on-site pending consignment to a hazardous waste disposal contractor. According to site personnel, no landfills/waste disposal areas are known to have been operated at the site during the Army's tenure. The storm sewer system on the installation exits to Cayuga Creek. Buildings are heated by hot water heat, fueled by natural gas with a fuel oil backup system. The boiler is located in Building 4-S.

A spill of PCB containing oil occurred at the site in 1991. The spill happened during removal of a PCB contaminated transformer (250 ppm concentration of PCBs). The transformer fell and broke over a storm sewer drain opening in the parking lot east of Building 22 (see Figure No. 2). An estimated 120 gallons of PCB oil was spilled on the pavement and into the drain. Surface paving materials, soils, and storm drain materials were remediated after the spill. During the course of spill remediation, approximately 1,000 tons of paving materials and soils were removed and consigned to a hazardous waste disposal contractor. On 31 October 1991, the New York State Department of Environmental Conservation (NYDEC) indicated that their review of data from the cleanup indicated that NYDEC requirements had been met (NYDEC, 1991). Installation personnel report that no PCB-containing equipment remains on-site. Photo No. 2 shows the re-paved site of the 1991 PCB oil spill.

2.3.2 NYARNG Operations

NYARNG employs about 35 full-time workers. On weekends (except holiday weekends), approximately 250 reservists are on the national guard portion of the site for training maneuvers.

The NYARNG houses and maintains one aviation company comprising 21 UH-1 helicopters in Building No. 4, also referred to as the Hangar (see Figure No. 2 and Photo No. 3). Previously, two aviation companies were housed and maintained at the Hangar. The Hangar has a cement floor (see Photo No. 3), with a floor drain passing through an oil/water separator and exiting to the storm sewer system. Maintenance operations conducted here include preventative daily inspections, aircraft modifications, and engine repairs, with all operations conducted inside the building. Reportedly, no large-scale painting or paint stripping are

conducted at the Hangar. Parts are cleaned mostly in "Safety-Kleen" closed systems, with waste solvent transported off-site for disposal. The Safety-Kleen procedure was instituted about two years ago. Prior to that, PD-680 (Stoddard solvent) was the principal solvent used for parts cleaning. A small quantity of methyl ethyl ketone (MEK) is still used occasionally to wipe parts or equipment. All operations are conducted using drip pans to collect dripping/leaking/spilled fluids, and spent rags are collected in a barrel for proper off-site disposal.

Aircraft cleaning operations are conducted either inside the Hangar, or outside on an asphalt-covered cement pad. Washwater drains to floor drains, which exit to the storm sewer system. Cleaning solutions are primarily soap/detergent concentrates (ZEP-Z-C), with small quantities of MEK and PD-680 used sparingly in small areas where oil or other localized product needs to be removed. Site personnel report that pressurized solvents are not currently used, nor were they used in the past, for purposes of aircraft cleaning, due to the solvents' flammability and associated fire hazards.

Building 4 also houses a sheet metal and an electrical shop. Neither of these have floor drains. Ni-Cad batteries are built and recharged in one area of the building (see Photo No. 4). The floor drain from this shop reportedly enters an acid-neutralizing sump, but the sump has never been used to the knowledge of site personnel. Past and current practice is to return all batteries wet (undrained), for recharge or disposal.

Wastes generated on the NYARNG portion of the facility are disposed under a separate contract from the remainder of the site. A 180-day holding area stores waste oils pending consignment to the hazardous waste contractor. A maximum of four 55-gallon drums are on-site at a time, holding mostly used oil and some JP4 (jet fuel) (see Photo No. 5). A collection barrel for spent Ni-Cad battery cells is picked up by the hazardous waste disposal contractor when filled. No pesticides are currently used on site; however, herbicides were used to control weeds along fence lines until summer of 1993, when their use was discontinued. Stored chemicals observed by on-site personnel during the visit to Building 4 included: ZEP-Z-C concentrate (used for washing); acetone; PD-680; lubricating and penetrating oils; hydraulic fluids; 50 to 60

spray cans of paint; and about 10 gallons of liquid paint. In addition, a drum labelled "Isopropyl Alcohol" was noted in a dirt area outside the hazardous waste holding shed. The drum is situated horizontally in a cradle, and has a pour spout. Alcohol from the drum is reportedly used occasionally to de-ice aircraft windows.

A vehicle storage area was observed on land adjacent to Building 4, land which is reportedly leased from the Niagara Falls Transportation Authority (the Airport) (see Photo No. 6). Vehicles stored on this site include three fueler trucks, several unused Army convoy vehicles, a decrepit bus, and other miscellaneous discarded vehicles and equipment.

2.3.3 Army Reserve Operations

The Army Reserve has an Area Maintenance Support Activity (AMSA) which performs vehicle maintenance on both tracked and wheeled vehicles. All vehicles serviced here belong to reserve units within the 77th Army Reserve Command (ARCOM). The Army Reserve employs about 65 on-site workers (non-resident), and about 1,350 reservists train at the facility on weekends.

A vehicle wash rack at the northwest corner of Building 18 drains through a waste oil separator sump, from which the water fraction exits to Cayuga Creek as does any surface runoff. A 500-gallon fiberglass tank was installed about 4 years ago to hold waste oils from the separator. Prior to installation of the oil/water separator and waste oil collection tank in 1989, vehicles were reportedly washed on the pavement near the AMSA shop, which drains into Cayuga Creek. Photo No. 7 shows the vehicle wash rack outside Building 18.

Building 18 is divided into two sections: a vehicle maintenance shop, and a motor pool used by reservists. The maintenance shop is housed in the quonset portion of Building 18, and the motor pool in the brick-construction portion.

Operations at the Building 18 vehicle maintenance shop include repairs and maintenance on vehicles, support equipment, electrical generators, and weapons. Approximately eight vehicles per month are serviced at the shop. All parts cleaning is conducted using Safety-Kleen systems. A floor drain in the shop exits to a "receiver" outside the building, then to the storm sewer system.

All hazardous waste products from operations in the Building 18 vehicle maintenance shop are drummed and contract disposed. Chemicals observed in this building during the site visit include detergents, antifreeze (ethylene glycol), battery acid, packaged (new) magnesium batteries, diesel fuel, gasoline, and engine oil. The shop reportedly generates about one 55-gallon drum per year of waste antifreeze. In addition, spent oil filters and asbestos brake shoes are stored prior to consignment to a hazardous waste contractor. The shop also inspects gas masks used off-site, and replaces filters as necessary. Used gas mask filters are collected and consigned. Photo No. 8 shows stored chemicals and waste products in the shop.

During the site visit to Building 18, a battery charger room was observed with a floor drain, but site personnel were unable to supply information clearly regarding the location of the drain outfall and/or hook-up to the sewer system. Sulfuric acid is stored in a locker, for filling depleted batteries. Photo No. 8 shows the battery charging room in Building 18.

The motor pool (brick-construction) portion of Building 18 was noted to contain a number of storage lockers for flammables, containing mostly oil, grease cartridges, ether bottles, antifreeze, and spray paint. In addition, a number of empty 5-gallon fuel cans were noted.

Building 17 is a new (constructed 1993) storage area for hazardous materials. During the site visit, on-site personnel observed stored products, including aircraft lubricating fluids, brake fluid, antifreeze, alcohol, and methanol, and a 55-gallon drum of kerosene. Outside Building 17 is a waste oil storage tank, and two containers (not presently in use) that can hold two 55-gallon drums each (see Photo No. 9). The waste storage area is surrounded by an approximately two-foot containment wall. A drain near the waste oil storage tank was observed,

but again, site personnel had no information regarding exit point or systems potentially connected to the drain.

Building 21 is operated by the Directorate of Engineering and Housing (DEH). This directorate is responsible for utilities maintenance and repair; snow removal; greenskceping; and routine maintenance on three pick up trucks, one dump truck, and several loaders. Building 21 houses a vehicle mechanics shop, a welding shop, and a metal working shop. Approximately 30 to 40 gallons per year of waste oil are generated in the mechanics shop, all of which is consigned to a hazardous waste disposal contractor. A large open floor drain with a sump was observed, but site personnel report that it has never been used. Routine painting, both interior and exterior, of walls, pipes, and equipment is coordinated from this building. In general, only latex-base paint is used on interior surfaces. Alkyd (oil-base) paint is used on exterior surfaces for durability. In the past, VMP naphtha had been used as a paint thinner, but none was observed on-site during the visit.

Asbestos containing material (ACM) has been mostly removed from the site. Some probable ACM remains, mostly as pipe insulation at change-of-direction elbows, or around valves. Specifically, ACM in Building 21 has been abated (removed).

At the northeast boundary of the Army Reserve portion of the site, on-site personnel observed a waste storage area. This area is used for storage of used but empty drums, spent batteries awaiting disposal, and scrap metal. Drums labelled for antifreeze, contaminated fuel, waste diesel fuel, brake fluid, and asbestos were noted. The spent battery holding area (covered with a tarp) is shown in Photo No. 10, and the scrap metal and empty drums are shown in Photo No. 11. Also near this area is a storage area containing discarded office furniture (desks, shelves, chairs, cabinets, etc.)

2.3.4 Other Tenants

Other tenants on the installation include the following additional Reserve components:

338th General Hospital, 77th ARCOM
365th Evacuation Hospital, 77th ARCOM
277th Quartermaster Company, 98th Division
Facility Engineering Division, Fort Drum

2.3.5 CERCLA Sources

Under CERCLA, the EPA defines "source" as, "an area where a hazardous substance may have been deposited, stored, disposed, or placed". Also, soil that may have become contaminated as a result of hazardous substance migration is considered a source. In general, however, the volumes of air, ground water, surface water, and stream sediments that may have become contaminated through migration are not considered sources. Constituents that are defined as hazardous substances, pollutants, or contaminants are listed in CERCLA Sections 101(14) and 101(33) (EPA, 1991). CERCLA, under the petroleum exclusion clause, eliminates petroleum products (crude oil or any fraction thereof) from consideration as contamination sources.

Nine potential CERCLA sources have been identified on the installation, based on the results of the site visit, and from the 1989 USATHAMA Property Report (USATHAMA, 1989).

NYARNG SOURCES

Source No. 1 Building 4 Battery Room Floor Drain

This potential source consists of a floor drain with acid neutralizing sump located in a room where battery maintenance occurs. Site representatives reported that the drain had never

been used and current practices return all batteries for recharge or disposal. Waste quantities for this source are unknown.

Source No. 2 Hazardous Waste Storage Area

This source consists of the hazardous waste storage building for the NYARNG. This building is constructed of steel and has a secondary containment feature in it's floor. Because the NYARNG is considered a Small Quantity Generator (SQG), they are allowed to store hazardous wastes up to 180 days. Typical wastes stored in the building are: oil, batteries, and jet fuel. Also included in this source is a partially filled drum of isopropyl alcohol observed adjacent to the storage area. During the inspection, on-site personnel observed approximately 440 gallons of hazardous waste being stored in the building and adjacent drum.

Source No. 3 Building 4 Chemical and Paint Storage

During the inspection, on-site personnel observed both chemical and paint storage lockers which are used to store these substances. These lockers are made of metal and marked **FLAMMABLE**. Approximately 50 gallons of these substances were observed being stored in this source.

ARMY RESERVE SOURCES

Source No. 4 AMSA Wash Rack

This source is located at the northwest corner of Building No. 18. This washrack is used to wash both tracked and wheeled vehicles. Overspray, from washing operations, is circulated through an oil/water separator and the water portion is routed to the storm sewer system. A 500-gallon fiberglass tank was installed approximately four years ago to hold waste oils from the separator. Waste quantities associated with this source are unknown.

Source No. 5 AMSA Hazardous Waste Storage Area

Within the vehicle repair shop is a hazardous waste storage area where wastes are stored prior to being transported off-site. The wastes accumulated in this area include antifreeze, battery acid, contaminated diesel fuel, contaminated gasoline, and engine oil. AMSA representatives reported that approximately one 55-gallon drum of hazardous waste is shipped off-site each year.

Source No. 6 AMSA Battery Room Storage

This source is a room within the AMSA vehicle repair shop where batteries are maintained. Battery maintenance includes filling new batteries with acid and water, and replacing battery cells as necessary. A metal locker within the room is used to store the acid and approximately 50 gallons of acid were observed by on-site personnel.

Source No. 7 AMSA Building 17 Chemical Storage Area

This source is a newly constructed storage area for hazardous substances. On-site personnel observed stored products including lubricating fluids, brake fluids, antifreeze, alcohol, methanol, and a 55 gallon drum of kerosene. A total of approximately 200 gallons of liquids were observed.

Source No. 8 Outside Storage Area

This source lies along the northeastern boundary of the installation and includes the outside storage of unusable batteries, partially empty drums and empty drums. There is no secondary containment for any of these items and the contents of some of the drums was uncertain. On-site representatives of NFAFRC completed an inventory and reported a total of 385 gallons which were stored in the partially filled drums and batteries (Paterson, 1994).

DEH SOURCES

Source No. 9 DEH Floor Drain and Sump

This source lies within the maintenance area of Building 21, the building used by the DEH. It consists of a floor drain with a sump that runs the length of the maintenance area and is susceptible to either petroleum or hazardous substance migration from maintenance operations. Waste quantities associated with this source are unknown.

2.3.6 Non-CERCLA Sources

The USATHAMA Property Report (USATHAMA, 1989) identified a number of potential sources associated with petroleum-based products.

A total of six UST have been removed from the installation in the past several years, with their locations shown on Figure No. 2. None of these removals required any further investigation.

3.0 GROUNDWATER PATHWAY

3.1 Soils Information and Hydrogeology

Soils at the NFAFRC are of two types: the Lakemont silty clay loam (85 percent of the area on site); and the Fonda mucky silt loam (15 percent of the area on site)(Soil Conservation Service, 1972). Both types are described as fine to moderately fine-textured, having low permeability, and having prolonged high water table at 0 to 0.5 feet below ground surface. Due to high clay content, these soils are subject to ponding. Permeability rates of the surface soil range from 0.2 to 0.6 inches/hour.

The complex geology of upstate New York is described in detail in Van Diver, 1985, and the hydrogeology of the Niagara Falls area forms the basis for a groundwater model described in USGS, 1993. The following description of geologic and hydrogeologic setting is taken primarily from these two sources.

The Niagara Falls area is underlain by glacial sediments consisting primarily of till and lacustrine silt and clay. The thickness of glacial deposits ranges from less than 5 feet near the Niagara Escarpment to more than 80 feet along Tonawanda Creek. These deposits act as a confining unit that limits the flow of water to and from the more permeable weathered bedrock below. Groundwater flow in these deposits is generally downward in recharge areas near topographic highs, and upward in discharge areas near streams and in other low-lying areas.

The glacial sediments are underlain by about 170 feet of virtually undeformed dolomites and limestones of the Lockport Group of the Niagaran Series (Middle Silurian). The Lockport Group is in turn underlain by the Clinton Group, which consists of about 100 feet of shale and limestone, and by the Medina Group, which consists of about 110 feet of sandstone and shale. All of the bedrock units crop out along the Niagara Escarpment (Van Diver, 1985).

The hydraulic properties of the Lockport Group are related primarily to secondary permeability caused by fractures. These openings have been widened by chemical dissolution in areas where groundwater circulates through the bedrock. The principal water-bearing zones in the Lockport Group are the weathered bedrock surface and horizontal-fracture zones near stratigraphic contacts. The rock matrix transmits only negligible amounts of groundwater because the primary porosity is very low. Horizontal hydraulic conductivity of the weathered bedrock was estimated by the USGS at 40 feet/day.

Groundwater flows through the Lockport Group from topographic highs near the Niagara Escarpment north toward the escarpment, and south and west toward low-lying areas near the Niagara River and outcrop areas along the Niagara River Gorge. Recharge enters the weathered bedrock as infiltration from the overlying glacial sediments and enters the horizontal-fracture zones where they intersect the bedrock surface and high-angle fractures. Recharge also enters the Lockport as infiltration from the Niagara River in areas where the bedrock crops out in the river bottom. Pumping from the Lockport Group by an industrial production well increases the rate of infiltration from the Niagara River near the city of Niagara Falls. Manmade structures increase recharge to the bedrock in other areas: for example, the New York Power Authority reservoir is surrounded by a dike that maintains a water level about 40 feet above natural land surface, and leakage from the municipal water supply and unlined storm sewers in the city of Niagara Falls probably contribute recharge to the weathered bedrock. Where bedrock is exposed at land surface, groundwater discharges directly to stream channels and springs; it also discharges directly to land surface along the Niagara Escarpment and Niagara River Gorge, where the horizontal-fracture zones crop out.

In summary, soils at NFAFRC have low permeabilities, prolonged high water tables, and are subject to ponding. NFAFRC is underlain by glacial sediments ranging from 5 to 80 feet, which restrict groundwater flow to and from the underlying bedrock. The bedrock is composed of three distinct formations, with each formation consisting of various combinations of sandstones, shales, limestones, and dolomites ranging in thickness from 100 to 170 feet. Groundwater flow through the uppermost bedrock formation is due to fractures. Horizontal flow

is from topographical high areas north toward the Niagara Escarpment, and south and west toward low-lying areas near the Niagara River. Groundwater enters the bedrock through infiltration from overlying soils, from direct bedrock contact with the Niagara River, and from man-made sources such as leaky pipes and sewers. Groundwater discharges directly into creeks and streams where bedrock is exposed at land surfaces, and to land surfaces along the Niagara Escarpment and Niagara River Gorge.

3.2 Groundwater Targets

Due to availability of plentiful surface water supply from the Niagara River, very few groundwater uses were identified within the four-mile study area of the NFAFRC. The USGS (1993) reports that one industrial production well takes groundwater for process operations. A few homeowners are reported to have shallow wells used only for lawn and garden irrigation.

The Tuscarora Indian School, located on the extreme northern margin of the four-mile study area, reportedly supplies drinking water from one well. The well taps the Lockport Dolomite. No information was located regarding the yield or completion depth of the well. According to a hydrogeologic report (Environmental Products & Services, Inc., 1989) the Lockport Group at this location could be expected to yield 10 to 50 gallons per minute, depending on the degree of fracturing and void space. Reported groundwater flow direction at this site is to the south, with groundwater discharge to Gill Creek and its wetlands; however, groundwater flow rate and direction may be influenced by seasonal recharge variations.

No sources discovered as part of this investigation are likely to cause groundwater contamination, however, Source 8, the Outside Storage Area represents the highest potential because of the lack of secondary containment. If a release was to occur in this area the most likely constituent would be battery acid.

3.3 Groundwater Conclusions

No release of hazardous substances to the aquifer has been documented at NFAFRC. Low permeability soils and surficial glacial material act as an moderate aquitard, preventing downward migration of contaminants. However, high water table conditions and hydraulic connection between groundwater and surface water at Cayuga Creek create a pathway for movement of contamination. Groundwater targets in the four-mile study area include only one well known to be used for a drinking water supply, and that well is at the extreme upgradient limit of the four-mile study area.

Although no documentation was found showing contaminant release to the groundwater system from the NFAFRC site, regional groundwater contamination from other hazardous waste sites may be present. Because the site is located in a heavily industrialized area with numerous documented contaminated groundwater plumes, presence of groundwater contamination at and near the installation is possible, and perhaps even likely. However, an investigation of regional groundwater contamination is beyond the scope of this report.

4.0 SURFACE WATER PATHWAY

4.1 Hydrologic Setting

The NFAFRC is situated in the Erie-Ontario Lowlands physiographic province. The region is characterized by relatively flat topography, dissected by east-west trending escarpments. The site is located about five miles south of the Niagara Escarpment, and about two miles north of the Niagara River, within the municipality of the Town of Niagara. Topography of the site is nearly level, with surface and storm sewer drainage to Cayuga Creek, which flows less than 100 feet from the western boundary. The Cayuga Creek is an intermittent tributary of the Niagara River and its 500-year and 100-year floodplains intersect the installation, as shown on Figure 2. The drainage area of the sources on the installation is less than 50 acres.

The average flow rate of the Niagara River, measured above and below hydroelectric power intakes and returns, is between 202,000 and 207,000 cubic feet per second.

4.2 Surface Water Targets

The City of Niagara Falls municipal water system intake is located in the Niagara River off Buckhorn Island, about three miles southwest of the site. In addition, the Town of Wheatfield and Niagara County have intakes for municipal water supply in the same location. Reportedly, 100 percent of rural and municipal drinking water supplies in the study area come from the Niagara River.

The Niagara River is a cold water fishery, used for recreational fishing; however, no food production rates are available (Roblec, 1993).

No information was located regarding the presence of federally-listed threatened or endangered species in the study area, however, the 15-mile downstream study area includes

habitat of four New York state-listed threatened or endangered plant species: tall tick clover (*Desmodium Glabellum*); Smooth Cliff Brake (*Pellaea Glabella*); Fringed Gentian (*Gentianopsis Procera*); and White Camas (*Zigadenus Elegans ssp Glaucus*). The reach also includes nesting grounds for terns, cormorants, and herring gulls, and wintering areas for a number of waterfowl.

The Probable Point of Entry (PPE) of contamination from the installation is into Cayuga Creek, adjacent to the western boundary. From the PPE, the surface water pathway continues approximately two miles downstream to the confluence of Cayuga Creek and the Niagara River. Approximately 0.5 miles of palustrine, forested, temporary, partially drained wetlands have been mapped along the two mile reach of Cayuga Creek above the Niagara River confluence.

The surface water pathway study area continues downstream another thirteen miles, bordered by a riverine, upper perennial, open water permanent wetland. Additional sensitive environments within the 15-mile study area include the Whirlpool State Park and Niagara Falls National Park.

4.3 Surface Water Conclusions

The review of documents and site visit indicated the potential for past releases of contaminants to the surface water system, although current practices have reduced that potential. On-site floor drains connect to the storm sewer drainage system, and exit directly to Cayuga Creek (Paterson, 1992). Although oil/water separators are present in several critical areas, many hazardous materials stored and used on-site (e.g., solvents, acids, isopropyl alcohol) would not be isolated by these devices, and any entry of these substances to the floor drain/storm sewer system would become a point source discharge to Cayuga Creek.

The 1991 PCB containing oil spill was remediated to the satisfaction of the NYDEC, and is therefore a qualifying removal action. However, no documents were located to indicate that the sediments of Cayuga Creek were sampled subsequent to the spill.

Because the volumetric flow rate of the Niagara River is so great, contaminants potentially entering the Niagara River system from NFAFRC would quickly become very dilute.

5.0 SOIL EXPOSURE AND AIR PATHWAYS

5.1 Physical Conditions

Site personnel at NFAFRC estimate that less than five percent of the 20-acre site is vegetation, bare soil, or gravel. The remaining 95 percent is concrete, asphalt, or building "footprint". All site operations are conducted in buildings or on asphalt/concrete surfaces. No record or report of past incidents (fires, spill, vehicle/aircraft accidents) was identified. A number of volatile substances are used in small quantities, including parts cleaners, isopropyl alcohol, paints and paint thinner, and acetone.

There are no identified Soil Exposure sources and the potential Air Pathway releases are limited to volatilization from closed containers in hazardous waste storage areas.

5.2 Soil and Air Targets

About 100 personnel work on-site Monday through Friday, and about 1,600 Reservists are on-site on most weekends and are therefore considered transient personnel. Table 1 presents resident population counts at specified distances from the site (CLARITAS, 1993).

Table 1. NFAFRC Population Count

Radius from Site	Population
On site	372
0.25 to 0.50 mile	1,677
0.50 to 1.0 mile	6,934
1.0 to 2.0 mile	20,609
2.0 to 3.0 mile	31,974
3.0 to 4.0 mile	52,179
Total	113,745

5.3 Soil Exposure and Air Pathway Conclusions

The soil exposure pathway poses minimal threat at NFAFRC, due to the nonexistence of sources (i.e. Hazardous storage area, Hazardous product storage area) and the high percentage of developed/paved land area at the site. Releases to the air are not suspected because of limited uses of volatile substances at the site, and because no on-site disposal of volatile materials occurs. For these reasons, no air sampling data was available to be reviewed or is believed to exist. This precludes comparisons to NAAQS or other CERCLA standards.

6.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

ETA performed a PA of the NFAFRC, including a site visit and a review of available relevant documents. No environmental sampling was conducted.

NFAFRC has been owned by the U.S. Government since 1939; it has been operated by the U.S. Army since the early 1960's as a reserve training installation. Several tenants, including the New York Army National Guard, and Army Reserve units occupy part of the installation. Principal operations conducted at the site include aircraft and vehicle maintenance, and reserve personnel training.

An unreferenced document located in files reviewed during the site visit (Appendix B), indicated that the site was constructed on a former landfill. No other documentation was available to confirm or refute that contention. The possible presence of a landfill in this region is significant, due to the degree and nature of industrial development nearby, including a number of chemical manufacturing facilities. Numerous landfills containing toxic substances have already been identified in the area, including the Love Canal Superfund site.

The principal pathway of potential contamination from the site is via floor drains which lead to the storm sewer system, entering the surface water system at Cayuga Creek. Spills of hazardous substances can potentially enter floor drains, and from there would become point source pollutant discharges into the Creek. No groundwater, soil, or air contamination is suspected at the installation.

Sensitive environments that could be affected by contaminants entering the surface water system from the NFAFRC include wetlands, waterfowl nesting and wintering areas, and habitat for four New York State-listed threatened or endangered plant species. In addition, a State Park and a National Park are within the 15-mile downstream study area.

Although it is possible that contaminants could be released to the environment from the site, quantities of hazardous substances used and stored on-site are relatively small; furthermore, volumetric flow rate of the Niagara River is very large, which would result in contaminant concentrations becoming very dilute.

Pursuant to ETA's findings, during the site visit and document review, the following recommendations for further study at the site are proposed:

1. Review of chain-of-title, aerial photographs and other property records to trace land use prior to U.S. Government acquisition. This investigation would help confirm or deny the presence of a landfill beneath the installation.
2. Install at least a sufficient number of sample borings on the installation to attempt to confirm or refute the existence of subsurface landfill materials, allegedly placed prior to site acquisition by the U.S. Government.
3. Collection and analysis of stream sediment samples at the three outfall points of the storm sewer system, along Cayuga Creek. At a minimum, the samples should be analyzed for metals, PCBs, chlorinated solvents, and pesticides.
4. Prepare a comprehensive drawing of the floor drain and sewer system.

7.0 REFERENCES

- Alexander, Tim. 1993. Personal communication during site visit, October 1993.
- CLARITAS, 1993. Population report. Ithaca, NY.
- Environmental Products and Services, Inc. 1989. Hydrogeologic Assessment Report, Tuscarora School, Tuscarora Indian Reservation, Niagara County, New York. Buffalo, NY.
- New York State Department of Environmental Conservation. 1991. Correspondence from Michael J. Hinton, Environmental Engineer to Commander, Fort Drum. Letter dated October 31, 1991.
- Paterson, Pat. 1993. Personal communication during site visit. October, 1993.
- Professional Services Group, Inc. 1983. Final Report of Corrosion Survey at Site of U.S. Army Support Center, Niagara Falls, New York. Detroit, Michigan.
- Roblee, Ken. 1993. Personal communication and excerpts from New York Natural Heritage Program Notebook. Senior Wildlife Biologist, Region 9, Buffalo, New York.
- Soil Conservation Service. 1972. Soil Survey of Niagara County, New York. US Department of Agriculture, in Cooperation with Cornell University Agricultural Experiment Station.
- USATHAMA. 1989. Property Report, USARC Niagara Falls, 6/2/1989.
- US Geological Survey. 1993. Simulated Three-Dimensional Ground-Water Flow in the Lockport Group, a Fractured Dolomite Aquifer Near Niagara Falls, New York. Water-Resources Investigations Report 92-4189, Ithaca, New York.

Van Diver, Bradford B. 1985. Roadside Geology of New York. Mountain Press Publishing Company, Missoula, Montana.

APPENDIX A

Potential Hazardous Waste Site Preliminary Assessment Form

EPA Potential Hazardous
Waste Site
Preliminary Assessment Form

Identification

State:
NY

CERCLIS Number:

CERCLIS Discovery Date:

1. General Site Information

Name:

Niagara Falls Armed Forces Reserve Ctr. 9400 Porter Rd.

City:
Town of Niagara

State:
NY

Zip Code:
14304

County:
Niagara

Co. Code:

Cong.
Dist.

Latitude:

Longitude:

43° 6' ____ " N 79° 4' ____ " W

Approximate Area of Site:

20 Acres

Square Ft.

Status of Site:

☒ Active ☐ Not Specified
☐ Inactive ☐ NA (GW phone, etc.)

2. Owner/Operator Information

Owner: U.S. Army Corps of Engineers

Operator: Ft. Drum

Street Address:

Street Address:

City: New York

City: Fort Drum

State:
NY

Zip Code:

Telephone:

(212) 264-0142

State:
NY

Zip Code:
13602-5097

Telephone:

(315) 772-9143

Type of Ownership:

☐ Private

☒ Federal Agency

Name: YND

☐ State

☐ Indian

☐ County

☐ Municipal

☐ Not Specified

☐ Other

How Initially Identified:

☐ Citizen Complaint

☐ PA Petition

☐ State/Local Program

☐ RCRA/CERCLA Notification

☒ Federal Program

☐ Incidental

☐ Not Specified

☐ Other

3. Site Evaluator Information

Name of Evaluator: Kim Walters,
Isobel McGowan

Agency/Organization:
ETA

Date Prepared:
10/25/93

Street Address: 165 S. Union Blvd, Ste 710

City: Lakewood

State: CO

Name of EPA or State Agency Contact:
Helen Shannon

Street Address: EPA Region II
Jacob K. Javits Fed. Bldg.

City:
New York

State:
NY

Telephone:

(212) 264-6664

4. Site Disposition (for EPA use only)

Emergency Response/Removal
Assessment Recommendation:

☐ Yes

☐ No

Date: _____

CERCLIS Recommendation:

☐ Higher Priority SI

☐ Lower Priority SI

☐ NFRAP

☐ RCRA

☐ Other

Date: _____

Signature:

Name (typed):

Position:



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 2 of 4

CERCLIS Number:

5. General Site Characteristics

Predominant Land Uses Within 1 Mile of Site (check all that apply):

<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Agriculture	<input type="checkbox"/> DOT
<input checked="" type="checkbox"/> Commercial	<input type="checkbox"/> Mining	<input type="checkbox"/> Other Federal Facility
<input checked="" type="checkbox"/> Residential	<input checked="" type="checkbox"/> DOD	
<input checked="" type="checkbox"/> Forest/Fields	<input type="checkbox"/> DOE	<input type="checkbox"/> Other _____

Site Setting:

<input checked="" type="checkbox"/> Urban
<input type="checkbox"/> Suburban
<input type="checkbox"/> Rural

Years of Operation:
Beginning Year 1939
Ending Year Current
☐ Unknown

Type of Site Operations (check all that apply):

☐ Manufacturing (must check subcategory)

<input type="checkbox"/> Lumber and Wood Products
<input type="checkbox"/> Inorganic Chemicals
<input type="checkbox"/> Plastic and/or Rubber Products
<input type="checkbox"/> Paints, Varnishes
<input type="checkbox"/> Industrial Organic Chemicals
<input type="checkbox"/> Agricultural Chemicals (e.g., pesticides, fertilizers)
<input type="checkbox"/> Miscellaneous Chemical Products (e.g., adhesives, explosives, ink)
<input type="checkbox"/> Primary Metals
<input type="checkbox"/> Metal Coating, Plating, Engraving
<input type="checkbox"/> Metal Forging, Stamping
<input type="checkbox"/> Fabricated Structural Metal Products
<input type="checkbox"/> Electronic Equipment
<input type="checkbox"/> Other Manufacturing

☐ Mining

<input type="checkbox"/> Metals
<input type="checkbox"/> Coal
<input type="checkbox"/> Oil and Gas
<input type="checkbox"/> Non-metallic Minerals

☐ Retail

☐ Recycling

☐ Junk/Salvage Yard

☐ Municipal Landfill

☐ Other Landfill

☒ DOD

☐ DOE

☐ DOT

☐ Other Federal Facility _____

☐ RCRA

☐ Treatment, Storage, or Disposal

☐ Large Quantity Generator

☐ Small Quantity Generator

☐ Subtitle D

☐ Municipal

☐ Industrial

☐ "Converter"

☐ "Protective Filer"

☐ "Non- or Late Filer"

☐ Not Specified

☐ Other _____

Waste Generated:

<input checked="" type="checkbox"/> Onsite
<input type="checkbox"/> Offsite
<input type="checkbox"/> Onsite and Offsite

Disposal
Waste Disposition Authorized By:

<input checked="" type="checkbox"/> Present Owner
<input type="checkbox"/> Former Owner
<input type="checkbox"/> Present & Former Owner
<input type="checkbox"/> Unauthorized
<input type="checkbox"/> Unknown

Waste Accessible to the Public:

<input type="checkbox"/> Yes
<input checked="" type="checkbox"/> No

Distance to Nearest Dwelling,
School, or Workplace:

0 Feet

6. Waste Characteristics Information

Source Type:
(check all that apply)

Source Waste Quantity:
(include units)

Tier:

General Types of Waste (check all that apply)

<input type="checkbox"/> Landfill		
<input type="checkbox"/> Surface Impoundment		
<input checked="" type="checkbox"/> Drums		
<input checked="" type="checkbox"/> Tanks and Non-Drum Containers	<u>26,700</u>	<u>B</u>
<input type="checkbox"/> Chemical Waste Pile		
<input checked="" type="checkbox"/> Scrap Metal or Junk Pile		
<input type="checkbox"/> Tailings Pile		
<input type="checkbox"/> Trash Pile (open dump)		
<input type="checkbox"/> Land Treatment		
<input type="checkbox"/> Contaminated Ground Water Plume (identified source)		
<input type="checkbox"/> Contaminated Surface Water/Sediment (identified source)		
<input type="checkbox"/> Contaminated Soil		
<input type="checkbox"/> Other _____		
<input type="checkbox"/> No Sources		

<input type="checkbox"/> Metals	<input type="checkbox"/> Pesticides/Herbicides
<input checked="" type="checkbox"/> Organics	<input checked="" type="checkbox"/> Acids/Bases
<input checked="" type="checkbox"/> Inorganics	<input checked="" type="checkbox"/> Oily Waste
<input checked="" type="checkbox"/> Solvents	<input checked="" type="checkbox"/> Municipal Waste
<input checked="" type="checkbox"/> Paints/Pigments	<input type="checkbox"/> Mining Waste
<input type="checkbox"/> Laboratory/Hospital Waste	<input type="checkbox"/> Explosives
<input type="checkbox"/> Radioactive Waste	<input type="checkbox"/> Other _____
<input checked="" type="checkbox"/> Construction/Demolition Waste	

Physical State of Waste as Deposited (check all that apply):

<input checked="" type="checkbox"/> Solid	<input type="checkbox"/> Sludge	<input type="checkbox"/> Powder
<input checked="" type="checkbox"/> Liquid	<input type="checkbox"/> Gas	

* C = Constituent, W = Wastestream, V = Volume, A = Area



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 3 of 4

CERCLIS Number:

7. Ground Water Pathway

Is Ground Water Used for Drinking Water Within 4 Miles:

- ☒ Yes
☐ No

Type of Drinking Water Wells Within 4 Miles (check all that apply):

- ☐ Municipal
☒ Private
☐ None

Is There a Suspected Release to Ground Water:

- ☐ Yes
☒ No

Have Primary Target Drinking Water Wells Been Identified:

- ☒ Yes
☐ No

If Yes, Enter Primary Target Population:

Unk. People

List Secondary Target Population Served by Ground Water Withdrawn From:

N/A

0 - 1/4 Mile

> 1/4 - 1/2 Mile

> 1/2 - 1 Mile

> 1 - 2 Miles

> 2 - 3 Miles

> 3 - 4 Miles

Total Within 4 Miles

Depth to Shallowest Aquifer:

5-80 Feet

Karst Terrain/Aquifer Present:

- ☐ Yes
☒ No

Nearest Designated Wellhead Protection Area:

- ☐ Underlies Site
☐ > 0 - 4 Miles
☒ None Within 4 Miles

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):

- ☒ Stream ☒ River ☐ Pond ☐ Lake
☐ Bay ☐ Ocean ☐ Other

Shortest Overland Distance From Any Source to Surface Water:

400 Feet

Miles

Is There a Suspected Release to Surface Water:

- ☐ Yes
☒ No

Site is Located in:

- ☐ Annual - 10 yr Floodplain
☐ > 10 yr - 100 yr Floodplain
☒ > 100 yr - 500 yr Floodplain
☒ > 500 yr Floodplain

Drinking Water Intakes Located Along the Surface Water Migration Path:

- ☒ Yes
☐ No

Have Primary Target Drinking Water Intakes Been Identified:

- ☒ Yes
☐ No

If Yes, Enter Population Served by Primary Target Intakes:

52,179 People

List All Secondary Target Drinking Water Intakes:

Name	Water Body	Flow (cfs)	Population Served
------	------------	------------	-------------------

NONE

Total within 15 Miles

Fisheries Located Along the Surface Water Migration Path:

- ☒ Yes
☐ No

Have Primary Target Fisheries Been Identified:

- ☒ Yes
☐ No

List All Secondary Target Fisheries:

Water Body/Fishery Name	Flow (cfs)
Niagara River	202-207,000cfs



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 4 of 4

CERCLIS Number:

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:

☒ Yes
☐ No

Have Primary Target Wetlands Been Identified:

☒ Yes
☐ No

List Secondary Target Wetlands:

Water Body	Flow (cfs)	Frontage Miles
Niagara River	200,000	16

Other Sensitive Environments Located Along the Surface Water Migration Path:

☒ Yes
☐ No

Have Primary Target Sensitive Environments Been Identified:

☒ Yes
☐ No

List Secondary Target Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
NONE		

9. Soil Exposure Pathway

Are People Occupying Residences or
Attending School or Daycare on or Within 200
Feet of Areas of Known or Suspected
Contamination:

☐ Yes
☒ No

If Yes, Enter Total Resident Population:

_____ People

Number of Workers Onsite:

☐ None
☐ 1 - 100
☐ 101 - 1,000
☒ > 1,000

Have Terrestrial Sensitive Environments Been Identified on
or Within 200 Feet of Areas of Known or Suspected
Contamination:

☒ Yes
☐ No

If Yes, List Each Terrestrial Sensitive Environment:

NONE

10. Air Pathway

Is There a Suspected Release to Air:

☐ Yes
☒ No

Enter Total Population on or Within:

Onsite	1,700
0 - ¼ Mile	372
> ¼ - ½ Mile	1,305
> ½ - 1 Mile	15,257
> 1 - 2 Miles	13,675
> 2 - 3 Miles	11,365
> 3 - 4 Miles	20,205
Total Within 4 Miles	52,179

Wetlands Located Within 4 Miles of the Site:

☒ Yes
☐ No

Other Sensitive Environments Located Within 4 Miles of the Site:

☒ Yes
☐ No

List All Sensitive Environments Within ¼ Mile of the Site:

Distance	Sensitive Environment Type/Wetlands Area (acres)
Onsite	0
0 - ¼ Mile	2
> ¼ - ½ Mile	10

APPENDIX B

**Operational Necessity Statement for
Maintenance and Repair Project, 1987**

27 SEP 1991
13 AUG 1987

92

ARMY

Fort Drum
New York

26659

M&R
Water Pipe Line Potable

REQUIREMENT:

This project is required to insure a reliable water service is available which can support the fire protection systems and domestic water requirements of the Reserve Center including the aircraft hangar. If this project is not approved, random piping failures will continue to occur creating a potential health problem as a result of contamination of the domestic water source. In addition, fire protection system will be inoperative during these random failures jeopardizing the safety of those personnel working in fire protected areas. High value items such as aircraft and maintenance equipment will be left unprotected, increasing the possibility of their loss due to the lack of early fire suppression capabilities.

JAMES R. ELLIS
MAJOR GENERAL, USA
COMMANDING

ESTIMATED CONSTRUCTION START:	APR 1992
ESTIMATED MIDPOINT OF CONSTRUCTION:	OCT 1992
ESTIMATED CONSTRUCTION COMPLETION:	APR 1993

INDEX: 1515
INDEX: 1887
INDEX: 1893

DATE 13 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 7 - GENERAL

7A GENERAL

The original facilities at the Niagara Falls Reserve Center were constructed in 1939 as a Naval Air Station. A new hangar was built in 1957. The majority of the buildings were acquired by the Army during the 1950's.

OPERATIONAL NECESSITY STATEMENT

FOR

Maintenance and Repair Project
1987

Military Department or Agency: Department of the Army
Fort Drum, New York

Installation:

Niagara Falls Water Lines, I-392

Project Description:

\$700,000

Cost:

This project is necessary due to the constant deterioration of the existing water lines from corrosive soils. These water lines provide water to the entire Niagara Falls Reserve Center for domestic water and fire protection. Consideration of Alternatives are discussed in DD Form 1391, Section 11, Economic Analysis. Breakdowns continue to occur in other sections of the pipe. The use of PVC pipe will resist reaction with the corrosive soils and result in a more reliable system.

DATE 13 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 7 - GENERAL

(CONTINUED)

7A GENERAL

Responsible Official:

Date: 23 Sep 8

/S/ Harold W. Wagner, Jr.

Harold W. Wagner, Jr.

LTC, EN

Directorate, Engineering & Housing

DATE 10 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 2 - PRESENT ACCOMMODATIONS AND DISPOSITIONS

2B PRESENT ACCOMMODATIONS AND DISPOSITIONS

N/A

DATE 13 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 10 - ANALYSIS OF DEFICIENCIES

The existing metal piping has failed at random, causing disruption of the fire protection service and the domestic water service. The failures are caused mainly by corrosion and occasional suspected high transient pressures. Future failures may occur at any time. Existing piping is 30 to 45 years old and 95% is cast iron with the remaining being steel piping. The site is known to have been a landfill prior to the original construction of the Naval Air Station; therefore the soil characteristics are not uniform. It has been determined that some areas are highly corrosive, causing considerable damage to the metal piping systems. During a survey of the systems in 1982 it was determined that the surge tank has been full of water and the jockey pump was not operating. Any time a low pressure was encountered in the fire system the 2,000 gpm booster pump would activate. It is believed that on some occasions this shocked the system leading to the transient pressures. The 1982 survey of the piping system used the standard vibration testing equipment. The testing indicated three active leaks localized to the following areas:

1. Extreme east end of property. Northeast of reservoir.
2. North Central. East of Building No. 4.
3. Extreme Northwest - on U.S. Army property.

DATE 13 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 25659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 11 - ECONOMIC ANALYSIS

11D ECONOMIC JUSTIFICATION SUMMARY

Decision Analysis:

a. Background:

The original facility was built as a Naval Air Station in 1939 on a site previously used as a landfill. For this reason the soil characteristics are not uniform and contribute to some areas being highly corrosive. The facility consists of approximately a dozen structures, including a central heat plant.

A majority of the structures are built with cavity wall construction using concrete masonry units and face brick. The original hangar was demolished and a new hangar built in the mid 1950's.

b. Site Investigations:

In 1982 the underground piping system was surveyed for leaks using standard vibration testing equipment. This testing indicated three active leaks localized to the following areas:

1. Extreme east end of the property - northeast of reservoir.
2. North central - east of building number 4, (new hangar plot).
3. Extreme northwest - on U.S. Army property.

It was also determined that the surge tank had been full of water and the jockey pump was not operating. Any time low pressure was encountered in the fire system the 2,000 GPM booster pump would activate. It was believed that on some occasions this shocked the system leading to high pressure transients.

c. Condition of Existing Facilities:

The corrosive nature of the existing soil eventually caused the random failure of portions of the existing underground piping for the domestic water, fire protection and steam and condensate lines. The history of the failures were not chronicled in the early years. The deterioration has culminated in an ever increasing number of serious failures which leave the center with a reduction or complete absence of domestic water and/or fire protection coverage.

The entire northeast quadrant has been capped off over the years. This area

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DATE 13 AUG 1987

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

serves no buildings now (it served the demolished hangar) and therefore the basic policy had been to cap off the lines at known locations rather than to dig up concrete and aircraft pavement in search of leaks. The capping off occurred in two or three phases as leaks became evident. In 1985 a decentralized heating project was implemented, replacing the central heat plant with individual building heating plants, to alleviate the frequent failures of the underground steam and condensate lines, which caused the loss of energy and expensive repair costs.

d. Causes:

Chemical analysis performed on the soil surrounding the sections of failed pipes revealed high sulfate concentrations and low resistivity leading to an anticipated corrosion activity of SEVERE magnitude. This condition creates a highly unfavorable condition for underground metal piping to be used for domestic water and fire protection distribution for this facility.

e. Alternatives/Decision:

The replacement/repair of the existing underground water lines may be done using one of two methods. The preferred method would be the excavation and replacement of the existing deteriorated cast iron piping with new PVC piping of similar size. The most economical and practical design for this project is to cap off abandon lines and reroute to eliminate excessive lengths of piping.

The alternative method would be the sliplining of the existing cast iron piping with a flexible type PVC pipe liner, along with replacement where the sliplining is not practical or cost effective. A preliminary design and estimate indicated that the sliplining method would not be cost effective due to the high unit cost for the material and the amount of excavation required to allow for the sliplining process. The preliminary estimate for the sliplining method is \$1,250,000 in comparison to \$740,000 for the excavation and replacement method.

DATE 13 AUG 1987

LY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 12 - CRITERIA FOR PROPOSED CONSTRUCTION

12A CRITERIA FOR PROPOSED CONSTRUCTION

This project will utilize criteria in the Architectural and Engineering Instructions dated July 1989, and current Department of the Army Regulations & Guidance.

12B PROJECT DEVELOPMENT BROCHURE (PDB) DISCUSSION:

N/A

FY 92 PROGRAM

DATE 13 AUG 1987

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 13 - FURNISHINGS AND EQUIPMENT

13B FURNISHINGS AND EQUIPMENT DISCUSSION

N/A

DATE 13 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 14 - SURVIVAL MEASURES

14B SURVIVAL MEASURES

N/A

DATE 13 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 15 - ENVIRONMENTAL ANALYSIS

1521 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This project qualifies as categorical exclusion No. 5, AR 200-2, Appendix A.

FY 92 PROGRAM

DATE 13 AUG 1987

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 16 - EVALUATION OF FLOOD HAZARD AND ENCROACHMENT

16A EVALUATION OF FLOOD HAZARD AND ENCROACHMENT

N/A

FY 92 PROGRAM
DATE 13 AUG 1987
PROJECT NUMBER: 26659
PROJECT TITLE: Water Pipe Line Potable
INSTALLATION: Fort Drum
LOCATION: New York

SECTION 18 - PROTECTION OF HISTORIC PROPERTIES

18A HISTORIC AND ARCHEOLOGICAL SITES (STANDARD TEXT)

a. This project has been evaluated for impact on historic and archeological property and complies with the National Historic Preservation Act (PL 89-665), as amended, and EO 11593.

DATE 13 AUG 1987

FY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 18 - ENERGY AND UTILITY REQUIREMENTS

18A SUMMARY OF ENERGY REQUIREMENTS

N/A

18C SUMMARY OF UTILITY SUPPORT

N/A

DATE 13 AUG 1987

BY 92 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 20 - PROVISIONS FOR THE HANDICAPPED

200 HANDICAP PROVISIONS

N/A

DATE 13 AUG 1987

EX-90 PROGRAM

PROJECT NUMBER: 26659

PROJECT TITLE: Water Pipe Line Potable

INSTALLATION: Fort Drum

LOCATION: New York

SECTION 21 - COMMERCIAL ACTIVITIES

21B EXECUTIVE SUMMARY OF THE CA ANALYSIS

0 N/A

APPENDIX C

Photographic Log

All photographs were taken during the site visit which occurred between October 18 - 22, 1993.

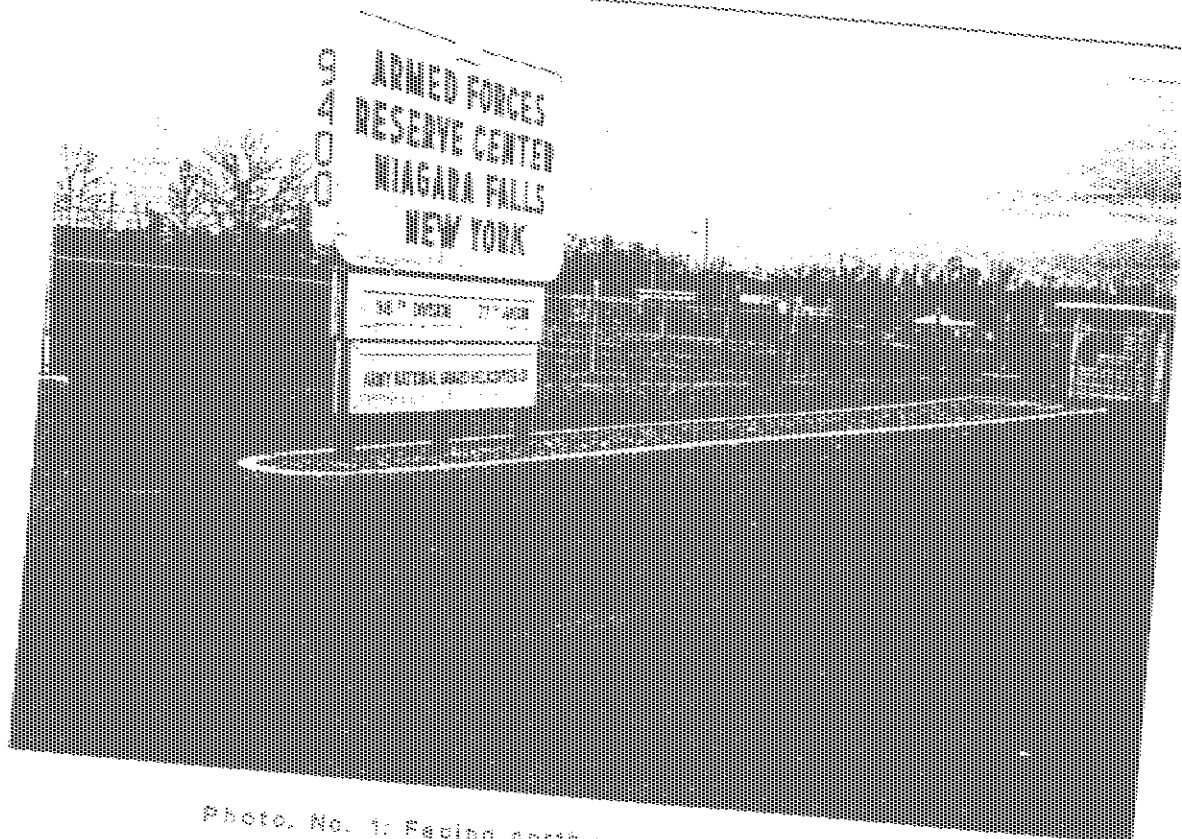


Photo. No. 1: Facing north : entrance to installation.

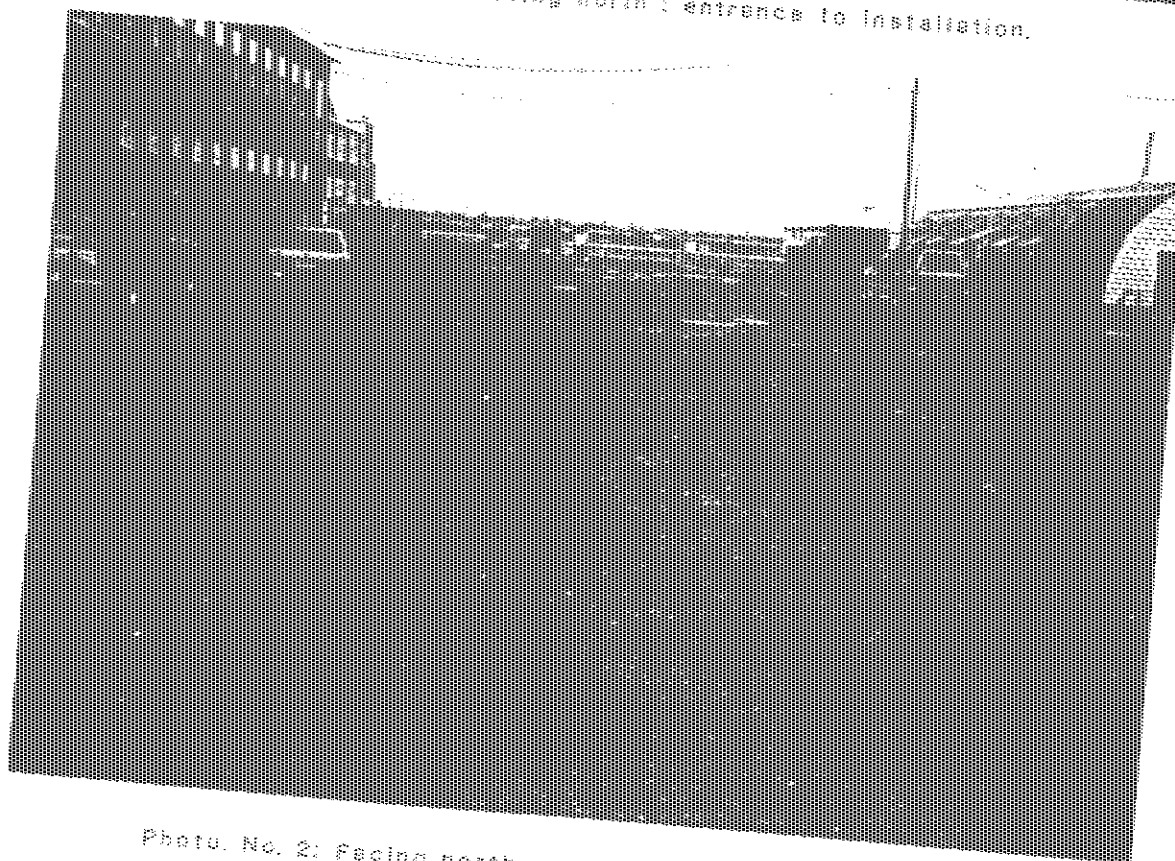


Photo. No. 2: Facing north: repaved site of 1991 PCB oil spill.

DRAWN _____ CHECKED _____ APPROVED _____	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3000 S. 10th Street, Suite 200 Aurora, IL 60018	NEARC Photographic Sheet No. 1 SCALE _____ CONTRACT NO. _____ DATE _____
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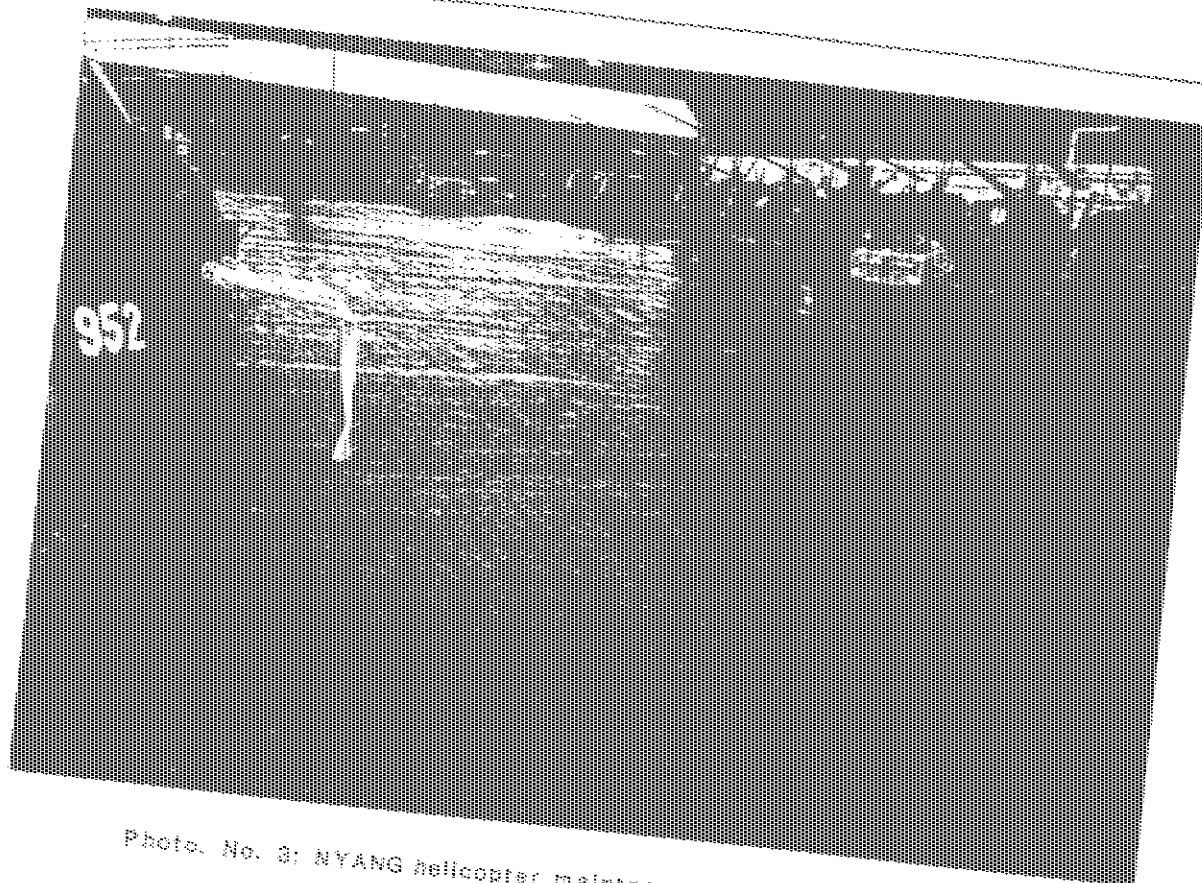


Photo. No. 3: NYANG helicopter maintenance area inside Building No.4

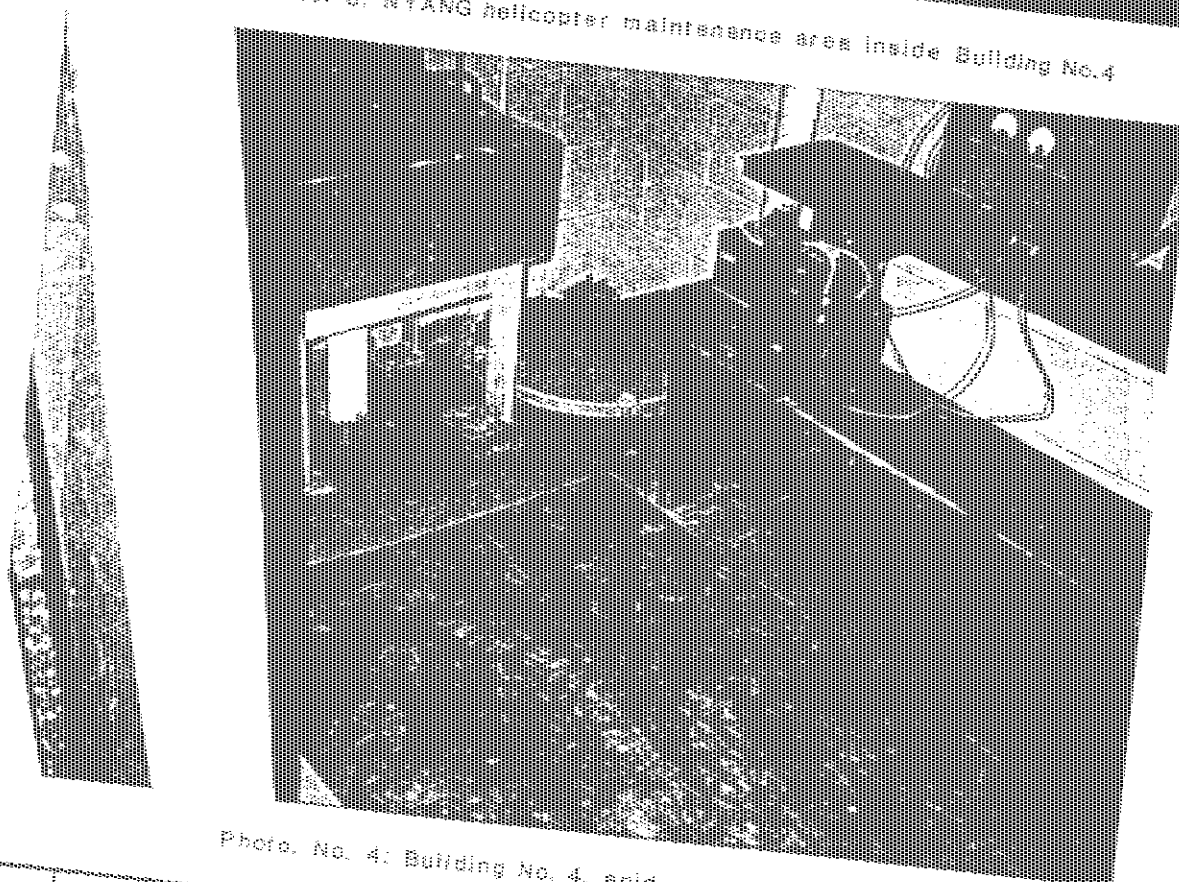


Photo. No. 4: Building No. 4, acid-neutralizing sump

DESIGNED _____	DATE _____	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS ONE EIGHTY SEVEN PARK AVE. 10 ELASTO INC. BOSTON, MASS. 617-267-0000 FAX 617-267-0001	NFARC Photographic Sheet No.2	
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APPROVED _____	DATE _____			

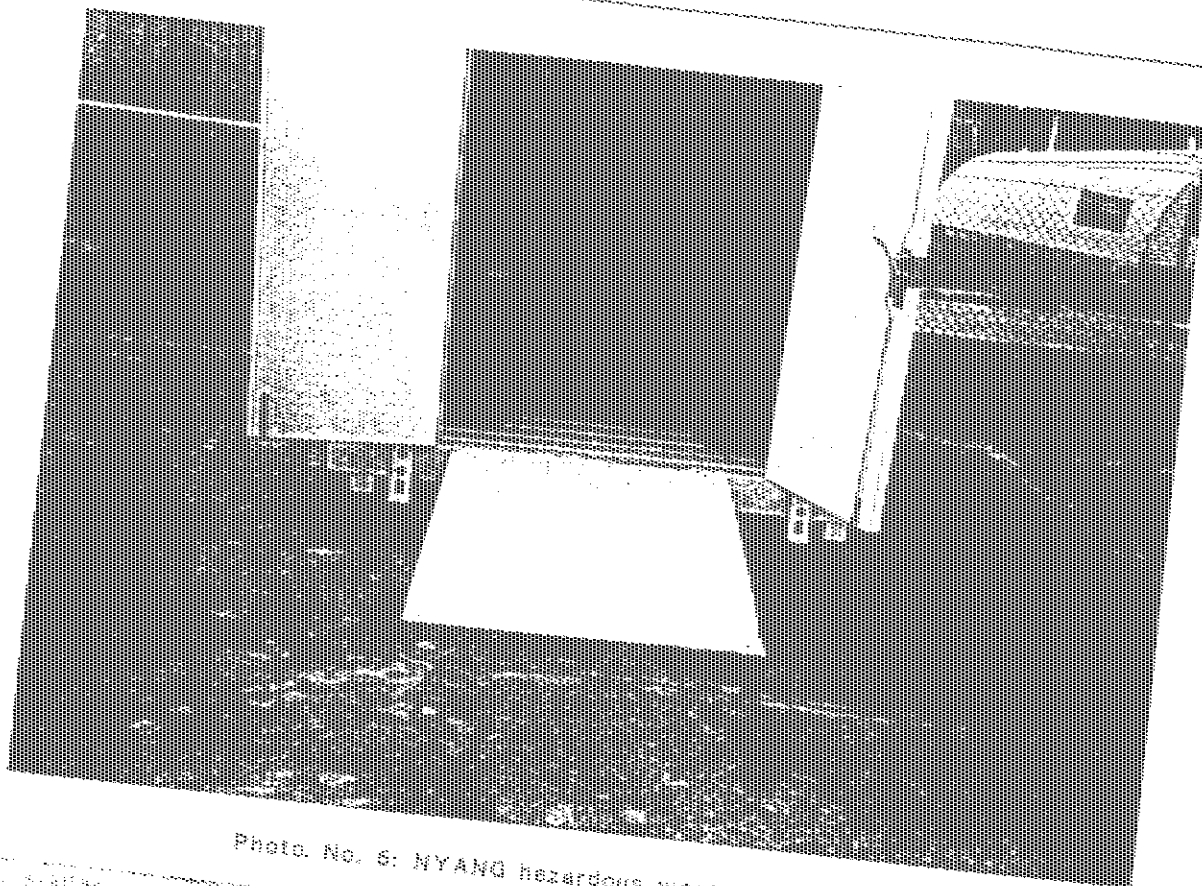


Photo. No. 6: NYANG hazardous waste storage area.

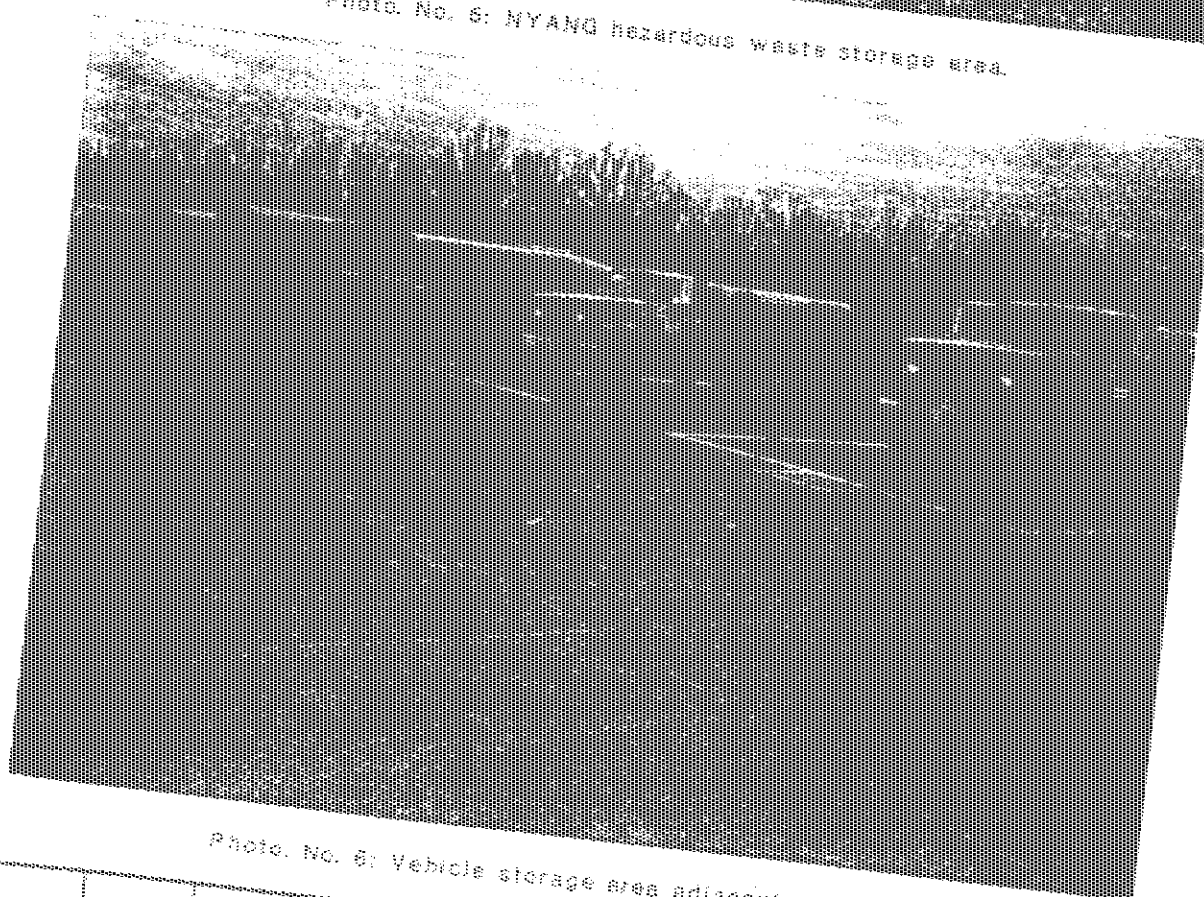


Photo. No. 6: Vehicle storage area adjacent to Building No. 4

DESIGNED _____
 DRAWN _____
 CHECKED _____
 APPROVED _____

**ENGINEERING TECHNOLOGIES
 ASSOCIATES, INC.**
 ENGINEERS & PLANNERS & ENVIRONMENTAL
 AND PLANNING CONSULTANTS
 10000 W. 10TH AVE., SUITE 100
 DENVER, CO 80231

NFARC

Photographic Sheet No. 3

10/1/82

CONTACT NO.

DATE

TIME

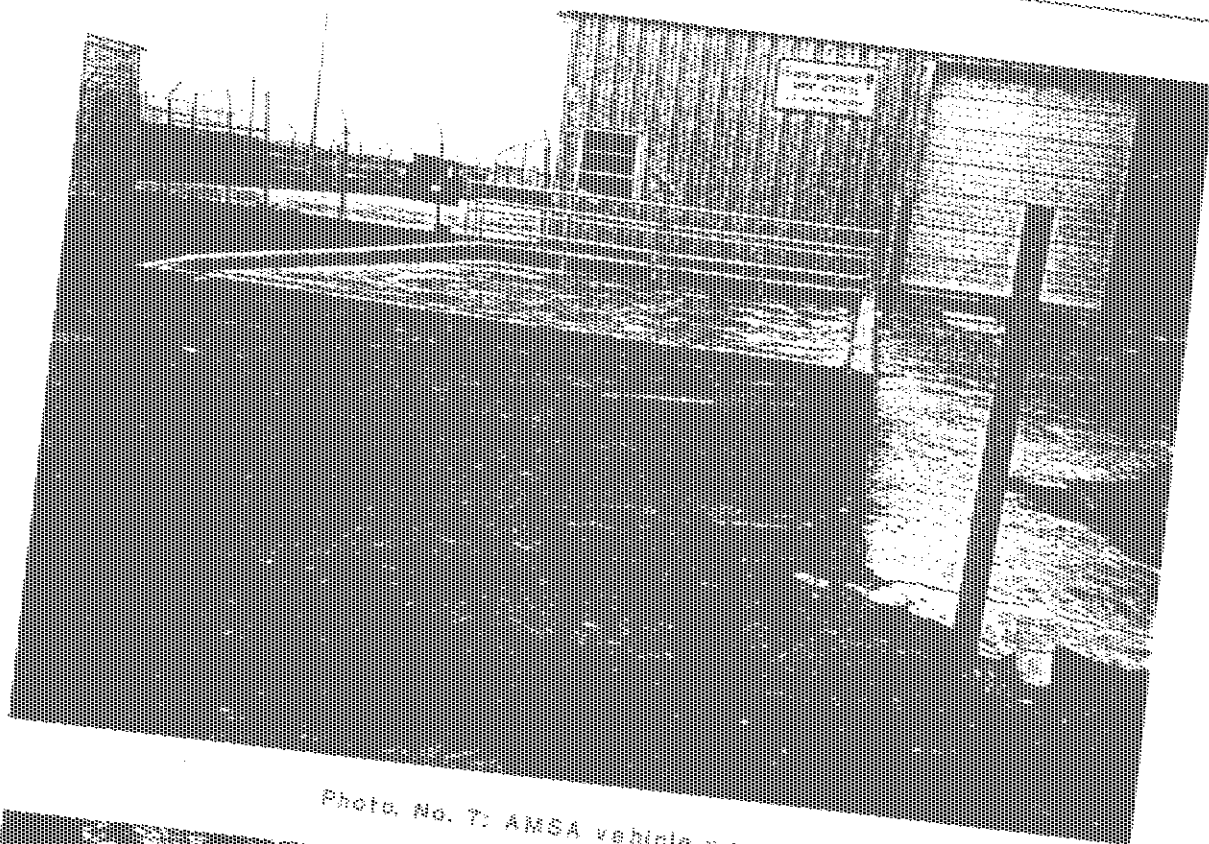


Photo. No. 7: AMSA vehicle wash rack.



Photo. No. 8: AMSA waste storage area

DESIGNED _____
 DRAWN _____
 CHECKED _____
 APPROVED _____

**ENGINEERING TECHNOLOGIES
 ASSOCIATES, INC.**

ENGINEERS • PLANNERS • SURVEYORS
 2000 ALBERTA STREET, SUITE 100
 ALBERTA, CANADA T2A 0A1
 (416) 291-1234 (416) 291-1235

NEARC

Photographic Sheet No. 4

FILED

CONTACT NO.

DATE

TIME

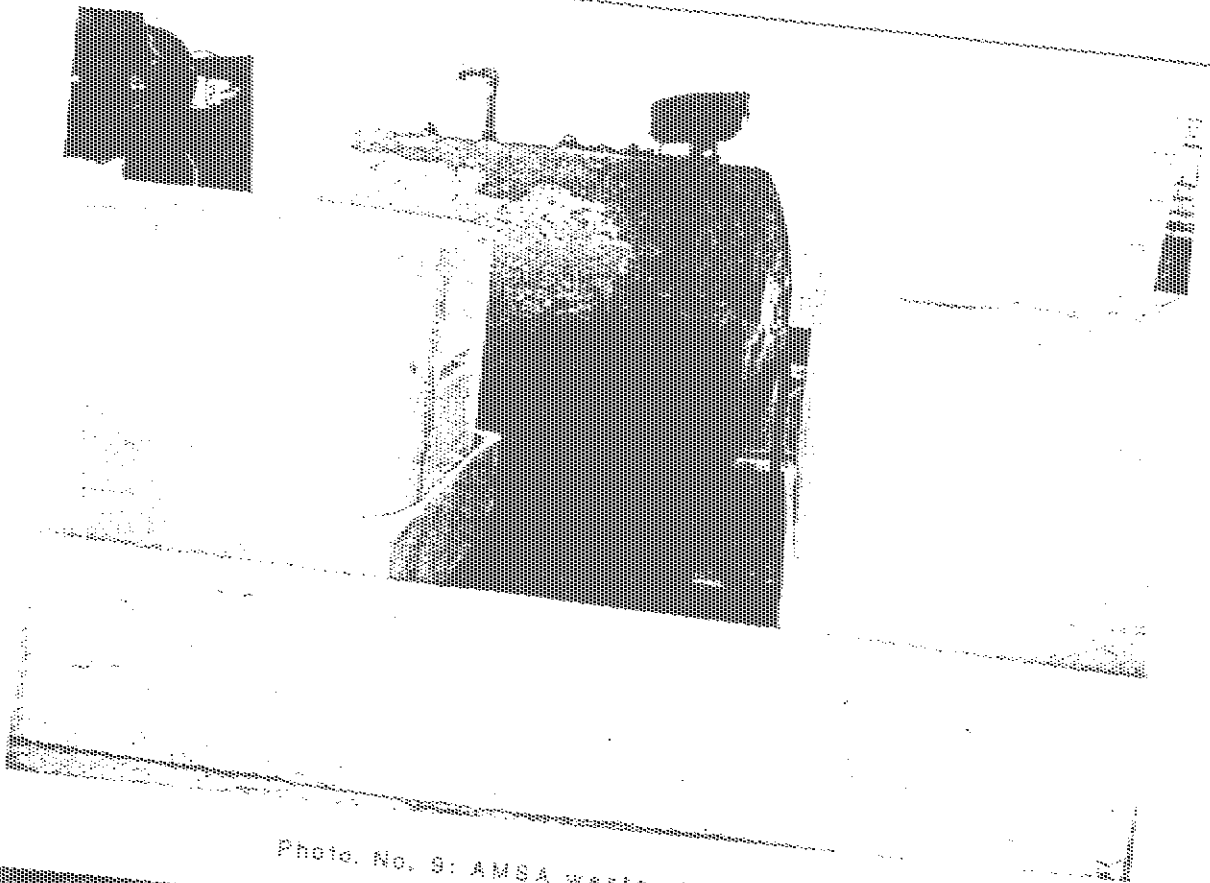


Photo. No. 9: AMSA waste storage area

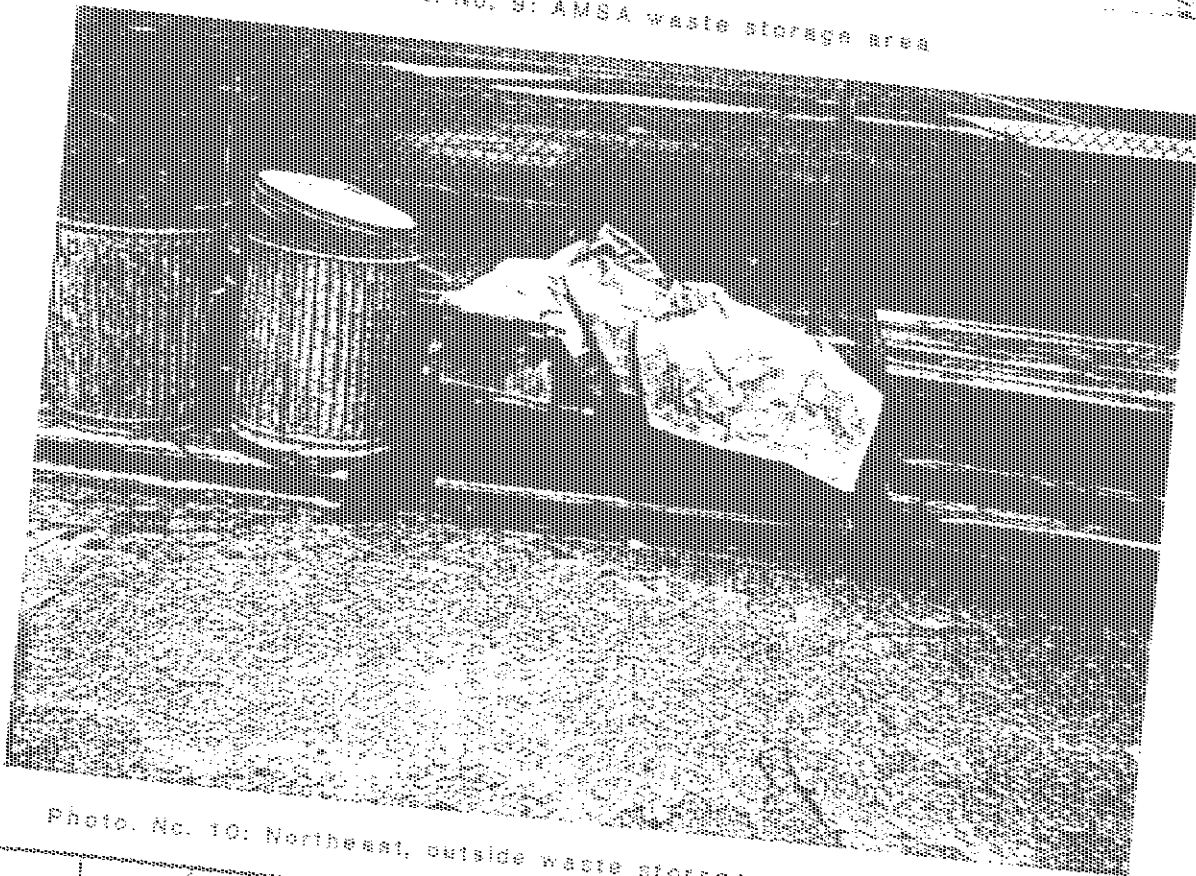


Photo. No. 10: Northeast, outside waste storage area showing batteries.

DESIGNED _____
 DRAWN _____
 CHECKED _____
 APPROVED _____

**ENGINEERING TECHNOLOGIES
 ASSOCIATES, INC.**
 DESIGNERS • PLANNERS • ENGINEERS
 1000 EAST 10TH AVENUE, SUITE 100
 DENVER, CO 80202

NFARC
 Photographic Sheet No. 5
 1000 1000 1000 1000

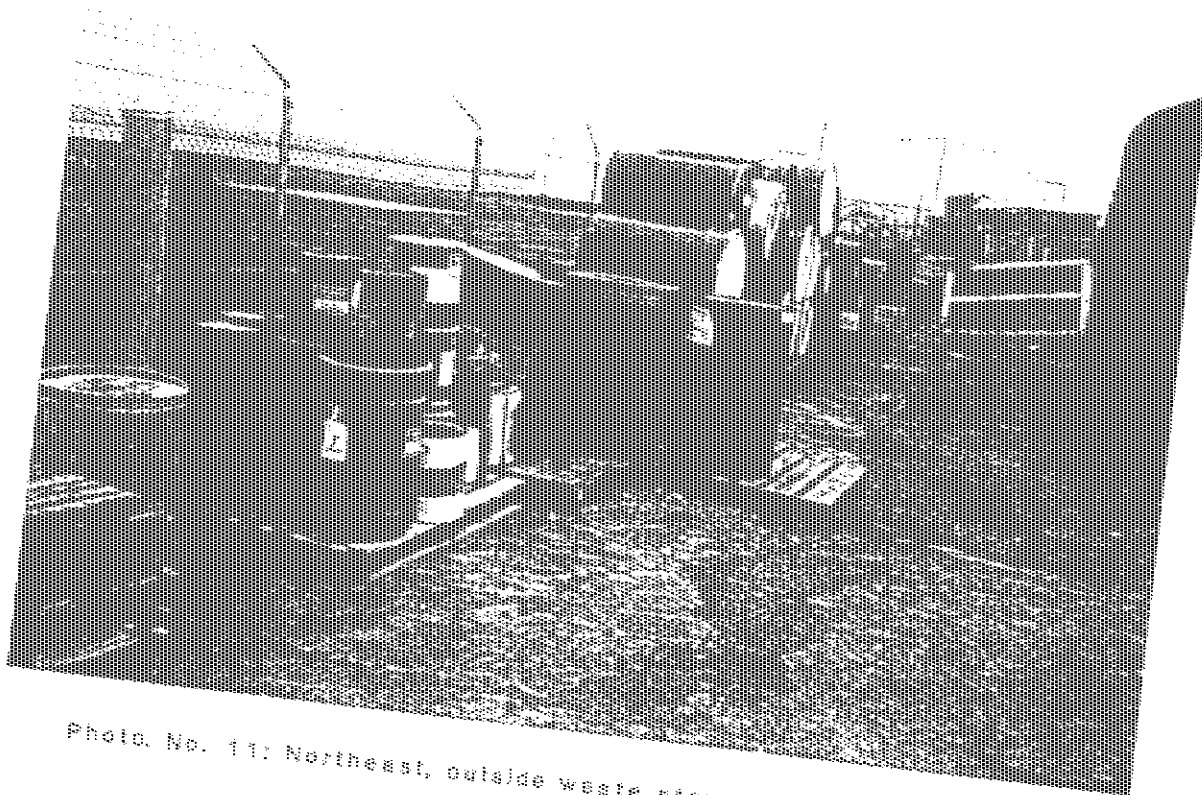


Photo. No. 11: Northeast, outside waste storage area showing drums.

100000 _____ 90000 _____ 80000 _____ 70000 _____ 60000 _____	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • CONSTRUCTORS 1400 E. 10TH AVENUE, SUITE 100 DENVER, CO 80202-1000 (303) 733-1000 • (303) 733-1001	NFARC Photographic Sheet No. 6 100000 _____ 90000 _____ 80000 _____ 70000 _____ 60000 _____
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APPENDIX D

Study Area Map

APPENDIX E

Acronym and Abbreviation List

ACM	asbestos containing material
AMSA	Area Maintenance Support Activity
ARCOM	Army Reserve Command
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DEH	Directorate of Engineering and Housing
ETA	Engineering Technologies Associates
HRS	Hazard Ranking System
JP4	jet fuel
MEK	Methyl ethyl ketone
NFAFRC	Niagara Falls Armed Forces Reserve Center
NYARNG	New York Army National Guard
NYDEC	New York Department of Environmental Conservation
PA	preliminary assessment
PCB	polychlorinated biphenyls
PPE	probable point of entry
SARA	Superfund Amendments and Re-authorization Act
SQG	Small Quantity Generator
USATHAMA	United States Army Toxic and Hazardous Materials Agency
USGS	United States Geological Survey
UST	underground storage tank
Zep-Z-C	soap/detergent concentrate

CLOSURE REPORT

UNDERGROUND STORAGE TANK REMOVALS

**Niagara Falls United States Army Reserve Center
9400 Porter Rd.
Niagara Falls, NY 14304**



Prepared for:

**U.S. Army Corps of Engineers
Baltimore District**

Prepared by:

**SVERDRUP ENVIRONMENTAL, INC.
575 S. CHARLES STREET, SUITE 404
BALTIMORE, MD 21201**

December 14, 1999

**USACE CONTRACT NO. DACA31-98-D-0035
DELIVERY ORDER NO. 0004
SVERDRUP PROJECT NO. 000223**



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS
UNITED STATES ARMY 77TH REGIONAL SUPPORT COMMAND
FORT TOTTEN
FLUSHING, NY 11359-1016

December 23, 1999

Office of the Deputy Chief of Staff,
Engineer

Andrea Skalski
New York State
Department of Environmental Conservation
270 Michigan Ave.
Buffalo, NY 14203

RE: Underground Storage Tank Closure Reports: Amherst U.S. Army Reserve Center, 100 N. Forest Rd., Amherst; Niagara Falls Armed Forces Reserve Center, 9400 Porter Rd, Niagara Falls; and PFC Deglopper U.S. Army Reserve Center, 2393 Colvin Blvd., Tonawanda

Dear Ms. Skalski:

Enclosed please find the underground storage closure reports for the Amherst, Niagara Falls, and Tonawanda United States Army Reserve Centers. The 4 UST's were associated with oil water separators, and were removed during September. A spill was reported for the 550 gallon fiberglass UST at Niagara Falls, NYSDEC spill number 9907461, due to the groundwater coming into contact with the interior of the UST causing a visible oil sheen on the surface. All groundwater in the excavation was pumped out and drummed for later disposal and no water sample was taken. Disposal manifests are included in the report. Please contact Dick Ramsdell at (718)352-2091 if you have any questions regarding these tank reports or the reported spill.

Sincerely,

Nickolas Christopher
Nickolas Christopher
Colonel, U.S. Army Reserve
Deputy Chief of Staff, Engineer

Enclosures

Copies Furnished:

David S. Martin
Niagara County Health Department
5467 Upper Mountain Rd
Lockport, NY 14094

December 23, 1999

David S. Martin
Niagara County Health Department
5467 Upper Mountain Rd
Lockport, NY 14094

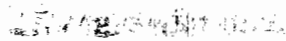
Enclosed please find the underground storage tank Closure Report for the Niagara Falls Armed Forces Reserve Center oil water separator - UST's. These tanks were removed September 21 and 22, 1999. Please see the enclosed letter to NYSDEC as well as the report, which provides details of the spill. If you have any questions, please call me at (718) 352-2091.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dick Ramsdell".

Dick Ramsdell
Environmental Specialist, 77th RSC
JM Waller Associates, Inc.

Enclosures



Sverdrup Civil, Inc.
575 South Charles Street
Suite 404
Baltimore, Maryland 21201

410 837-5840
FAX: 410 837-3277

December 20, 1999

Mr. Richard C. Ramsdell
77th Regional Support Command
AFRC-CNY-EN, Building 200
Ft. Totten, NY 11359

Re: Contract DACA31-98-D-0035, Delivery Order 0004
Underground Storage Tank Removals at Six United States Army Reserve
Centers - 77th RSC

Subject: Response to 77th RSC Comments on SvE Closure Reports

Dear Mr. Ramsdell:

Enclosed, please find the subject Response to Comments document dated 20 December 1999, three-hole punched copies of the associated replacement pages, and a set of floppy discs containing the electronic copies of the various Closure Reports, as requested. One copy of this submittal has been forwarded to Mr. William Ebersbach, USACE, Ft. Drum, New York.

Also enclosed, as requested 20 December 1999 via e-mail, is an additional copy of the Niagara Falls USARC, UST Removal Closure Report dated 14 December 1999.

Please contact me at (410) 837-5840 if you have any questions regarding this submittal.

Sincerely,
SVERDRUP ENVIRONMENTAL, INC.

Christopher L. Stone
Project Manager

CC: R. Gribben, SvE
W. Ebersbach, USACE
Proj File 223-04-32A
STL File 223-04-32A

**UST Closure Reports
Various USARCs
Response to Comments**

The Sverdrup Environmental, Inc. (SvE) action taken or response to each comment pertaining to UST Closure Reports at various USARCs, received from the 77th RSC, are presented in bold type immediately following the comment.

A. Amherst

1. Page 2-1: The 3rd paragraph in section 2.2 should be moved up and become the first paragraph.

Page 2-1: Corrected, as requested.

2. Page 4-1: All copies of the report we received have the Deglopper Section 4.0 Report Summary. Please send us the Amherst page 4-1.

Page 4-1: Corrected, as requested.

B. Tonawanda

1. Page 2-1: Section 2.2 last paragraph should further describe that the UST was broken up due to it being under the groundwater and close to the sanitary line, as seen in the photo. This helps to explain why there was contamination in the GW and the sidewall, but not the bottom composite soil sample, since there may have been some residue in the UST bottom that contained these compounds and floated on the water.

Page 2-1: The explanation of the tank demolition has been added to the report, as requested. SvE can not, however, speculate as to why the analytical results varied between the three closure samples. It should be noted that the contaminants identified in the groundwater sample were not necessarily the same chemical compounds as those identified in the sidewall soil closure sample. Further, the contaminants identified in the groundwater sample were not detected in the sample of the UST contents collected and analyzed prior to the tank removal.

2. Page 3-2: Please write out the 3 compounds found to be above the EGV in sample DLAC-GW-W-02 as done earlier in the report.

Page 3-2: Information included, as requested.

3. Page 4-1: Section 4.1 should include information about the UST being broken up to help explain the soil and GW contamination found at the site similar to above in 1.

Page 4-1: Information included, as requested. See Response to Comment 1.

C. Niagara Falls

1. Please add a line or two that states the contamination found in the soil and water samples from both tank excavations is likely to have come from the mixing of the GW with the interior sludges from both UST's.

SvE can not speculate as to why contaminants were identified in the closure samples for the 1000-gallon UST. It should be noted that the contaminants identified in the groundwater sample were not necessarily the same chemical compounds as those

identified in the soil samples. Further, the contaminants identified in the groundwater sample were not detected in the sample of the UST contents collected and analyzed prior to the tank removal. In regard to the 550-gallon UST, no contaminants, listed as parameters in Table 2 of the NYSDEC STARS Memo #1, were detected at a level above the laboratory quantitation limit.

2. Page 1-1: Section 1.2 second paragraph last sentence. Identify the 550 gallon UST as being "used for storage of waste oil discharged from the washrack oil/water separator," not "the facility OWS".

Page 1-1: Corrected, as requested.

3. Page 2-1: Last paragraph needs to identify that the spill was reported by the 77th RSC, Mr. Ravi Ajodah, REMSA, Inc., and that Linda began communication with NYSDEC Region 9.

Page 2-1: Information provided, as requested.

4. Page 2-2: first paragraph on the page, please add that the GW was not recharging the pit and that after removing the approximately 400 gallons, the pit was dry and remained so for over 30 minutes while we waited for the Niagara County inspector and while Linda tried to contact Sal from NYSDEC.

Page 2-2: Information provided, as requested.

5. Page 2-2: 4th paragraph down 3rd line in the paragraph. ... the UST removed from the Niagara Falls USARC was combined... not "were," change were to was.

Page 2-2: Corrected, as requested.

6. Page 2-3: Section 2.2.2, 3rd paragraph, please add a description of the 1000 UST partially filling with water and describe how it was inverted and discharged its contents as seen in the photo during removal. Also add that there was not a visible sheen or any form of sludge visibly discharged during the tank emptying into the pit.

Page 2-3: Information provided, as requested.

7. Page 3-4: Table 3. Please invert the table so the top is along the binder.

Page 3-4: Corrected (also Table 4), as requested.

8. Appendix B: Include copies of the disposal manifests that I sent you.

Appendix B: Information provided, as requested.

9. Appendix D: The samples for the 1000 gallon UST are not included. Please send sample results for the 1000 gallon UST.

Appendix D: Information provided, as requested.

10. Appendix F: Include the UST summary page before the COC form for each UST pulled.

Appendix F: Information provided, as requested.

CLOSURE REPORT

UNDERGROUND STORAGE TANK REMOVALS

**Niagara Falls United States Army Reserve Center
9400 Porter Rd.
Niagara Falls, NY 14304**



Prepared for:

**U.S. Army Corps of Engineers
Baltimore District**

Prepared by:

**SVERDRUP ENVIRONMENTAL, INC.
575 S. CHARLES STREET, SUITE 404
BALTIMORE, MD 21201**

December 14, 1999

**USACE CONTRACT NO. DACA31-98-D-0035
DELIVERY ORDER NO. 0004
SVERDRUP PROJECT NO. 000223**

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FIGURES

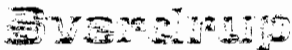
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D	Post Closure Summary Report
E	Laboratory Report of Analysis for UST/OWS Contents
F	Laboratory Report of Analysis for Project Closure Samples
G	Tank Certificate of Disposal
H	NYSDEC STARS Memo #1 Guidance Values
I	Minutes of Spill Report



Sverdrup Civil, Inc.
575 South Charles Street
Suite 404
Baltimore, Maryland 21201

410 837-5840
FAX: 410 837-3277

19 November 1999

Mr. William Ebersbach
Resident Engineer
CENAN-CO-WD
4895 Nininger St.
Fort Drum, NY 13602

Re: Contract DACA31-98-D-0035, Delivery Order 0004
Underground Storage Tank Removal Activities at Niagara Falls USARC

Subject: Professional Engineer Certification Letter for Services Performed

Dear Mr. Ebersbach:

This letter certifies all underground storage tank removal activities performed by Sverdrup Environmental, Inc. (SvE) at Niagara Falls United States Army Reserve Center, Niagara Falls, NY have been completed in accordance with the Contract, Base Specifications, and approved work plans for this task. Furthermore, SvE has complied with all federal, state, and local regulatory requirements throughout the course of work at Niagara Falls USARC.

If you have any questions or require additional information, please contact me at (703) 790-0040.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerald C. Brown".

Gerald C. Brown, P.E.
Vice President/Program Manager

EXECUTIVE SUMMARY

Sverdrup Environmental, Inc. (SvE), under contract with the United States Army Corps of Engineers (USACE) Baltimore District, performed the removal of two underground storage tanks (USTs) at the Niagara Falls United States Army Reserve Center (Niagara Falls USARC) located at 9400 Porter Rd. Niagara Falls, NY. A 550-gallon fiberglass UST was located beneath a concrete pad, adjacent to the facility vehicle wash rack. The fiberglass UST was 4 feet in diameter and 6 feet long. A 1,000-gallon, double wall, steel tank was located beneath asphalt, next to a concrete vault containing an oil/water separator (OWS). The steel tank was 4 feet in diameter and 10 feet 9 inches long.

Prior to the removal of the 550-gallon tank, the contents of the UST and the adjacent OWS were sampled and analyzed. A composite sample of the OWS and UST contents was collected and analyzed for waste characterization. Analytical parameters included: PAHs by Method 8270, VOAs by Method 8260, PCBs by Method 8082, TCLP Metals, Ignitability, Reactivity, and Corrosivity. Based upon TCLP analytical data for Lead, Selenium, and Cadmium, the UST and OWS contents were determined to be hazardous waste. The contents of the 550-gallon UST and associated OWS were removed using a vacuum truck. The liquid was drummed, staged, and labeled by SvE. The 77th RSC was responsible for disposal of the drummed waste. The UST was removed in sections, cleaned, and transported to the CID Chaffee Landfill in Chaffee, NY for disposal.

Prior to the removal of the 1,000-gallon UST, the tank contents were sampled and analyzed for waste characterization. Analytical parameters included: PAHs by Method 8270, VOAs by Method 8260, PCBs by Method 8082, TCLP Metals, Ignitability, Reactivity, and Corrosivity. Based upon analytical results, the UST contents were determined to be non-hazardous waste and were removed using a vacuum truck. The waste was transported to Environmental & Industrial Contracting Services (EICS) in Niagara Falls, NY, for recycling. The UST was removed, cleaned, rendered useless, and transported to Lake Erie Recycling Corp., in Buffalo, NY to be recycled as scrap steel.

During excavation, the condition of each UST and the soil in the excavation pits were observed and noted by the SvE Site Superintendent. Both tanks appeared to be in good condition, with no visible holes. The soil at the bottom of each excavation exhibited no petroleum odor or staining. During removal of the 550-gallon tank, groundwater contacted the interior of the tank, which created a visible sheen on the groundwater. A spill was reported in accordance with New York State Department of Environmental Conservation (NYSDEC) regulatory requirements. The SvE Superintendent inspected the excavated soil stockpiles. Headspace analysis of the excavated soil did not indicate the presence of volatile organic compounds (VOCs).

Subsequent to field screening activities, excavation activities were halted and closure samples were collected from both excavation pits. Since the contents of the 550-gallon

UST were determined to be hazardous waste, the soil and water from the 550-Gallon UST excavation pit were sampled for NYSDEC STARS 8021 and 8270, and for hazardous waste characterization. The hazardous waste characterization sampling included: PAHs by Method 8270, VOAs by Method 8260, PCBs by Method 8082, TCLP Metals, Ignitability, Reactivity, and Corrosivity. None of the STARS 8021 or 8270 compounds were detected in the samples. Trichloroethene was detected by method 8260 at 42 ppb in sample number NFAC-SW-S-03 (composite soil sample of the excavation side-walls), and at 6.6 ppb in sample number NFAC-ES-S-04 (composite of excavation floor).

Soil and water from the 1,000-gallon UST excavation pit were sampled for NYSDEC STARS 8021 and 8270. Analytical results of the groundwater sample identified 1,2,4-Trimethylbenzene, n-Butylbenzene, and Naphthalene present in the excavation groundwater sample (NFAC-GW-W-05), at concentrations which exceeded the NYSDEC STARS Memo #1 extraction guidance values (EGV) for liquids. Analytical results identified Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Benzo(a)pyrene, Benzo(g,h,i)perylene, and Indeno(1,2,3-cd)pyrene present in soil sample NFAC-ES-S-06, at concentrations which exceeded the NYSDEC STARS Memo #1 alternative guidance values (AGV) for solids. Analytical results identified Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Benzo(a)pyrene, and Benzo(g,h,i)perylene present in the soil sample NFAC-ES-S-07, at concentrations which exceeded the NYSDEC STARS Memo #1 alternative guidance values (AGV) for solids.

Due to the lack of petroleum contamination in the soil surrounding the 550-gallon UST and the limited nature of the petroleum contamination in the soil surrounding the 1,000-gallon UST, SvE recommends that no further action is necessary at this time. It should be noted, however, that subsequent site assessment and/or remedial action may be required by the NYSDEC for the UST closures at Niagara Falls USARC.

1.0 PROJECT BACKGROUND

The United States Army Corps of Engineers (USACE), Baltimore District, selected Sverdrup Environmental, Inc. (SvE) to perform underground storage tank (UST) removal and installation actions, at various locations within the United States Environmental Protection Agency (USEPA) Regions I, II, and III, under the UST Removal and/or Upgrade Contract, No. DACA31-98-D-0035. SvE was tasked under Delivery Order 0004 of this contract with the removal of two USTs at the Niagara Falls United States Army Reserve Center (Niagara Falls USARC) in Niagara Falls, NY.

1.1 Objectives

The primary project objective was to close the 550-gallon UST and the 1,000-gallon UST at Niagara Falls USARC by removal and to provide the USACE with a description of activities, field observations, and analytical data associated with the project. This UST Removal Closure Report summarizes information regarding the UST removals, including: narrative description of field work activities and observations; project photographs; laboratory reports associated with soil and groundwater samples collected; record drawings identifying UST and closure sample locations; and disposal documentation of waste streams generated from the removal.

The UST Removal Closure Report is intended to provide sufficient information for NYSDEC officials to determine if a more detailed investigation of site conditions is necessary, or if no further action is warranted.

1.2 Site Description

Niagara Falls USARC is located at 9400 Porter Rd. Niagara Falls, NY 14304. Figure 1 provides a map of the site and vicinity.

The 550-gallon fiberglass tank was located beneath a concrete pad adjacent to the facility wash rack. A diagram of the wash-rack and OWS/ UST layout is presented in Figure 2. The UST was previously used for storage of waste oil discharged from the washrack oil/water separator (OWS).

The 1,000-gallon steel tank was located beneath an asphalt parking area, adjacent to a concrete vault containing the oil/water separator. A diagram of the OWS vault and the 1,000-gallon UST layout is presented in Figure 3. The UST was previously used for storage of waste oil discharged from the oil/water separator (OWS). The oil/water separator is piped to the floor drains inside the vehicle maintenance building. The oil/water separator is also piped to the building roof drains.

The 550-gallon UST was removed and the oil discharge line was cut at the excavation wall and plugged with hydraulic cement, and then plugged at the OWS with a 2 inch threaded galvanized steel plug. The vent line from the UST was cut and capped at the excavation wall with hydraulic cement. The vent line from the OWS was left in place.

The 1,000-Gallon UST was removed and the oil discharge line was cut inside the concrete vault and capped with hydraulic cement and a wing nut type expandable plug. The OWS and UST vent lines were originally manifolded via a tee connection. The vent line from the UST was disconnected at a 2-inch elbow fitting and capped underground with a 2 inch galvanized steel plug. The 4-inch OWS vent line was thereby isolated and left in place, and is now used to vent the OWS only.

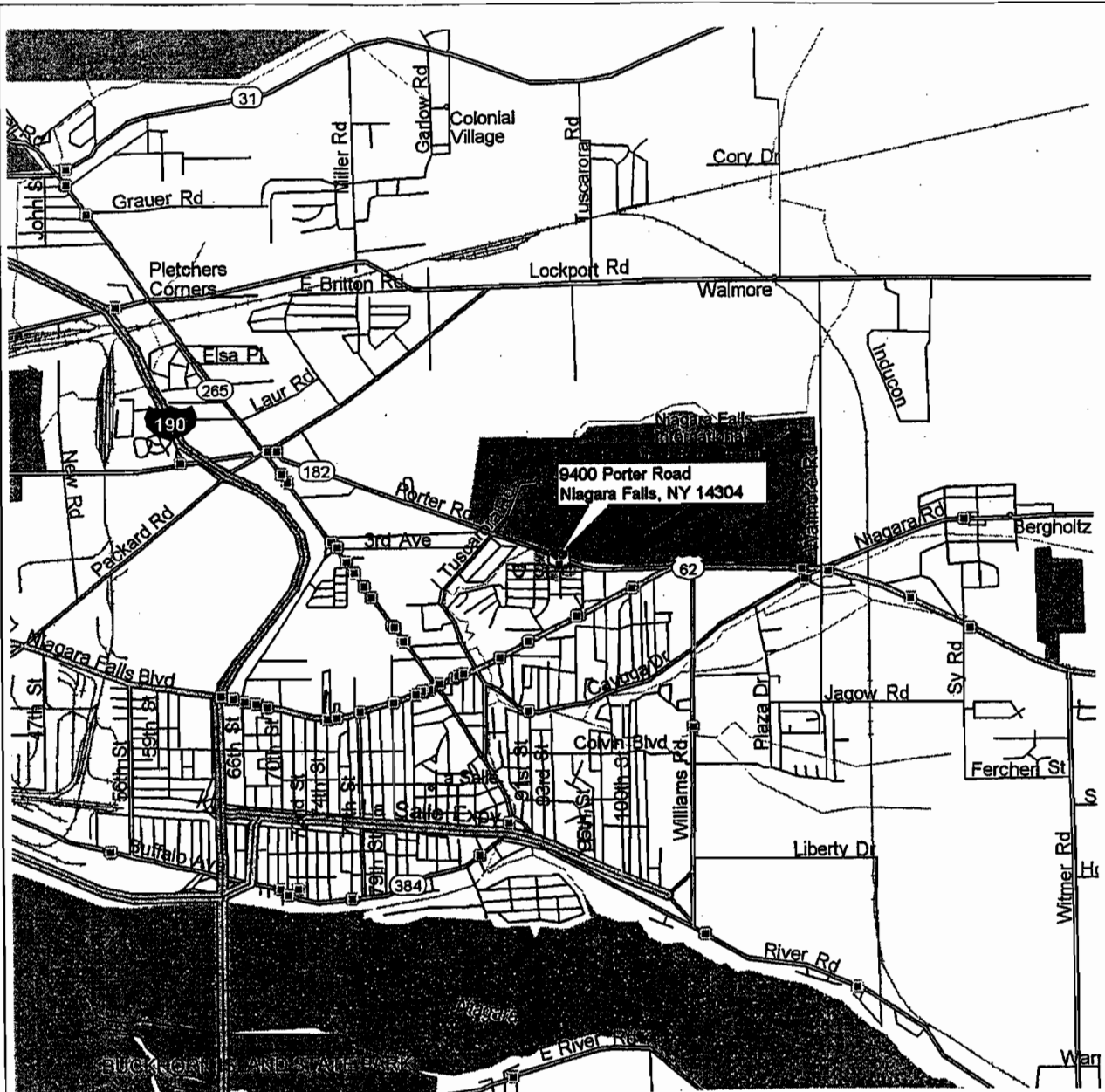
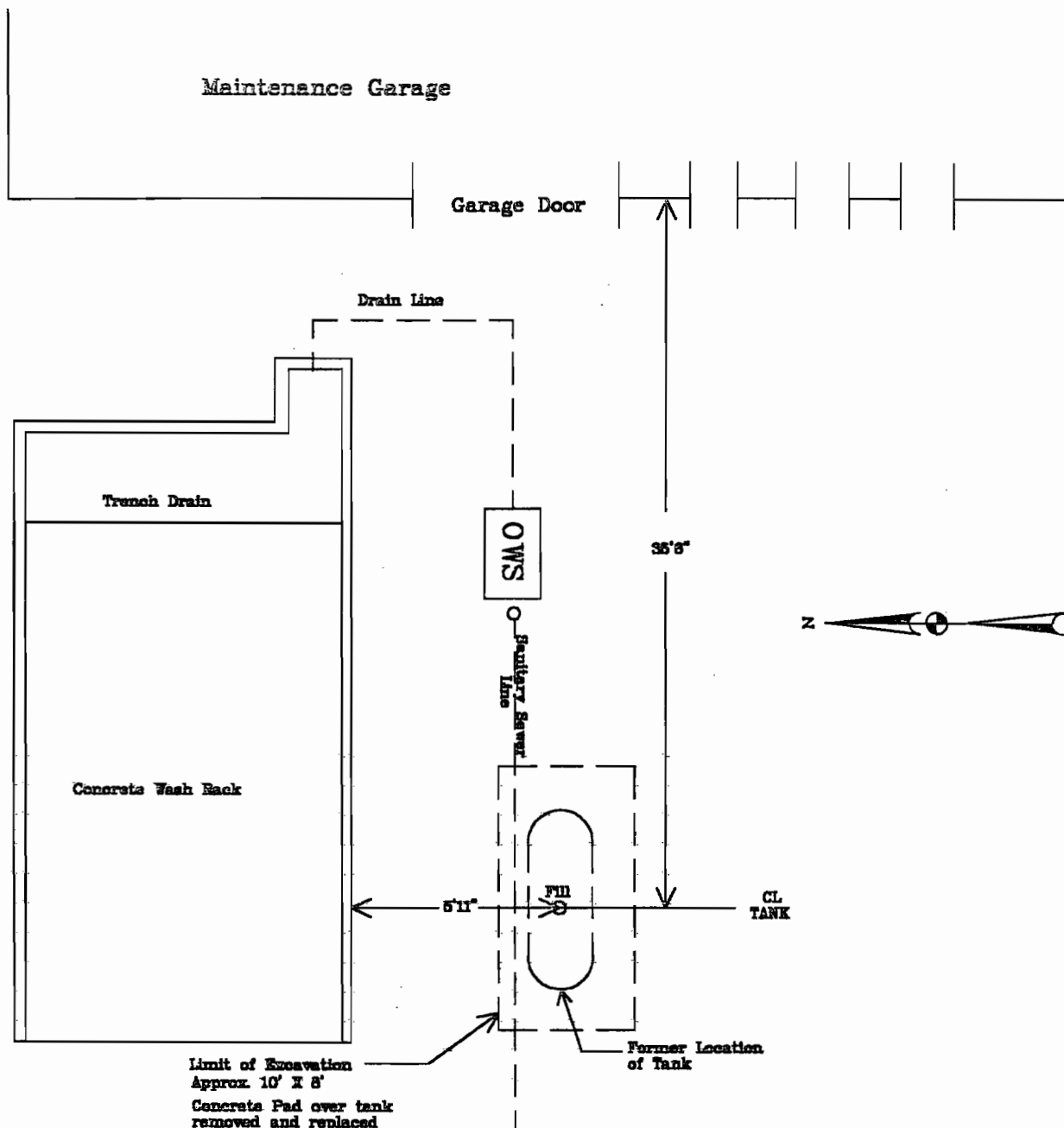


Figure 1
Site Location Map
Niagara Falls USARC

USACE Contract No.	Sverdrup Project No.	Delivery Order No.
DACA31-98-D-0035	000223	0004



Item Description	UST - Niagara Falls USARC
Capacity (gallons)	550
Composition	Fiberglass
Previous Contents	Waste oil and water
Bulk Liquids Removed from UST (gallons)	300
Bulk Liquids Removed from OWS(gallons)	25
Length (feet)	6 feet
Diameter (feet)	4 feet
Condition	Good
Volume contaminated soil for disposal or recycle (drums)	2

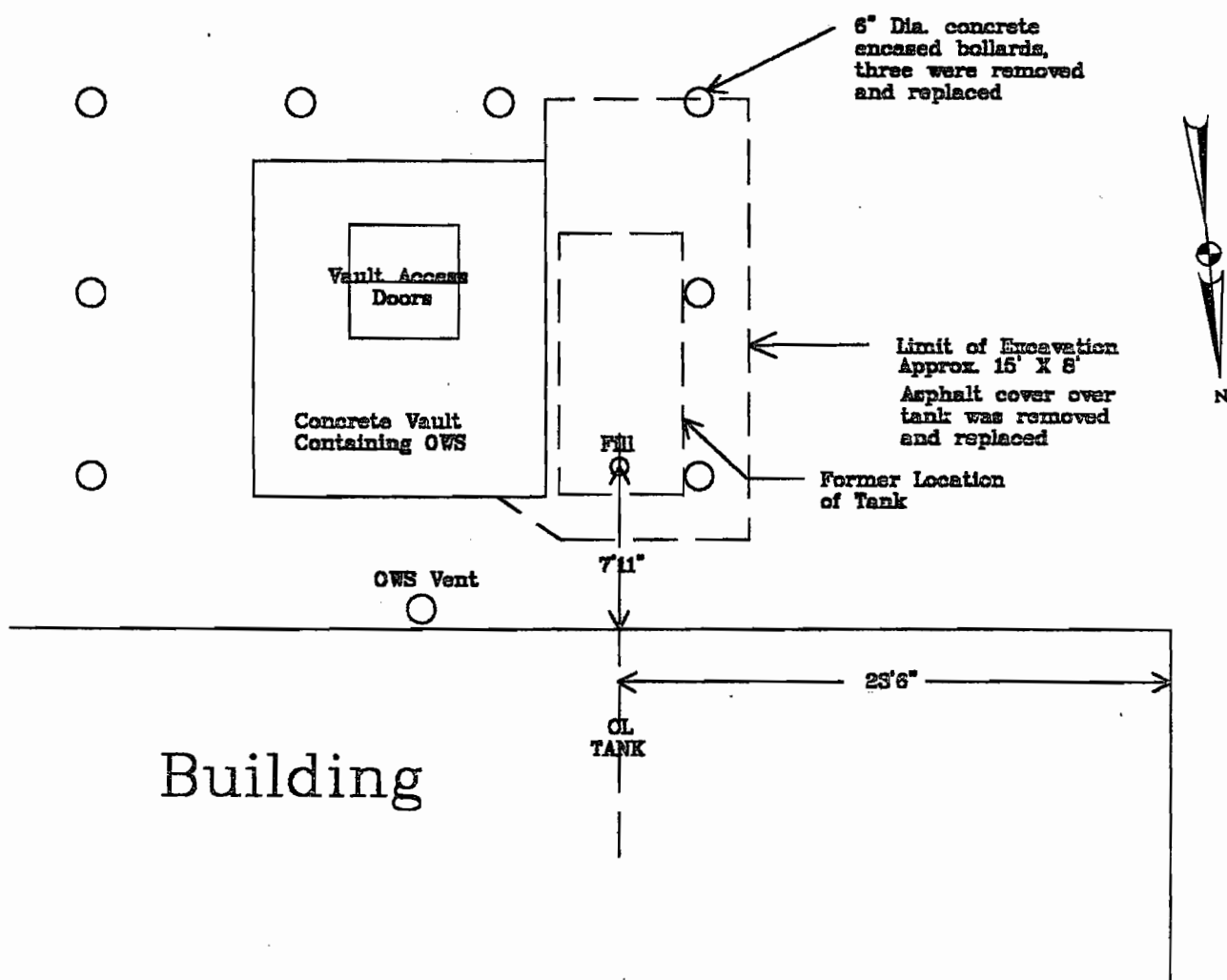
DESIGNED BY R.G.
 CHECKED _____
 APPROVED _____

SVERDRUP ENVIRONMENTAL, INC.
 575 SOUTH CHARLES ST., ST. 404
 BALTIMORE, MD 21201
 Phone: 410-837-5840 Fax 410-837-3277

FIGURE 2-UST REMOVAL PLAN
NIAGARA FALLS USARC
AS-BUILT DRAWING

SCALE: NTS CONTRACT NO. DACAS1-98-D-0008 DATE 10/20/99

Item Description	UST - Niagara Falls USARC
Capacity (gallons)	1,000
Composition	Steel
Previous Contents	Waste oil and water
Bulk Liquids Removed from UST (gallons)	1,000
Bulk Liquids Removed from OWS(gallons)	1,000
Length (feet)	10.75 feet
Diameter (feet)	4 feet
Condition	Good
Volume contaminated soil for disposal or recycle (drums)	0



DESIGNED R.G.
 DRAWN _____
 CHECKED _____
 APPROVED _____

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 BALTIMORE, MD 21201
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FIGURE 3-UST REMOVAL PLAN
NIAGARA FALLS USARC
AS-BUILT DRAWING

SCALE: NTS CONTRACT NO. D-22-2-0332 DATE: 10/20/03

1.3 Schedule of Activities

All work was performed in accordance with relevant provisions of the base contract (DACA31-98-D-0035) and the base specifications for the contract. The UST removal actions complied with current applicable regulations and provisions of the work plans.

SvE mobilized to the Niagara Falls USARC site on 20 September 1999 to begin UST removal activities. The general schedule of activities for the entire UST removal project consisted of:

- Preconstruction/preparatory inspection meetings;
- Submittal review and approval (USACE);
- Initiation of required NYSDEC notifications;
- Pre-Construction sampling of UST/OWS contents;
- Remove and dispose/recycle oil from the 1,000-Gallon tank;
- Acquisition of utility clearances and markings;
- Mobilization of personnel, equipment, and materials;
- Pump and drum product from the 550-Gallon UST/OWS system;
- Excavation and removal of 550-Gallon UST;
- Pump and drum excavation pit water;
- Soil sample collection and analysis from 550-Gallon tank removal excavation pit;
- Demolition and disposal of UST;
- Backfill and compaction of 550-Gallon tank excavation pit;
- Excavation and removal of 1,000-Gallon UST;
- Soil and groundwater sample collection and analysis from 1,000-Gallon tank removal excavation pit;
- Backfill and compaction of 1,000-Gallon tank excavation pit
- Concrete restoration at 550-Gallon UST removal location;
- Asphalt restoration at 1,000-Gallon UST removal location;

SvE demobilized from the Niagara Falls USARC project site on 23 September 1999. The asphalt restoration took place on 30 September 1999. The drummed product and groundwater was disposed of by the 77th RSC.

2.0 TANK REMOVAL SUMMARY

2.1 Notifications

SvE, in coordination with the USACE and the 77th RSC, processed all necessary NYSDEC notifications for the UST removals at Niagara Falls USARC. The notifications identified in this section are based on the requirements set forth in the NYSDEC Petroleum Bulk Storage Requirements (6 NYCRR Part 612, 613, and 614). A copy of the Niagara Falls USARC, Notification of UST Removal Form is included in Appendix A of this report.

2.2 Tank Excavation and Removal

2.2.1 550-Gallon Tank

On 19 August 1999, prior to construction activities at Niagara Falls USARC, SvE sampled the contents of the UST and OWS. A composite sample was acquired by combining samples collected from the contents of the UST and OWS. The composite sample (sample number NFAC-TC-P-01) was analyzed for hazardous waste parameters, in order to properly characterize the waste for disposal. The waste oil and water were determined to be RCRA hazardous, based upon a review of the resulting analytical data. A copy of the analytical data for the UST/OWS contents is included in Appendix F of this report.

On 20 September 1999, the UST and OWS contents were removed and transferred into 55-gallon drums, by Environmental Products and Services (EPS), utilizing a vacuum truck. A total of six drums were labeled and staged on site, for subsequent disposal by the 77TH RSC. The vacuum truck was decontaminated following the transfer activities.

The atmospheric conditions inside the UST were assessed with a triple gas meter prior to the removal of the tank. The tank atmosphere contained between 19.5% and 23.5% oxygen and did not exceed 10% of the Lower Explosive Limit (LEL). The atmosphere was also measured for levels of volatile organic compounds (VOCs) using a photoionization detector (PID).

On 20 September 1999, upon confirmation of satisfactory atmospheric conditions inside the tank, the tank was removed by EPS, serving as the SvE construction subcontractor. The tank was buried between a sanitary sewer line and an abandoned concrete footer. The position of the tank relative to the footer and the sanitary line made it impossible to remove the tank intact. The tank was demolished in the ground and removed in pieces. Groundwater infiltrated into the tank and mixed with tank residuals, creating a sheen on the surface of the groundwater. The spill was reported by the 77th RSC, Mr. Ravi Ajodah, REMSA, Inc. Ms. Linda Grimmer (EPS) began communication with Mr. Sal Calandra, NYSDEC Region 9 in regard to the spill. Mr. Dave Martin, of Niagara County Health Department, arrived on site to observe the excavation and its subsequent

backfill. The minutes of the spill report are included in Appendix I of this report. Because the groundwater displayed a visible sheen, it was pumped from the excavation and stored in 55-gallon drums while awaiting transportation and disposal. Approximately 400 gallons (8 drums) of groundwater were removed from the excavation pit for disposal. In the 30 minutes following the collection of accumulated groundwater and prior to backfill, it was observed that the pit remained dry (groundwater did not recharge the excavation pit). The drums containing groundwater were labeled by SvE and were disposed of by the 77TH RSC.

Two drums of waste soil/debris were collected during tank removal and cleaning of the OWS and wash rack trench drain. The soil and debris appeared oily and displayed a strong petroleum odor. Both drums were labeled by SvE and were disposed of by the 77TH RSC.

The piping from the OWS was cut at the excavation wall and plugged with hydraulic cement. The feed line from the OWS to the UST was plugged at the OWS with a 2-inch, threaded, galvanized steel plug. The vent line from the UST was cut at the excavation wall and capped with hydraulic cement. The vent line from the OWS was left in place.

The UST was removed in pieces and cleaned prior to disposal at the CID Chaffee Landfill, in Chaffee, NY. The fiberglass UST removed from the Niagara Falls USARC was combined with the tanks removed from PFC Deglopper and Amherst USARCs in one roll-off container, which was transported to the CID Chaffee Landfill. A copy of the certificate of disposal for the tank is included in Appendix G of this report. A copy of the Bill of Lading and the landfill ticket is included in Appendix B of this report.

Following collection of the groundwater, inspection of the excavation, and field screening and sampling of the soil, the excavation pit was backfilled. Section 3.0 of this report provides specific information regarding the closure samples collected during the UST removal activities.

2.2.2 1,000-Gallon Tank

On 19 August 1999, prior to construction activities at Niagara Falls USARC, SvE sampled the contents of the 1,000-gallon UST. The OWS was inside a concrete vault and was not accessible for sample collection. The sample (number NFAC-TC-P-02) was analyzed for hazardous waste parameters to characterize the waste for disposal. The contents of the tank appeared to be water, containing no visible oil. The tank contents were analyzed and determined to be non-hazardous. A copy of the analytical data for the UST contents is included in Appendix E of this report.

On 14 September 1999, the UST contents were removed using the EPS vacuum truck. Approximately 1,961 gallons of liquid were collected from the UST, indicating that approximately 961 gallons of liquid was removed from the OWS, which was connected to the tank. The liquid waste was transported by Environmental Products and Services

(EPS) for treatment and disposal at Environmental & Industrial Contracting Services (EICS) in Niagara Falls, NY. An additional 250 gallons of water were removed from the tank on 20 September 1999 and transported by EPS for treatment and disposal by EICS. Copies of the Bills of Lading for 14 September 1999 and 20 September 1999 are included in Appendix B of this report.

The atmospheric conditions inside the UST were assessed with a triple gas meter prior to the removal of the tank. The tank atmosphere contained between 19.5% and 23.5% oxygen and did not exceed 10% of the Lower Explosive Limit (LEL). The atmosphere was also measured for levels of volatile organic compounds (VOCs) using a photo-ionization detector (PID).

On 22 September 1999, upon confirmation of satisfactory atmospheric conditions inside the tank, the tank was removed by EPS, serving as the SvE construction subcontractor. The tank was buried approximately 8 feet below grade, under asphalt, and next to the concrete vault. Groundwater infiltrated into the tank during removal activities, there was no visible sheen on the surface of the groundwater. The piping from the OWS was cut inside the concrete vault and plugged with hydraulic cement and a 2-inch wing nut expandable plug. The vent line from the tank, originally connected to the OWS vent line with a tee connection, was disconnected at a 2-inch elbow fitting and capped underground with a 2 inch galvanized steel plug. The 4-inch OWS vent line was thereby isolated and left in place.

During the lifting of the tank from a depth of 8 feet below grade, the tank was inadvertently turned over in the excavation pit, allowing groundwater to flow into and out of several openings in the tank. The water drained from the tank did not appear to contain sludge materials or display a petroleum sheen.

The tank was a double wall steel tank, it was in good condition, with no visible pits or holes. The tank was cut open and cleaned prior to recycling at the Lake Erie Recycling Corp. in Buffalo, NY. A copy of the certified scale ticket of recycling for the tank is included in Appendix B of this report.

Following inspection of the excavation, field screening and sampling of the soil, and groundwater sample collection, the excavation was backfilled. Section 3.0 of this report describes closure sampling activities during the UST removal.

2.3 Site Restoration

2.3.1 550-Gallon Tank

The excavation was backfilled with crusher run material and the excavated soil stockpiled on site. The backfill was performed in 12-inch lifts, which were compacted using the backhoe. When the excavation was filled to within four feet of grade, a walk-behind, vibratory tamper was used to compact the sub-base material. Six inches of reinforced concrete was restored over the excavation area on 23 September 1999.

2.3.2 1,000-Gallon Tank

The excavation was backfilled with crusher run material and the excavated soil stockpiled on site. Backfill of the excavation was performed in 12-inch lifts, which were compacted using the backhoe. When the excavation was filled to within four feet of grade, a walk-behind, vibratory tamper was used to compact the sub-base material. Five inches of asphalt was restored over the excavation area on 30 September 1999.

3.0 SITE ASSESSMENT

3.1 Initial UST/OWS Sampling Activities

3.1.1 550-Gallon Tank

SvE collected a composite sample of the UST and OWS contents on 19 August 1999, prior to UST removal activities, to characterize the waste for disposal in accordance with local, state, and federal regulations. The sample from the tank was collected using a clean, six foot long sample bailer, in order to provide a representative sample from the tank contents. The tank contents appeared to be a mixture of waste oil and water. The sample from the OWS appeared to be mostly waste oil. The UST and OWS grab samples were combined to create one composite sample.

This sample was numbered NFAC-TC-P-01, where NFAC is Niagara Falls Army Center, TC is Tank Contents, P is Product, and 01 is the first sample collected at the site under this tank removal project. The sample was packed in an ice filled cooler and shipped to Specialized Assays, Inc. in Nashville, TN, to be analyzed for PAHs, VOAs, PCBs, TCLP Metals, Ignitability, Corrosivity, and Reactivity. Specialized Assays, Inc. is certified by the USACE, MRD and by the New York State Department of Health.

The resulting analytical data indicated that the UST and OWS contents were classified as hazardous waste. The TCLP Metals analytical results for Lead, Cadmium, and Selenium were reported above regulatory limits. The analytical parameters, methods, and results for the UST/OWS contents composite samples are summarized in Table 1. The analytical data for the UST/OWS contents samples, provided by Specialized Assays, Inc., are included in Appendix E of this report.

3.1.2 1,000-Gallon Tank

SvE collected a composite sample of the UST contents on 19 August 1999, prior to UST removal activities, to characterize the waste for disposal in accordance with local, state, and federal regulations. The sample from the tank was collected using a clean, six foot long sample bailer, in order to provide a representative sample of the tank. The tank contents appeared to be water, with no visible signs of oil.

This sample was numbered NFAC-TC-P-02, where NFAC is Niagara Falls Army Center, TC is Tank Contents, P is Product, and 02 is the second sample collected at the site under this tank removal project. The sample was packed in an ice filled cooler and shipped to Specialized Assays, Inc. in Nashville, TN, to be analyzed for PAHs, VOAs, PCBs, TCLP Metals, Ignitability, Corrosivity, and Reactivity.

The resulting analytical data indicated that the UST and OWS contents were classified as non-hazardous. The analytical parameters, methods, and results for this UST sample are summarized in Table 2. The analytical data for the UST contents sample, provided by Specialized Assays, Inc., are included in Appendix E of this report.

Table 1
550-Gallon Tank – Initial UST/OWS Sample # NFAC-TC-P-01
Analytical Data Summary

Analytical Parameter	USEPA SW-846 Analytical Method	Concentration or Results (ppm)
PAHs (Hits Only)		
Fluorene	8270	1.65
Phenanthrene	8270	3.76
VOAs (Hits Only)		
Naphthalene	8260	7.1
Miscellaneous		
PCBs	8082	Non-detect
TCLP Metals-Arsenic & Mercury	1311/6010B	Non-detect
TCLP Metals-Barium	1311/6010B	31.2
TCLP Metals-Cadmium	1311/6010B	2.4
TCLP Metals-Chromium	1311/6010B	3.8
TCLP Metals-Lead	1311/6010B	24.8
TCLP Metals-Selenium	1311/6010B	2.0
TCLP Metals-Silver	1311/6010B	2.2
Corrosivity	1100	Not Corrosive
Reactive Cyanide	USEPA SW-846	Non-detect
Reactive Sulfide	USEPA SW-846	94.0
Ignitability	1020M	>200 °F

Table 2
1,000-Gallon Tank – Initial UST/OWS Sample # NFAC-TC-P-02
Analytical Data Summary

Analytical Parameter	USEPA SW-846 Analytical Method	Concentration or Results
PAHs	8270	Non-detect
VOAs	8260	Non-detect
PCBs	8082	Non-detect
TCLP Metals	1311/6010B	Non-detect
Corrosivity	1100	Not Corrosive
Reactive Cyanide	USEPA SW-846	Non-detect
Reactive Sulfide	USEPA SW-846	Non-detect
Ignitability	1020M	>200 °F

3.2 UST Closure Sampling

3.2.1 550-Gallon Tank

Soil excavated from around the tank was field screened for petroleum contamination through visual assessment and headspace analysis using a PID. Field samples of the excavated soil yielded non-detectable headspace VOC concentrations. The stockpiled excavated soil was deemed acceptable backfill material in accordance with NYSDEC procedures and was used in backfill operations.

All closure samples were analyzed in accordance with the NYSDEC STARS Memo #1. Since the tank contents were determined to be RCRA hazardous, the excavation soil was also sampled for hazardous waste parameters. Two composite soil samples, one from the excavation floor and one from the excavation side-walls, were collected for analysis. No groundwater closure samples were taken, since the groundwater was removed from the excavation and disposed of. Figure 4 identifies the approximate locations of the closure samples collected by SvE. The two closure samples were submitted to Specialized Assays, Inc. for analysis. Table 3 provides an analytical data summary for the closure samples taken during the removal of the 550-gallon UST and the Specialized Assays, Inc. analytical data report for the closure samples is included in Appendix F of this report.

3.2.2 1,000-Gallon Tank

Soil excavated from around the tank was field screened for petroleum contamination through visual assessment and headspace analysis using a PID. Field samples of the excavated soil yielded non-detectable headspace VOC concentrations. The stockpiled excavated soil was deemed acceptable backfill material in accordance with NYSDEC procedures and was used in backfill operations.

Subsequent to field screening activities in the excavation pit, excavation activities were halted and groundwater and soil closure samples were collected. All closure samples were analyzed in accordance with the NYSDEC STARS Memo #1. Two composite soil samples, both from the excavation floor, were collected for analysis. Samples of the excavation side-walls were not collected, because the side-wall was comprised of pea-gravel. One groundwater closure sample was collected for analysis. Figure 4 identifies the approximate locations of the closure samples collected by SvE. The three closure samples were submitted to Specialized Assays, Inc. for analysis. Table 4 provides an analytical data summary for the closure samples taken during the removal of the 1,000-gallon tank and the Specialized Assays, Inc. analytical data for the closure samples is included in Appendix F of this report.

TABLE 3

**NIAGARA FALLS USARC - UST CLOSURE SUMMARY
550-GALLON TANK
ANALYTICAL DATA SUMMARY**

STATS MEMO #1 GUIDANCE VALUES										NIAGARA FALLS USARC-UST CLOSURE SAMPLE NUMBER		
Compound	EPA Method	Detection Limit (ppb)		Soil (CLP) AGV (ppb)	Water (TCLP) EGV (ppb)	HHGV (ppb)	Laboratory Quantitation Limit (ppb)	NFAC-ES-S-03 (ppb)	NFAC-SW-S-04 (ppb)			
		Solid	Liquid									
Benzene	8021	2	1	14	0.7	2.40E+04	1	ND	ND			
Ethylbenzene	8021	2	1	100	5	8.00E+06	1	ND	ND			
Toluene	8021	2	1	100	5	2.00E+07	1	ND	ND			
o-Xylene	8021	2	2	100	5	2.00E+08	1	ND	ND			
m,p-Xylenes	8021	2	2	100	5	2.00E+08	1	ND	ND			
Isopropylbenzene	8021	1	1	100	5	***	1	ND	ND			
n-Propylbenzene	8021	1	1	100	5	***	1	ND	ND			
4-Isopropyltoluene	8021	1	1	100	5	***	1	ND	ND			
1,2,4-Trimethylbenzene	8021	1	1	100	5	***	1	ND	ND			
1,3,5-Trimethylbenzene	8021	1	1	100	5	***	1	ND	ND			
n-Butylbenzene	8021	1	1	100	5	***	1	ND	ND			
sec-Butylbenzene	8021	1	1	100	5	***	1	ND	ND			
t-Butylbenzene	8021	1	1	100	5	***	1	ND	ND			
Naphthalene	8021	1	1	200	10	3.00E+05	1	ND	ND			
Anthracene	8270	330	330	1,000	50	2.00E+07	165	ND	ND			
Fluorene	8270	330	330	1,000	50	3.00E+06	165	ND	ND			
Phenanthrene	8270	330	330	1,000	50	***	165	ND	ND			
Pyrene	8270	330	330	1,000	50	2.00E+06	165	ND	ND			
Acenaphthene	8270	330	330	400	20	5.00E+06	165	ND	ND			
Benzo(a)anthracene	8270	330	330	0.04	0.002	220	165	ND	ND			
Fluoranthene	8270	330	330	1,000	50	3.00E+06	165	ND	ND			
Benzo(b)fluoranthene	8270	330	330	0.04	0.002	220	165	ND	ND			
Benzo(k)fluoranthene	8270	330	330	0.04	0.002	220	165	ND	ND			
Chrysene	8270	330	330	0.04	0.002	***	165	ND	ND			
Benzo(a)pyrene	8270	330	330	0.04	0.002	61	165	ND	ND			
Benzo(g,h,i)perylene	8270	330	330	0.04	0.002	***	165	ND	ND			
Indeno(1,2,3-cd)pyrene	8270	330	330	0.04	0.002	***	165	ND	ND			
Naphthalene	8270	330	6	200	10	3.00E+05	165	ND	ND			
Dibenz(a,h)anthracene	8270	330	330	1,000	50	14	165	ND	ND			

HHGV=Human Health Guidance Value
ND=Not Detected at report limit

AGV=Alternative Guidance Value
NR=Not reported

EGV=Extraction Guidance Value
***=None identified in EPA HEARST Report
Bold indicates contaminant concentrations greater than the TCLP AGV or the TCLP EGV for a solid or liquid matrix, respectively.

TABLE 4

NIAGARA FALLS USARC - UST CLOSURE SUMMARY
1,000-GALLON TANK
ANALYTICAL DATA SUMMARY

STAR MEMO #1 GUIDANCE VALUES										NIAGARA FALLS USARC-UST CLOSURE SAMPLE NUMBER			
Compound	EPA Method	Detection Limit (ppb)		Soil TCLP AGV (ppb)	Water TCLP EGV (ppb)	HHGV (ppb)	Laboratory Quant Limit (ppb)		NFAC-GW-W-05 (ppb)	Laboratory Quant Limit (ppb)		NFAC-ES-S-06 (ppb)	NFAC-ES-S-07 (ppb)
		Solid	Liquid										
Benzene	8021	2	1	14	0.7	2.40E+04	1	1	ND	1	1	ND	ND
Ethylbenzene	8021	2	1	100	5	8.00E+06	1	1	ND	1	1	ND	ND
Toluene	8021	2	1	100	5	2.00E+07	1	1	ND	1	1	ND	ND
o-Xylene	8021	2	2	100	5	2.00E+08	1	1	ND	1	1	ND	ND
m,p-Xylenes	8021	2	2	100	5	2.00E+08	1	1	1.3	1	1	ND	ND
Isopropylbenzene	8021	1	1	100	5	***	1	1	ND	1	1	1.1	ND
n-Propylbenzene	8021	1	1	100	5	***	1	1	1.0	1	1	ND	ND
4-Isopropyltoluene	8021	1	1	100	5	***	1	1	2.3	1	1	2.4	ND
1,2,4-Trimethylbenzene	8021	1	1	100	5	***	1	1	6.9	1	1	2.4	ND
1,3,5-Trimethylbenzene	8021	1	1	100	5	***	1	1	2.8	1	1	2.2	ND
n-Butylbenzene	8021	1	1	100	5	***	1	1	12.4	1	1	4.6	ND
sec-Butylbenzene	8021	1	1	100	5	***	1	1	2.1	1	1	2.2	ND
t-Butylbenzene	8021	1	1	100	5	***	1	1	1.2	1	1	ND	ND
Naphthalene	8021	1	1	200	10	3.00E+05	1	1	17.5	1	1	3.8	ND
Anthracene	8270	330	330	1,000	50	2.00E+07	5	5	ND	165	165	ND	ND
Fluorene	8270	330	330	1,000	50	3.00E+06	5	5	ND	165	165	ND	ND
Phenanthrene	8270	330	330	1,000	50	***	5	5	6.0	165	165	561	561
Pyrene	8270	330	330	1,000	50	2.00E+06	5	5	ND	165	165	594	726
Acenaphthene	8270	330	330	400	20	5.00E+06	5	5	ND	165	165	ND	ND
Benzo(a)anthracene	8270	330	330	0.04	0.002	220	5	5	ND	165	165	297	396
Fluoranthene	8270	330	330	1,000	50	3.00E+06	5	5	6.0	165	165	792	957
Benzo(b)fluoranthene	8270	330	330	0.04	0.002	220	5	5	ND	165	165	231	264
Benzo(k)fluoranthene	8270	330	330	0.04	0.002	220	5	5	ND	165	165	264	363
Chrysene	8270	330	330	0.04	0.002	***	5	5	ND	165	165	297	429
Benzo(a)pyrene	8270	330	330	0.04	0.002	61	5	5	ND	165	165	297	396
Benzo(g,h,i)perylene	8270	330	330	0.04	0.002	***	5	5	ND	165	165	165	198
Indeno(1,2,3-cd)pyrene	8270	330	330	0.04	0.002	***	5	5	ND	165	165	165	ND
Naphthalene	8270	330	6	200	10	3.00E+05	5	5	ND	165	165	ND	ND
Dibenz(a,h)anthracene	8270	330	330	1,000	50	14	5	5	ND	165	165	ND	ND

HHGV=Human Health Guidance Value

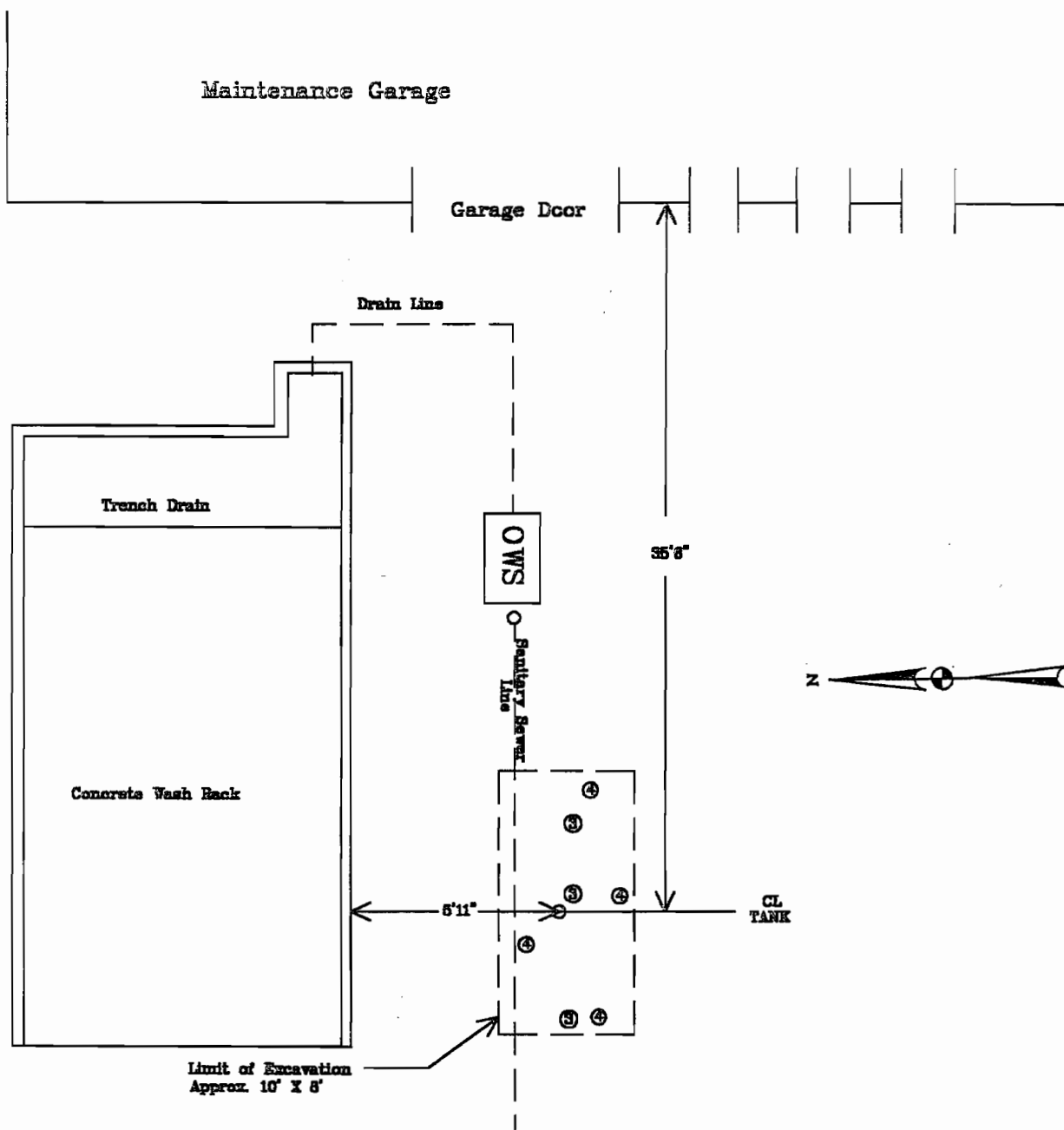
AGV=Alternative Guidance Value

EGV=Extraction Guidance Value

ND=Not Detected at report limit

NR=Not reported

***=None identified in EPA HEARST Report
Bold indicates contaminant concentrations greater than the TCLP AGV or the TCLP EGV for a solid or liquid matrix, respectively.



SAMPLE NUMBER IDENTIFICATION:

NFAC-ES-S-03 = COMPOSITE SOIL SAMPLE OF EXCAVATION FLOOR = 3
 NFAC-SW-S-04 = COMPOSITE SOIL SAMPLE OF EXCAVATION SIDEWALLS = 4

DESIGNED R.G.
 CHECKED _____
 APPROVED _____

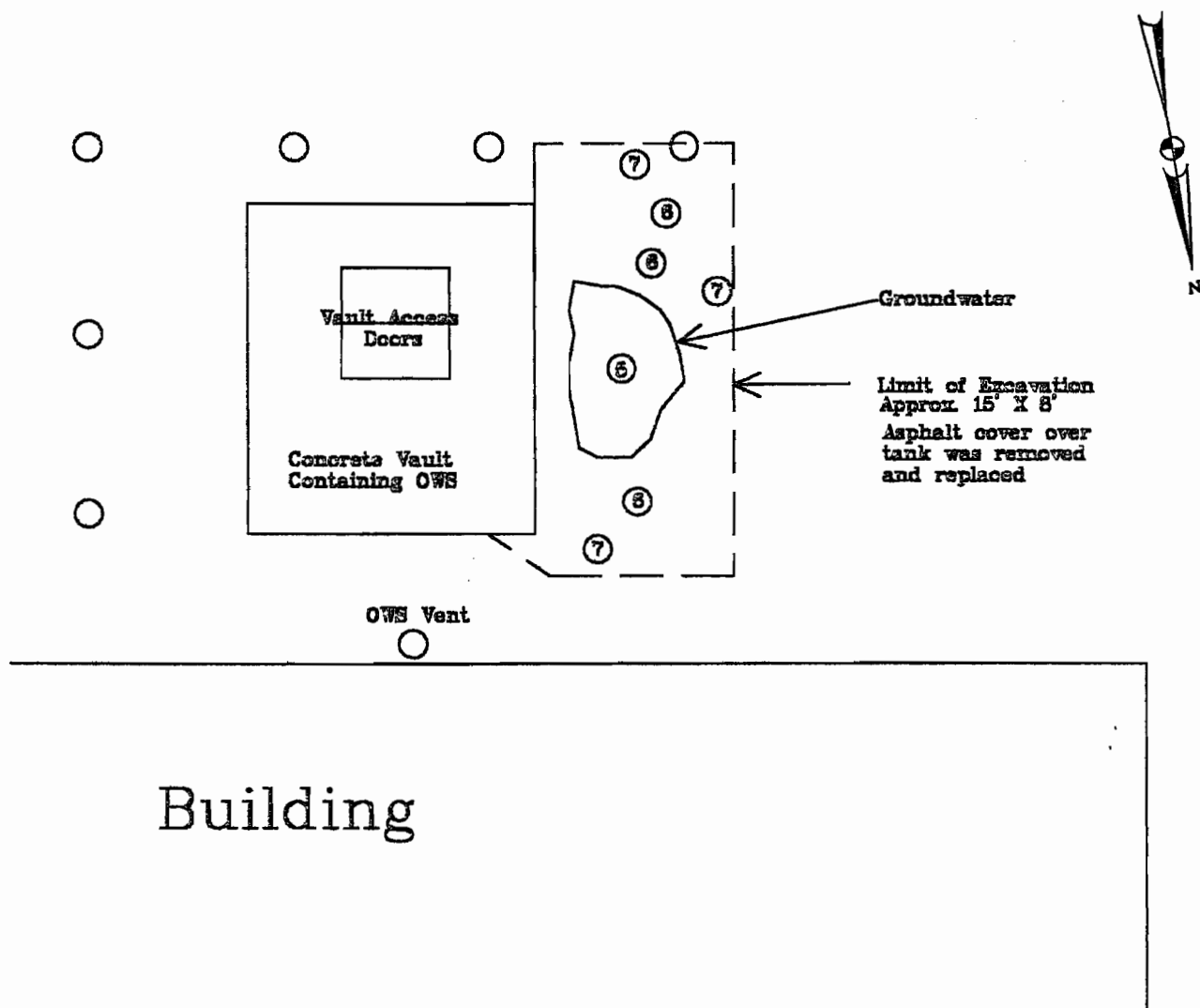
SVERDRUP ENVIRONMENTAL, INC.
 575 SOUTH CHARLES ST., ST. 404
 BALTIMORE, MD 21201
 Phone: 410-837-5840 Fax: 410-837-3277

**FIGURE 4-UST CLOSURE SAMPLE LOCATIONS
 NIAGARA FALLS USARC
 AS-BUILT DRAWING**

SCALE: NTS CONTRACT NO. DACW41-93-D-0055 DATE 10/20/93

SAMPLE NUMBER IDENTIFICATION:

NFAC-GW-W-05 = GRAB SAMPLE OF EXCAVATION GROUNDWATER = 5
 NFAC-ES-S-06 = COMPOSITE SOIL SAMPLE OF EXCAVATION FLOOR = 6
 NFAC-ES-S-07 = COMPOSITE SOIL SAMPLE OF EXCAVATION FLOOR = 7



Building

DESIGNED _____
 BY R.G.
 CHECKED _____
 APPROVED _____

SVERDRUP ENVIRONMENTAL, INC.
 575 SOUTH CHARLES ST., ST. 404
 BALTIMORE, MD 21201
 Phone: 410-837-5840 Fax: 410-837-3277

FIGURE 5-USF CLOSURE SAMPLE LOCATIONS
 NIAGARA FALLS USARC
 AS-BUILT DRAWING

SCALE: NTS DRAWING NO.: DACAS1-88-D-0082 DATE: 10/20/88

3.3 Sample Labeling, Custody, and Shipment

Laboratory supplied certified clean containers with Teflon-lined caps were used for each sample collected during the UST Removal activities at Niagara Falls USARC. Sample containers were labeled with water-resistant adhesive labels. The following information was recorded on each sample label, with black permanent ink:

- Project name (Niagara Falls - UST Removal)
- Date and time of collection;
- Sampler's name;
- Unique sample number;
- Indication of sample type and method of preservation (if applicable); and
- Requested analysis.

Chain-of-custody (COC) forms and custody seals were used to document that samples were released and received by the proper individuals and that shipping containers were not tampered with during transport to Specialized Assays, Inc. Chain of custody began at the time of sampling and ended upon receipt at the laboratory. The COC forms provide a record of the unique information given on each sample label and any remarks for each sample collected. The COC forms also provide a record of the signatures of persons who released and received the samples. Each COC form was completed and signed by the sampler and then signed again by the receiving individual at Specialized Assays, Inc. A copy of the COC form can be found in Appendix D of the report.

Sample bottles were carefully prepared and packaged for shipment to minimize bottle breakage and provide adequate sample temperature. Sample packages were delivered via Federal Express overnight service to the Specialized Assays, Inc. laboratory in Nashville, TN. Upon receiving the shipped coolers, Specialized Assays, Inc. personnel verified the following:

- The coolers were not damaged or leaking and the tamper-proof seals were not broken;
- Contents of cooler reflect the information provided on the chain-of-custody;
- Sample jars were not damaged or leaking; and
- The temperature of the cooler contents was below 4°C;

Any discrepancies between cooler contents and chain-of-custody forms and comments regarding damaged samples were noted in the "Remarks" section of the chain-of-custody form. The date, time, and signature were recorded on the chain-of-custody form acknowledging the condition and receipt of samples. Once the laboratory signed the chain-of-custody, it assumed responsibility for the proper storage, analysis and disposal of the samples.

4.0 REPORT SUMMARY

4.1 Conclusions, and Recommendations

4.1.1 550-Gallon Tank

Analytical results of the closure samples collected from the excavation of the 550-gallon UST, reported no compounds at concentrations above the NYSDEC STARS Memo #1 alternative guidance values (AGV) for solids. The SvE recommendation for closure of the 550-gallon UST, is that no further action is necessary at this time.

4.1.2 1,000-Gallon Tank

Analytical results of the groundwater sample identified 1,2,4-Trimethylbenzene, n-Butylbenzene, and Naphthalene present in the excavation groundwater sample (NFAC-GW-W-05), at concentrations which exceeded the NYSDEC STARS Memo #1 extraction guidance values (EGV) for liquids.

Analytical results identified Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Benzo(a)pyrene, Benzo(g,h,i)perylene, and Indeno(1,2,3-cd)pyrene present in soil sample NFAC-ES-S-06, at concentrations which exceeded the NYSDEC STARS Memo #1 alternative guidance values (AGV) for solids. Analytical results identified Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Benzo(a)pyrene, and Benzo(g,h,i)perylene present in the soil sample NFAC-ES-S-07, at concentrations which exceeded the NYSDEC STARS Memo #1 alternative guidance values (AGV) for solids.

Although the excavation closure samples contained compounds at concentration levels above the NYSDEC AGV and EGV, the petroleum-impacted soil and water appears to be confined to a limited area and the probable sources of contamination, the UST and product piping, have been removed. Further, It is possible that the contaminants identified in the groundwater sample resulted from the mingling of residual waste oil inside the tank with the groundwater in the excavation, during tank removal. SvE, therefore, recommends that no further action be taken at this time.

It should be noted, however, that since these closure samples contained contaminant concentrations at levels above the NYSDEC STARS Memo #1 guidance values, subsequent site assessment and/or remedial action may be required by NYSDEC Region 9.

4.2 General Summary

Table 5 summarizes general project information regarding the removals of the 550-gallon and 1,000-gallon USTs at Niagara Falls USARC.

Table 5
UST Closure Information Summary

Item Description	550-Gallon UST	1,000-Gallon UST
Capacity (gallons)	550	1,000
Composition	Fiberglass	Steel
Previous Contents	Waste oil/water	Waste oil/water
Bulk Liquids Removed from UST (gal)	300	1,000
Bulk Liquids Removed from OWS(gal)	25	1,000
Length (feet)	6.0	10.75
Diameter (feet)	4.0	4.0
Condition	Good	Good
Contaminated soil disposal/recycle (drums)	2	0

4.3 Contractor List

Table 6 provides a contractor list that identifies all of the contractors who participated in the UST removal activities at Niagara Falls USARC. The table provides the contractor name, project role, location, and telephone number.

Table 6
Project Contractor List

Contractor	Project Role	Location	Telephone Number
Sverdrup Environmental, Inc.	Prime Contractor	Baltimore, MD	(410) 837-5840
Environmental Products and Services, Inc.	Subcontractor for construction activities	Buffalo, NY	(716) 447-4700
Specialized Assays, Inc.	Laboratory Analytical Services	Nashville, TN	(615) 726-0177

4.4 Post Closure

A copy of the Post Closure Summary Report, completed by SvE and submitted to the USACE and the 77TH RSC, is included in Appendix D of this report.

Appendix A

NYSDEC Notification Forms

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

PETROLEUM BULK STORAGE APPLICATION

Pursuant to the Petroleum Bulk Storage Law,

Article 17, Title 10 of ECL; 6 NYCRR 612-614 and 6 NYCRR, Subpart 360-14

(Continued on the Reverse Side—Please Be Sure to Complete Section B)

Please Type or Print Clearly
and Complete All Items

SECTION A—See Instructions on Cover Sheet

PHS NUMBER Indicate other existing DEC Numbers, if any, for this facility: CBS Number SPDES Number NYR00C444		FACILITY NAME Niagara Falls Armed Forces Reserve Center LOCATION (Not P.O. Boxes) 9400 Foster Rd. LOCATION (Continued)		CITY/TOWN/VILLAGE Niagara Falls COUNTY Niagara County TOWNSHIP OR CITY NY STATE NY ZIP CODE 14304-1698	
TRANSACTION TYPE (Check all that apply) NOTE: Transaction types 1, 2 and 5 may require a fee. 1 <input type="checkbox"/> New Facility 2 <input type="checkbox"/> Change of Ownership 3 <input checked="" type="checkbox"/> Substantial Tank Modification 4 <input type="checkbox"/> Information 5 <input type="checkbox"/> Renewal		NAME OF OPERATOR AT FACILITY Mr. Donner EMERGENCY CONTACT NAME Same FACILITY TELEPHONE NUMBER 716, 297-7340 EMERGENCY TELEPHONE NO. 1, 1		TYPE OF PETROLEUM FACILITY: (Check all that apply) A. <input type="checkbox"/> Storage Terminal/Petroleum Distributor B. <input type="checkbox"/> Retail Gasoline Sales C. <input type="checkbox"/> Other Retail Sales D. <input type="checkbox"/> Manufacturing E. <input type="checkbox"/> Utility F. <input type="checkbox"/> Trucking/Transportation G. <input type="checkbox"/> Apartment Building H. <input type="checkbox"/> School I. <input type="checkbox"/> Farm J. <input type="checkbox"/> Private Residence K. <input type="checkbox"/> Airline (Air Taxi) L. <input checked="" type="checkbox"/> Other (Specify Below) U.S. Army Reserve	
OWNER NAME 77th Regional Support Command ADDRESS (Street and/or P.O. Box) AFRC-CV-EN CITY Fort Totten STATE NY ZIP CODE 11359-1016 FEDERAL TAX ID NUMBER 1718, 352-5624 OWNER TELEPHONE NUMBER 1718, 352-5624		TYPE OF OWNER (Check only one) 1 <input type="checkbox"/> Private Resident 2 <input type="checkbox"/> State Government 3 <input type="checkbox"/> Local Government 4 <input checked="" type="checkbox"/> Federal Government 5 <input type="checkbox"/> Corporate/Commercial		I hereby certify under penalty of perjury that the information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.	
ATTENTION 77th RSC NAME OF COMPANY ADDRESS AFRC-CV-EN (Ramsdell) ADDRESS Fort Totten, NY CITY/STATE/ZIP CODE 11359-1016 TELEPHONE NUMBER 1718 352-2091		NAME OF OWNER OR AUTHORIZED REPRESENTATIVE Anthony J. Billello TITLE LTC, U.S. Army Reserve Acting DCS EN/6K SIGNATURE [Signature] DATE 28 SEP 99		AMOUNT ENCLOSED \$ 0	
Geographical Locator for this facility (if known) LATITUDE: DEG MIN SEC LONGITUDE: DEG MIN SEC		OFFICIAL USE ONLY Page ____ of ____ Date Received: ____/____/____ Date Processed: ____/____/____ Amount Received \$ ____ Reviewed By: ____			

Tank Information for Petroleum Bulk Storage Facility
SECTION B—See Instructions on Cover Sheet

Tank Number	Tank Location	Status	Installation or Permanent Closure Date (MO) (YR)		Capacity (gallons)	Product Stored	Tank Type	Tank Internal Protection	Tank External Protection	Piping Location	Piping Type	Piping Internal Protection	Piping External Protection	Secondary Containment	Leak Detection	Spill/Overfill Prevention	Dispenser	Last Test Date (Underground Tanks) (MO) (YR)
			(MO)	(YR)														
0W-1-18		4	07	89	550	05	3	4	2	1	0	0	0	0	0	0	3	
0W-2-4		4	07	89	550	05	3	4	2	1	0	0	0	0	0	0	3	

KEY FOR SECTION B

ACTION

- Initial Listing
- Add Tank
- Close/Remove Tank
- Information Correction
- Recondition/Repair/Refine Tank

TANK LOCATION

- Aboveground
- Aboveground on saddles, legs, stilts, rack, or cradle
- Aboveground: 10% or more below ground
- Underground
- Underground, vaulted, with access

STATUS

- In-service
- Temporarily out-of-service
- Closed—Removed
- Closed—In Place
- Tank Converted to Non-Regulated Use

PRODUCT STORED

- Empty
- Leaded Gasoline
- Unleaded Gasoline
- Nos. 1, 2, or 4 Fuel Oil
- Nos. 5 or 6 Fuel Oil
- Kerosene
- Diesel
- Lube Oil
- Used Oil
- Other*

TANK TYPE

- Steel/Carbon Steel
- Stainless Steel Alloy
- Concrete
- Fiberglass Coated Steel
- Fiberglass Reinforced Plastic (FRP)
- Epoxy/liner technology
- Other*

INTERNAL PROTECTION: Tank/Piping

- None
- Epoxy Liner
- Rubber Liner
- Fiberglass Liner (FR)
- Glass Liner
- Other*

PILING LOCATION

- None
- Aboveground
- Underground
- Underground/Combination
- None
- Vault
- Double-Walled Tank
- Excavation Liner
- Cut-off Walls
- Imperious Underlayment
- Earthen Dike
- Prefabricated Steel Dike
- Concrete Dike
- Synthetic Liner
- Natural Liner
- Other*

LEAK DETECTION

- None
- Interstitial Monitoring
- Vapor Well
- Groundwater Well
- In-Tank System
- Concrete Pad w/channels
- Double Bottom
- Other*

SPILL/OVERFILL PREVENTION

- None
- Flood Vent Valve
- High Level Alarm
- Automatic Shut-off
- Product Level Gauge
- Catch Basin
- Vent Whistle
- Other*

DISPENSER

- Submersible
- Suction
- Gravity

* If other, please list on separate sheet including Tank Number

Appendix B

Bills of Lading/Manifests for Waste Disposal/Recycling

STRAIGHT BILL OF LADING/NON-HAZ... DIOUS WASTE MANIFEST

10/20/1999 WED 11:59 FAX 716 447 4708 ENVIRONMENTAL PRODUCTS

009/021

1. Generator Information		Site Address:		Generator Telephone No.:		No.
Generator Name: ARMY		SAME				
Generator Mailing Address: 9400 PORTER AVENUE NIAGARA FALLS NY 14204						
2. Destination/Disposal Facility Information		Facility: 8335 QUARRY ROAD Site Address: NIAGARA FALLS NY 14304				
Company Name: ENVIRONMENTAL & INDUSTRIAL CONTRACTING SVCS.						
Telephone No.: 716 298-5297						
3. Transporter Information		Transporter 1 Company Name: ENVIRONMENTAL PRODUCTS & SERVICES		Transporter 2 Company Name:		
Telephone No.: 315 471-0503		Telephone No.:				
License Plate No.: DXS 797-NY		License Plate No.:				
4. Material/Waste Description		Material Description/Proper Shipping Name if DOT Hazardous Material		Hazard Class		
Containers: 1 HM		WASTES NON-PCRA LIQUID N.O.S. (CONTAINED IN 1 GALLON)		NON		
5. Job No. B2681		6. Approval Nos. a. EPS990907A b. c. EPS990907A d.		7. Purchase Order No. a.		
8. Generator Certification: I hereby certify the above-named materials are properly classified, described, packaged, marked, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.		9. Additional Information		Required Pictorial(s)		
Generator Name: Armed Forces Reserve Center		Generator Signature: [Signature]		Shipment Date: 9/14/99		
11. Acknowledgement of Receipt of Material - To be Completed by Signatories		Transporter 1 Driver Name (Print): [Signature]		Shipment Date: 9/14/99		
Transporter 2 Driver Name (Print): [Signature]		Signature: [Signature]		Shipment Date: [Signature]		
12. Facility Receiving Wastes - Authorized Agent		Contact Name: [Signature]		Receipt Date: [Signature]		
Emergency Telephone No.: ()		Contact Name: [Signature]		Required for transportation of DOT Hazardous Material only.		
14. Discrepancy Indication Space to be Completed by the Disposal Facility.		LTS 20-21 - incorrect calculation of Gallons. Correct Gallons are 1,961				

This form may not be used for wastes identified as hazardous under state or RCRA regulations.

White: Retained by TSDF Canary: Mailed by TSDF to EPS Branch Pink: Retained by Generator

Environmental Products & Services, Inc., P.O. Box 315, Syracuse, NY 13208

2031 ENV.200.9612

STRAIGHT BILL OF LADING/NON-HAZARDOUS WASTE MANIFEST

No.

Generator Information
 Generator Name: US ARMY
 Generator Mailing Address: 9400 PORTER AVENUE
 NIAGARA FALLS NY 14204
 Site Address: SAME
 Generator Telephone No.:
Destination/Disposal Facility Information
 Company Name: CID LANDFILL INC
 Telephone No.: 716 496-5514
 Facility Site Address: 10860 CLEAN ROAD
 CHAFFEE NY 14030
Transporter Information
 Transporter 1 Company Name:
 Telephone No.:
 License Plate No.:
 Transporter 2 Company Name:
 Telephone No.:
 License Plate No.:

Material/Waste Description		Container	Material Description/ Proper Shipping Name (DOT Hazardous Material)	Hazard Class	ID Number	Packing Group	Total Weight/Volume	Unit of Weight/Volume
No.	Type	Size						
001	RO	42	WASTE NON HAZARDOUS SOLID N.O.S. (CONCRETE, ASPHALT, FIBERGLASS TANKS)	NON HAZARDOUS	NONE	PG		P
002								
003								
004								
005								
006								
007								
008								
009								
010								
011								
012								
013								
014								
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097								
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099								
100								

Generator Name: Paul E. Dwyer Generator Signature: Paul E. Dwyer Shipment Date: 5/20/99

1. Acknowledgement of Receipt of Material - To be Completed by Signatories
 Transporter 1 Driver Name (Print): _____ Signature: _____ Shipment Date: _____
 Transporter 2 Driver Name (Print): _____ Signature: _____ Shipment Date: _____

2. Facility Receiving Wastes - Authorized Agent: _____ Signature: _____ Receipt Date: _____
 Emergency Telephone No.: _____ Contact Name: _____
 Discrepancy Indication Space to be Completed by the Disposal Facility: _____
 Required for Transportation of DOT Hazardous Material only

Paul E. Dwyer 44 306 0575 14 49 7444
 C.I.D. Landfill, Inc.
 10860 Clean Road
 Chaffee, NY 14030
 Fax (716) 406-5500

This form may not be used for wastes identified as hazardous under state or federal regulations.
 Wastes Retained by TSD Facility Retained by Generator
 Environmental Products & Services, Inc., P.O. Box 315, Syracuse, NY 13200

FROM: CID_REFUSE SERV

FAX NO.: 7164967325

11-04-99 04:13P P.02

C.I.D. LANDFILL CHAFFEE SITE
716/496-5000

TICKET DATE: 10/11/99

TICKET NUMBER: 306575
CUSTOMER NUMBER: 12.000

GENERATOR NUMBER: 32412.000

C.I.D. IND SUPPORT

ENVIRONMENTAL PROD. & SERVICE

10880 GLEAN RD
CHAFFEE, NY 140309400 PORTER AVE.
NIAGARA FALLS, NY 14304TRUCK NUMBER: 402902
ROUTE NUMBER:WASTE TYPE: GRAVEL MISC. -
APPLICATION #:

THEIR TICKET #: 10708

LOCATION: 6F1610

MANIFEST NUMBER:

MISC QUANTITY: 0.00

CONTAINER TYPE: 30

30 YD OPEN TOP

YARDAGE: 30.00

TIME IN: 10:40:30

GROSS WEIGHT: 62,720

TIME OUT: 11:06:43

TARE WEIGHT: 33,740

NET: 28,980

TONS: 14.49

10880 Glean Road
Chaffee, NY 14030-0799
(716) 496-5000
(800) 422-4040
(716) 496-5500 Fax

Ticket: 10708

Date Requested: 10/11/1999

opened by: MLATES

Date Dispatched: 10/11/1999

customer: 342-32412 ENVIRONMENTAL PROD. & SERVICE

9400 PORTER AVE

NIAGARA FALLS

NY 14304

716-447-4700

attn.: LINDA GRIMMER

requested by: FFY

Load Type: FULL FROM YARD
Dump Site: CID SOLID WASTE

Map Code Map Grid ORR

Service	Quantity	Yards	Weight	Job	Special Description
30YD OPEN TOP ROLLOFF	1.00	30			P45

Signature: _____

Date: _____

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED
TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CONTAINER REMOVED

30.992

CONTAINER DELIVERED

STRAIGHT BILL OF LADING/NON-HAZARDOUS WASTE MANIFEST

1. Generator Information		Site Address: SAME		No.	
Generator Name: US ARMY		Generator Telephone No.:			
Generator Mailing Address: PORTAGE RD		Facility			
NIGARA FALLS, NY		Site Address: 127 FILLMORE			
2. Destination/Disposal Facility Information		Buffalo, NY			
Company Name: LOUIS LEVIN		Transporter 2 Company Name:			
Telephone No.:		Telephone No.:			
License Plate No.: PHV(0288(NY))		License Plate No.:			
3. Transporter Information		Transporter 1 Company Name:			
ENVIRONMENTAL PRODUCTS		Telephone No.:			
License Plate No.:		License Plate No.:			
4. Material/Waste Description		Material Description/Proper Shipping Name (DOT Hazardous Material)		Unit of Weight/Volume	
Containers		Hazard Class		Total Weight/Volume	
No.	Type	HM	ID Number	Packing Group	
a. 001	TP		NONE		1000 P
b.					
c.					
d.					
5. Job No.		7. Purchase Order No.		9. Required Placard(s)	
6. Approval Nos.		Additional Information			
a.		b.			
c.		d.			
10. Generator Certification: I hereby certify the above-named materials are properly classified, described, packaged, marked, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.					
Generator Name: Nigara Falls APPL		Generator Signature: [Signature]		Shipment Date: 9/24/99	
11. Acknowledgement of Receipt of Material - To be Completed by Signatory		Signature: [Signature]		Shipment Date: 9/24/99	
Transporter 1 Driver Name (Print): CHARLES BLOWERS		Signature: [Signature]		Shipment Date: 9/24/99	
Transporter 2 Driver Name (Print):		Signature: [Signature]		Shipment Date: 9/24/99	
12. Facility Receiving Wastes - Authorized Agent:		Signature: [Signature]		Receipt Date: 9/24/99	
Emergency Telephone No.: (315) 471-0503		Contact Name: CHARLES BLOWERS		Required for transportation of DOT Hazardous Material only.	
14. Discrepancy Indication Space to be Completed by the Disposal Facility.					
[Signature]					

This form may not be used for wastes identified as hazardous under state or RCRA regulations.
 White: Retained by TSDF Canary: Mailed by TSDF to EPS Branch Pink: Retained by Generator

Lake Erie Recycling Corp. / Louis Levin Co.

Metalico - Buffalo

PO Box 6601 • 127 Fillmore Ave. • Buffalo, NY 14240-6601
Tel (716) 823-3788 • Fax (716) 825-6324

CERTIFIED SCALE TICKET

NO. 38343

DATE _____

2:14 PM 09 23 99

SHIPPED TO _____

RECEIVED FROM ENVIRONMENTAL PRODUCTS SERVICES

24000 lb

ADDRESS _____

MATERIALS SCRAP TANK 1000 GALLON

2:27 PM 09 23 99

22200 lb

PRICE _____

TRUCK # THICK BOX # _____

CARRIER Rev Dump

DRIVER ☒ ON ☐ OFF WEIGHED BY Mid

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-97

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NY 8210424273		Manifest Document No. NJ 2948675		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address NIAGARA FALLS AFRC U.S. ARMY 77TH RSC ENV. DIV. FORT TOTTEN NY 11359-1016				A. State Manifest Document Number NJA 2948675					
4. Generator's Phone (716) 297-7909				B. State Generator ID (Gen. Site Address) 9400 FORTER ROAD NIAGARA FALLS, NY 14304					
5. Transporter 1 Company Name ONYX ENVIRONMENTAL SVCS L.L.C.				6. US EPA ID Number NJ D090631369		C. State Trans. ID-NJDEP 086880			
7. Transporter 2 Company Name FRANK VALLAN TRUCK SERVICE INC.				8. US EPA ID Number NY D982792814		D. Transporter's Phone (716) 879-0650			
9. Designated Facility Name and Site Address ONYX ENVIRONMENTAL SERVICES L.L.C. 1 EDEN LANE FLANDERS, NJ 07836				10. US EPA ID Number NJ T080636503		E. State Trans. ID-NJDEP 50115			
11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group) HAZARDOUS WASTE, SOLID, n.o.s. (LEAD, CADMIUM, SELENIUM) 9, NA3077, III				12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
								I. Waste No.	
a. X				001		IM		00400	
b.				015		DM		06000	
c.									
d.									
J. Additional Descriptions for Materials Listed Above S/E SOIL ALSO D006, D010 MDCAA 7475, 1-55 GAL NONE, D00125, 15-55 GAL				K. Handling Codes for Wastes Listed Above a. SOIL b. SOIL					
15. Special Handling Instructions and Additional Information PACKING SLIPS ATTACHED FOR CLARIFICATION ONYX EMERGENCY PHONE 888 353-2387 **INVOICE ONYX-TON, NY2, PC056**									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name Patrick D. Patterson				Signature <i>[Signature]</i>		Month Day Year 11/02/99			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name MICHAEL J. FOSE				Signature <i>[Signature]</i>		Month Day Year 11/02/99			
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Leonard Mosen				Signature <i>[Signature]</i>		Month Day Year 11/08/99			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name Bob Wilton									
Signature <i>[Signature]</i>				Month Day Year 11/10/99					

Appendix C

UST Removal Site Activity Photographs

550-Gallon UST Removal



9/20/99 – Transfer of waste liquid from UST and OWS into 55-gallon drums, placed on staging pad.



9/20/99 – Transfer of waste soil/debris material from trench drain and OWS into 55-gallon drums.



9/20/99 - Hydraulic concrete breaker demolishing concrete cover above UST.



9/20/99 - UST ripped during excavation (groundwater entering). Sanitary line visible above the tank.



9/20/99 - Tank and piping removed and staged in pieces on plastic.



9/20/99 - Excavation pit following UST removal. Concrete footer and pooled groundwater are visible



9/20/99 – Transfer of groundwater from the excavation into 55-gallon drums.



9/20/99 - Outlet from OWS to UST is plugged with a threaded, two-inch, galvanized steel plug.



9/20/99 – Excavation pit following removal of the groundwater.



9/20/99 – Collecting samples of excavated soil.



9/21/99 - Compaction of sub-base material prior to installation of concrete.



9/23/99 - Concrete restoration following UST removal activities.



9/24/99 – Staged and labeled 55-gallon drums containing UST and OWS liquids, water, and soil/debris.

1,000-Gallon UST Removal



9/14/99 - Removing liquids from UST/OWS and concrete vault.



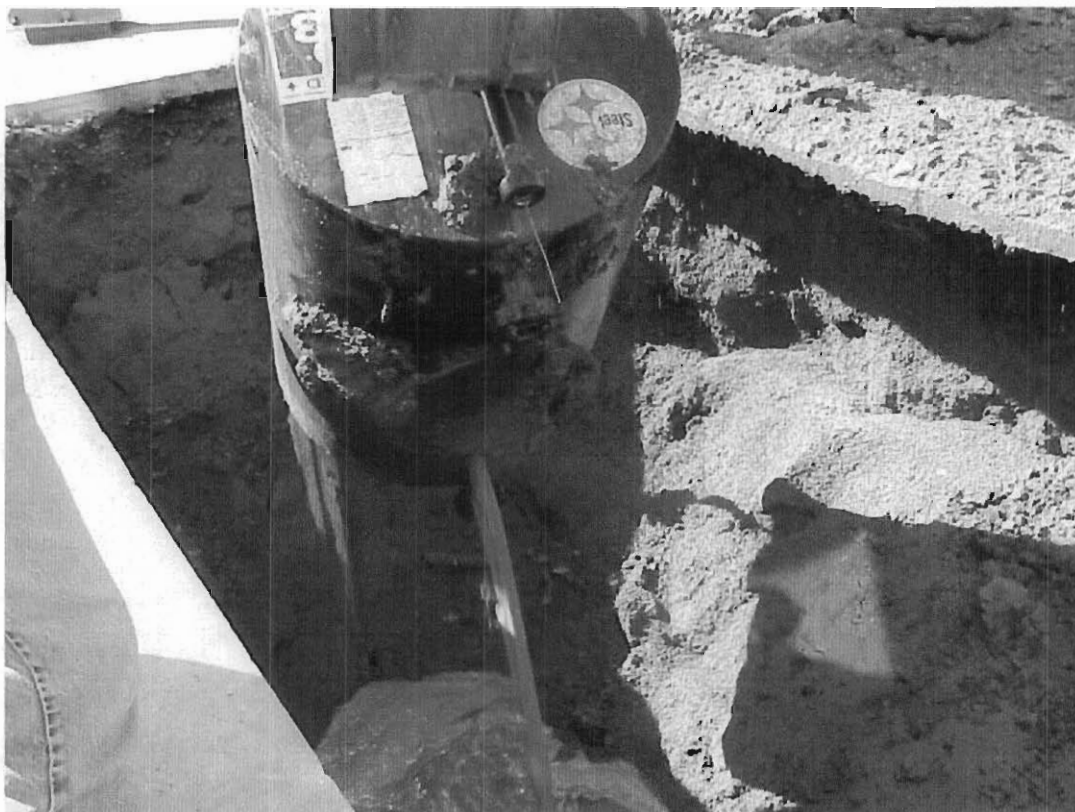
9/20/99 - Removing residual liquids from the UST, prior to tank removal.



9/22/99 - Hydraulic breaker demolishing asphalt cover above the UST.



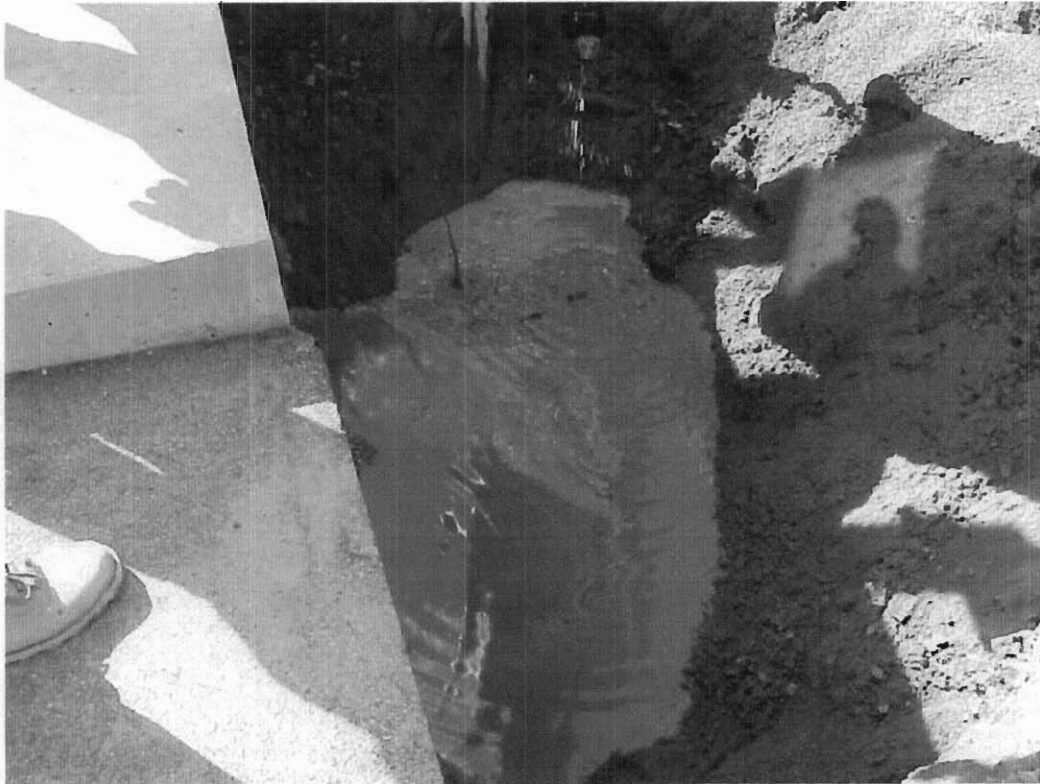
9/22/99 - Top of UST exposed during excavation. Oil feed line from OWS to the UST is visible.



9/22/99 – UST being removed from excavation. Groundwater visible in excavation pit.



9/22/99 – UST rendered useless prior to transportation to scrap yard.



9/22/99 – Excavation pit following UST removal. Groundwater contained no visible sheen.



9/23/99 – New OWS manway gasket and bolts. Piping from OWS to UST is cut/capped inside vault.



9/22/99 - Groundwater sample collection from the excavation pit.



9/22/99 - Collecting soil sample for VOC field screening via headspace analysis with a PID



9/22/99 – Preparation for asphalt restoration. Compacted sub-base with bollards reset and repainted.



9/30/99 – Completed asphalt and site restoration.

Appendix D

Post Closure Summary Report

UST-POST CLOSURE SUMMARY

Closure Date: 09/21/99

Regulatory Authority: NYSDEC-Region 9
270 Michigan Ave.
Buffalo, NY 14203-2999

Site Name and Address: Niagara Falls United States Army Reserve Center
9400 Porter Rd.
Niagara Falls, NY 14304

Owner's Name, Address:
And Phone Number Nickolas Christopher-Colonel, DCSENGR
AFRC-CNY-EN
Fort Totten, NY 11359-1016
(718)352-5624

Tank Size	Tank Mat'l	Tank Product	No. of Samples Taken	Contaminated Soil Disposed (Quantity)	Contaminated Groundwater Disposed (Quantity)	Condition Of Tank
550 G	FRP-SW	WO	1-EF 1-ESW	0	325 G	G

Key:

G=Gallons

FRP=Fiberglass Reinforced Plastic

STL=Steel

SW=Single Wall

DW=Double Wall

WO=Waste Oil and Water mixture

EF=Excavation Floor

ESW=Excavation Sidewall

GW=Groundwater

G=Good

F=Fair

P=Poor

Sample Numbering Key:

The samples are numbered in a format as follows:

AAAA-BB-C-01, where AAAA=Facility identification, BB=Sample type, C=sample matrix, 01=sample number. The following key may be helpful when reviewing sample results:

MCAC=McConnell Army Reserve Center

ES=Excavation sample

SW=Sidewall sample

GW=Groundwater

S=Soil

W=Water

Remarks:

Soil Samples were composites. Groundwater was drummed for disposal, therefore no samples were taken. Sample results are attached. A spill was reported during this UST removal due to groundwater mixing with tank residue and creating a sheen on the groundwater. Please see the attached notes regarding the details of the spill report.

9/21/99

NIAGARA FALLS USARC

2:30 Linda Gerner called Sal Chavira, NYSDEC
and left message

2:45 Sal paged Linda Gerner

2:46 Linda G. called Sal. Line was

busy

2:46 - 3:05 Linda G. continued attempts

line busy

3:05 Sal paged Linda G.

3:06 - Linda G. spoke to Sal.

He was aware that spill was
called in + thought Dave Brust from
Niagara County Health Dept.
was coming out.

- Sal asked if excavation was backfilled
- I informed backfilling had started
I asked if he wanted me to
stop backfilling he said no.
- Sal asked about circumstances of
spill report.

I indicated that slight sheen was
noted. Sheen was believed to
be from ground water mixing with
toxic residue. I informed him
that water was pumped into drums
and that toxic had been drawn

prior to attempting to pull

- I informed Sal that soil samples had been collected. I also asked if he would require a groundwater sample. He said soil samples were sufficient

- Sal stated that he would attempt to reach Dave must and confirm he was coming to the site

3:15

Dave Martin of MARION County Health Dept. arrived onsite and met with Dick.



PAUL R. DICKY
Assistant Public Health Engineer

439-7595

NIAGARA COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

~~R.O. BOYER~~
~~10th & D STREET~~
~~NIAGARA FALLS, NY 14302~~
~~OFFICE (716) 278-8787~~
~~TELEPHONE (716) 278-8787~~

5467 UPPER MT. ROAD
LOCKPORT, NY 14094
OFFICE (716) 439-7444
FAX (716) 439-7440

• 24-HOUR EMERGENCY NO. (716) 439-7430 •

NIAGARA County Health Dept

Dave Martin

439-7444



New York State
Department of
Environmental Conservation



MARVIN PRINGLE
Environmental Engineering Technician II
Spill Response Unit
Region 9

270 Michigan Avenue
Buffalo, NY 14203-2999
(716) 851-7220

24-Hour Spill Hotline
1 (800) 457-7362

ROLODEX

REFILL NO. S30 & S831
PATENTED

NYSDEC

851-7220

Sal Cichora

Environmental Engineer I

TABLE 2
Guidance Values for Fuel Oil Contaminated Soil*

Compound	EPA Method	Detection Limit ⁽¹⁾ (ppb)		TCLP Extraction Guidance Value ⁽²⁾ C _w (ppb)	TCLP Alternative Guidance Value C _s (ppb)	Human Health Guidance Value C _h (ppb)	Sediment Guidance Value C _s (ppb)	
		Liquid	Solid				Fresh	Marine
Benzene	8021 (8020)	1	2	0.7	14	2.4 x 10 ⁴		
Ethylbenzene	8021 (8020)	1	2	5	100	8.0 x 10 ⁶		
Toluene	8021 (8020)	1	2	5	100	2.0 x 10 ⁷		
o-Xylene	8021 (8020)	2	2	5	100	2.0 x 10 ⁸		
m-Xylene	8021 (8020)	2	2	5	100	2.0 x 10 ⁸		
p-Xylene	8021 (8020)	2	2	5	100	***		
Mixed Xylenes	8021 (8020)	2	2	5	100	2.0 x 10 ⁸		
Isopropylbenzene	8021	1	1	5	100	***		
n-Propylbenzene	8021	1	1	5	100	***		
p-Isopropyltoluene	8021	1	1	5	100	***		
1,2,4-Trimethylbenzene	8021	1	1	5	100	***		
1,3,5-Trimethylbenzene	8021	1	1	5	100	***		
n-Butylbenzene	8021	1	1	5	100	***		
sec-Butylbenzene	8021	1	1	5	100	***		
t-Butyl benzene	8021	1	1	5	100	***		
Naphthalene ⁽³⁾	8021 (8270)	1 (6)	1 (330)	10	200	3.0 x 10 ⁵		
Anthracene	8270	8	330	50	1,000	2.0 x 10 ⁷		
Fluorene	8270	8	330	50	1,000	3.0 x 10 ⁶		
Phenanthrene	8270	22	330	50	1,000	***		
Pyrene	8270	8	330	50	1,000	2.0 x 10 ⁶		
Acenaphthene	8270	8	330	20	400	5.0 x 10 ⁶		
Benzo(a)anthracene	8270	31	330	.002	.04 ⁽⁶⁾	220	33	18
Fluoranthene	8270	9	330	50	1,000	3.0 x 10 ⁵		

(CONTINUED ON THE NEXT PAGE)

TABLE 2 (Cont'd)
Guidance Values for Fuel Oil Contaminated Soil*

Compound	EPA Method	Detection Limit (ppb)		TCLP Extraction Guidance Value ⁽¹⁾ C _w (ppb)	TCLP Alternative Guidance Value C _a (ppb)	Human Health Guidance Value C _h (ppb)	Sediment Guidance Value C _s (ppb)	
		Liquid	Solid				Fresh	Marine
Benzo(b)fluoranthene	8270	19	330	.002	.04 ⁽⁴⁾	220	33	18
Benzo(k)fluoranthene	8270	10	330	.002	.04 ⁽⁴⁾	220	33	18
Chrysene	8270	10	330	.002	.04 ⁽⁴⁾	***	33	18
Benzo(a)pyrene	8270	10	330	.002	.04 ⁽⁴⁾	61	33	18
Benzo(g,h,i)perylene	8270	10	330	.002	.04 ⁽⁴⁾	***		
Indeno(1,2,3-cd)pyrene	8270	10	330	.002	.04 ⁽⁴⁾	***		
Dibenz(a,h)anthracene	8270	10	330	50	1,000	14		

*** Nuisance Characteristics Guidance:**

No Petroleum-type odors.

No individual contaminant in soil at greater than 10,000 ppb.

⁽¹⁾ The listed Detection Limits are Practical Quantitation Limits (PQL's). The Method Detection Limit (MDL) is the best possible detection. Laboratories report the Practical Quantitation Limit (PQL), which is generally 4 times the MDL. Efforts should be made to obtain the best detection possible when selecting a laboratory. When the Guidance Value or standard is below the detection limit, achieving the detection limit will be considered acceptable for meeting the Guidance Value or standard.

⁽²⁾ The TCLP Extraction Guidance Values are equal to the NYSDEC groundwater quality standards or Guidance Values, or the NYSDOH drinking water quality standards or Guidance Values, whichever is more stringent.

⁽³⁾ For naphthalene analysis in a liquid matrix, both Method 8021 and Method 8270 can provide satisfactory levels for comparison to the C_w of 10 ppb.

For naphthalene analysis in a solid matrix, Method 8021 is preferred over Method 8270 for comparison to the C_s of 200 ppb. If the C_s Guidance Value is not being used in the soil evaluation, then both Method 8021 and 8270 can provide satisfactory detection levels for comparison to the C_s of 3.0 x 10⁵, and nuisance characteristic of 10,000 ppb.

⁽⁴⁾ Due to the high detection limit for a solid matrix, the TCLP Extraction Method must be used to demonstrate groundwater quality protection for these compounds.

*** No Guidance Value identified in EPA HEAST Report.



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2960 Foster Creighton Dr.
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Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 7212
ROBERT GRIBBEN
575 S. CHARLES ST. STE 404
BALTIMORE, MD 21201

Lab Number: 79-A144500
Sample ID: NFAC-ES-S-00
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Benzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromoform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Butanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
n-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
sec-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
t-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Carbon disulfide	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Carbon tetrachloride	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Chloroethylvinylether	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chloroform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
4-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dibromo-3-chloropropane	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Dibromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dibromoethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Dibromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,3-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,4-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Dichlorodifluoromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
cis-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
trans-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,3-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924



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ANALYTICAL REPORT

Laboratory Number: 99-A144500

Sample ID: NFAC-ES-S-02

Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
cis-1,3-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
trans-1,3-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Ethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Hexachlorobutadiene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Hexanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Isopropylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
4-Isopropyltoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
4-Methyl-2-pentanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Methylene chloride	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Naphthalene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
n-Propylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Styrene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,1,2-Tetrachloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,2,2-Tetrachloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Tetrachloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Toluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,3-Trichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,4-Trichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,1-Trichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,2-Trichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Trichloroethene	0.0420	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,3-Trichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,4-Trimethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,3,5-Trimethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Vinyl chloride	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Xylenes	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromodichloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Trichlorofluoromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
PESTICIDE/PCP'S/HERBICIDES										
Aroclor 1016	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1221	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1232	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1242	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1248	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1254	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1260	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
GENERAL CHEMISTRY PARAMETERS										
Reactive Cyanide	ND	ng/kg	2.0	2.0	1	9/28/99	15:00	CHollingsworth	SM-846	1302
Reactive Sulfide	ND	ng/kg	20.0	20.0	1	9/28/99	15:00	CHollingsworth	SM-846	1302
Corrosivity	NOT CORROSIVE					9/23/99	18:35	McFarland	1110	8562
Ignitability	Not Ignitable up to 200 F					9/23/99	19:07	J. Brewer	1010M	7956



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2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 99-A144500

Sample ID: NFAC-ES-S-03

Page 3

ICLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Arsenic	< 0.10	ng/l	5.0	107		9/30/99	60100
Barium	1.18	ng/l	100	93		9/30/99	60100
Cadmium	< 0.100	ng/l	1.0	101		9/30/99	60100
Chromium	< 0.50	ng/l	5.0	96		9/30/99	60100
Lead	< 0.500	ng/l	5.0	103		9/30/99	60100
Mercury	< 0.210	ng/l	0.20	109		9/27/99	7470A
Selenium	< 0.100	ng/l	1.0	108		9/30/99	60100
Silver	< 0.10	ng/l	5.0	87		9/30/99	60100
ICLP Extraction	Initiated					9/22/99	1311

ND = Not detected at the report limit.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Wt/Vol		Date	Analyst	Method
	Extracted	Extract Vol			
PCB's	30.2 gm	10.0 ml	9/23/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
surr-1,2-Dichloroethane, d4	104.	48. - 160.
surr-Toluene d8	113.	79. - 119.
surr-4-Bromofluorobenzene	98.	69. - 135.
surr-Dibromofluoromethane	117.	63. - 135.
pcb surr-TCDF	114.	10. - 138.
pcb surr-PCB	114.	15. - 130.



**SPECIALIZED
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2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 99-A144500
Sample ID: NFAC-E5-S-03

Page 4

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: *Michael A. Dunn* Report Date: 5/30/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A. Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A144501
Sample ID: NFAC-SN-S-04
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS*										
Acetone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	8260B	7924
Benzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Bromobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Bromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Bromoform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Bromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
2-Butanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	8260B	7924
n-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
sec-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
t-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Carbon disulfide	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Carbon tetrachloride	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Chlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Chloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
2-Chloroethylvinylether	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Chloroform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Chloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
2-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
4-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2-Dibromo-3-chloropropane	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	8260B	7924
Dibromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2-Dibromoethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Dibromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,3-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,4-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Dichlorodifluoromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,1-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,1-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
cis-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
trans-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,3-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
2,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924



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ANALYTICAL REPORT

Laboratory Number: 79-A144501

Sample ID: NFAC-SN-S-04

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Analyte	Result	Units	Report Limit	Rush Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
cis-1,3-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
trans-1,3-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Ethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Hexachlorobutadiene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
2-Hexanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	82600	7924
Isopropylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
4-Isopropyltoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
4-Methyl-2-pentanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	82600	7924
Methylene chloride	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	82600	7924
Naphthalene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
n-Propylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Styrene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,1,1,2-Tetrachloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,1,2,2-Tetrachloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Tetrachloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Toluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2,3-Trichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2,4-Trichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,1,1-Trichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,1,2-Trichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Trichloroethane	0.0066	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2,3-Trichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2,4-Trinethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,3,5-Trinethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Vinyl chloride	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Xylenes	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Bromodichloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Trichlorofluoromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924

PESTICIDE/PCB'S/HERBICIDES

Aroclor 1016	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carmichael	8082	9335
Aroclor 1221	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carmichael	8082	9335
Aroclor 1232	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carmichael	8082	9335
Aroclor 1242	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carmichael	8082	9335
Aroclor 1248	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carmichael	8082	9335
Aroclor 1254	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carmichael	8082	9335
Aroclor 1260	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carmichael	8082	9335

GENERAL CHEMISTRY PARAMETERS

Reactive Cyanide	ND	ng/kg	2.0	2.0	1	9/28/99	15:00	Chollingsworth	SM-846	1302
Reactive Sulfide	ND	ng/kg	26.0	20.0	1	9/28/99	15:00	Chollingsworth	SM-846	1302
Corrosivity	NOT CORROSIVE					9/23/99	18:35	McFarland	1110	8582
Ignitability	Not ignitable up to 200 F					9/23/99	18:36	S. Brewer	1010M	8437



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ANALYTICAL REPORT

Laboratory Number: 97-A144501

Sample ID: NFAC-SN-S-04

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ICLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)			
Arsenic	< 0.10	ng/l	5.0	107		9/30/99	60100
Barium	< 1.00	ng/l	100	98		9/30/99	60100
Cadmium	< 0.100	ng/l	1.0	101		9/30/99	60100
Chromium	< 0.50	ng/l	5.0	98		9/30/99	60100
Lead	< 0.500	ng/l	5.0	100		9/30/99	60100
Mercury	< 0.010	ng/l	0.20	109		9/27/99	74700
Selenium	< 0.100	ng/l	1.0	100		9/30/99	60100
Silver	< 0.10	ng/l	5.0	89		9/30/99	60100
ICLP Extraction	Initiated					9/22/99	1311

ND = Not detected at the report limit.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Wt/Vol		Date	Analyst	Method
	Extracted	Extract Vol			
PCB's	30.5 gm	10.0 ml	9/23/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
surr-1,2-Dichloroethane, d4	95.	48. - 160.
surr-Toluene d8	113.	79. - 119.
surr-4-Fluorofluorobenzene	97.	69. - 135.
surr-Dibromofluoromethane	111.	63. - 135.
pcb surr-TCDF	112.	10. - 130.
pcb surr-PCB	114.	15. - 130.



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2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 97-A144501

Sample ID: NFAC-BN-S-04

Page 4

These results relate only to the items tested.
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Report Approved By:

Michael H. Dunn

Report Date: 9/30/98

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A. Lage, Technical Services

Laboratory Certification Number: 11342



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2960 Foster Creighton Dr.
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Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST. STE 404
BALTIMORE, MD 21201

Lab Number: 99-A144502
Sample ID: NFAC-ES-S-03
Sample Type: Soil
Site ID:

Project: 000223-004
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Fluorene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(a)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(a)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(b)fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(k)fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Chrysene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Dibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(g,h,i)perylene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Phenanthrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
VOLATILE ORGANICS by GC										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
sec-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Isopropylbenzene	ND	ng/kg	0.0010	0.0001	1	9/23/99	15:15	T McCollum	8021B	9480
4-Isopropyltoluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Toluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,2,4-Trimethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,3,5-Trimethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
m,p-Xylenes	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480

ND = Not detected at the report limit.



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ANALYTICAL REPORT

Laboratory Number: 97-A144302
Sample ID: NFAC-ES-S-03

Page 2

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
DMS's	27.6 gm	1.0 ml	9/23/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
FID Surr., a,a,a-trifluorotoluene	99.	50. - 150.
surr-Nitrobenzene-d5	47.	20. - 110.
surr-2-Fluorobiphenyl	52.	18. - 110.
surr-Terphenyl d14	56.	27. - 123.
Hall Surr., chloroprene	98.	67. - 125.
Hall Surr., 1-chloro-3-fluorobenzene	85.	60. - 137.

These results relate only to the items tested.

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Report Approved By:

Michael A. Dunn

Report Date: 9/30/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



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Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 7212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A144503
Sample ID: NFAC-SW-S-04
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Swas Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Fluorene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Benzo(a)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Benzo(b)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Benzo(k)fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Chrysene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Bibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Benzo(g,h,i)perylene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
Phenanthrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	M. Cobb	8270C	9214
VOLATILE ORGANICS by GC										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
sec-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Isopropylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
4-Isopropyltoluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Toluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,2,4-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,3,5-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
m,p-Xylene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480

ND = Not detected at the report limit.



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ANALYTICAL REPORT

Laboratory Number: 99-A144503
Sample ID: NFAC-SN-S-04

Page 2

Sample Extraction Data

Parameter	WT/Vol Extracted	Extract Vol	Date	Analyst	Method
DNA's	29.7 gm	1.0 ml	9/23/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
PID Surr., 2,2,2-trifluorotoluene	98.	50. - 150.
surr-Nitrobenzene-d5	56.	20. - 110.
surr-2-FLUORODIPHENYL	61.	18. - 110.
surr-Terphenyl d14	63.	27. - 128.
Hall Surr., chloroprene	96.	67. - 125.
Hall Surr., 1-chloro-3-fluorobenzene	89.	68. - 137.

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Report Approved By:

Michael H. Dunn

Report Date: 9/30/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



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PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	R.C. Batch
Naphthalene	ng/kg	< 0.165	< 0.165	3.33	N/A	54. - 128.	9214
Acenaphthene	ng/kg	< 0.165	1.52	3.33	46%	52. - 120.	9214
Anthracene	ng/kg	< 0.165	< 0.165	3.33	N/A	50. - 132.	9214
Fluoranthene	ng/kg	< 0.165	< 0.165	3.33	N/A	58. - 139.	9214
Fluorene	ng/kg	< 0.165	< 0.165	3.33	N/A	63. - 139.	9214
Pyrene	ng/kg	< 0.165	1.62	3.33	49	27. - 137.	9214
Benzo(a)anthracene	ng/kg	< 0.165	< 0.165	3.33	N/A	39. - 120.	9214
Benzo(a)pyrene	ng/kg	< 0.165	< 0.165	3.33	N/A	42. - 142.	9214
Benzo(b)fluoranthene	ng/kg	< 0.165	< 0.165	3.33	N/A	47. - 128.	9214
Benzo(k)fluoranthene	ng/kg	< 0.165	< 0.165	3.33	N/A	52. - 146.	9214
Chrysene	ng/kg	< 0.165	< 0.165	3.33	N/A	68. - 132.	9214
Dibenzo(a,h)anthracene	ng/kg	< 0.165	< 0.165	3.33	N/A	51. - 119.	9214
Indeno(1,2,3-cd)pyrene	ng/kg	< 0.165	< 0.165	3.33	N/A	53. - 153.	9214
Benzo(g,h,i)perylene	ng/kg	< 0.165	< 0.165	3.33	N/A	58. - 112.	9214
Phenanthrene	ng/kg	< 0.165	< 0.165	3.33	N/A	67. - 128.	9214
Benzene	ng/kg	< 0.0020	0.0533	0.0500	107	62. - 147.	7924
Chlorobenzene	ng/kg	< 0.0020	0.0524	0.0500	105	59. - 141.	7924
1,1-Dichloroethene	ng/kg	< 0.0020	0.0542	0.0500	108	61. - 143.	7924
Toluene	ng/kg	< 0.0020	0.0521	0.0500	104	57. - 136.	7924
Trichloroethene	ng/kg	< 0.0020	0.0533	0.0500	107	60. - 158.	7924
Benzene	ng/kg	< 0.0010	0.0193	0.0200	96	67. - 137.	9480
Toluene	ng/kg	< 0.0010	0.0193	0.0200	96	65. - 139.	9480
m,p-Xylenes	ng/kg	< 0.0010	0.0390	0.0400	99	58. - 136.	9480
Aroclor 1260	ng/kg	< 0.0200	0.1828	0.1667	110	17. - 145.	9335

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	R.C. Batch
Naphthalene	ng/kg	< 0.165	< 0.165	N/A	15.	9214
Acenaphthene	ng/kg	1.52	1.39	8.93	18.	9214
Anthracene	ng/kg	< 0.165	< 0.165	N/A	17.	9214
Fluoranthene	ng/kg	< 0.165	< 0.165	N/A	15.	9214
Fluorene	ng/kg	< 0.165	< 0.165	N/A	16.	9214
Pyrene	ng/kg	1.62	1.32	20.41%	20.	9214
Benzo(a)anthracene	ng/kg	< 0.165	< 0.165	N/A	21.	9214
Benzo(a)pyrene	ng/kg	< 0.165	< 0.165	N/A	20.	9214
Benzo(b)fluoranthene	ng/kg	< 0.165	< 0.165	N/A	25.	9214
Benzo(k)fluoranthene	ng/kg	< 0.165	< 0.165	N/A	43.	9214
Chrysene	ng/kg	< 0.165	< 0.165	N/A	11.	9214
Dibenzo(a,h)anthracene	ng/kg	< 0.165	< 0.165	N/A	37.	9214
Indeno(1,2,3-cd)pyrene	ng/kg	< 0.165	< 0.165	N/A	46.	9214
Benzo(g,h,i)perylene	ng/kg	< 0.165	< 0.165	N/A	46.	9214
Phenanthrene	ng/kg	< 0.165	< 0.165	N/A	17.	9214
Benzene	ng/kg	0.0533	0.0559	3.14	20.	7924
Chlorobenzene	ng/kg	0.0524	0.0519	0.96	30.	7924



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	MPD	Limit	R.C. Batch
1,1-Dichloroethene	ng/kg	0.0542	0.0545	4.16	21.	7924
Toluene	ng/kg	0.0521	0.0538	3.21	20.	7924
Trichloroethene	ng/kg	0.0533	0.0542	1.67	22.	7924
Benzene	ng/kg	0.0193	0.0203	5.05	19.	9480
Toluene	ng/kg	0.0193	0.0203	4.06	19.	9480
m,p-Xylenes	ng/kg	0.0390	0.0410	5.00	20.	9480
Aroclor 1260	ng/kg	0.1628	0.1661	1.77	46.	9335

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
Naphthalene	ng/kg	1.67	1.22	73	60 - 140	9214
Acenaphthene	ng/kg	1.67	1.06	63	60 - 140	9214
Anthracene	ng/kg	1.67	1.16	69	60 - 140	9214
Fluoranthene	ng/kg	1.67	1.29	77	60 - 140	9214
Fluorene	ng/kg	1.67	1.22	73	60 - 140	9214
Pyrene	ng/kg	1.67	1.35	81	60 - 140	9214
Benzo(a)anthracene	ng/kg	1.67	1.35	81	60 - 140	9214
Benzo(a)pyrene	ng/kg	1.67	1.22	73	60 - 140	9214
Benzo(b)fluoranthene	ng/kg	1.67	1.12	67	60 - 140	9214
Benzo(k)fluoranthene	ng/kg	1.67	1.48	89	60 - 140	9214
Chrysene	ng/kg	1.67	1.45	87	60 - 140	9214
Dibenzo(a,h)anthracene	ng/kg	1.67	1.52	91	60 - 140	9214
Indeno(1,2,3-cd)pyrene	ng/kg	1.67	1.42	85	60 - 140	9214
Benzo(g,h,i)perylene	ng/kg	1.67	1.42	85	60 - 140	9214
Phenanthrene	ng/kg	1.67	1.19	71	60 - 140	9214
Acetone	ng/kg	0.0500	0.4000	160	70 - 130	7924
Benzene	ng/kg	0.0500	0.0537	107	70 - 130	7924
Bromobenzene	ng/kg	0.0500	0.0502	100	70 - 130	7924
Bromochloromethane	ng/kg	0.0500	0.0527	105	70 - 130	7924
Bromoforn	ng/kg	0.0500	0.0512	102	70 - 130	7924
Bromomethane	ng/kg	0.0500	0.0584	117	70 - 130	7924
2-Butanone	ng/kg	0.0500	0.3610	144	70 - 130	7924
n-Butylbenzene	ng/kg	0.0500	0.0551	106	70 - 130	7924
sec-Butylbenzene	ng/kg	0.0500	0.0511	102	70 - 130	7924
t-Butylbenzene	ng/kg	0.0500	0.0514	103	70 - 130	7924
Carbon disulfide	ng/kg	0.0500	0.0557	111	70 - 130	7924
Carbon tetrachloride	ng/kg	0.0500	0.0549	110	70 - 130	7924
Chlorobenzene	ng/kg	0.0500	0.0566	101	70 - 130	7924
Chloroethane	ng/kg	0.0500	0.0583	119	70 - 130	7924
2-Chloroethylvinylether	ng/kg	0.0500	0.2720	109	70 - 130	7924
Chloroform	ng/kg	0.0500	0.0566	113	70 - 130	7924
Chloromethane	ng/kg	0.0500	0.0570	114	70 - 130	7924
3-Chlorotoluene	ng/kg	0.0500	0.0500	100	70 - 130	7924
4-Chlorotoluene	ng/kg	0.0500	0.0530	106	70 - 130	7924



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
1,2-Dibromo-3-chloropropane	ng/kg	0.0500	0.0567	113	70 - 130	7924
Dibromochloromethane	ng/kg	0.0500	0.0515	103	70 - 130	7924
1,2-Dibromoethane	ng/kg	0.0500	0.0554	111	70 - 130	7924
Gibromomethane	ng/kg	0.0500	0.0532	106	70 - 130	7924
1,2-Dichlorobenzene	ng/kg	0.0500	0.0513	103	70 - 130	7924
1,3-Dichlorobenzene	ng/kg	0.0500	0.0515	103	70 - 130	7924
1,4-Dichlorobenzene	ng/kg	0.0500	0.0504	101	70 - 130	7924
Dichlorodifluoromethane	ng/kg	0.0500	0.0566	113	70 - 130	7924
1,1-Dichloroethane	ng/kg	0.0500	0.0541	108	70 - 130	7924
1,2-Dichloroethane	ng/kg	0.0500	0.0541	108	70 - 130	7924
1,1-Dichloroethene	ng/kg	0.0500	0.0549	110	70 - 130	7924
cis-1,2-Dichloroethene	ng/kg	0.0500	0.0525	105	70 - 130	7924
trans-1,2-Dichloroethene	ng/kg	0.0500	0.0559	108	70 - 130	7924
1,2-Dichloropropane	ng/kg	0.0500	0.0548	110	70 - 130	7924
1,3-Dichloropropane	ng/kg	0.0500	0.0534	107	70 - 130	7924
2,2-Dichloropropane	ng/kg	0.0500	0.0545	109	70 - 130	7924
1,1-Dichloropropene	ng/kg	0.0500	0.0554	111	70 - 130	7924
cis-1,3-Dichloropropene	ng/kg	0.0500	0.0525	105	70 - 130	7924
trans-1,3-Dichloropropene	ng/kg	0.0500	0.0530	106	70 - 130	7924
Ethylbenzene	ng/kg	0.0500	0.0519	104	70 - 130	7924
Hexachlorobutadiene	ng/kg	0.0500	0.0457	91	70 - 130	7924
2-Hexanone	ng/kg	0.2500	0.3400	136	70 - 130	7924
Isopropylbenzene	ng/kg	0.0500	0.0523	105	70 - 130	7924
4-Isopropyltoluene	ng/kg	0.0500	0.0493	99	70 - 130	7924
4-Methyl-2-pentanone	ng/kg	0.2500	0.3190	128	70 - 130	7924
Methylene chloride	ng/kg	0.0500	0.0545	109	70 - 130	7924
Naphthalene	ng/kg	0.0500	0.0529	106	70 - 130	7924
n-Propylbenzene	ng/kg	0.0500	0.0521	104	70 - 130	7924
Styrene	ng/kg	0.0500	0.0504	101	70 - 130	7924
1,1,1,2-Tetrachloroethane	ng/kg	0.0500	0.0512	102	70 - 130	7924
1,1,2,2-Tetrachloroethane	ng/kg	0.0500	0.0542	108	70 - 130	7924
Tetrachloroethene	ng/kg	0.0500	0.0567	101	70 - 130	7924
Toluene	ng/kg	0.0500	0.0520	104	70 - 130	7924
1,2,3-Trichlorobenzene	ng/kg	0.0500	0.0422	84	70 - 130	7924
1,2,4-Trichlorobenzene	ng/kg	0.0500	0.0396	79	70 - 130	7924
1,1,1-Trichloroethane	ng/kg	0.0500	0.0563	113	70 - 130	7924
1,1,2-Trichloroethane	ng/kg	0.0500	0.0548	110	70 - 130	7924
Trichloroethene	ng/kg	0.0500	0.0527	105	70 - 130	7924
1,2,3-Trichloropropane	ng/kg	0.0500	0.0582	116	70 - 130	7924
1,2,4-Trimethylbenzene	ng/kg	0.0500	0.0492	98	70 - 130	7924
1,3,5-Trimethylbenzene	ng/kg	0.0500	0.0498	100	70 - 130	7924
Vinyl chloride	ng/kg	0.0500	0.0554	111	70 - 130	7924
Xylenes	ng/kg	0.1500	0.1513	101	70 - 130	7924
Bromodichloromethane	ng/kg	0.0500	0.0544	109	70 - 130	7924
Trichlorofluoromethane	ng/kg	0.0500	0.0563	113	70 - 130	7924
Benzene	ng/kg	0.0200	0.0200	100	70 - 130	948R



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
n-Butylbenzene	ng/kg	0.0200	0.0215	108	70 - 130	9480
sec-Butylbenzene	ng/kg	0.0200	0.0195	98	70 - 130	9480
tert-Butylbenzene	ng/kg	0.0200	0.0194	97	70 - 130	9480
Ethylbenzene	ng/kg	0.0200	0.0196	98	70 - 130	9480
Isopropylbenzene	ng/kg	0.0200	0.0195	98	70 - 130	9480
4-Isopropyltoluene	ng/kg	0.0200	0.0200	100	70 - 130	9480
n-Propylbenzene	ng/kg	0.0200	0.0193	96	70 - 130	9480
Toluene	ng/kg	0.0200	0.0197	99	70 - 130	9480
1,2,4-Trimethylbenzene	ng/kg	0.0200	0.0220	110	70 - 130	9480
1,3,5-Trimethylbenzene	ng/kg	0.0200	0.0214	107	70 - 130	9480
m,p-Xylenes	ng/kg	0.0400	0.0388	97	70 - 130	9480
o-Xylene	ng/kg	0.0200	0.0191	96	70 - 130	9480
Aroclor 1216	ng/kg	0.1667	0.1598	96	60 - 140	9335
Aroclor 1248	ng/kg	0.1667	0.1978	119	60 - 140	9335

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Naphthalene	< 0.165	ng/kg	9214
Acenaphthene	< 0.165	ng/kg	9214
Anthracene	< 0.165	ng/kg	9214
Fluoranthene	< 0.165	ng/kg	9214
Fluorene	< 0.165	ng/kg	9214
Pyrene	< 0.165	ng/kg	9214
Benzo(a)anthracene	< 0.165	ng/kg	9214
Benzo(a)pyrene	< 0.165	ng/kg	9214
Benzo(b)fluoranthene	< 0.165	ng/kg	9214
Benzo(k)fluoranthene	< 0.165	ng/kg	9214
Chrysene	< 0.165	ng/kg	9214
Dibenzo(a,h)anthracene	< 0.165	ng/kg	9214
Indeno(1,2,3-cd)pyrene	< 0.165	ng/kg	9214
Benzo(g,h,i)perylene	< 0.165	ng/kg	9214
Phenanthrene	< 0.165	ng/kg	9214
Arsenic	< 0.10	ng/l	1615
Barium	< 1.00	ng/l	1615
Cadmium	< 0.100	ng/l	1615
Chromium	< 0.50	ng/l	1615
Lead	< 0.500	ng/l	1615
Mercury	< 0.010	ng/l	8805
Selenium	< 0.100	ng/l	1615
Silver	< 0.10	ng/l	1615
Acetone	< 0.0100	ng/kg	7924
Benzene	< 0.0020	ng/kg	7924
Bromobenzene	< 0.0020	ng/kg	7924
Bromochloromethane	< 0.0020	ng/kg	7924



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	S.C. Batch
Bromoform	< 0.0020	ng/kg	7924
Bromonethane	< 0.0020	ng/kg	7924
2-Butanone	< 0.0100	ng/kg	7924
n-Butylbenzene	< 0.0020	ng/kg	7924
sec-Butylbenzene	< 0.0020	ng/kg	7924
t-Butylbenzene	< 0.0020	ng/kg	7924
Carbon disulfide	< 0.0020	ng/kg	7924
Carbon tetrachloride	< 0.0020	ng/kg	7924
Chlorobenzene	< 0.0020	ng/kg	7924
Chloroethane	< 0.0020	ng/kg	7924
2-Chloroethylvinylether	< 0.0020	ng/kg	7924
Chloroform	< 0.0020	ng/kg	7924
Chloronethane	< 0.0020	ng/kg	7924
2-Chlorotoluene	< 0.0020	ng/kg	7924
4-Chlorotoluene	< 0.0020	ng/kg	7924
1,2-Dibromo-3-chloropropane	< 0.0100	ng/kg	7924
Dibromochloromethane	< 0.0020	ng/kg	7924
1,2-Dibromoethane	< 0.0020	ng/kg	7924
Dibromomethane	< 0.0020	ng/kg	7924
1,2-Dichlorobenzene	< 0.0020	ng/kg	7924
1,3-Dichlorobenzene	< 0.0020	ng/kg	7924
1,4-Dichlorobenzene	< 0.0020	ng/kg	7924
Dichlorodifluoromethane	< 0.0020	ng/kg	7924
1,1-Dichloroethane	< 0.0020	ng/kg	7924
1,2-Dichloroethane	< 0.0020	ng/kg	7924
1,1-Dichloroethene	< 0.0020	ng/kg	7924
cis-1,2-Dichloroethene	< 0.0020	ng/kg	7924
trans-1,2-Dichloroethene	< 0.0020	ng/kg	7924
1,2-Dichloropropane	< 0.0020	ng/kg	7924
1,3-Dichloropropane	< 0.0020	ng/kg	7924
2,2-Dichloropropane	< 0.0020	ng/kg	7924
1,1-Dichloropropene	< 0.0020	ng/kg	7924
cis-1,3-Dichloropropene	< 0.0020	ng/kg	7924
trans-1,3-Dichloropropene	< 0.0020	ng/kg	7924
Ethylbenzene	< 0.0020	ng/kg	7924
Hexachlorobutadiene	< 0.0020	ng/kg	7924
2-Hexanone	< 0.0100	ng/kg	7924
Isopropylbenzene	< 0.0020	ng/kg	7924
4-Isopropyltoluene	< 0.0020	ng/kg	7924
4-Methyl-2-pentanone	< 0.0100	ng/kg	7924
Methylene chloride	< 0.0020	ng/kg	7924
Naphthalene	< 0.0020	ng/kg	7924
n-Propylbenzene	< 0.0020	ng/kg	7924
Styrene	< 0.0020	ng/kg	7924
1,1,1,2-Tetrachloroethane	< 0.0020	ng/kg	7924
1,1,2,2-Tetrachloroethane	< 0.0020	ng/kg	7924



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	S.C. Batch
Tetrachloroethene	< 0.0020	ng/kg	7924
Toluene	< 0.0020	ng/kg	7924
1,2,3-Trichlorobenzene	< 0.0020	ng/kg	7924
1,2,4-Trichlorobenzene	< 0.0020	ng/kg	7924
1,1,1-Trichloroethane	< 0.0020	ng/kg	7924
1,1,2-Trichloroethane	< 0.0020	ng/kg	7924
Trichloroethene	< 0.0020	ng/kg	7924
1,2,3-Trichloropropane	< 0.0020	ng/kg	7924
1,2,4-Trimethylbenzene	< 0.0020	ng/kg	7924
1,3,5-Trimethylbenzene	< 0.0020	ng/kg	7924
Vinyl chloride	< 0.0020	ng/kg	7924
Xylenes	< 0.0020	ng/kg	7924
Bromodichloromethane	< 0.0020	ng/kg	7924
Trichlorofluoromethane	< 0.0020	ng/kg	7924
Benzene	< 0.0010	ng/kg	9480
n-Butylbenzene	< 0.0010	ng/kg	9480
sec-Butylbenzene	< 0.0010	ng/kg	9480
tert-Butylbenzene	< 0.0010	ng/kg	9480
Ethylbenzene	< 0.0010	ng/kg	9480
Isopropylbenzene	< 0.0010	ng/kg	9480
4-Isopropyltoluene	< 0.0010	ng/kg	9480
n-Propylbenzene	< 0.0010	ng/kg	9480
Toluene	< 0.0010	ng/kg	9480
1,2,4-Trimethylbenzene	< 0.0010	ng/kg	9480
1,3,5-Trimethylbenzene	< 0.0010	ng/kg	9480
m,p-Xylenes	< 0.0010	ng/kg	9480
o-Xylene	< 0.0010	ng/kg	9480
Aroclor 1016	< 0.0200	ng/kg	9335
Aroclor 1221	< 0.0200	ng/kg	9335
Aroclor 1232	< 0.0200	ng/kg	9335
Aroclor 1242	< 0.0200	ng/kg	9335
Aroclor 1248	< 0.0200	ng/kg	9335
Aroclor 1254	< 0.0200	ng/kg	9335
Aroclor 1260	< 0.0200	ng/kg	9335

Appendix D

Post Closure Summary Report

UST-POST CLOSURE SUMMARY

Closure Date: 09/22/99

Regulatory Authority: NYSDEC-Region 9
270 Michigan Ave.
Buffalo, NY 14203-2999

Site Name and Address: Niagara Falls United States Army Reserve Center
9400 Porter Rd.
Niagara Falls, NY 14304

Owner's Name, Address: Nickolas Christopher-Colonel, DCSENGR
And Phone Number AFRC-CNY-EN
Fort Totten, NY 11359-1016
(718)352-5624

Tank Size	Tank Mat'l	Tank Product	No. of Samples Taken	Contaminated Soil Disposed (Quantity)	Contaminated Groundwater Disposed (Quantity)	Condition Of Tank
1,000 G	STL-DW	WO	1-GW 1-EF 1-ESW	0	0	G

Key:

G=Gallons

FRP=Fiberglass Reinforced Plastic

STL=Steel

SW=Single Wall

DW=Double Wall

WO=Waste Oil and Water mixture

EF=Excavation Floor

ESW=Excavation Sidewall

GW=Groundwater

G=Good

F=Fair

P=Poor

Sample Numbering Key:

The samples are numbered in a format as follows:

AAAA-BB-C-01, where AAAA=Facility identification, BB=Sample type, C=sample matrix, 01=sample number. The following key may be helpful when reviewing sample results:

MCAC=McConnell Army Reserve Center

ES=Excavation sample

SW=Sidewall sample

GW=Groundwater

S=Soil

W=Water



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8B-022585

ANALYSIS REQUEST

Company Sverdrup CIVIL, Inc Client Number 9212

Address 575 S. Charles St Ste 404 Zip 21201

City Baltimore, MD

Sampler Sign/Print Robert F. Canham Jr.

Project Name Virginia Falls USAR (2) Proj. # 00023-DoD

Facility Location (City, St) 4405 Peter Rd. Virginia Falls, AL

Project Manager Chris Stove

PO Number NA /Fac. Site I.D. NA

Phone Number 410-837-5840 Fax Number 410-837-3277

B.C. # 161669

B.C. # 161669																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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SPECIAL DETECTION LIMITS

REMARKS

NYSDEC STARS

SPECIAL REPORTING REQUIREMENTS
As per sec 15 - PC 15 (b) (1),
Catherine Cervantes

SAI PROJECT or QUOTE NUMBER
(to insure correct Analysis and Billing)

NA

Temperature Received 4
Airbill Number NA

CUSTODY RECORD

Relinquished by: Robert F. Canham Jr.
Relinquished by: NA

Date 9-22-99 Time 2:30 PM

Received by: NA

Received by: Laboratory AM. Brady

Date 9/24/99 Time 9:00

DR



SPECIALIZED ANALYTICAL SERVICES, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A146632
Sample ID: NFAC-GW-W-05
Sample Type: Water
Site ID:

Project: 000223-004
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS by GC*										
Benzene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
n-Butylbenzene	0.0124	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
sec-Butylbenzene	0.0021	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
tert-Butylbenzene	0.0012	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
Ethylbenzene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
Isopropylbenzene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
4-Isopropyltoluene	0.0023	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
Naphthalene	0.0175	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
n-Propylbenzene	0.0010	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
Toluene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
1,2,4-Trimethylbenzene	0.0069	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
1,3,5-Trimethylbenzene	0.0028	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
m,p-Xylenes	0.0013	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40
o-Xylene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Himeclick	8021B	40

ND = Not detected at the report limit.

These results relate only to the items tested.

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permission of the laboratory.

Report Approved By:

Report Date: 10/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A. Lage, Technical Services

Laboratory Certification Number: 11342

**SPECIALIZED ANALYTICAL SYSTEMS, INC.**

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 7212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A146633
Sample ID: NFAC-GW-W-05
Sample Type: Water
Site ID:

Project: 000223-D04
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Acenaphthene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Anthracene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Fluoranthene	0.006	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Fluorene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Pyrene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(a)anthracene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(a)pyrene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(b)fluoranthene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(k)fluoranthene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Chrysene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Dibenzo(a,h)anthracene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Indeno(1,2,3-cd)pyrene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(g,h,i)perylene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Phenanthrene	0.006	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
DNA's	1000 ml	1.0 ml	9/25/99	Fitzwater	3510

Surrogate	% Recovery	Target Range
surr-Nitrobenzene-d5	50.	15. - 105.
surr-2-Fluorobiphenyl	42.	17. - 110.
surr-Terphenyl d14	16.	10. - 116.



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2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
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ANALYTICAL REPORT

Laboratory Number: 99-A146633

Sample ID: NFAC-GW-W-05

Page 2

These results relate only to the items tested.

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Report Approved By:

Report Date: 10/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342

**SPECIALIZED ANALYTICAL SERVICES, INC.**

2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A146634
Sample ID: NFAC-ES-S-06
Sample Type: Soil
Site ID:

Project: 000223-DO4
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Fluoranthene	0.792	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Fluorene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Pyrene	0.594	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Benzo(a)anthracene	0.297	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Benzo(a)pyrene	0.297	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Benzo(b)fluoranthene	0.231	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Benzo(k)fluoranthene	0.264	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Chrysene	0.297	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Dibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Indeno(1,2,3-cd)pyrene	0.165	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Benzo(g,h,i)perylene	0.165	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
Phenanthrene	0.561	ng/kg	0.165	0.165	1	9/29/99	9:43	M. Cobb	8270C	1807
VOLATILE ORGANICS by GC										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Butylbenzene	0.0046	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
sec-Butylbenzene	0.0022	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Isopropylbenzene	0.0011	ng/kg	0.0010	0.0001	1	9/27/99	15:32	T McCollum	8021B	1620
4-Isopropyltoluene	0.0024	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Naphthalene	0.0038	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Toluene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,2,4-Trimethylbenzene	0.0024	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,3,5-Trimethylbenzene	0.0022	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
m,p-Xylenes	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620

ND = Not detected at the report limit.



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ANALYTICAL REPORT

Laboratory Number: 99-A146634
Sample ID: NFAC-ES-S-06

Page 2

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
DNA's	30.6 gm	1.0 ml	9/27/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
PID Surr., a,a,a-trifluorotoluene	97.	50. - 150.
surr-Nitrobenzene-d5	40.	20. - 110.
surr-2-Fluorobiphenyl	37.	18. - 110.
surr-Terphenyl d14	54.	27. - 128.
Hall Surr., chloroprene	93.	67. - 125.
Hall Surr., 1-chloro-3-fluorobenzene	92.	60. - 137.

These results relate only to the items tested.

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Report Approved By:

Report Date: 10/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342

**SPECIALIZED ANALYTICAL SERVICES, INC.**

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A146635
Sample ID: NFAC-ES-S-07
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Fluoranthene	0.957	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Fluorene	ND	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Pyrene	0.726	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Benzo(a)anthracene	0.396	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Benzo(a)pyrene	0.396	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Benzo(b)fluoranthene	0.264	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Benzo(k)fluoranthene	0.363	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Chrysene	0.429	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Dibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Benzo(g,h,i)perylene	0.198	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
Phenanthrene	0.561	ng/kg	0.165	0.165	1	9/29/99	10:20	M. Cobb	8270C	1807
VOLATILE ORGANICS by GC										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
sec-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Isopropylbenzene	ND	ng/kg	0.0010	0.0001	1	9/27/99	15:32	T McCollum	8021B	1620
4-Isopropyltoluene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Naphthalene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Toluene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,2,4-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,3,5-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
m,p-Xylenes	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620

ND = Not detected at the report limit.

**SPECIALIZED ANALYTICAL SYSTEMS, INC.**

2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 99-A146635
Sample ID: NFAC-ES-S-07

Page 2

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
ENAs	30.3 gm	1.0 ml	9/27/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
PID Surr., a,a,a-trifluorotoluene	97.	50. - 150.
surr-Nitrobenzene-d5	47.	20. - 110.
surr-2-Fluorobiphenyl	47.	18. - 110.
surr-Terphenyl d14	69.	27. - 126.
Hall Surr., chloroprene	118.	67. - 125.
Hall Surr., 1-chloro-3-fluorobenzene	138.	60. - 137.

These results relate only to the items tested.

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Report Approved By:

Report Date: 10/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZED ANALYTICAL SYSTEMS, INC.

2960 Foster Creighton Dr.
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PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	R.C. Batch
Naphthalene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 139.	453
Acenaphthene	ng/l	< 0.005	0.036	0.100	36%	58. - 140.	453
Anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	60. - 127.	453
Fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 135.	453
Fluorene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 122.	453
Pyrene	ng/l	< 0.005	0.041	0.100	41%	59. - 118.	453
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 130.	453
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 132.	453
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 135.	453
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 133.	453
Chrysene	ng/l	< 0.005	< 0.005	0.100	N/A	10. - 180.	453
Dibenzo(a,h)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	69. - 124.	453
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 143.	453
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	0.100	N/A	24. - 145.	453
Phenanthrene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 111.	453
Benzene	ng/l	< 0.0010	0.0194	0.0200	97	76. - 122.	40
Benzene	ng/kg	< 0.0010	0.0192	0.0200	96	67. - 137.	1620
Toluene	ng/l	< 0.0010	0.0195	0.0200	98	74. - 127.	40
Toluene	ng/kg	< 0.0010	0.0195	0.0200	98	65. - 139.	1620
m,p-Xylenes	ng/l	< 0.0010	0.0394	0.0400	98	75. - 133.	40
m,p-Xylenes	ng/kg	< 0.0010	0.0432	0.0400	108	58. - 136.	1620

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	R.C. Batch
Naphthalene	ng/l	< 0.005	< 0.005	N/A	32.	453
Acenaphthene	ng/l	0.036	0.039	8.00	15.	453
Anthracene	ng/l	< 0.005	< 0.005	N/A	14.	453
Fluoranthene	ng/l	< 0.005	< 0.005	N/A	15.	453
Fluorene	ng/l	< 0.005	< 0.005	N/A	31.	453
Pyrene	ng/l	0.041	0.043	4.76	8.	453
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	N/A	21.	453
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	N/A	16.	453
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	N/A	26.	453
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	N/A	30.	453
Chrysene	ng/l	< 0.005	< 0.005	N/A	16.	453
Dibenzo(a,h)anthracene	ng/l	< 0.005	< 0.005	N/A	38.	453
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	N/A	39.	453
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	N/A	48.	453
Phenanthrene	ng/l	< 0.005	< 0.005	N/A	16.	453
Benzene	ng/l	0.0194	0.0200	3.05	12.	40
Benzene	ng/kg	0.0192	0.0198	1.05	19.	1620
Toluene	ng/l	0.0195	0.0200	2.53	11.	40
Toluene	ng/kg	0.0195	0.0191	2.07	19.	1620
m,p-Xylenes	ng/l	0.0394	0.0407	3.25	12.	40



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PROJECT QUALITY CONTROL DATA

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	R.C. Batch
n,p-Xylenes	ng/kg	0.0432	0.0422	2.34	20.	1620

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
Acenaphthene	ng/kg	1.67	1.68	101	60 - 140	1807
Anthracene	ng/kg	1.67	1.75	105	60 - 140	1807
Fluoranthene	ng/kg	1.67	1.72	103	60 - 140	1807
Fluorene	ng/kg	1.67	1.65	99	60 - 140	1807
Pyrene	ng/kg	1.67	1.65	99	60 - 140	1807
Benzo(a)anthracene	ng/kg	1.67	1.72	103	60 - 140	1807
Benzo(a)pyrene	ng/kg	1.67	1.78	107	60 - 140	1807
Benzo(b)fluoranthene	ng/kg	1.67	1.78	107	60 - 140	1807
Benzo(k)fluoranthene	ng/kg	1.67	1.78	107	60 - 140	1807
Chrysene	ng/kg	1.67	1.88	113	60 - 140	1807
Dibenzo(a,b)anthracene	ng/kg	1.67	1.58	95	60 - 140	1807
Indeno(1,2,3-cd)pyrene	ng/kg	1.67	1.45	87	60 - 140	1807
Benzo(g,h,i)perylene	ng/kg	1.67	1.25	75	60 - 140	1807
Phenanthrene	ng/kg	1.67	1.78	107	60 - 140	1807
Naphthalene	ng/l	0.050	0.030	60	60 - 140	453
Acenaphthene	ng/l	0.050	0.034	68	60 - 140	453
Anthracene	ng/l	0.050	0.043	86	60 - 140	453
Fluoranthene	ng/l	0.050	0.044	88	60 - 140	453
Fluorene	ng/l	0.050	0.037	74	60 - 140	453
Pyrene	ng/l	0.050	0.044	88	60 - 140	453
Benzo(a)anthracene	ng/l	0.050	0.045	90	60 - 140	453
Benzo(a)pyrene	ng/l	0.050	0.042	84	60 - 140	453
Benzo(b)fluoranthene	ng/l	0.050	0.035	70	60 - 140	453
Benzo(k)fluoranthene	ng/l	0.050	0.064	128	60 - 140	453
Chrysene	ng/l	0.050	0.043	86	60 - 140	453
Dibenzo(a,b)anthracene	ng/l	0.050	0.051	102	60 - 140	453
Indeno(1,2,3-cd)pyrene	ng/l	0.050	0.048	96	60 - 140	453
Benzo(g,h,i)perylene	ng/l	0.050	0.047	94	60 - 140	453
Phenanthrene	ng/l	0.050	0.042	84	60 - 140	453
Benzene	ng/l	0.0200	0.0201	100	70 - 130	40
Benzene	ng/kg	0.0200	0.0198	99	70 - 130	1620
n-Butylbenzene	ng/l	0.0200	0.0205	102	70 - 130	40
n-Butylbenzene	ng/kg	0.0200	0.0217	108	70 - 130	1620
sec-Butylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
sec-Butylbenzene	ng/kg	0.0200	0.0188	94	70 - 130	1620
tert-Butylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
tert-Butylbenzene	ng/kg	0.0200	0.0202	101	70 - 130	1620
Ethylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
Ethylbenzene	ng/kg	0.0200	0.0225	112	70 - 130	1620
Isopropylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
Isopropylbenzene	ng/kg	0.0200	0.0194	97	70 - 130	1620
4-Isopropyltoluene	ng/l	0.0200	0.0206	103	70 - 130	40
4-Isopropyltoluene	ng/kg	0.0200	0.0186	93	70 - 130	1620
Naphthalene	ng/l	0.0200	0.0201	100	70 - 130	40
Naphthalene	ng/kg	0.0200	0.0203	102	70 - 130	1620
n-Propylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
n-Propylbenzene	ng/kg	0.0200	0.0194	97	70 - 130	1620
Toluene	ng/l	0.0200	0.0201	100	70 - 130	40
Toluene	ng/kg	0.0200	0.0200	100	70 - 130	1620
1,2,4-Trimethylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
1,2,4-Trimethylbenzene	ng/kg	0.0200	0.0220	110	70 - 130	1620
1,3,5-Trimethylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
1,3,5-Trimethylbenzene	ng/kg	0.0200	0.0222	111	70 - 130	1620
m,p-Xylenes	ng/l	0.0400	0.0411	103	70 - 130	40
m,p-Xylenes	ng/kg	0.0400	0.0457	114	70 - 130	1620
o-Xylene	ng/l	0.0200	0.0206	103	70 - 130	40
o-Xylene	ng/kg	0.0200	0.0198	99	70 - 130	1620

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Acenaphthene	< 0.165	ng/kg	1807
Anthracene	< 0.165	ng/kg	1807
Fluoranthene	< 0.165	ng/kg	1807
Fluorene	< 0.165	ng/kg	1807
Pyrene	< 0.165	ng/kg	1807
Benzo(a)anthracene	< 0.165	ng/kg	1807
Benzo(a)pyrene	< 0.165	ng/kg	1807
Benzo(b)fluoranthene	< 0.165	ng/kg	1807
Benzo(k)fluoranthene	< 0.165	ng/kg	1807
Chrysene	< 0.165	ng/kg	1807
Dibenzo(a,h)anthracene	< 0.165	ng/kg	1807
Indeno(1,2,3-cd)pyrene	< 0.165	ng/kg	1807
Benzo(g,h,i)perylene	< 0.165	ng/kg	1807
Phenanthrene	< 0.165	ng/kg	1807
Naphthalene	< 0.005	ng/l	453
Acenaphthene	< 0.005	ng/l	453
Anthracene	< 0.005	ng/l	453
Fluoranthene	< 0.005	ng/l	453
Fluorene	< 0.005	ng/l	453
Pyrene	< 0.005	ng/l	453
Benzo(a)anthracene	< 0.005	ng/l	453
Benzo(a)pyrene	< 0.005	ng/l	453
Benzo(b)fluoranthene	< 0.005	ng/l	453
Benzo(k)fluoranthene	< 0.005	ng/l	453



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Chrysene	< 0.005	ng/l	453
Dibenzo(a,h)anthracene	< 0.005	ng/l	453
Indeno(1,2,3-cd)pyrene	< 0.005	ng/l	453
Benzo(g,h,i)perylene	< 0.005	ng/l	453
Phenanthrene	< 0.005	ng/l	453
Benzene	< 0.0010	ng/l	40
Benzene	< 0.0010	ng/kg	1620
n-Butylbenzene	< 0.0010	ng/l	40
n-Butylbenzene	< 0.0010	ng/kg	1620
sec-Butylbenzene	< 0.0010	ng/l	40
sec-Butylbenzene	< 0.0010	ng/kg	1620
tert-Butylbenzene	< 0.0010	ng/l	40
tert-Butylbenzene	< 0.0010	ng/kg	1620
Ethylbenzene	< 0.0010	ng/l	40
Ethylbenzene	< 0.0010	ng/kg	1620
Isopropylbenzene	< 0.0010	ng/l	40
Isopropylbenzene	< 0.0010	ng/kg	1620
4-Isopropyltoluene	< 0.0010	ng/l	40
4-Isopropyltoluene	< 0.0010	ng/kg	1620
Naphthalene	< 0.0010	ng/l	40
Naphthalene	< 0.0010	ng/kg	1620
n-Propylbenzene	< 0.0010	ng/l	40
n-Propylbenzene	< 0.0010	ng/kg	1620
Toluene	< 0.0010	ng/l	40
Toluene	< 0.0010	ng/kg	1620
1,2,4-Trimethylbenzene	< 0.0010	ng/l	40
1,2,4-Trimethylbenzene	< 0.0010	ng/kg	1620
1,3,5-Trimethylbenzene	< 0.0010	ng/l	40
1,3,5-Trimethylbenzene	< 0.0010	ng/kg	1620
m,p-Xylenes	< 0.0010	ng/l	40
m,p-Xylenes	< 0.0010	ng/kg	1620
o-Xylene	< 0.0010	ng/l	40
o-Xylene	< 0.0010	ng/kg	1620

Appendix E

Laboratory Report of Analysis for UST/OWS Contents



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIEBEN
375 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A126763
Sample ID: NFAC-TC-P-01
Sample Type: Ground water
Site ID:

Project: 000223-DO4
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT G.

Date Collected: 8/19/99
Time Collected: 14:35
Date Received: 8/20/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Acenaphthene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Anthracene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Fluoranthene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Fluorene	1.63	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Pyrene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Benzo(a)anthracene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Benzo(a)pyrene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Benzo(b)fluoranthene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Benzo(k)fluoranthene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Chrysene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Bibenzo(a,h)anthracene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Indeno(1,2,3-cd)pyrene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Acenaphthylene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Benzo(g,h,i)perylene	ND	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
Phenanthrene	3.76	ng/l	1.18	0.005	20	8/25/99	1:10	J. Gott	8270C	1896
VOLATILE ORGANICS										
Acetone	ND	ng/l	5.000	0.0100	500	8/30/99	7:59	K. Hill	82600	2588
Benzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Bromobenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Bromochloromethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Bromoform	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Bromomethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
2-Butanone	ND	ng/l	5.000	0.0100	500	8/30/99	7:59	K. Hill	82600	2588
n-Butylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
sec-Butylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
t-Butylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Carbon disulfide	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Carbon tetrachloride	ND	ng/l	1.0000	0.00200	500	8/30/99	7:59	K. Hill	82600	2588
Chlorobenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Chloroethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1-Chloroethylvinylether	ND	ng/l	2.500	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Chloroform	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Chloromethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
2-Chlorotoluene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
4-Chlorotoluene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A126763
Sample ID: NFAC-TC-P-01

Page 2

Analyte	Result	Units	Report Limit	Ruan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2-Dibromo-3-chloropropane	ND	ng/l	5.000	0.0100	500	8/30/99	7:59	K. Hill	82600	2588
Dibromochloromethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2-Dibromoethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Dibromomethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2-Dichlorobenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,3-Dichlorobenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,4-Dichlorobenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Dichlorodifluoromethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,1-Dichloroethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2-Dichloroethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,1-Dichloroethene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
cis-1,2-Dichloroethene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
trans-1,2-Dichloroethene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2-Dichloropropane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,3-Dichloropropane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
2,2-Dichloropropane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1-Dichloropropene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
cis-1,3-Dichloropropene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
trans-1,3-Dichloropropene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Ethylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Hexachlorobutadiene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
2-Hexanone	ND	ng/l	5.000	0.0100	500	8/30/99	7:59	K. Hill	82600	2588
Isopropylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
4-Isopropyltoluene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
4-Methyl-2-pentanone	ND	ng/l	5.000	0.0100	500	8/30/99	7:59	K. Hill	82600	2588
Methylene chloride	ND	ng/l	5.000	0.0100	500	8/30/99	7:59	K. Hill	82600	2588
Naphthalene	7.100	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
n-Propylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Styrene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,1,1,2-Tetrachloroethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,1,2,2-Tetrachloroethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Tetrachloroethene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Toluene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2,3-Trichlorobenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2,4-Trichlorobenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,1,1-Trichloroethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,1,2-Trichloroethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Trichloroethene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2,3-Trichloropropane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,2,4-Trimethylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
1,3,5-Trimethylbenzene	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Vinyl chloride	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Xylenes	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Bromodichloromethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588
Trichlorofluoromethane	ND	ng/l	1.000	0.0020	500	8/30/99	7:59	K. Hill	82600	2588



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A126763

Sample ID: NFAC-TC-F-01

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Analyte	Result	Units	Report Limit	Ruan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDES/PCB's/HERBICIDES										
Aroclor 1016	ND	ng/l	0.03000	0.00050	20	8/26/99	11:07	N. Rogers	8082	2187
Aroclor 1221	ND	ng/l	0.03000	0.00050	20	8/26/99	11:07	N. Rogers	8082	2187
Aroclor 1232	ND	ng/l	0.03000	0.00050	20	8/26/99	11:07	N. Rogers	8082	2187
Aroclor 1242	ND	ng/l	0.03000	0.00050	20	8/26/99	11:07	N. Rogers	8082	2187
Aroclor 1248	ND	ng/l	0.03000	0.00050	20	8/26/99	11:07	N. Rogers	8082	2187
Aroclor 1254	ND	ng/l	0.03000	0.00050	20	8/26/99	11:07	N. Rogers	8082	2187
Aroclor 1260	ND	ng/l	0.03000	0.00050	20	8/26/99	11:07	N. Rogers	8082	2187

MISCELLANEOUS CHEMISTRY

Reactive Cyanide	ND	ng/kg	2.0	2.0	1	8/25/99	17:00	CHollingsworth	SW-846	2020
Reactive Sulfide	94.0	ng/kg	20.0	20.0	1	8/25/99	17:00	CHollingsworth	SW-846	2020
Ignitability	NOT IGNITABLE UP TO 200F					8/26/99	10:20	J. Brewer	1010H	2327
Corrosivity	NOT CORROSIVE					8/24/99	14:35	McFarland	1110	936

CLP Results

Analyte	Result	Units	Matrix Spike		Date	Method
			Reg Limit	Recovery (%)		
Arsenic	< 1.00	ng/l	5.0	96	8/31/99	6010B
Barium	31.2	ng/l	100	92	8/31/99	6010B
Cadmium	2.40	ng/l	1.0	96	8/31/99	6010B
Chromium	3.80	ng/l	5.0	95	8/31/99	6010B
Lead	24.80	ng/l	5.0	97	8/31/99	6010B
Mercury	< 0.010	ng/l	0.20	42	8/24/99	7470A
Selenium	2.00	ng/l	1.0	95	8/31/99	6010B
Silver	2.20	ng/l	5.0	64	8/31/99	6010B

ND = Not detected at the report limit.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Ml/Vol		Date	Analyst	Method
	Extracted	Extract Vol			
MA's	850. ml	10.0 ml	8/21/99	Fitzwater	3510
PCB's	500. ml	15.0 ml	8/21/99	Fitzwater	3510



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 99-A126763
Sample ID: NFAC-TC-P-01

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Surrogate	% Recovery	Target Range
UHA Surr, 1,2-DCA, 44	82.	68. - 138.
UHA Surr, Toluene 48	71.	88. - 123.
UHA Surr, 4-BFN	106.	73. - 122.
UHA Surr, DEFA	93.	74. - 133.

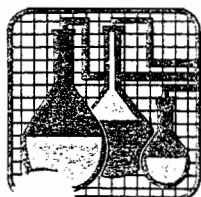
Surrogate diluted out due to sample matrix.

Report Approved By:

Report Date: 9/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
375 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A126764
Sample ID: NFAC-TC-P-02
Sample Type: Ground water
Site ID:

Project: 000223-D04
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT G.

Date Collected: 8/19/99
Time Collected: 15:00
Date Received: 8/20/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Acenaphthene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Anthracene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Fluoranthene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Fluorene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Pyrene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Benzo(a)anthracene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Benzo(a)pyrene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Benzo(b)fluoranthene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Benzo(k)fluoranthene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Chrysene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Bibenz(a,h)anthracene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Indeno(1,2,3-cd)pyrene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Acenaphthylene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Benzo(g,h,i)perylene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
Phenanthrene	ND	ng/l	0.005	0.005	1	8/28/99	20:27	J. Gott	8270C	3508
VOLATILE ORGANICS										
Acetone	ND	ng/l	0.0100	0.0100	1	8/29/99	17:04	K. Hill	8260B	2588
Benzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Bromobenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Bromochloromethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Bromoform	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Bromomethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
2-Butanone	ND	ng/l	0.0100	0.0100	1	8/29/99	17:04	K. Hill	8260B	2588
n-Butylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
sec-Butylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
t-Butylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Carbon disulfide	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Carbon tetrachloride	ND	ng/l	0.00200	0.00200	1	8/29/99	17:04	K. Hill	8260B	2588
Chlorobenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Chloroethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
2-Chloroethylvinylether	ND	ng/l	0.0050	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Chloroform	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Chloromethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
2-Chlorotoluene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
4-Chlorotoluene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A126764

Sample ID: NFAC-TC-F-02

Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2-Dibromo-3-chloropropane	ND	ng/l	0.0100	0.0100	1	8/29/99	17:04	K. Hill	8260B	2588
Dibromochloromethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2-Dibromoethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Dibromomethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2-Dichlorobenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,3-Dichlorobenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,4-Dichlorobenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Dichlorodifluoromethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,1-Dichloroethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2-Dichloroethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,1-Dichloroethene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
cis-1,2-Dichloroethene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
trans-1,2-Dichloroethene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2-Dichloropropane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,3-Dichloropropane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
2,2-Dichloropropane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1-Dichloropropene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
cis-1,3-Dichloropropene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
trans-1,3-Dichloropropene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Ethylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Hexachlorobutadiene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
2-Hexanone	ND	ng/l	0.0100	0.0100	1	8/29/99	17:04	K. Hill	8260B	2588
Isopropylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
4-Isopropyltoluene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
4-Methyl-2-pentanone	ND	ng/l	0.0100	0.0100	1	8/29/99	17:04	K. Hill	8260B	2588
Methylene chloride	ND	ng/l	0.0100	0.0100	1	8/29/99	17:04	K. Hill	8260B	2588
Naphthalene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
n-Propylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Styrene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,1,1,2-Tetrachloroethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,1,2,2-Tetrachloroethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Tetrachloroethene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Toluene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2,3-Trichlorobenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2,4-Trichlorobenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,1,1-Trichloroethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,1,2-Trichloroethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Trichloroethene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2,3-Trichloropropane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,2,4-Trimethylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
1,3,5-Trimethylbenzene	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Vinyl chloride	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Xylenes	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Bromodichloromethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588
Trichlorofluoromethane	ND	ng/l	0.0020	0.0020	1	8/29/99	17:04	K. Hill	8260B	2588



SPECIALIZED ASSAYS, INC.

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ANALYTICAL REPORT

Laboratory Number: 99-A126764
Sample ID: NFAC-TC-P-02

Page 3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
PESTICIDES/PCB's/HERBICIDES										
Aroclor 1016	ND	ng/l	0.00050	0.00050	1	8/25/99	2:49	N. Rogers	8082	2187
Aroclor 1221	ND	ng/l	0.00050	0.00050	1	8/25/99	2:49	N. Rogers	8082	2187
Aroclor 1232	ND	ng/l	0.00050	0.00050	1	8/25/99	2:49	N. Rogers	8082	2187
Aroclor 1242	ND	ng/l	0.00050	0.00050	1	8/25/99	2:49	N. Rogers	8082	2187
Aroclor 1248	ND	ng/l	0.00050	0.00050	1	8/25/99	2:49	N. Rogers	8082	2187
Aroclor 1254	ND	ng/l	0.00050	0.00050	1	8/25/99	2:49	N. Rogers	8082	2187
Aroclor 1260	ND	ng/l	0.00050	0.00050	1	8/25/99	2:49	N. Rogers	8082	2187

MISCELLANEOUS CHEMISTRY

Reactive Cyanide	ND	ng/kg	2.0	2.0	1	8/26/99	16:00	CHollingsu	SW-846	2877
Reactive Sulfide	ND	ng/kg	20.0	20.0	1	8/26/99	16:00	CHollingsu	SW-846	2877
Ignitability	NOT IGNITABLE UP TO 200F					8/26/99	10:20	S. Brewer	1010M	2327
Corrosivity	NOT CORROSIVE					8/25/99	17:30	McFarland	1110	2108

CLP Results

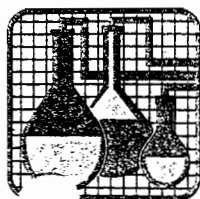
Analyte	Result	Units	Matrix Spike		Date	Method
			Reg Limit	Recovery (%)		
Arsenic	< 0.10	ng/l	5.0	102	8/28/99	6010M
Barium	< 1.00	ng/l	100	100	8/28/99	6010M
Cadmium	< 0.100	ng/l	1.0	101	8/28/99	6010M
Chromium	< 0.50	ng/l	5.0	100	8/28/99	6010M
Lead	< 0.500	ng/l	5.0	96	8/28/99	6010M
Mercury	< 0.010	ng/l	0.20	110	8/24/99	7470A
Selenium	< 0.100	ng/l	1.0	107	8/28/99	6010M
Silver	< 0.10	ng/l	5.0	70	8/28/99	6010M

ND = Not detected at the report limit.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Wt/Vol		Date	Analyst	Method
	Extracted	Extract Vol			
WHA's	1000 ml	1.0 ml	8/21/99	Fitzwater	3510
PCB's	500. ml	5.00 ml	8/21/99	Fitzwater	3510



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2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 99-A126764
Sample ID: NFAC-TC-P-02

Page 4

<u>Surrogate</u>	<u>% Recovery</u>	<u>Target Range</u>
VGA Surr, 1,2-DCB, d4	104.	60. - 138.
VGA Surr, Toluene d8	98.	80. - 123.
VGA Surr, 4-BFN	103.	73. - 122.
VGA Surr, DDFN	91.	74. - 133.
surr-Nitrobenzene-d5	40.	15. - 105.
surr-2-Fluorobiphenyl	38.	17. - 110.
surr-Terphenyl d14	21.	10. - 116.
pcb surr - TCXX	64.	20. - 122.
pcb surr-DCB	49.	10. - 120.

Report Approved By:

T. J. Duello

Report Date: 9/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



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PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	R.C. Batch
Naphthalene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 139.	1896
Naphthalene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 139.	3508
Acenaphthene	ng/l	< 0.005	0.073	0.100	73	58. - 140.	1896
Acenaphthene	ng/l	< 0.005	0.050	0.100	50	58. - 140.	3508
Anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	60. - 127.	1896
Anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	60. - 127.	3508
Fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 135.	1896
Fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 135.	3508
Fluorene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 122.	1896
Fluorene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 122.	3508
Pyrene	ng/l	< 0.005	0.078	0.100	78	59. - 118.	1896
Pyrene	ng/l	< 0.005	0.054	0.100	54	59. - 118.	3508
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 130.	1896
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 130.	3508
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 132.	1896
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 132.	3508
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 135.	1896
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 135.	3508
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 133.	1896
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 133.	3508
Chrysene	ng/l	< 0.005	< 0.005	0.100	N/A	10. - 180.	1896
Chrysene	ng/l	< 0.005	< 0.005	0.100	N/A	10. - 180.	3508
Dibenzo(a,h)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	69. - 124.	1896
Dibenzo(a,h)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	69. - 124.	3508
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 143.	1896
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 143.	3508
Acenaphthylene	ng/l	< 0.005	< 0.005	0.100	N/A	54. - 123.	1896
Acenaphthylene	ng/l	< 0.005	< 0.005	0.100	N/A	54. - 123.	3508
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	0.100	N/A	24. - 145.	1896
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	0.100	N/A	24. - 145.	3508
Phenanthrene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 111.	1896
Phenanthrene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 111.	3508
Benzene	ng/l	< 0.0020	0.0484	0.0500	97	66. - 135.	2588
Chlorobenzene	ng/l	< 0.0020	0.0487	0.0500	97	68. - 134.	2588
1,1-Dichloroethene	ng/l	< 0.0020	0.0486	0.0500	97	59. - 144.	2588
Toluene	ng/l	< 0.0020	0.0473	0.0500	95	55. - 151.	2588
Trichloroethene	ng/l	< 0.0020	0.0622	0.0500	124	54. - 153.	2588
Aroclor 1260	ng/l	< 0.00050	0.01138	0.01000	114	60. - 143.	2187

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	R.C. Batch
Naphthalene	ng/l	< 0.005	< 0.005	N/A	32.	1896
Naphthalene	ng/l	< 0.005	< 0.005	N/A	32.	3508
Acenaphthene	ng/l	0.073	0.067	8.57	15.	1896



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PROJECT QUALITY CONTROL DATA

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Acenaphthene	ng/l	0.050	0.047	6.19	15.	3508
Anthracene	ng/l	< 0.005	< 0.005	N/A	14.	1896
Anthracene	ng/l	< 0.005	< 0.005	N/A	14.	3508
Fluoranthene	ng/l	< 0.005	< 0.005	N/A	13.	1896
Fluoranthene	ng/l	< 0.005	< 0.005	N/A	15.	3508
Fluorene	ng/l	< 0.005	< 0.005	N/A	31.	1896
Fluorene	ng/l	< 0.005	< 0.005	N/A	31.	3508
Pyrene	ng/l	0.078	0.074	5.26	8.	1896
Pyrene	ng/l	0.054	0.054	0.00	8.	3508
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	N/A	21.	1896
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	N/A	21.	3508
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	N/A	16.	1896
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	N/A	16.	3508
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	N/A	26.	1896
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	N/A	26.	3508
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	N/A	30.	1896
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	N/A	30.	3508
Chrysene	ng/l	< 0.005	< 0.005	N/A	16.	1896
Chrysene	ng/l	< 0.005	< 0.005	N/A	16.	3508
Dibenzo(a,h)anthracene	ng/l	< 0.005	< 0.005	N/A	38.	1896
Dibenzo(a,h)anthracene	ng/l	< 0.005	< 0.005	N/A	38.	3508
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	N/A	39.	1896
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	N/A	39.	3508
Acenaphthylene	ng/l	< 0.005	< 0.005	N/A	36.	1896
Acenaphthylene	ng/l	< 0.005	< 0.005	N/A	36.	3508
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	N/A	48.	1896
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	N/A	48.	3508
Phenanthrene	ng/l	< 0.005	< 0.005	N/A	16.	1896
Phenanthrene	ng/l	< 0.005	< 0.005	N/A	16.	3508
Benzene	ng/l	0.0484	0.0474	2.09	18.	2588
Chlorobenzene	ng/l	0.0437	0.0451	7.68	20.	2588
1,1-Dichloroethene	ng/l	0.0486	0.0490	0.82	52.	2588
Toluene	ng/l	0.0473	0.0457	3.44	22.	2588
Trichloroethene	ng/l	0.0622	0.0631	1.44	18.	2588
Aroclor 1260	ng/l	0.01138	0.01320	14.81	30.	2187

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Naphthalene	ng/l	0.050	0.037	74	60 - 140	1896
Naphthalene	ng/l	0.050	0.041	82	60 - 140	3508
Acenaphthene	ng/l	0.050	0.040	80	60 - 140	1896
Acenaphthene	ng/l	0.050	0.039	78	60 - 140	3508
Anthracene	ng/l	0.050	0.045	90	60 - 140	1896
Anthracene	ng/l	0.050	0.040	80	60 - 140	3508



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyste	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
Fluoranthene	ng/l	0.050	0.042	84	60 - 140	1896
Fluoranthene	ng/l	0.050	0.044	88	60 - 140	3508
Fluorene	ng/l	0.050	0.039	78	60 - 140	1896
Fluorene	ng/l	0.050	0.039	78	60 - 140	3508
Pyrene	ng/l	0.050	0.046	92	60 - 140	1896
Pyrene	ng/l	0.050	0.043	86	60 - 140	3508
Benzo(a)anthracene	ng/l	0.050	0.045	90	60 - 140	1896
Benzo(a)anthracene	ng/l	0.050	0.043	86	60 - 140	3508
Benzo(a)pyrene	ng/l	0.050	0.045	90	60 - 140	1896
Benzo(a)pyrene	ng/l	0.050	0.041	82	60 - 140	3508
Benzo(b)fluoranthene	ng/l	0.050	0.036	72	60 - 140	1896
Benzo(b)fluoranthene	ng/l	0.050	0.043	86	60 - 140	3508
Benzo(k)fluoranthene	ng/l	0.050	0.070	140	60 - 140	1896
Benzo(k)fluoranthene	ng/l	0.050	0.046	92	60 - 140	3508
Chrysene	ng/l	0.050	0.046	92	60 - 140	1896
Chrysene	ng/l	0.050	0.049	98	60 - 140	3508
Dibenzo(a,h)anthracene	ng/l	0.050	0.039	78	60 - 140	1896
Dibenzo(a,h)anthracene	ng/l	0.050	0.046	92	60 - 140	3508
Indeno(1,2,3-cd)pyrene	ng/l	0.050	0.036	72	60 - 140	1896
Indeno(1,2,3-cd)pyrene	ng/l	0.050	0.044	88	60 - 140	3508
Acenaphthylene	ng/l	0.050	0.041	82	60 - 140	1896
Acenaphthylene	ng/l	0.050	0.042	84	60 - 140	3508
Benzo(g,h,i)perylene	ng/l	0.050	0.033	66	60 - 140	1896
Benzo(g,h,i)perylene	ng/l	0.050	0.045	90	60 - 140	3508
Phenanthrene	ng/l	0.050	0.045	90	60 - 140	1896
Phenanthrene	ng/l	0.050	0.044	88	60 - 140	3508
Acetone	ng/l	0.2500	0.1860	74	70 - 130	2588
Benzene	ng/l	0.0500	0.0494	99	70 - 130	2588
Bromobenzene	ng/l	0.0500	0.0490	98	70 - 130	2588
Bromochloromethane	ng/l	0.0500	0.0528	106	70 - 130	2588
Bromoform	ng/l	0.0500	0.0579	116	70 - 130	2588
Bromomethane	ng/l	0.0500	0.0443	89	70 - 130	2588
2-Butanone	ng/l	0.2500	0.2540	102	70 - 130	2588
n-Butylbenzene	ng/l	0.0500	0.0455	91	70 - 130	2588
sec-Butylbenzene	ng/l	0.0500	0.0467	93	70 - 130	2588
t-Butylbenzene	ng/l	0.0500	0.0469	94	70 - 130	2588
Carbon disulfide	ng/l	0.0500	0.0477	95	70 - 130	2588
Carbon tetrachloride	ng/l	0.05000	0.05430	109	70 - 130	2588
Chlorobenzene	ng/l	0.0500	0.0492	98	70 - 130	2588
Chloroethane	ng/l	0.0500	0.0486	97	70 - 130	2588
2-Chloroethylvinyl ether	ng/l	0.2500	0.2590	104	70 - 130	2588
Chloroform	ng/l	0.0500	0.0579	116	70 - 130	2588
Chloromethane	ng/l	0.0500	0.0473	95	70 - 130	2588
2-Chlorotoluene	ng/l	0.0500	0.0483	97	70 - 130	2588
4-Chlorotoluene	ng/l	0.0500	0.0484	97	70 - 130	2588
1,2-Dibromo-3-chloropropane	ng/l	0.0500	0.0627	125	70 - 130	2588



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
Dibromochloromethane	ng/l	0.0500	0.0548	110	70 - 130	2588
1,2-Dibromoethane	ng/l	0.0500	0.0570	114	70 - 130	2588
Dibromomethane	ng/l	0.0500	0.0585	117	70 - 130	2588
1,2-Dichlorobenzene	ng/l	0.0500	0.0472	98	70 - 130	2588
1,3-Dichlorobenzene	ng/l	0.0500	0.0475	95	70 - 130	2588
1,4-Dichlorobenzene	ng/l	0.0500	0.0473	95	70 - 130	2588
Dichlorodifluoromethane	ng/l	0.0500	0.0487	97	70 - 130	2588
1,1-Dichloroethane	ng/l	0.0500	0.0547	109	70 - 130	2588
1,2-Dichloroethane	ng/l	0.0500	0.0638	128	70 - 130	2588
1,1-Dichloroethene	ng/l	0.0500	0.0510	102	70 - 130	2588
cis-1,2-Dichloroethene	ng/l	0.0500	0.0567	113	70 - 130	2588
trans-1,2-Dichloroethene	ng/l	0.0500	0.0533	107	70 - 130	2588
1,2-Dichloropropane	ng/l	0.0500	0.0517	103	70 - 130	2588
1,3-Dichloropropane	ng/l	0.0500	0.0540	108	70 - 130	2588
2,2-Dichloropropane	ng/l	0.0500	0.0419	84	70 - 130	2588
1,1-Dichloropropene	ng/l	0.0500	0.0473	95	70 - 130	2588
cis-1,3-Dichloropropene	ng/l	0.0500	0.0503	101	70 - 130	2588
trans-1,3-Dichloropropene	ng/l	0.0500	0.0514	103	70 - 130	2588
Ethylbenzene	ng/l	0.0500	0.0490	98	70 - 130	2588
Hexachlorobutadiene	ng/l	0.0500	0.0430	86	70 - 130	2588
2-Hexanone	ng/l	0.2500	0.2520	101	70 - 130	2588
Isopropylbenzene	ng/l	0.0500	0.0474	95	70 - 130	2588
4-Isopropyltoluene	ng/l	0.0500	0.0454	91	70 - 130	2588
4-Methyl-2-pentanone	ng/l	0.2500	0.3140	126	70 - 130	2588
Methylene chloride	ng/l	0.0500	0.0480	96	70 - 130	2588
Naphthalene	ng/l	0.0500	0.0528	106	70 - 130	2588
n-Propylbenzene	ng/l	0.0500	0.0470	94	70 - 130	2588
Styrene	ng/l	0.0500	0.0474	95	70 - 130	2588
1,1,1,2-Tetrachloroethane	ng/l	0.0500	0.0534	107	70 - 130	2588
1,1,2,2-Tetrachloroethane	ng/l	0.0500	0.0454	91	70 - 130	2588
Tetrachloroethene	ng/l	0.0500	0.0457	91	70 - 130	2588
Toluene	ng/l	0.0500	0.0508	102	70 - 130	2588
1,2,3-Trichlorobenzene	ng/l	0.0500	0.0493	99	70 - 130	2588
1,2,4-Trichlorobenzene	ng/l	0.0500	0.0459	92	70 - 130	2588
1,1,1-Trichloroethane	ng/l	0.0500	0.0535	107	70 - 130	2588
1,1,2-Trichloroethane	ng/l	0.0500	0.0545	109	70 - 130	2588
Trichloroethene	ng/l	0.0500	0.0574	115	70 - 130	2588
1,2,3-Trichloropropane	ng/l	0.0500	0.0564	113	70 - 130	2588
1,2,4-Trimethylbenzene	ng/l	0.0500	0.0472	94	70 - 130	2588
1,3,5-Trimethylbenzene	ng/l	0.0500	0.0459	92	70 - 130	2588
Vinyl chloride	ng/l	0.0500	0.0505	101	70 - 130	2588
Xylenes	ng/l	0.1500	0.1474	98	70 - 130	2588
Bromodichloromethane	ng/l	0.0500	0.0573	115	70 - 130	2588
Trichlorofluoromethane	ng/l	0.0500	0.0510	102	70 - 130	2588
Aroclor 1016	ng/l	0.01000	0.01027	103	60 - 140	2187
Aroclor 1260	ng/l	0.01000	0.01292	129	60 - 140	2187



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyste	Blank Value	Units	Q.C. Batch
Naphthalene	< 0.005	ng/l	1896
Naphthalene	< 0.005	ng/l	3508
Acenaphthene	< 0.005	ng/l	1896
Acenaphthene	< 0.005	ng/l	3508
Anthracene	< 0.005	ng/l	1896
Anthracene	< 0.005	ng/l	3508
Fluoranthene	< 0.005	ng/l	1896
Fluoranthene	< 0.005	ng/l	3508
Fluorene	< 0.005	ng/l	1896
Fluorene	< 0.005	ng/l	3508
Pyrene	< 0.005	ng/l	1896
Pyrene	< 0.005	ng/l	3508
Benzo(a)anthracene	< 0.005	ng/l	1896
Benzo(a)anthracene	< 0.005	ng/l	3508
Benzo(a)pyrene	< 0.005	ng/l	1896
Benzo(a)pyrene	< 0.005	ng/l	3508
Benzo(b)fluoranthene	< 0.005	ng/l	1896
Benzo(b)fluoranthene	< 0.005	ng/l	3508
Benzo(k)fluoranthene	< 0.005	ng/l	1896
Benzo(k)fluoranthene	< 0.005	ng/l	3508
Chrysene	< 0.005	ng/l	1896
Chrysene	< 0.005	ng/l	3508
Dibenzo(a,h)anthracene	< 0.005	ng/l	1896
Dibenzo(a,h)anthracene	< 0.005	ng/l	3508
Indeno(1,2,3-cd)pyrene	< 0.005	ng/l	1896
Indeno(1,2,3-cd)pyrene	< 0.005	ng/l	3508
Acenaphthylene	< 0.005	ng/l	1896
Acenaphthylene	< 0.005	ng/l	3508
Benzo(g,h,i)perylene	< 0.005	ng/l	1896
Benzo(g,h,i)perylene	< 0.005	ng/l	3508
Phenanthrene	< 0.005	ng/l	1896
Phenanthrene	< 0.005	ng/l	3508
Arsenic	< 0.10	ng/l	2478
Arsenic	< 0.10	ng/l	5194
Barium	< 1.00	ng/l	2478
Barium	< 1.00	ng/l	5194
Cadmium	< 0.100	ng/l	2478
Cadmium	< 0.100	ng/l	5194
Chromium	< 0.50	ng/l	2478
Chromium	< 0.50	ng/l	5194
Lead	< 0.500	ng/l	2478
Lead	< 0.500	ng/l	5194
Mercury	< 0.010	ng/l	407
Selenium	< 0.100	ng/l	2478
Selenium	< 0.100	ng/l	5194
Silver	< 0.10	ng/l	2478



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Silver	< 0.10	ng/l	5194
Acetone	< 0.0100	ng/l	2588
Benzene	< 0.0020	ng/l	2588
Bromobenzene	< 0.0020	ng/l	2588
Bromochloromethane	< 0.0020	ng/l	2588
Bromoform	< 0.0020	ng/l	2588
Bromomethane	< 0.0020	ng/l	2588
2-Butanone	< 0.0100	ng/l	2588
n-Butylbenzene	< 0.0020	ng/l	2588
sec-Butylbenzene	< 0.0020	ng/l	2588
t-Butylbenzene	< 0.0020	ng/l	2588
Carbon disulfide	< 0.0020	ng/l	2588
Carbon tetrachloride	< 0.00200	ng/l	2588
Chlorobenzene	< 0.0020	ng/l	2588
Chloroethane	< 0.0020	ng/l	2588
2-Chloroethylvinylether	< 0.0050	ng/l	2588
Chloroform	< 0.0020	ng/l	2588
Chloromethane	< 0.0020	ng/l	2588
2-Chlorotoluene	< 0.0020	ng/l	2588
4-Chlorotoluene	< 0.0020	ng/l	2588
1,2-Dibromo-3-chloropropane	< 0.0100	ng/l	2588
Dibromochloromethane	< 0.0020	ng/l	2588
1,2-Dibromoethane	< 0.0020	ng/l	2588
Dibromomethane	< 0.0020	ng/l	2588
1,2-Dichlorobenzene	< 0.0020	ng/l	2588
1,3-Dichlorobenzene	< 0.0020	ng/l	2588
1,4-Dichlorobenzene	< 0.0020	ng/l	2588
Dichlorodifluoromethane	< 0.0020	ng/l	2588
1,1-Dichloroethane	< 0.0020	ng/l	2588
1,2-Dichloroethane	< 0.0020	ng/l	2588
1,1-Dichloroethene	< 0.0020	ng/l	2588
cis-1,2-Dichloroethene	< 0.0020	ng/l	2588
trans-1,2-Dichloroethene	< 0.0020	ng/l	2588
1,2-Dichloropropane	< 0.0020	ng/l	2588
1,3-Dichloropropane	< 0.0020	ng/l	2588
2,2-Dichloropropane	< 0.0020	ng/l	2588
1,1-Dichloropropene	< 0.0020	ng/l	2588
cis-1,3-Dichloropropene	< 0.0020	ng/l	2588
trans-1,3-Dichloropropene	< 0.0020	ng/l	2588
Ethylbenzene	< 0.0020	ng/l	2588
Hexachlorobutadiene	< 0.0020	ng/l	2588
2-Hexanone	< 0.0100	ng/l	2588
Isopropylbenzene	< 0.0020	ng/l	2588
4-Isopropyltoluene	< 0.0020	ng/l	2588
4-Methyl-2-pentanone	< 0.0100	ng/l	2588
Methylene chloride	< 0.0020	ng/l	2588



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2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Naphthalene	< 0.0020	ng/l	2588
n-Propylbenzene	< 0.0020	ng/l	2588
Styrene	< 0.0020	ng/l	2588
1,1,1,2-Tetrachloroethane	< 0.0020	ng/l	2588
1,1,2,2-Tetrachloroethane	< 0.0020	ng/l	2588
Tetrachloroethene	< 0.0020	ng/l	2588
Toluene	< 0.0020	ng/l	2588
1,2,3-Trichlorobenzene	< 0.0020	ng/l	2588
1,2,4-Trichlorobenzene	< 0.0020	ng/l	2588
1,1,1-Trichloroethane	< 0.0020	ng/l	2588
1,1,2-Trichloroethane	< 0.0020	ng/l	2588
Trichloroethene	< 0.0020	ng/l	2588
1,2,3-Trichloropropane	< 0.0020	ng/l	2588
1,2,4-Trimethylbenzene	< 0.0020	ng/l	2588
1,3,5-Trimethylbenzene	< 0.0020	ng/l	2588
Vinyl chloride	< 0.0020	ng/l	2588
Alkenes	< 0.0020	ng/l	2588
Bromodichloromethane	< 0.0020	ng/l	2588
Trichlorofluoromethane	< 0.0020	ng/l	2588
Aroclor 1016	< 0.00050	ng/l	2187
Aroclor 1221	< 0.00050	ng/l	2187
Aroclor 1232	< 0.00050	ng/l	2187
Aroclor 1242	< 0.00050	ng/l	2187
Aroclor 1248	< 0.00050	ng/l	2187
Aroclor 1254	< 0.00050	ng/l	2187
Aroclor 1260	< 0.00050	ng/l	2187

Appendix F

Laboratory Report of Analysis for Project Closure Samples

UST-POST CLOSURE SUMMARY

Closure Date: 09/21/99

Regulatory Authority: NYSDEC-Region 9
270 Michigan Ave.
Buffalo, NY 14203-2999

Site Name and Address: Niagara Falls United States Army Reserve Center
9400 Porter Rd.
Niagara Falls, NY 14304

Owner's Name, Address: Nickolas Christopher-Colonel, DCSENGR
And Phone Number AFRC-CNY-EN
Fort Totten, NY 11359-1016
(718)352-5624

Tank Size	Tank Mat'l	Tank Product	No. of Samples Taken	Contaminated Soil Disposed (Quantity)	Contaminated Groundwater Disposed (Quantity)	Condition Of Tank
550 G	FRP-SW	WO	1-EF 1-ESW	0	325 G	G

Key:

G=Gallons

FRP=Fiberglass Reinforced Plastic

STL=Steel

SW=Single Wall

DW=Double Wall

WO=Waste Oil and Water mixture

EF=Excavation Floor

ESW=Excavation Sidewall

GW=Groundwater

G=Good

F=Fair

P=Poor

Sample Numbering Key:

The samples are numbered in a format as follows:

AAAA-BB-C-01, where AAAA=Facility identification, BB=Sample type, C=sample matrix, 01=sample number. The following key may be helpful when reviewing sample results:

MCAC=McConnell Army Reserve Center

ES=Excavation sample

SW=Sidewall sample

GW=Groundwater

S=Soil

W=Water



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ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A144500
Sample ID: NFAC-ES-S-03
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Benzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromoform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Butanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
n-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
sec-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
t-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Carbon disulfide	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Carbon tetrachloride	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Chloroethylvinylether	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chloroform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Chloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
4-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dibromo-3-chloropropane	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Dibromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dibromoethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Dibromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,3-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,4-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Dichlorodifluoromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
cis-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
trans-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,3-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924



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ANALYTICAL REPORT

Laboratory Number: 99-A144500
Sample ID: NFAC-ES-S-03

Page 2

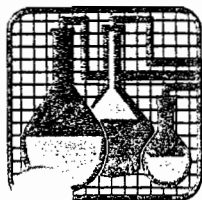
Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloropropene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
cis-1,3-Dichloropropene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
trans-1,3-Dichloropropene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Ethylbenzene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Hexachlorobutadiene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
2-Hexanone	ND	mg/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Isopropylbenzene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
4-Isopropyltoluene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
4-Methyl-2-pentanone	ND	mg/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Methylene chloride	ND	mg/kg	0.0100	0.0100	1	9/26/99	8:17	R. Ward	8260B	7924
Naphthalene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
n-Propylbenzene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Styrene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Tetrachloroethene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Toluene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,3-Trichlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,4-Trichlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,1-Trichloroethane	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,1,2-Trichloroethane	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Trichloroethene	0.0420	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,3-Trichloropropane	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,2,4-Trimethylbenzene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
1,3,5-Trimethylbenzene	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Vinyl chloride	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Xylenes	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Bromodichloromethane	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924
Trichlorofluoromethane	ND	mg/kg	0.0020	0.0020	1	9/26/99	8:17	R. Ward	8260B	7924

PESTICIDE/PCP's/HERBICIDES

Aroclor 1016	ND	mg/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1221	ND	mg/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1232	ND	mg/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1242	ND	mg/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1248	ND	mg/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1254	ND	mg/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335
Aroclor 1260	ND	mg/kg	0.0200	0.0200	1	9/25/99	15:32	Carmichael	8082	9335

GENERAL CHEMISTRY PARAMETERS

Reactive Cyanide	ND	mg/kg	2.0	2.0	1	9/28/99	15:00	CHollingsworth	SW-846	1302
Reactive Sulfide	ND	mg/kg	20.0	20.0	1	9/28/99	15:00	CHollingsworth	SW-846	1302
Corrosivity	NOT CORROSIVE					9/23/99	18:35	McFarland	1110	8582
Ignitability	Not Ignitable up to 200 F					9/23/99	14:07	S. Brewer	1010M	7956



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ANALYTICAL REPORT

Laboratory Number: 99-A144500
Sample ID: NFAC-ES-5-03

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TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike	Date	Method
				Recovery (%)		
Arsenic	< 0.10	mg/l	5.0	107	9/30/99	6010B
Barium	1.18	mg/l	100	98	9/30/99	6010B
Cadmium	< 0.100	mg/l	1.0	101	9/30/99	6010B
Chromium	< 0.50	mg/l	5.0	98	9/30/99	6010B
Lead	< 0.500	mg/l	5.0	108	9/30/99	6010B
Mercury	< 0.010	mg/l	0.20	109	9/27/99	7470A
Selenium	< 0.100	mg/l	1.0	108	9/30/99	6010B
Silver	< 0.10	mg/l	5.0	89	9/30/99	6010B
TCLP Extraction	Initiated				9/22/99	1311

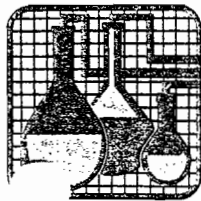
ND = Not detected at the report limit.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Wt/Vol		Date	Analyst	Method
	Extracted	Extract Vol			
PCB's	30.2 gm	10.0 mL	9/23/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
surr-1,2-Dichloroethane, d4	104.	48. - 160.
surr-Toluene d8	113.	79. - 119.
surr-4-Bromofluorobenzene	98.	69. - 135.
surr-Dibromofluoromethane	117.	63. - 135.
pcb surr-TCMX	114.	10. - 138.
pcb surr-PCB	114.	15. - 130.



**SPECIALIZED
ASSAYS, INC.**

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ANALYTICAL REPORT

Laboratory Number: 99-A144300
Sample ID: NFAC-ES-S-03

Page 4

These results relate only to the items tested.
This report shall not be reproduced except in full and with
permission of the laboratory.

Report Approved By:

Michael H. Dunn

Report Date: 9/30/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZED ASSAYS, INC.

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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

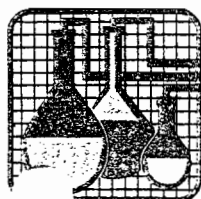
SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A144501
Sample ID: NFAC-SN-5-04
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyste	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	82600	7924
Benzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Bromobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Bromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Bromoform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Bromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
2-Butanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	82600	7924
n-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
sec-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
t-Butylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Carbon disulfide	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Carbon tetrachloride	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Chlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Chloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
2-Chloroethylvinylether	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Chloroform	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Chloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
2-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
4-Chlorotoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2-Dibromo-3-chloropropane	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	82600	7924
Dibromochloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2-Dibromoethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Dibromomethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,3-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,4-Dichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
Dichlorodifluoromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,1-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2-Dichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,1-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
cis-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
trans-1,2-Dichloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
1,3-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924
2,2-Dichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	82600	7924



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ANALYTICAL REPORT

Laboratory Number: 99-A144501
Sample ID: NFAC-SN-S-04

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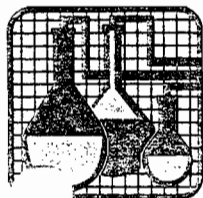
Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
cis-1,3-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
trans-1,3-Dichloropropene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Ethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Hexachlorobutadiene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
2-Hexanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	8260B	7924
Isopropylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
4-Isopropyltoluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
4-Methyl-2-pentanone	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	8260B	7924
Methylene chloride	ND	ng/kg	0.0100	0.0100	1	9/26/99	8:58	R. Ward	8260B	7924
Naphthalene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
n-Propylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Styrene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,1,1,2-Tetrachloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,1,2,2-Tetrachloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Tetrachloroethene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Toluene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2,3-Trichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2,4-Trichlorobenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,1,1-Trichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,1,2-Trichloroethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Trichloroethene	0.0066	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2,3-Trichloropropane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,2,4-Trinethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
1,3,5-Trinethylbenzene	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Uragl chloride	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Xylenes	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Bromodichloromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924
Trichlorofluoromethane	ND	ng/kg	0.0020	0.0020	1	9/26/99	8:58	R. Ward	8260B	7924

PESTICIDE/PCB's/HERBICIDES

Aroclor 1016	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carnichael	8082	9335
Aroclor 1221	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carnichael	8082	9335
Aroclor 1232	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carnichael	8082	9335
Aroclor 1242	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carnichael	8082	9335
Aroclor 1248	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carnichael	8082	9335
Aroclor 1254	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carnichael	8082	9335
Aroclor 1260	ND	ng/kg	0.0200	0.0200	1	9/25/99	15:54	Carnichael	8082	9335

GENERAL CHEMISTRY PARAMETERS

Reactive Cyanide	ND	ng/kg	2.0	2.0	1	9/28/99	15:00	CHollingsworth	SW-846	1302
Reactive Sulfide	ND	ng/kg	20.0	20.0	1	9/28/99	15:00	CHollingsworth	SW-846	1302
Corrosivity	NOT CORROSIVE					9/23/99	18:35	McFarland	1110	8582
Ignitability	Not ignitable up to 200 F					9/23/99	13:36	S. Brewer	1010H	8437



SPECIALIZED ASSAYS, INC.

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ANALYTICAL REPORT

Laboratory Number: 99-A144301
Sample ID: NFAC-SN-S-04

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TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike	Date	Method
				Recovery (%)		
Arsenic	< 0.10	ng/l	5.0	107	9/30/99	6010B
Barium	< 1.00	ng/l	100	98	9/30/99	6010B
Cadmium	< 0.100	ng/l	1.0	101	9/30/99	6010B
Chromium	< 0.50	ng/l	5.0	98	9/30/99	6010B
Lead	< 0.500	ng/l	5.0	108	9/30/99	6010B
Mercury	< 0.010	ng/l	0.20	109	9/27/99	7470A
Selenium	< 0.100	ng/l	1.0	108	9/30/99	6010B
Silver	< 0.10	ng/l	5.0	89	9/30/99	6010B
TCLP Extraction	Initiated				9/22/99	1311

ND = Not detected at the report limit.

Flash point/ignitability reported to the nearest 10 deg F.

Sample Extraction Data

Parameter	Wt/Vol		Date	Analyst	Method
	Extracted	Extract Vol			
PCB's	30.5 gm	10.0 ml	9/23/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
surr-1,2-Dichloroethane, d4	95.	48. - 160.
surr-Toluene d8	113.	79. - 119.
surr-4-Bromofluorobenzene	97.	69. - 135.
surr-Dibromofluoromethane	111.	63. - 135.
pcb surr-TCMX	112.	10. - 138.
pcb surr-PCB	114.	15. - 130.



**SPECIALIZE
ASSAYS, INC.**

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ANALYTICAL REPORT

Laboratory Number: 99-A144301
Sample ID: NFAC-SN-S-04

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These results relate only to the items tested.
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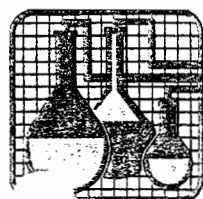
Report Approved By:

Herb A. Dunn

Report Date: 9/30/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZE ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A144502
Sample ID: NFAC-ES-S-03
Sample Type: Soil
Site ID:

Project: 000223-DO4
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Fluorene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(a)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(a)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(b)fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(k)fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Chrysene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Dibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Benzo(g,h,i)perylene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
Phenanthrene	ND	ng/kg	0.165	0.165	1	9/24/99	12:43	N. Cobb	8270C	9214
VOLATILE ORGANICS by GC										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
sec-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Isopropylbenzene	ND	ng/kg	0.0010	0.0001	1	9/23/99	15:15	T McCollum	8021B	9480
4-Isopropyltoluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Toluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,2,4-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,3,5-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
m,p-Xylenes	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480

ND = Not detected at the report limit.



SPECIALIZE ASSAYS, INC.

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ANALYTICAL REPORT

Laboratory Number: 99-A144502
Sample ID: NFAC-ES-S-03

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Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
KOA's	29.6 gm	1.0 ml	9/23/99	Fitzwater	3530

Surrogate	% Recovery	Target Range
PID Surr., 2,2,2-trifluorotoluene	99.	50. - 150.
surr-Nitrobenzene-d5	47.	20. - 110.
surr-2-Fluorobiphenyl	52.	18. - 110.
surr-Terphenyl d14	56.	27. - 128.
Hall Surr., chloroprene	98.	67. - 125.
Hall Surr., 1-chloro-3-fluorobenzene	85.	60. - 137.

These results relate only to the items tested.

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Report Approved By:

Michael H. Dunn

Report Date: 9/30/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZED ASSAYS, INC.

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Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

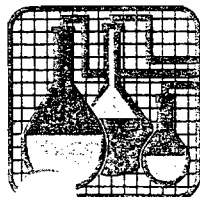
Lab Number: 99-A144503
Sample ID: NFAC-SN-S-04
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGRA FALLS USARC(1)
Sampler: ROBERT GRIBBEN

Date Collected: 9/21/99
Time Collected: 11:30
Date Received: 9/22/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Ruan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
INORGANIC PARAMETERS										
Naphthalene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Fluorene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Benzo(a)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Benzo(a)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Benzo(b)fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Benzo(k)fluoranthene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Chrysene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Dibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Benzo(g,h,i)perylene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
Phenanthrene	ND	ng/kg	0.165	0.165	1	9/24/99	13:21	N. Cobb	8270C	9214
VOLATILE ORGANICS by GC										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
sec-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Isopropylbenzene	ND	ng/kg	0.0010	0.0001	1	9/23/99	15:15	T McCollum	8021B	9480
4-Isopropyltoluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
Toluene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,2,4-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
1,3,5-Trinethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
m,p-Xylenes	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/23/99	15:15	T McCollum	8021B	9480

ND = Not detected at the report limit.



SPECIALIZE ASSAYS, INC.

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Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A144503
Sample ID: NFAC-SN-S-04

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Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
KOH's	29.7 gm	1.0 ml	9/23/99	Fitzwater	3550

Surrogate	% Recovery	Target Range
FID Surr., 2,2,2-trifluorotoluene	98.	50. - 150.
surr-Nitrobenzene-d5	56.	20. - 110.
surr-2-Fluorobiphenyl	61.	18. - 110.
surr-Terphenyl d14	63.	27. - 128.
Hall Surr., chloroprene	96.	67. - 125.
Hall Surr., 1-chloro-3-fluorobenzene	89.	60. - 137.

These results relate only to the items tested.

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Report Approved By:

Michael H. Dunn

Report Date: 9/30/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



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Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	R.C. Batch
1,1-Dichloroethene	ng/kg	0.0542	0.0565	4.16	21.	7924
Toluene	ng/kg	0.0521	0.0538	3.21	20.	7924
Trichloroethene	ng/kg	0.0533	0.0542	1.67	22.	7924
Benzene	ng/kg	0.0193	0.0203	5.05	19.	9480
Toluene	ng/kg	0.0193	0.0201	4.06	19.	9480
m,p-Xylenes	ng/kg	0.0390	0.0410	5.00	20.	9480
Aroclor 1260	ng/kg	0.1828	0.1861	1.79	46.	9335

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
Naphthalene	ng/kg	1.67	1.22	73	60 - 140	9214
Acenaphthene	ng/kg	1.67	1.06	63	60 - 140	9214
Anthracene	ng/kg	1.67	1.16	69	60 - 140	9214
Fluoranthene	ng/kg	1.67	1.29	77	60 - 140	9214
Fluorene	ng/kg	1.67	1.22	73	60 - 140	9214
Pyrene	ng/kg	1.67	1.35	81	60 - 140	9214
Benzo(a)anthracene	ng/kg	1.67	1.35	81	60 - 140	9214
Benzo(a)pyrene	ng/kg	1.67	1.22	73	60 - 140	9214
Benzo(b)fluoranthene	ng/kg	1.67	1.12	67	60 - 140	9214
Benzo(k)fluoranthene	ng/kg	1.67	1.48	89	60 - 140	9214
Chrysene	ng/kg	1.67	1.45	87	60 - 140	9214
Dibenzo(a,h)anthracene	ng/kg	1.67	1.52	91	60 - 140	9214
Indeno(1,2,3-cd)pyrene	ng/kg	1.67	1.42	85	60 - 140	9214
Benzo(g,h,i)perylene	ng/kg	1.67	1.42	85	60 - 140	9214
Phenanthrene	ng/kg	1.67	1.19	71	60 - 140	9214
Acetone	ng/kg	0.2500	0.4000	160 %	70 - 130	7924
Benzene	ng/kg	0.0500	0.0537	107	70 - 130	7924
Bromobenzene	ng/kg	0.0500	0.0502	100	70 - 130	7924
Bromochloromethane	ng/kg	0.0500	0.0527	105	70 - 130	7924
Bromoform	ng/kg	0.0500	0.0512	102	70 - 130	7924
Bromomethane	ng/kg	0.0500	0.0584	117	70 - 130	7924
2-Butanone	ng/kg	0.2500	0.3610	144 %	70 - 130	7924
n-Butylbenzene	ng/kg	0.0500	0.0531	106	70 - 130	7924
sec-Butylbenzene	ng/kg	0.0500	0.0511	102	70 - 130	7924
t-Butylbenzene	ng/kg	0.0500	0.0514	103	70 - 130	7924
Carbon disulfide	ng/kg	0.0500	0.0557	111	70 - 130	7924
Carbon tetrachloride	ng/kg	0.0500	0.0549	110	70 - 130	7924
Chlorobenzene	ng/kg	0.0500	0.0506	101	70 - 130	7924
Chloroethane	ng/kg	0.0500	0.0593	119	70 - 130	7924
2-Chloroethylvinylether	ng/kg	0.2500	0.2720	109	70 - 130	7924
Chloroform	ng/kg	0.0500	0.0566	113	70 - 130	7924
Chloromethane	ng/kg	0.0500	0.0578	116	70 - 130	7924
2-Chlorotoluene	ng/kg	0.0500	0.0500	100	70 - 130	7924
4-Chlorotoluene	ng/kg	0.0500	0.0530	106	70 - 130	7924



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
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Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	A.C. Batch
Naphthalene	ng/kg	< 0.165	< 0.165	3.33	N/A	54. - 128.	9214
Acenaphthene	ng/kg	< 0.165	1.52	3.33	46%	52. - 120.	9214
Anthracene	ng/kg	< 0.165	< 0.165	3.33	N/A	58. - 132.	9214
Fluoranthene	ng/kg	< 0.165	< 0.165	3.33	N/A	58. - 139.	9214
Fluorene	ng/kg	< 0.165	< 0.165	3.33	N/A	63. - 138.	9214
Pyrene	ng/kg	< 0.165	1.62	3.33	49	27. - 137.	9214
Benzo(a)anthracene	ng/kg	< 0.165	< 0.165	3.33	N/A	39. - 120.	9214
Benzo(a)pyrene	ng/kg	< 0.165	< 0.165	3.33	N/A	42. - 142.	9214
Benzo(b)fluoranthene	ng/kg	< 0.165	< 0.165	3.33	N/A	47. - 128.	9214
Benzo(k)fluoranthene	ng/kg	< 0.165	< 0.165	3.33	N/A	52. - 146.	9214
Chrysene	ng/kg	< 0.165	< 0.165	3.33	N/A	68. - 132.	9214
Dibenzo(a,h)anthracene	ng/kg	< 0.165	< 0.165	3.33	N/A	51. - 119.	9214
Indeno(1,2,3-cd)pyrene	ng/kg	< 0.165	< 0.165	3.33	N/A	53. - 153.	9214
Benzo(g,h,i)perylene	ng/kg	< 0.165	< 0.165	3.33	N/A	58. - 112.	9214
Phenanthrene	ng/kg	< 0.165	< 0.165	3.33	N/A	67. - 129.	9214
Benzene	ng/kg	< 0.0020	0.0533	0.0500	107	62. - 147.	7924
Chlorobenzene	ng/kg	< 0.0020	0.0524	0.0500	105	59. - 141.	7924
1,1-Dichloroethene	ng/kg	< 0.0020	0.0542	0.0500	108	61. - 143.	7924
Toluene	ng/kg	< 0.0020	0.0521	0.0500	104	57. - 156.	7924
Trichloroethene	ng/kg	< 0.0020	0.0533	0.0500	107	60. - 158.	7924
Benzene	ng/kg	< 0.0010	0.0193	0.0200	96	67. - 137.	9480
Toluene	ng/kg	< 0.0010	0.0193	0.0200	96	65. - 139.	9480
m,p-Xylenes	ng/kg	< 0.0010	0.0390	0.0400	98	58. - 136.	9480
Aroclor 1260	ng/kg	< 0.0200	0.1828	0.1667	110	17. - 145.	9335

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	A.C. Batch
Naphthalene	ng/kg	< 0.165	< 0.165	N/A	15.	9214
Acenaphthene	ng/kg	1.52	1.39	8.93	18.	9214
Anthracene	ng/kg	< 0.165	< 0.165	N/A	17.	9214
Fluoranthene	ng/kg	< 0.165	< 0.165	N/A	15.	9214
Fluorene	ng/kg	< 0.165	< 0.165	N/A	16.	9214
Pyrene	ng/kg	1.62	1.32	20.41%	20.	9214
Benzo(a)anthracene	ng/kg	< 0.165	< 0.165	N/A	21.	9214
Benzo(a)pyrene	ng/kg	< 0.165	< 0.165	N/A	20.	9214
Benzo(b)fluoranthene	ng/kg	< 0.165	< 0.165	N/A	25.	9214
Benzo(k)fluoranthene	ng/kg	< 0.165	< 0.165	N/A	43.	9214
Chrysene	ng/kg	< 0.165	< 0.165	N/A	11.	9214
Dibenzo(a,h)anthracene	ng/kg	< 0.165	< 0.165	N/A	37.	9214
Indeno(1,2,3-cd)pyrene	ng/kg	< 0.165	< 0.165	N/A	48.	9214
Benzo(g,h,i)perylene	ng/kg	< 0.165	< 0.165	N/A	46.	9214
Phenanthrene	ng/kg	< 0.165	< 0.165	N/A	17.	9214
Benzene	ng/kg	0.0533	0.0530	3.14	20.	7924
Chlorobenzene	ng/kg	0.0524	0.0519	0.96	20.	7924



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
1,2-Dibromo-3-chloropropane	ng/kg	0.0500	0.0567	113	70 - 130	7924
Dibromochloromethane	ng/kg	0.0500	0.0515	103	70 - 130	7924
1,2-Dibromoethane	ng/kg	0.0500	0.0554	111	70 - 130	7924
Dibromomethane	ng/kg	0.0500	0.0532	106	70 - 130	7924
1,2-Dichlorobenzene	ng/kg	0.0500	0.0513	103	70 - 130	7924
1,3-Dichlorobenzene	ng/kg	0.0500	0.0515	103	70 - 130	7924
1,4-Dichlorobenzene	ng/kg	0.0500	0.0504	101	70 - 130	7924
Dichlorodifluoromethane	ng/kg	0.0500	0.0566	113	70 - 130	7924
1,1-Dichloroethane	ng/kg	0.0500	0.0541	108	70 - 130	7924
1,2-Dichloroethane	ng/kg	0.0500	0.0541	108	70 - 130	7924
1,1-Dichloroethene	ng/kg	0.0500	0.0549	110	70 - 130	7924
cis-1,2-Dichloroethene	ng/kg	0.0500	0.0525	105	70 - 130	7924
trans-1,2-Dichloroethene	ng/kg	0.0500	0.0539	108	70 - 130	7924
1,2-Dichloropropane	ng/kg	0.0500	0.0548	110	70 - 130	7924
1,3-Dichloropropane	ng/kg	0.0500	0.0534	107	70 - 130	7924
2,2-Dichloropropane	ng/kg	0.0500	0.0545	109	70 - 130	7924
1,1-Dichloropropene	ng/kg	0.0500	0.0554	111	70 - 130	7924
cis-1,3-Dichloropropene	ng/kg	0.0500	0.0525	105	70 - 130	7924
trans-1,3-Dichloropropene	ng/kg	0.0500	0.0530	106	70 - 130	7924
Ethylbenzene	ng/kg	0.0500	0.0519	104	70 - 130	7924
Hexachlorobutadiene	ng/kg	0.0500	0.0457	91	70 - 130	7924
2-Hexanone	ng/kg	0.2500	0.3400	136	70 - 130	7924
Isopropylbenzene	ng/kg	0.0500	0.0523	105	70 - 130	7924
4-Isopropyltoluene	ng/kg	0.0500	0.0493	99	70 - 130	7924
4-Methyl-2-pentanone	ng/kg	0.2500	0.3170	128	70 - 130	7924
Methylene chloride	ng/kg	0.0500	0.0545	109	70 - 130	7924
Naphthalene	ng/kg	0.0500	0.0529	106	70 - 130	7924
n-Propylbenzene	ng/kg	0.0500	0.0521	104	70 - 130	7924
Styrene	ng/kg	0.0500	0.0504	101	70 - 130	7924
1,1,1,2-Tetrachloroethane	ng/kg	0.0500	0.0512	102	70 - 130	7924
1,1,2,2-Tetrachloroethane	ng/kg	0.0500	0.0542	108	70 - 130	7924
Tetrachloroethene	ng/kg	0.0500	0.0507	101	70 - 130	7924
Toluene	ng/kg	0.0500	0.0520	104	70 - 130	7924
1,2,3-Trichlorobenzene	ng/kg	0.0500	0.0422	84	70 - 130	7924
1,2,4-Trichlorobenzene	ng/kg	0.0500	0.0396	79	70 - 130	7924
1,1,1-Trichloroethane	ng/kg	0.0500	0.0563	113	70 - 130	7924
1,1,2-Trichloroethane	ng/kg	0.0500	0.0548	110	70 - 130	7924
Trichloroethene	ng/kg	0.0500	0.0527	105	70 - 130	7924
1,2,3-Trichloropropane	ng/kg	0.0500	0.0582	116	70 - 130	7924
1,2,4-Trinethylbenzene	ng/kg	0.0500	0.0492	98	70 - 130	7924
1,3,5-Trinethylbenzene	ng/kg	0.0500	0.0498	100	70 - 130	7924
Vinyl chloride	ng/kg	0.0500	0.0554	111	70 - 130	7924
Xylenes	ng/kg	0.1500	0.1513	101	70 - 130	7924
Bromodichloromethane	ng/kg	0.0500	0.0544	109	70 - 130	7924
Trichlorofluoromethane	ng/kg	0.0500	0.0563	113	70 - 130	7924
Benzene	ng/kg	0.0200	0.0200	100	70 - 130	9480



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Bromoform	< 0.0020	ng/kg	7924
Bromomethane	< 0.0020	ng/kg	7924
2-Butanone	< 0.0100	ng/kg	7924
n-Butylbenzene	< 0.0020	ng/kg	7924
sec-Butylbenzene	< 0.0020	ng/kg	7924
t-Butylbenzene	< 0.0020	ng/kg	7924
Carbon disulfide	< 0.0020	ng/kg	7924
Carbon tetrachloride	< 0.0020	ng/kg	7924
Chlorobenzene	< 0.0020	ng/kg	7924
Chloroethane	< 0.0020	ng/kg	7924
2-Chloroethylvinylether	< 0.0020	ng/kg	7924
Chloroform	< 0.0020	ng/kg	7924
Chloromethane	< 0.0020	ng/kg	7924
2-Chlorotoluene	< 0.0020	ng/kg	7924
4-Chlorotoluene	< 0.0020	ng/kg	7924
1,2-Dibromo-3-chloropropane	< 0.0100	ng/kg	7924
Dibromochloromethane	< 0.0020	ng/kg	7924
1,2-Dibromoethane	< 0.0020	ng/kg	7924
Dibromomethane	< 0.0020	ng/kg	7924
1,2-Dichlorobenzene	< 0.0020	ng/kg	7924
1,3-Dichlorobenzene	< 0.0020	ng/kg	7924
1,4-Dichlorobenzene	< 0.0020	ng/kg	7924
Dichlorodifluoromethane	< 0.0020	ng/kg	7924
1,1-Dichloroethane	< 0.0020	ng/kg	7924
1,2-Dichloroethane	< 0.0020	ng/kg	7924
1,1-Dichloroethene	< 0.0020	ng/kg	7924
cis-1,2-Dichloroethene	< 0.0020	ng/kg	7924
trans-1,2-Dichloroethene	< 0.0020	ng/kg	7924
1,2-Dichloropropane	< 0.0020	ng/kg	7924
1,3-Dichloropropane	< 0.0020	ng/kg	7924
2,2-Dichloropropane	< 0.0020	ng/kg	7924
1,1-Dichloropropene	< 0.0020	ng/kg	7924
cis-1,3-Dichloropropene	< 0.0020	ng/kg	7924
trans-1,3-Dichloropropene	< 0.0020	ng/kg	7924
Ethylbenzene	< 0.0020	ng/kg	7924
Hexachlorobutadiene	< 0.0020	ng/kg	7924
2-Hexanone	< 0.0100	ng/kg	7924
Isopropylbenzene	< 0.0020	ng/kg	7924
4-Isopropyltoluene	< 0.0020	ng/kg	7924
4-Methyl-2-pentanone	< 0.0100	ng/kg	7924
Methylene chloride	< 0.0020	ng/kg	7924
Naphthalene	< 0.0020	ng/kg	7924
n-Propylbenzene	< 0.0020	ng/kg	7924
Styrene	< 0.0020	ng/kg	7924
1,1,1,2-Tetrachloroethane	< 0.0020	ng/kg	7924
1,1,2,2-Tetrachloroethane	< 0.0020	ng/kg	7924



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
n-Butylbenzene	ng/kg	0.0200	0.0215	108	70 - 130	9480
sec-Butylbenzene	ng/kg	0.0200	0.0195	98	70 - 130	9480
tert-Butylbenzene	ng/kg	0.0200	0.0194	97	70 - 130	9480
Ethylbenzene	ng/kg	0.0200	0.0196	98	70 - 130	9480
Isopropylbenzene	ng/kg	0.0200	0.0195	98	70 - 130	9480
4-Isopropyltoluene	ng/kg	0.0200	0.0200	100	70 - 130	9480
n-Propylbenzene	ng/kg	0.0200	0.0193	96	70 - 130	9480
Toluene	ng/kg	0.0200	0.0197	98	70 - 130	9480
1,2,4-Trimethylbenzene	ng/kg	0.0200	0.0220	110	70 - 130	9480
1,3,5-Trimethylbenzene	ng/kg	0.0200	0.0214	107	70 - 130	9480
m,p-Xylenes	ng/kg	0.0400	0.0388	97	70 - 130	9480
o-Xylene	ng/kg	0.0200	0.0191	96	70 - 130	9480
Aroclor 1016	ng/kg	0.1667	0.1598	96	60 - 140	9335
Aroclor 1260	ng/kg	0.1667	0.1778	119	60 - 140	9335

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Naphthalene	< 0.165	ng/kg	9214
Acenaphthene	< 0.165	ng/kg	9214
Anthracene	< 0.165	ng/kg	9214
Fluoranthene	< 0.165	ng/kg	9214
Fluorene	< 0.165	ng/kg	9214
Pyrene	< 0.165	ng/kg	9214
Benzo(a)anthracene	< 0.165	ng/kg	9214
Benzo(a)pyrene	< 0.165	ng/kg	9214
Benzo(b)fluoranthene	< 0.165	ng/kg	9214
Benzo(k)fluoranthene	< 0.165	ng/kg	9214
Chrysene	< 0.165	ng/kg	9214
Dibenzo(a,h)anthracene	< 0.165	ng/kg	9214
Indeno(1,2,3-cd)pyrene	< 0.165	ng/kg	9214
Benzo(g,h,i)perylene	< 0.165	ng/kg	9214
Phenanthrene	< 0.165	ng/kg	9214
Arsenic	< 0.10	ng/l	1615
Barium	< 1.00	ng/l	1615
Cadmium	< 0.100	ng/l	1615
Chromium	< 0.50	ng/l	1615
Lead	< 0.500	ng/l	1615
Mercury	< 0.010	ng/l	8805
Selenium	< 0.100	ng/l	1615
Silver	< 0.10	ng/l	1615
Acetone	< 0.0100	ng/kg	7924
Benzene	< 0.0020	ng/kg	7924
Bromobenzene	< 0.0020	ng/kg	7924
Bromochloromethane	< 0.0020	ng/kg	7924



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Tetrachloroethene	< 0.0020	ng/kg	7924
Toluene	< 0.0020	ng/kg	7924
1,2,3-Trichlorobenzene	< 0.0020	ng/kg	7924
1,2,4-Trichlorobenzene	< 0.0020	ng/kg	7924
1,1,1-Trichloroethane	< 0.0020	ng/kg	7924
1,1,2-Trichloroethane	< 0.0020	ng/kg	7924
Trichloroethene	< 0.0020	ng/kg	7924
1,2,3-Trichloropropane	< 0.0020	ng/kg	7924
1,2,4-Trinethylbenzene	< 0.0020	ng/kg	7924
1,3,5-Trinethylbenzene	< 0.0020	ng/kg	7924
Vinyl chloride	< 0.0020	ng/kg	7924
Xylenes	< 0.0020	ng/kg	7924
Bromodichloromethane	< 0.0020	ng/kg	7924
Trichlorofluoromethane	< 0.0020	ng/kg	7924
Benzene	< 0.0010	ng/kg	9480
n-Butylbenzene	< 0.0010	ng/kg	9480
sec-Butylbenzene	< 0.0010	ng/kg	9480
tert-Butylbenzene	< 0.0010	ng/kg	9480
Ethylbenzene	< 0.0010	ng/kg	9480
Isopropylbenzene	< 0.0010	ng/kg	9480
4-Isopropyltoluene	< 0.0010	ng/kg	9480
n-Propylbenzene	< 0.0010	ng/kg	9480
Toluene	< 0.0010	ng/kg	9480
1,2,4-Trinethylbenzene	< 0.0010	ng/kg	9480
1,3,5-Trinethylbenzene	< 0.0010	ng/kg	9480
m,p-Xylenes	< 0.0010	ng/kg	9480
o-Xylene	< 0.0010	ng/kg	9480
Aroclor 1015	< 0.0200	ng/kg	9335
Aroclor 1221	< 0.0200	ng/kg	9335
Aroclor 1232	< 0.0200	ng/kg	9335
Aroclor 1242	< 0.0200	ng/kg	9335
Aroclor 1248	< 0.0200	ng/kg	9335
Aroclor 1254	< 0.0200	ng/kg	9335
Aroclor 1260	< 0.0200	ng/kg	9335

UST-POST CLOSURE SUMMARY

Closure Date: 09/22/99

Regulatory Authority: NYSDEC-Region 9
270 Michigan Ave.
Buffalo, NY 14203-2999

Site Name and Address: Niagara Falls United States Army Reserve Center
9400 Porter Rd.
Niagara Falls, NY 14304

Owner's Name, Address: Nickolas Christopher-Colonel, DCSENGR
And Phone Number AFRC-CNY-EN
Fort Totten, NY 11359-1016
(718)352-5624

Tank Size	Tank Mat'l	Tank Product	No. of Samples Taken	Contaminated Soil Disposed (Quantity)	Contaminated Groundwater Disposed (Quantity)	Condition Of Tank
1,000 G	STL-DW	WO	1-GW 1-EF 1-ESW	0	0	G

Key:

G=Gallons

FRP=Fiberglass Reinforced Plastic

STL=Steel

SW=Single Wall

DW=Double Wall

WO=Waste Oil and Water mixture

EF=Excavation Floor

ESW=Excavation Sidewall

GW=Groundwater

G=Good

F=Fair

P=Poor

Sample Numbering Key:

The samples are numbered in a format as follows:

AAAA-BB-C-01, where AAAA=Facility identification, BB=Sample type, C=sample matrix, 01=sample number. The following key may be helpful when reviewing sample results:

MCAC=McConnell Army Reserve Center

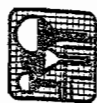
ES=Excavation sample

SW=Sidewall sample

GW=Groundwater

S=Soil

W=Water



SPECIALIZED ASSAYS, INC.

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8B-022585

ANALYSIS REQUEST

Company Sverdrup CIVIL, Inc Client Number 9212
Address 575 S. Charles St Ste 404
City Baltimore, MD 21205 Zip 21205
Sampler Sign/Print Robert F. Cochran Jr.
Project Name Nyngan Falls USAC (2) Proj. # 000223-DO4
Facility Location (City, St) 9400 Poter Rd. Nyngan Falls, NY
Project Manager Chris Stone
PO Number NA /Fac./Site I.D. _____
Phone Number 410-837-5840 Fax Number 410-837-3277

B.C. # 161669

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SPECIAL DETECTION LIMITS

NYSDC STARS

SPECIAL REPORTING REQUIREMENTS

As per spec - per 15 EPA, Catherine Cerreus

REMARKS

SAI PROJECT or QUOTE NUMBER
(to insure correct Analysis and Billing)

NA

Temperature Received 4
Airbill Number _____

CUSTODY RECORD

Relinquished by: Robert F. Cochran Jr.
Relinquished by: _____

Date 9-22-99 Time 2:30 PM
Date _____ Time _____

Received by: _____
Received by: _____

Date _____ Time _____

Received by: Laboratory AM. Brady
Received by: _____

Date 9/22/99 Time _____
Date _____ Time _____

Date _____ Time _____
Date _____ Time _____

Baltimore 000223-700-20



SPECIALIZED ASSAY, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

EVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST. STE 404
BALTIMORE, MD 21201

Lab Number: 99-A146632
Sample ID: NFAC-GW-W-09
Sample Type: Water
Site ID:

Project: 000223-D04
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyst	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS by GC										
Benzene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
n-Butylbenzene	0.0124	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
sec-Butylbenzene	0.0021	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
tert-Butylbenzene	0.0012	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
Ethylbenzene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
Isopropylbenzene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
4-Isopropyltoluene	0.0023	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
Naphthalene	0.0175	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
n-Propylbenzene	0.0010	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
Toluene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
1,2,4-Trimethylbenzene	0.0069	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
1,3,5-Trimethylbenzene	0.0028	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
m,p-Xylenes	0.0013	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40
o-Xylene	ND	ng/l	0.0010	0.0010	1	9/26/99	8:12	M. Hinkelick	8021B	40

ND = Not detected at the report limit.

These results relate only to the items tested.

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Report Approved By:

Report Date: 10/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A. Lage, Technical Services

Laboratory Certification Number: 11342

**SPECIALIZED ASSAYS, INC.**

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 79-A146633
Sample ID: NFAC-GW-W-05
Sample Type: Water
Site ID:

Project: 000223-D04
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Run Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Acenaphthene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Anthracene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Fluoranthene	0.006	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Fluorene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Pyrene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(a)anthracene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(a)pyrene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(b)fluoranthene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(k)fluoranthene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Chrysene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Dibenz(a,h)anthracene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Indeno(1,2,3-cd)pyrene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Benzo(g,h,i)perylene	ND	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453
Phenanthrene	0.006	ng/l	0.005	0.005	1	9/26/99	22:39	D.Fountain	8270C	453

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
DNA's	1000 ml	1.0 ml	9/25/99	Fitzwater	3510

Surrogate	% Recovery	Target Range
surr-Nitrobenzene-d5	50.	15. - 105.
surr-2-Fluorobiphenyl	42.	17. - 110.
surr-Terphenyl d14	16.	10. - 116.



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ANALYTICAL REPORT

Laboratory Number: 79-A146633
Sample ID: NFAC-GW-W-03

Page 2

These results relate only to the items tested.
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Report Approved By:

Report Date: 10/ 1/79

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



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P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A146634
Sample ID: NFAC-ES-S-06
Sample Type: Soil
Site ID:

Project: 000223-D04
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Fluoranthene	0.792	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Fluorene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Pyrene	0.594	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Benzo(a)anthracene	0.297	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Benzo(a)pyrene	0.297	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Benzo(b)fluoranthene	0.231	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Benzo(k)fluoranthene	0.264	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Chrysene	0.297	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Dibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Indeno(1,2,3-cd)pyrene	0.165	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Benzo(g,h,i)perylene	0.165	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
Phenanthrene	0.541	ng/kg	0.165	0.165	1	9/29/99	9:43	N. Cobb	8270C	1807
VOLATILE ORGANICS by GC										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Butylbenzene	0.0046	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
sec-Butylbenzene	0.0022	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Isopropylbenzene	0.0011	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
4-Isopropyltoluene	0.0024	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Naphthalene	0.0038	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Toluene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,2,4-Trinethylbenzene	0.0024	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,3,5-Trinethylbenzene	0.0022	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
m,p-Xylenes	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620

ND = Not detected at the report limit.

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ANALYTICAL REPORT

Laboratory Number: 99-A146634
Sample ID: NFAC-ES-S-06

Page 2

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
DMACs	30.6 gm	1.0 ml	9/27/99	Fitzwater	3550

Surrugate	% Recovery	Target Range
FID Surr., a,a,a-trifluorotoluene	97.	50. - 150.
surr-Nitrobenzene-d5	40.	20. - 110.
surr-2-Fluorobiphenyl	37.	18. - 110.
surr-Terphenyl d14	54.	27. - 128.
Halil Surr., chloroprene	93.	67. - 125.
Halil Surr., 1-chloro-3-fluorobenzene	92.	60. - 137.

These results relate only to the items tested.

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Report Approved By:

Report Date: 10/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZED ASSAYS, INC.

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P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SVERDRUP CIVIL, INC 9212
ROBERT GRIBBEN
575 S. CHARLES ST, STE 404
BALTIMORE, MD 21201

Lab Number: 99-A148835
Sample ID: NFAC-ES-S-07
Sample Type: Soil
Site ID:

Project: 000223-DO4
Project Name: NIAGARA FALLS USARC
Sampler: ROBERT GRIBBEN, JR.

Date Collected:
Time Collected:
Date Received: 9/24/99
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Acenaphthene	ND	ng/kg	0.165	0.165	1	9/29/99	18:29	N. Cobb	8270C	1807
Anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Fluoranthene	0.957	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Fluorene	ND	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Pyrene	0.726	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Benzo(a)anthracene	0.396	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Benzo(a)pyrene	0.396	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Benzo(b)fluoranthene	0.264	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Benzo(k)fluoranthene	0.363	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Chrysene	0.429	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Dibenzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Benzo(g,h,i)perylene	0.198	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
Phenanthrene	0.561	ng/kg	0.165	0.165	1	9/29/99	18:20	N. Cobb	8270C	1807
VOLATILE ORGANICS by GCX										
Benzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
sec-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
tert-Butylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Isopropylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
4-Isopropyltoluene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Naphthalene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
n-Propylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
Toluene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,2,4-Trimethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
1,3,5-Trimethylbenzene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
m,p-Xylenes	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620
o-Xylene	ND	ng/kg	0.0010	0.0010	1	9/27/99	15:32	T McCollum	8021B	1620

ND = Not detected at the report limit.



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ANALYTICAL REPORT

Laboratory Number: 99-A146635
Sample ID: NFAC-ES-S-07

Page 2

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
BWA's	30.3 gm	1.0 ml	9/27/99	Fitzwater	9550

Surrogate	% Recovery	Target Range
FID Surr., a,a,a-trifluorotoluene	97.	50. - 150.
surr-Nitrobenzene-d5	47.	20. - 110.
surr-2-Fluorobiphenyl	47.	10. - 110.
surr-Terphenyl d14	69.	27. - 120.
Hall Surr., chloroprene	110.	67. - 125.
Hall Surr., 1-chloro-3-fluorobenzene	100.	60. - 137.

These results relate only to the items tested.

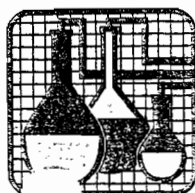
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

Report Date: 10/ 1/99

Theodore J. Duello, Ph.D., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director
Gail A. Lage, Technical Services

Laboratory Certification Number: 11342



SPECIALIZED ASSAYS, INC.

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PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
Naphthalene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 139.	453
Acenaphthene	ng/l	< 0.005	0.036	0.100	363	58. - 140.	453
Anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	60. - 127.	453
Fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	63. - 135.	453
Fluorene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 122.	453
Pyrene	ng/l	< 0.005	0.041	0.100	413	59. - 118.	453
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 130.	453
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	72. - 132.	453
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	68. - 135.	453
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 133.	453
Chrysene	ng/l	< 0.005	< 0.005	0.100	N/A	10. - 130.	453
Dibenzo(a,b)anthracene	ng/l	< 0.005	< 0.005	0.100	N/A	67. - 124.	453
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	0.100	N/A	26. - 143.	453
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	0.100	N/A	24. - 145.	453
Phenanthrene	ng/l	< 0.005	< 0.005	0.100	N/A	81. - 111.	453
Benzene	ng/l	< 0.0010	0.0194	0.0200	97	76. - 122.	40
Benzene	ng/kg	< 0.0010	0.0192	0.0200	96	67. - 137.	1620
Toluene	ng/l	< 0.0010	0.0195	0.0200	98	74. - 127.	40
Toluene	ng/kg	< 0.0010	0.0195	0.0200	98	65. - 139.	1620
m,p-Xylenes	ng/l	< 0.0010	0.0394	0.0400	98	75. - 133.	40
m,p-Xylenes	ng/kg	< 0.0010	0.0432	0.0400	108	58. - 136.	1620

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	NPD	Limit	Q.C. Batch
Naphthalene	ng/l	< 0.005	< 0.005	N/A	32.	453
Acenaphthene	ng/l	0.036	0.039	0.00	13.	453
Anthracene	ng/l	< 0.005	< 0.005	N/A	14.	453
Fluoranthene	ng/l	< 0.005	< 0.005	N/A	15.	453
Fluorene	ng/l	< 0.005	< 0.005	N/A	31.	453
Pyrene	ng/l	0.041	0.043	4.76	8.	453
Benzo(a)anthracene	ng/l	< 0.005	< 0.005	N/A	21.	453
Benzo(a)pyrene	ng/l	< 0.005	< 0.005	N/A	16.	453
Benzo(b)fluoranthene	ng/l	< 0.005	< 0.005	N/A	26.	453
Benzo(k)fluoranthene	ng/l	< 0.005	< 0.005	N/A	30.	453
Chrysene	ng/l	< 0.005	< 0.005	N/A	16.	453
Dibenzo(a,b)anthracene	ng/l	< 0.005	< 0.005	N/A	38.	453
Indeno(1,2,3-cd)pyrene	ng/l	< 0.005	< 0.005	N/A	39.	453
Benzo(g,h,i)perylene	ng/l	< 0.005	< 0.005	N/A	48.	453
Phenanthrene	ng/l	< 0.005	< 0.005	N/A	16.	453
Benzene	ng/l	0.0194	0.0200	3.05	12.	40
Benzene	ng/kg	0.0172	0.0190	1.05	19.	1620
Toluene	ng/l	0.0195	0.0200	2.33	11.	40
Toluene	ng/kg	0.0195	0.0191	2.07	19.	1620
m,p-Xylenes	ng/l	0.0394	0.0407	3.25	12.	40



SPECIALIZED ASSAY, INC.

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Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	R.C. Batch
m,p-Xylenes	ng/kg	0.0432	0.0422	2.34	20.	1620

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	R.C. Batch
Acenaphthene	ng/kg	1.67	1.62	101	60 - 140	1807
Anthracene	ng/kg	1.67	1.75	105	60 - 140	1807
Fluoranthene	ng/kg	1.67	1.72	103	60 - 140	1807
Fluorene	ng/kg	1.67	1.65	99	60 - 140	1807
Pyrene	ng/kg	1.67	1.65	99	60 - 140	1807
Benzo(a)anthracene	ng/kg	1.67	1.72	103	60 - 140	1807
Benzo(a)pyrene	ng/kg	1.67	1.78	107	60 - 140	1807
Benzo(b)fluoranthene	ng/kg	1.67	1.79	107	60 - 140	1807
Benzo(k)fluoranthene	ng/kg	1.67	1.78	107	60 - 140	1807
Chrysene	ng/kg	1.67	1.88	113	60 - 140	1807
Dibenzo(a,h)anthracene	ng/kg	1.67	1.58	95	60 - 140	1807
Indeno(1,2,3-cd)pyrene	ng/kg	1.67	1.45	87	60 - 140	1807
Benzo(g,h,i)perylene	ng/kg	1.67	1.25	75	60 - 140	1807
Phenanthrene	ng/kg	1.67	1.78	107	60 - 140	1807
Naphthalene	ng/l	0.050	0.030	60	60 - 140	453
Acenaphthene	ng/l	0.050	0.034	68	60 - 140	453
Anthracene	ng/l	0.050	0.043	86	60 - 140	453
Fluoranthene	ng/l	0.050	0.044	88	60 - 140	453
Fluorene	ng/l	0.050	0.037	74	60 - 140	453
Pyrene	ng/l	0.050	0.044	88	60 - 140	453
Benzo(a)anthracene	ng/l	0.050	0.045	90	60 - 140	453
Benzo(a)pyrene	ng/l	0.050	0.042	84	60 - 140	453
Benzo(b)fluoranthene	ng/l	0.050	0.035	70	60 - 140	453
Benzo(k)fluoranthene	ng/l	0.050	0.064	128	60 - 140	453
Chrysene	ng/l	0.050	0.043	86	60 - 140	453
Dibenzo(a,h)anthracene	ng/l	0.050	0.051	102	60 - 140	453
Indeno(1,2,3-cd)pyrene	ng/l	0.050	0.048	96	60 - 140	453
Benzo(g,h,i)perylene	ng/l	0.050	0.047	94	60 - 140	453
Phenanthrene	ng/l	0.050	0.042	84	60 - 140	453
Benzene	ng/l	0.0200	0.0201	100	70 - 130	40
Benzene	ng/kg	0.0200	0.0198	99	70 - 130	1620
n-Butylbenzene	ng/l	0.0200	0.0205	102	70 - 130	40
n-Butylbenzene	ng/kg	0.0200	0.0217	108	70 - 130	1620
sec-Butylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
sec-Butylbenzene	ng/kg	0.0200	0.0188	94	70 - 130	1620
tert-Butylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
tert-Butylbenzene	ng/kg	0.0200	0.0202	101	70 - 130	1620
Ethylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40
Ethylbenzene	ng/kg	0.0200	0.0225	112	70 - 130	1620
Isopropylbenzene	ng/l	0.0200	0.0206	103	70 - 130	40



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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	B.C. Batch
Isopropylbenzene	ng/kg	0.0200	0.0194	97	70 - 130	1620
4-Isopropyltoluene	ng/l	0.0200	0.0206	103	70 - 130	40
4-Isopropyltoluene	ng/kg	0.0200	0.0194	97	70 - 130	1620
Napthalene	ng/l	0.0200	0.0201	100	70 - 130	40
Napthalene	ng/kg	0.0200	0.0203	102	70 - 130	1620
n-Propylbenzene	ng/l	0.0200	0.0204	102	70 - 130	40
n-Propylbenzene	ng/kg	0.0200	0.0194	97	70 - 130	1620
Toluene	ng/l	0.0200	0.0201	100	70 - 130	40
Toluene	ng/kg	0.0200	0.0200	100	70 - 130	1620
1,2,4-Trimethylbenzene	ng/l	0.0200	0.0204	103	70 - 130	40
1,2,4-Trimethylbenzene	ng/kg	0.0200	0.0220	110	70 - 130	1620
1,3,5-Trimethylbenzene	ng/l	0.0200	0.0204	103	70 - 130	40
1,3,5-Trimethylbenzene	ng/kg	0.0200	0.0222	111	70 - 130	1620
m,p-Xylenes	ng/l	0.0400	0.0411	103	70 - 130	40
m,p-Xylenes	ng/kg	0.0400	0.0457	114	70 - 130	1620
o-Xylene	ng/l	0.0200	0.0206	103	70 - 130	40
o-Xylene	ng/kg	0.0200	0.0198	99	70 - 130	1620

Blank Data

Analyte	Blank Value	Units	B.C. Batch
Acenaphthene	< 0.165	ng/kg	1807
Anthracene	< 0.165	ng/kg	1807
Fluoranthene	< 0.165	ng/kg	1807
Fluorene	< 0.165	ng/kg	1807
Pyrene	< 0.165	ng/kg	1807
Benzo(a)anthracene	< 0.165	ng/kg	1807
Benzo(a)pyrene	< 0.165	ng/kg	1807
Benzo(b)fluoranthene	< 0.165	ng/kg	1807
Benzo(k)fluoranthene	< 0.165	ng/kg	1807
Chrysene	< 0.165	ng/kg	1807
Dibenzo(a,h)anthracene	< 0.165	ng/kg	1807
Indeno(1,2,3-cd)pyrene	< 0.165	ng/kg	1807
Benzo(g,h,i)perylene	< 0.165	ng/kg	1807
Phenanthrene	< 0.165	ng/kg	1807
Napthalene	< 0.005	ng/l	453
Acenaphthene	< 0.005	ng/l	453
Anthracene	< 0.005	ng/l	453
Fluoranthene	< 0.005	ng/l	453
Fluorene	< 0.005	ng/l	453
Pyrene	< 0.005	ng/l	453
Benzo(a)anthracene	< 0.005	ng/l	453
Benzo(a)pyrene	< 0.005	ng/l	453
Benzo(b)fluoranthene	< 0.005	ng/l	453
Benzo(k)fluoranthene	< 0.005	ng/l	453



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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	R.C. Batch
Chrysene	< 0.005	ng/l	453
Dibenzo(a,b)anthracene	< 0.005	ng/l	453
Indeno(1,2,3-cd)pyrene	< 0.005	ng/l	453
Benzo(g,h,i)perylene	< 0.005	ng/l	453
Phenanthrene	< 0.005	ng/l	453
Benzene	< 0.0010	ng/l	40
Benzene	< 0.0010	ng/kg	1620
n-Butylbenzene	< 0.0010	ng/l	40
n-Butylbenzene	< 0.0010	ng/kg	1620
sec-Butylbenzene	< 0.0010	ng/l	40
sec-Butylbenzene	< 0.0010	ng/kg	1620
tert-Butylbenzene	< 0.0010	ng/l	40
tert-Butylbenzene	< 0.0010	ng/kg	1620
Ethylbenzene	< 0.0010	ng/l	40
Ethylbenzene	< 0.0010	ng/kg	1620
Isopropylbenzene	< 0.0010	ng/l	40
Isopropylbenzene	< 0.0010	ng/kg	1620
4-Isopropyltoluene	< 0.0010	ng/l	40
4-Isopropyltoluene	< 0.0010	ng/kg	1620
Naphthalene	< 0.0010	ng/l	40
Naphthalene	< 0.0010	ng/kg	1620
n-Propylbenzene	< 0.0010	ng/l	40
n-Propylbenzene	< 0.0010	ng/kg	1620
Toluene	< 0.0010	ng/l	40
Toluene	< 0.0010	ng/kg	1620
1,2,4-Trimethylbenzene	< 0.0010	ng/l	40
1,2,4-Trimethylbenzene	< 0.0010	ng/kg	1620
1,3,5-Trimethylbenzene	< 0.0010	ng/l	40
1,3,5-Trimethylbenzene	< 0.0010	ng/kg	1620
m,p-Xylenes	< 0.0010	ng/l	40
m,p-Xylenes	< 0.0010	ng/kg	1620
o-Xylene	< 0.0010	ng/l	40
o-Xylene	< 0.0010	ng/kg	1620

Appendix G

Tank Certificate of Disposal



Environmental
PRODUCTS & SERVICES, INC.

170 Cooper Avenue, Suite 100, Tonawanda, NY 14150 (716) 447-4700, FAX (716) 447-4708, (800) 757-7455

- Emergency Response
- Remediation
- Geoscience Services
- Waste Mgmt.
- Training Svcs.
- Industrial Maintenance
- Products
- Analytical Services

October 20, 1999

Rob Gribben
Sverdrup
575 South Charles Suite 404
Baltimore, Maryland 21201

RE: **SUBCONTRACT NO. 000223-004.**
DISPOSAL OF UNDERGROUND STORAGE TANKS (UST)

Dear Rob:

This letter is submitted as clarification of proof of disposal for the fiberglass UST disposal of in conjunction with the above referenced project.

PFC Deglopper USARC - one (1) - 550 gallon fiberglass UST was transported to the Niagara Falls USARC and placed in a rolloff box. Please refer to the BOL dated 9/15/99 and the rolloff BOL and weight ticket dated 10-11-99.

Amherst USARC - one (1) - 550 gallon fiberglass UST was transported to the Niagara Falls USARC and placed in a rolloff box. Please refer to the BOL dated 9/16/99 and the rolloff BOL and weight ticket dated 10-11-99.

Niagara Falls USARC - one (1) - 550 gallon fiberglass UST was placed in the onsite rolloff. Please refer to the rolloff BOC and weight ticket dated 10-11-99.

One (1) - 1,000 steel UST was transported to Louis Levin for scrap metal recycling. Please refer to the BOL and weight ticket dated 9/23/99.

Should you have questions or require any additional information, please contact me at (716) 447-4700. Thank you.

Very truly yours,

ENVIRONMENTAL PRODUCTS & SERVICES, INC.

Linda J. Grimmer, Project Coordinator
Buffalo Branch

LJG/cjc
9248.LJG.941

Enclosure

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Lake Erie Recycling Corp. / Louis Levin Co.

Metalico - Buffalo

PO Box 6601 • 127 Fillmore Ave. • Buffalo, NY 14240-6601
Tel (716) 823-3788 • Fax (716) 825-6324

CERTIFIED SCALE TICKET

NO. 38343

DATE _____

2:14 PM 09 23 99

SHIPPED TO _____

RECEIVED FROM ENVIRONMENTAL PRODUCTS SERVICES

24000 lb

ADDRESS _____

MATERIALS SCRAP TANK 1000 GALLON

2:27 PM 09 23 99

22200 lb

PRICE _____

TRUCK # THEIR BOX # _____

CARRIER Rev Dump

DRIVER ☒ ON ☐ OFF WEIGHED BY Mid

Appendix H

NYSDEC STARS Memo #1 Guidance Values

TABLE 2
Guidance Values for Fuel Oil Contaminated Soil*

Compound	EPA Method	Detection Limit ⁽¹⁾ (ppb)		TCLP Extraction Guidance Value ⁽²⁾ C _w (ppb)	TCLP Alternative Guidance Value C _a (ppb)	Human Health Guidance Value C _h (ppb)	Sediment Guidance Value C _s (ppb)	
		Liquid	Solid				Fresh	Marine
Benzene	8021 (8020)	1	2	0.7	14	2.4 x 10 ⁴		
Ethylbenzene	8021 (8020)	1	2	5	100	8.0 x 10 ⁵		
Toluene	8021 (8020)	1	2	5	100	2.0 x 10 ⁷		
o-Xylene	8021 (8020)	2	2	5	100	2.0 x 10 ⁸		
m-Xylene	8021 (8020)	2	2	5	100	2.0 x 10 ⁸		
p-Xylene	8021 (8020)	2	2	5	100	...		
Mixed Xylenes	8021 (8020)	2	2	5	100	2.0 x 10 ⁸		
Isopropylbenzene	8021	1	1	5	100	...		
n-Propylbenzene	8021	1	1	5	100	...		
p-Isopropyltoluene	8021	1	1	5	100	...		
1,2,4-Trimethylbenzene	8021	1	1	5	100	...		
1,3,5-Trimethylbenzene	8021	1	1	5	100	...		
n-Butylbenzene	8021	1	1	5	100	...		
sec-Butylbenzene	8021	1	1	5	100	...		
t-Butyl benzene	8021	1	1	5	100	...		
Naphthalene ⁽³⁾	8021 (8270)	1 (6)	1 (330)	10	200	3.0 x 10 ⁵		
Anthracene	8270	8	330	50	1,000	2.0 x 10 ⁷		
Fluorene	8270	8	330	50	1,000	3.0 x 10 ⁶		
Phenanthrene	8270	22	330	50	1,000	...		
Pyrene	8270	8	330	50	1,000	2.0 x 10 ⁶		
Acenaphthene	8270	8	330	20	400	5.0 x 10 ⁶		
Benzo(a)anthracene	8270	31	330	.002	.04 ⁽⁴⁾	220	33	18
Fluoranthene	8270	9	330	50	1,000	3.0 x 10 ⁶		

(CONTINUED ON THE NEXT PAGE)

TABLE 2 (Cont'd)
Guidance Values for Fuel Oil Contaminated Soil*

Compound	EPA Method	Detection Limit (ppb)		TCLP Extraction Guidance Value ⁽¹⁾ C _w (ppb)	TCLP Alternative Guidance Value C _s (ppb)	Human Health Guidance Value C _h (ppb)	Sediment Guidance Value C _s (ppb)	
		Liquid	Solid				Fresh	Marine
Benzo(b)fluoranthene	8270	19	330	.002	.04 ⁽⁴⁾	220	33	18
Benzo(k)fluoranthene	8270	10	330	.002	.04 ⁽⁴⁾	220	33	18
Chrysene	8270	10	330	.002	.04 ⁽⁴⁾	***	33	18
Benzo(a)pyrene	8270	10	330	.002	.04 ⁽⁴⁾	61	33	18
Benzo(g,h,i)perylene	8270	10	330	.002	.04 ⁽⁴⁾	***		
Indeno(1,2,3-cd)pyrene	8270	10	330	.002	.04 ⁽⁴⁾	***		
Dibenz(a,h)anthracene	8270	10	330	50	1,000	14		

* Nuisance Characteristics Guidance:

No Petroleum-type odors.

No individual contaminant in soil at greater than 10,000 ppb.

⁽¹⁾ The listed Detection Limits are Practical Quantitation Limits (PQL's). The Method Detection Limit (MDL) is the best possible detection. Laboratories report the Practical Quantitation Limit (PQL), which is generally 4 times the MDL. Efforts should be made to obtain the best detection possible when selecting a laboratory. When the Guidance Value or standard is below the detection limit, achieving the detection limit will be considered acceptable for meeting the Guidance Value or standard.

⁽²⁾ The TCLP Extraction Guidance Values are equal to the NYSDEC groundwater quality standards or Guidance Values, or the NYSDOH drinking water quality standards or Guidance Values, whichever is more stringent.

⁽³⁾ For naphthalene analysis in a liquid matrix, both Method 8021 and Method 8270 can provide satisfactory levels for comparison to the C_w of 10 ppb.

For naphthalene analysis in a solid matrix, Method 8021 is preferred over Method 8270 for comparison to the C_s of 200 ppb. If the C_s Guidance Value is not being used in the soil evaluation, then both Method 8021 and 8270 can provide satisfactory detection levels for comparison to the C_s of 3.0 x 10⁵, and nuisance characteristic of 10,000 ppb.

⁽⁴⁾ Due to the high detection limit for a solid matrix, the TCLP Extraction Method must be used to demonstrate groundwater quality protection for these compounds.

*** No Guidance Value identified in EPA HEAST Report.

Appendix I

Minutes of Spill Report

9/21/99

NIAGARA FALLS

USARC

2:30 Linda Gerner called Sal Chavira, NYSDEC
and left message

2:45 Sal paged Linda Gerner

2:46 Linda G. called Sal. line was

busy

2:46 - 3:05 Linda G. continued attempts

line busy

3:05 Sal paged Linda G.

3:06 - Linda G. spoke to Sal.

He was aware that spill was
called in + thought Dave Brust from
Niagara County Health Dept.
was coming out.

- Sal asked if excavation was backfilled

- I informed backfilling had started

I asked if he wanted me to

stop backfilling he said no.

- Sal asked about circumstances of
spill report.

I indicated that slight sheen was
noted. Sheen was believed to
be from ground water mixing with
toxic residue. I informed him
that water was pumped into drums
and that toxic had been drawn

prior to attempting to pull

- I informed Sal that soil samples had been collected. I also asked if he would require a groundwater sample. He said soil samples were sufficient

- Sal stated that he would attempt to reach Dave Brust and confirm he was coming to the site

3:15

Dave Martin of Niagara County Health Dept. arrived onsite and met with Dick.



PAUL R. DICKY
Assistant Public Health Engineer

439-7595

NIAGARA COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

~~10th & E. O. BOWEN STREET
NIAGARA FALLS, NY 14302
OFFICE (716) 278-3787
FAX (716) 278-3787~~

5467 UPPER MT. ROAD
LOCKPORT, NY 14094
OFFICE (716) 439-7444
FAX (716) 439-7440

• 24-HOUR EMERGENCY NO. (716) 439-7430 •

NIAGARA County Health Dept

DAVE MARTIN

439-7444



New York State
Department of
Environmental Conservation



MARVIN PRINGLE
Environmental Engineering Technician II
Spill Response Unit
Region 9

270 Michigan Avenue
Buffalo, NY 14203-2999
(716) 851-7220

24-Hour Spill Hotline
1 (800) 457-7362

ROLODEX

REFILL NO. S30 & S831
PATENTED

NYSDEC

851-7220

Sal Calandra

Environmental Engineer I

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client: U.S. Army 77th RSC Engineers
AFRC-CNY-EN
Bldg. 200
Pl. Totten, NY 11359-1016

Lab ID #: 4843.01-03
Sample Received: 10/05/99
Sample Matrix: Aq
Sample Extracted: Na

Site: Niagara Falls OWS

Field ID#: Drones 1-8

Method of Analysis: Std. Methods 18th, Method 3120B, 3112B
Method of Extraction: NA

TCLP-METALS RESULTS SUMMARY (mg/L)

Element	Date Analyzed	Results	Regulatory Level (mg/L)	MDL (mg/L)
Arsenic	10/07/99	0.006	5.0	0.002
Barium	10/07/99	0.124	100	0.0005
Cadmium	10/07/99	0.0009	1.0	0.0005
Chromium	10/07/99	0.0583	5.0	0.0005
Lead	10/07/99	ND	5.0	0.002
Selenium	10/07/99	ND	1.0	0.003
Silver	10/07/99	ND	5.0	0.003
Mercury	10/13/99	0.00014	0.2	0.0001

ND = Not Detected, MDL = Method Detection Limit, NLE = No Limit Established

ASBESTOS INSPECTION REPORT

US ARMY RESERVE SITE

NIAGARA FALLS, NEW YORK

(NY046)



Prepared for:

77TH REGIONAL READINESS COMMAND
UNITED STATES ARMY RESERVE
FORT TOTTEN, NEW YORK



Prepared by:

ENVIRONMENTAL ENTERPRISE GROUP, INC.
1345 BARRACKS ROAD
NORTH CHARLESTON, SOUTH CAROLINA
29405
(843) 202.8003

DECEMBER 2004

UNITED STATES ARMED FORCES RESERVE CENTER NIAGARA FALLS, NEW YORK (NY046)

ASBESTOS INSPECTION REPORT

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US ARMED FORCES RESERVE CENTER - NIAGARA FALLS (NY046)

ASBESTOS INSPECTION REPORT

EXECUTIVE SUMMARY

1. INTRODUCTION

Asbestos Building Inspectors Mark Moltzen and Terry Lewis from the Environmental Enterprise Group, Inc. (EEG) of Charleston, SC conducted an inspection to identify asbestos containing building material (ACBM) at the US Army Reserve Center located in Niagara Falls, NY. The inspections were conducted on 14-15 October 2004 and the results of the inspections provide an inventory of ACBM in ten (10) buildings.

All inspectors were certified by an EPA accredited training center under the Asbestos Hazard Emergency Response Act (AHERA), as Building Inspectors. All Inspectors and Management Planners are employees of EEG, Inc. and copies of inspector licenses are located in the **TRAINING** section of this report.

Suspect ACBM was identified and sampled in accordance with AHERA-style guidelines (See Paragraph 5 for sampling strategy). Some materials suspected of being ACBM may not have been assumed to be ACBM and not sampled. Assumed materials may include floor tile and ventilation transition boots. Some materials may not have been identified as ACBM because they were portable and removable (e.g. blackboards, fire hoses), were not safe to sample (e.g. electrical insulation), or sampling would have damaged the material and impaired the normal system operation/integrity (e.g. heating/ventilation/AC systems, furnace, boiler door and pipe gaskets).

Bulk samples were analyzed by the Environmental Hazards Services (EHS) laboratory of Richmond, Virginia. EHS is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Industrial Hygiene Association (AIHA) for asbestos analysis. Polarized Light Microscopy (PLM) was used to analyze samples.

Materials identified as ACBM and either sampled or assumed were designated a homogeneous area by similarity of color, texture and date of application. Each homogeneous area was assessed in accordance with the "Asbestos Facility Inventory/Assessment Protocol," NEESA 70.2-010, Developed by the Naval Facilities Engineering Service Center (NFESC).

US ARMED FORCES RESERVE CENTER - NIAGARA FALLS (NY046)

ASBESTOS INSPECTION REPORT

The NFESC protocol establishes an algorithm rating for each homogeneous area based on condition, quantity, friability, exposure potential, number of persons exposed, building significance and percentage of asbestos present in the material. The ***BUILDING SUMMARY TABLES*** lists the ratings for each homogeneous area. The rating is heavily weighted by condition, friability, exposure potential and building significance. The higher the rating, the more attention is needed for this material. For the purposes of this inspection, all buildings were listed as essential and occupied during the inspection.

2. **FINDINGS SUMMARY**

BUILDING 4 (Main Reserve Center): Confirmed friable ACBM in the form of piping TSI and vent duct TSI and non-friable ACBM in the form of floor tile, floor tile mastic and fire doors are found in this building.

BUILDING 18 (AMSA 76/Motorpool): No confirmed ACBM was found in this building.

BUILDING 19 (Quonset Hut): Confirmed non-friable ACBM in the form of sheetrock joint compound and roofing mastic are located in the building.

BUILDING 20 (Electronics Storage): No suspect material was found in this building.

BUILDING 21 (277th QM HQ) Confirmed non-friable ACBM in the form of floor tile, floor tile mastic and coving mastic are located in the building.

BUILDING 22 (Dining Hall/Storage): Confirmed friable ACBM in the form of fitting TSI and cork ceiling panels was found in this building.

BUILDING 23 (Storage Building): Confirmed non-friable ACBM in the form of roofing mastic is located in the building.

BUILDING 24 (Storage Building): No suspect material was found in this building.

BUILDING 25 (Former Power Plant) No confirmed ACBM was found in this building.

BUILDING 26 (Storage Building): Confirmed non-friable ACBM in the form of roofing mastic is located in the building.

See individual Building Summaries for detailed information on these materials.

Buildings containing asbestos are required to be included in an Operations and Maintenance (O&M) Program. Any identified asbestos containing material not removed must be maintained following the guidelines of an O&M Plan.

3. **RENOVATION/DEMOLITION**

The National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 requires written notification to the state and/or local environmental regulators at least ten working days prior to renovation or demolition of ACBM in quantities of 260 linear feet, 160 square feet, 35 cubic feet, or greater, except in cases of emergencies.

US ARMED FORCES RESERVE CENTER - NIAGARA FALLS (NY046)

ASBESTOS INSPECTION REPORT

Contractors are advised to verify most current regulations with the state and/or local environmental regulators prior to start of any work.

4. **REPORT ORGANIZATION**

Specific, detailed information on each inspected building is noted in the *BUILDING SUMMARIES* section of this report and include the following:

- Photos of existing buildings
- Narrative description of the building with findings and recommendations
- Building Summary Table
- Report Summary Table
- Laboratory Test Results Table, if applicable
- Operations and Maintenance Table, if applicable
- CADD drawing showing sample locations, if applicable
- Chain of Custody and laboratory results forms

Following the *BUILDING SUMMARIES* is a tabbed section for *TRAINING*. Copies of each inspector's appropriate certificates and laboratory accreditations are included there.

5. **SAMPLING STRATEGY**

The sampling and analysis of bulk samples was conducted in accordance with established AHERA guidelines. Unless otherwise stated, the following sampling scheme was utilized during the survey:

Thermal System Insulation (TSI)

- 1) A minimum of 1 sample was taken of each homogenous area <6 linear feet (LF) or <6 square feet (SF).
- 2) A minimum of 3 samples was taken of each homogenous area >6 LF or > 6 SF.

Surfacing Materials

- 1) A minimum of 3 samples were taken of each homogeneous area of material 1000 SF or less.
- 2) A minimum of 5 samples were taken of each homogenous area of material greater than 1000 SF but less than 5000 SF.
- 3) A minimum of 7 samples were taken of each homogenous area of material greater than 5000 SF.

Miscellaneous Materials (Including floor tiles, ceiling tiles and mastics)

A minimum of 2 samples

US ARMED FORCES RESERVE CENTER - NIAGARA FALLS (NY046)

ASBESTOS INSPECTION REPORT

6. DISCLAIMER

A comprehensive and thorough asbestos inspection was conducted on these facilities by certified and experienced Environmental Enterprise Group asbestos inspectors. Every effort was made to identify all ACM in the facility, but due to random sampling techniques mandated by EPA regulations and the non-destructive sampling policy for this project, the possibility always exists that some ACM remains undetected.

REPORT SUMMARY TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS ASBESTOS BUILDING INSPECTION

Bldg No.	Bldg Name or Description	Year Built	Sq. Ft.	Number of Homogeneous Areas			Comments
				Total	Assumed	Confirmed	
18	AMSA 76/Motorpool	1956	9,720	2	0	0	No asbestos detected in this building
19	Storage Quonset Hut	1956	1,600	2	0	2	Sheetrock joint compound (mud) - roofing mastic
21	277th Quartermasters HQ	1956	13,055	8	1	2	Floor tile - floor tile mastic - coving mastic
22	Dining Hall/Storage	1956	20,703	9	0	2	Cork ceiling panels - fitting TSI
23	Storage Building	1956	2,058	2	0	1	Roofing mastic
25	Former Power Plant	1956	1,504	1	0	0	No asbestos detected in this building
26	Storage Building	1960	2,150	1	0	1	Roofing mastic
4	Niagara Falls Army Reserve Center	1956	85,500	15	3	4	Aircell piping TSI - white piping TSI - Vent duct TSI - Floor tiles - floor tile mastic - fire doors

NOTES: Buildings 20 and 24 are not listed above because no suspect material was found there.

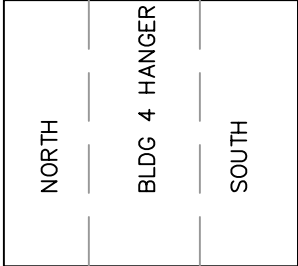
**US ARMED FORCES RESERVE CENTER - NIAGARA FALLS
(NY046)
ASBESTOS INSPECTION REPORT**

BUILDING SUMMARIES

The following pages report observations noted and suggest actions required as a result of an asbestos inspection conducted by Environmental Enterprise Group, Inc. in October of 2004. Ten (10) buildings at the US Army Reserve Center located in Niagara Falls, NY were inspected for possible presence of suspect/assumed asbestos. This section provides *Description, Findings, Observations, Recommended Abatement Action, and Recommendations for Operations and Maintenance* for each building inspected.

The room numbers shown on the CADD drawings and referenced in this report were assigned by the inspectors at the time of inspection unless previous room numbers were assigned and displayed.

Some room numbers are prefixed by a letter to indicate the type of room; **E** indicates an entry to the building, **H** indicates a hallway, **R** indicates a roof, **S** indicates a stairwell, **A** is an attic area and **B** indicates basement rooms.



24

23

22

19

18

25

20

21

26

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
SITE MAP ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 1-6-05	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER ee9lnc_NY046_SM_10-04		SHEET 1 OF 1



Building 4 – Main Reserve Building
Niagara Falls Armed Forces Reserve Center – Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 4: Niagara Falls Armed Forces Reserve Center

1. DESCRIPTION:

Building 4 is an 85,500 square-foot building constructed in 1956. It is a large metal-framed hanger with 2-story brick buildings attached on the north and south sides. All roofs are rubber-coated. The following information was identified during the survey and from the analysis of the samples taken:

- Fifteen homogeneous areas were identified during the initial survey.
- Three homogeneous areas were assumed to contain asbestos.
- Twelve of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Four of the suspected homogeneous areas were confirmed to contain asbestos.
- Eight of the suspected homogenous areas did not contain asbestos.

2. FINDINGS:

Twelve homogeneous areas with suspected ACM were identified. Thirty-eight samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in three of the homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos:

- H-4: TSI, PIPE, AIRCELL, Gray, was Moderately-friable and Damaged.
- H-8: TSI, PIPE, FIBROUS, White, was Highly-friable and Not Damaged.
- H-9: MISC, FLOOR TILE MASTIC ONLY, Black mastic under 12" light brown floor tile, was Non-friable and Not Damaged.
- H-11: TSI, VENT DUCT, FIBROUS, White, was Highly-friable and Damaged.

Assumed ACM. The following homogeneous areas were assumed to contain asbestos:

- H-5: MISC, FLOOR TILE & MASTIC, 9" dark brown tile/mastic, was Moderately-friable and Not Damaged.
- H-14: MISC, FIRE DOOR, Metal, was Non-friable and Not Damaged.
- H-15: MISC, FLOOR TILE & MASTIC, 9" green tile w/white streaks/mastic, was Non-friable and Not Damaged.

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, COVING MASTIC, Brown
- H-2: TSI, FITTING, CLOTH WRAPPED, Gray
- H-3: MISC, SHEETROCK/MUD, White
- H-6: MISC, ACOUSTICAL TILE, White w/grooves & small holes
- H-7: MISC, ACOUSTICAL TILE, White smooth w/pinholes
- H-10: MISC, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marbling/mastic
- H-12: SURFACING, FIREPROOFING, White
- H-13: SURFACING, FIREPROOFING, Gray

3. OBSERVATIONS:

Rooms from the north side building (4N) have an "N" preface and rooms from the south side (4S) have no preface. 12" brown floor tile with brown & white marbling and ceiling tiles were replaced when building was renovated in 2001/02 and these materials are not considered to be suspect.

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-4: TSI, PIPE, Gray: **Remove/O&M**
- H-5: MISC, FLOOR TILE & MASTIC, 9" dark brown tile/mastic: **O&M**
- H-8: TSI, PIPE, White: **Remove/O&M**
- H-9: MISC, FLOOR TILE MASTIC ONLY, Black mastic under 12" light brown floor tile: **O&M**
- H-11: TSI, VENT DUCT, White: **Remove/O&M**
- H-14: MISC, FIRE DOOR, Metal: **O&M**
- H-15: MISC, FLOOR TILE & MASTIC, 9" green tile w/white streaks/mastic: **O&M**

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance (O&M) recommendations for confirmed and assumed homogeneous materials of ACM are found in the Operations & Maintenance Table of this report. The materials listed below should be maintained following the guidelines in the O&M Plan during regular maintenance and small-scale repair activities, until removed.

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY
ASBESTOS INSPECTION REPORT

TSI PIPE is Confirmed, Moderately-friable ACM.

H-4 (PIPE, Gray) is located in Rooms 100, 101, 102, 102b, 103, 104, 105, 106, 107, 103a, 110, 110a, 110b, 121, 121a, 122, 122a, 122b, 122c, 122d, 124a, 124b, 124c, 124d, E-001, E-002, N100, N103, N105, N107, N109a, N111, N112, N117, N118a, N118b, N119, N120, N121, N122, NH-100, N208, N210, N212, N214, N225, Hanger bay and Hall NH-101.

H-8 (PIPE, White) is located in Rooms 103, 104, 107, E-002 and N121.

MISC FLOOR TILE & MASTIC is Assumed, Non-friable ACM.

H-5 (FLOOR TILE & MASTIC, 9" dark brown tile/mastic) is located in Rooms 103, 106, 107, 121, 124a, 124b, 144, 208, 210, 211, 214, 216b, 228, 228a, 229, 250, 251, 252, 253, 255, 257, 258, 259, 260, 261, 262, 263, 264, 281, 282, N103, N104, N104a, N105, N107, N108a, N108b, N109b, N109c, N117, N118b, N201, N202, N202a, N203, N204, N204a, N205, N208, N210, N212, N212a, N214 and N216.

H-15 (FLOOR TILE & MASTIC, 9" green tile w/white streaks/mastic) is located in Room N115.

MISC FLOOR TILE MASTIC ONLY is Confirmed, Non-friable ACM.

H-9 (FLOOR TILE MASTIC ONLY, Black mastic under 12" light brown floor tile) is located in Rooms 100, 212, 216, 216a, 216c, 216d, 216e, 224, 230, 231, 232, 232a, 232b, 232c, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 246, 248, 247a and Entry E-001.

TSI VENT DUCT is Confirmed, Highly-friable ACM.

H-11 (VENT DUCT, White) is located in Room 216c.

MISC FIRE DOOR is Assumed, Non-friable ACM.

H-14 (FIRE DOORS, Metal) are located in Room N115a and the Hanger bay.

BUILDING SUMMARY TABLE US ARMY RESERVE CENTER - NIAGARA FALLS Building No. 4

ASBESTOS BUILDING INSPECTION

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Friability	Cond	% D	Recommended Action	Abate Cost	Comments
1	N	Misc, COVING MASTIC, Brown	SF	0						
Rooms 104, E-001s, various										
2	N	TSI, FITTING, CLOTH WRAPPED, Gray	SF	0						
Rooms 103, N109a, S-001s										
3	N	Misc, SHEETROCK/MUD, White	SF	0						
Rooms 206, N117										
4	Y	TSI, PIPE, AIRCELL, Gray	5,924 LF	35	Mod	D	0.2	Remove/O&M		
Rooms 100, 101, 102, 102b, 103, 104, 105, 106, 107, 103a, 110, 110a, 110b, 121, 121a, 122, 122a, 122b, 122c, 122d, 124a, 124b, 124c, 124d, E-001, E-002, Hanger, N100, N103, N105, N107, N109a, N111, N112, N117, N118a, N118b, N119, N120, N121, N122, NH-100, N208, N210, N212, N214, N225, NH-101										
5	A	Misc, FLOOR TILE & MASTIC, 9" dark brown tile/mastic	20,538 SF	24	Mod	PD	0.0	O&M		Located under carpet in some listed rooms.
Rooms 103, 106, 107, 121, 124a, 124b, 144, 208, 210, 211, 214, 216b, 228, 228a, 229, 250, 251, 252, 253, 255, 257, 258, 259, 260, 261, 262, 263, 264, 281, 282, N103, N104, N104a, N105, N107, N108a, N108b, N109b, N109c, N117, N118b, N201, N202, N204, N205, N208, N210, N212, N212a, N214, N216										
6	N	Misc, ACOUSTICAL TILE, White w/grooves & small holes	SF	0						
Rooms 128, 129, 144										
7	N	Misc, ACOUSTICAL TILE, White smooth w/pinholes	SF	0						
Rooms 102a, N104, N104a, N105										
8	Y	TSI, PIPE, FIBROUS, White	3,390 LF	26	High	PD	0.0	Remove/O&M		
Rooms 103, 104, 107, E-002, N121										
9	Y	Misc, FLOOR TILE MASTIC ONLY, Black mastic under 12" light brown floor tile	6,945 SF	3	Non	PD	0.0	O&M		Mastic contains asbestos, floor tile does not.
Rooms 100, 212, 216, 216a, 216c, 216d, 224, 230, 231, 232, 232a, 232b, 232c, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 246, 248, 247a, E-001										
10	N	Misc, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marbling/mastic	SF	0						
Rooms 202, NH-100										
11	Y	TSI, VENT DUCT, FIBROUS, White	198 SF	33	High	D	8.0	Remove/O&M		
Rooms 216c										

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

BUILDING SUMMARY TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS

ASBESTOS BUILDING INSPECTION

Building No. 4

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
12	N	Surfacing, FIREPROOFING, White	SF	0						
Rooms Hanger										
13	N	Surfacing, FIREPROOFING, Gray	SF	0						
Rooms Hanger										
14	A	Misc, FIRE DOOR, Metal	308 SF	10	Non	PD	0.0	O&M		Doors located in hanger bay & north side mechanical room.
Rooms N115a, Hanger										
15	A	Misc, FLOOR TILE & MASTIC, 9" green tile w/white streaks/mastic	84 SF	11	Non	PD	0.0	O&M		
Rooms N115										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

LABORATORY TEST RESULTS TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS ASBESTOS BUILDING INSPECTION INDUSTRIAL LABORATORY TEST REPORT

Building No. 4

Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	NO	Niagrfls-048	E-001s	Misc, COVING MASTIC, Brown	10/13/04	10/20/04	No Asbestos Detected	0%
1	NO	Niagrfls-049	104	Misc, COVING MASTIC, Brown	10/13/04	10/20/04	No Asbestos Detected	0%
2	NO	Niagrfls-050	103	TSI, FITTING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
2	NO	Niagrfls-051	S-001s	TSI, FITTING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
2	NO	Niagrfls-052	N109a	TSI, FITTING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
3	NO	Niagrfls-053	206	Misc, SHEETROCK/MUD, White	10/13/04	10/20/04	No Asbestos Detected	0%
3	NO	Niagrfls-054	N117	Misc, SHEETROCK/MUD, White	10/13/04	10/20/04	No Asbestos Detected	0%
4	YES	Niagrfls-055	103a	TSI, PIPE, Gray	10/13/04	10/20/04	Chrysotile	8%
4	YES	Niagrfls-056	NH-101	TSI, PIPE, Gray	10/13/04	10/20/04	Chrysotile	7%
4	YES	Niagrfls-057	N117	TSI, PIPE, Gray	10/13/04	10/20/04	Chrysotile	5%
6	NO	Niagrfls-058	144	Misc, ACOUSTICAL TILE, White w/grooves & small holes	10/13/04	10/20/04	No Asbestos Detected	0%
6	NO	Niagrfls-059	144	Misc, ACOUSTICAL TILE, White w/grooves & small holes	10/13/04	10/20/04	No Asbestos Detected	0%
7	NO	Niagrfls-060	102a	Misc, ACOUSTICAL TILE, White smooth w/pinholes	10/13/04	10/20/04	No Asbestos Detected	0%
7	NO	Niagrfls-061	N105	Misc, ACOUSTICAL TILE, White smooth w/pinholes	10/13/04	10/20/04	No Asbestos Detected	0%
8	YES	Niagrfls-062	E-002	TSI, PIPE, White	10/13/04	10/20/04	Amosite	40%
8	YES	Niagrfls-062	E-002	TSI, PIPE, White	10/13/04	10/20/04	Chrysotile	15%
8	YES	Niagrfls-063	107	TSI, PIPE, White	10/13/04	10/20/04	Amosite	35%
8	YES	Niagrfls-063	107	TSI, PIPE, White	10/13/04	10/20/04	Chrysotile	12%
8	YES	Niagrfls-064	N121	TSI, PIPE, White	10/13/04	10/20/04	Amosite	40%
8	YES	Niagrfls-064	N121	TSI, PIPE, White	10/13/04	10/20/04	Chrysotile	15%
9	YES	Niagrfls-065	E-001	Misc, FLOOR TILE MASTIC ONLY, Black mastic under 12" light bro	10/13/04	10/20/04	Chrysotile	5%
9	NO	Niagrfls-066	247a	Misc, FLOOR TILE MASTIC ONLY, Black mastic under 12" light bro	10/13/04	10/20/04	No Asbestos Detected	0%
10	NO	Niagrfls-067	202	Misc, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marblin	10/13/04	10/20/04	No Asbestos Detected	0%
10	NO	Niagrfls-068	NH-100	Misc, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marblin	10/13/04	10/20/04	No Asbestos Detected	0%
11	YES	Niagrfls-069	216c	TSI, VENT DUCT, White	10/13/04	10/20/04	Chrysotile	75%
11	YES	Niagrfls-070	216c	TSI, VENT DUCT, White	10/13/04	10/20/04	Chrysotile	75%
11	YES	Niagrfls-071	216c	TSI, VENT DUCT, White	10/13/04	10/20/04	Chrysotile	70%
12	NO	Niagrfls-072	Hanger	Surfacing, FIREPROOFING, White	10/13/04	10/20/04	No Asbestos Detected	0%
12	NO	Niagrfls-073	Hanger	Surfacing, FIREPROOFING, White	10/13/04	10/20/04	No Asbestos Detected	0%
12	NO	Niagrfls-074	Hanger	Surfacing, FIREPROOFING, White	10/13/04	10/20/04	No Asbestos Detected	0%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

**LABORATORY TEST
RESULTS TABLE**

**US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION
INDUSTRIAL LABORATORY TEST REPORT**

Building No. 4

Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
12	NO	Niagrfls-075	Hanger	Surfacing, FIREPROOFING, White	10/13/04	10/20/04	No Asbestos Detected	0%
12	NO	Niagrfls-076	Hanger	Surfacing, FIREPROOFING, White	10/13/04	10/20/04	No Asbestos Detected	0%
12	NO	Niagrfls-077	Hanger	Surfacing, FIREPROOFING, White	10/13/04	10/20/04	No Asbestos Detected	0%
12	NO	Niagrfls-078	Hanger	Surfacing, FIREPROOFING, White	10/13/04	10/20/04	No Asbestos Detected	0%
13	NO	Niagrfls-079	Hanger	Surfacing, FIREPROOFING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
13	NO	Niagrfls-080	Hanger	Surfacing, FIREPROOFING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
13	NO	Niagrfls-081	Hanger	Surfacing, FIREPROOFING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
13	NO	Niagrfls-082	Hanger	Surfacing, FIREPROOFING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
13	NO	Niagrfls-083	Hanger	Surfacing, FIREPROOFING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
13	NO	Niagrfls-084	Hanger	Surfacing, FIREPROOFING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%
13	NO	Niagrfls-085	Hanger	Surfacing, FIREPROOFING, Gray	10/13/04	10/20/04	No Asbestos Detected	0%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

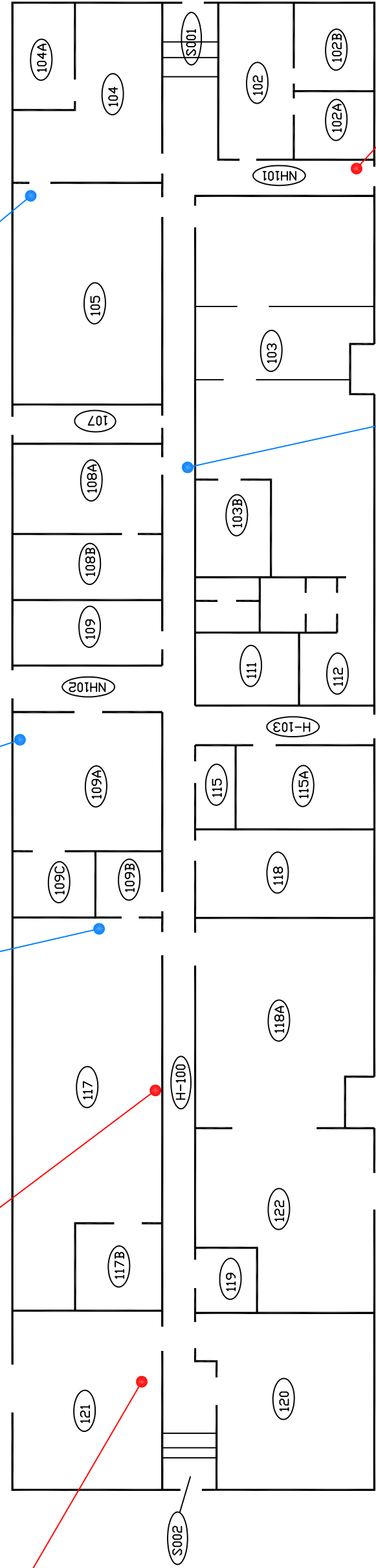
**OPERATIONS AND
MAINTENANCE TABLE**

**US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION**

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rating	Friability	Condition	% D	Recommended Action
4	4	TSI, PIPE, AIRCELL, Gray	5,924 LF	35	Mod	Damaged	0.18	Remove/O&M
Locations: Rooms 100, 101, 102, 102b, 103, 104, 105, 106, 107, 103a, 110, 110a, 110b, 121, 121a, 122, 122a, 122b, 122c, 122d, 124a, 124b, 124c, 124d, E-001, E-002, Hanger, N100, N103, N105, N107, N109a, N111, N112, N117, N118a, N118b, N119, N120, N121, N122, NH-100, N208, N210, N212, N214, N225, NH-101								
4	5	Misc, FLOOR TILE & MASTIC, 9" dark brown tile/mastic	20,538 SF	24	Mod	Not Damaged	0.00	O&M
Locations: Rooms 103, 106, 107, 121, 124a, 124b, 144, 208, 210, 211, 214, 216b, 228, 228a, 229, 250, 251, 252, 253, 255, 257, 258, 259, 260, 261, 262, 263, 264, 281, 282, N103, N104, N104a, N105, N107, N108a, N108b, N109b, N109c, N117, N118b, N201, N202, N202a, N203, N204, N204a, N205, N208, N210, N212, N212a, N214, N216								
4	8	TSI, PIPE, FIBROUS, White	3,390 LF	26	High	Not Damaged	0.00	Remove/O&M
Locations: Rooms 103, 104, 107, E-002, N121								
4	9	Misc, FLOOR TILE MASTIC ONLY, Black mastic under 12" light brown floor tile	6,945 SF	3	Non	Not Damaged	0.00	O&M
Locations: Rooms 100, 212, 216, 216a, 216c, 216d, 216e, 224, 230, 231, 232, 232a, 232b, 232c, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 246, 248, 247a, E-001								
4	11	TSI, VENT DUCT, FIBROUS, White	198 SF	33	High	Damaged	8.00	Remove/O&M
Locations: Rooms 216c								
4	14	Misc, FIRE DOOR, Metal	308 SF	10	Non	Not Damaged	0.00	O&M
Locations: Rooms N115a, Hanger								
4	15	Misc, FLOOR TILE & MASTIC, 9" green tile w/white streaks/mastic	84 SF	11	Non	Not Damaged	0.00	O&M
Locations: Rooms N115								

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.



LEGEND

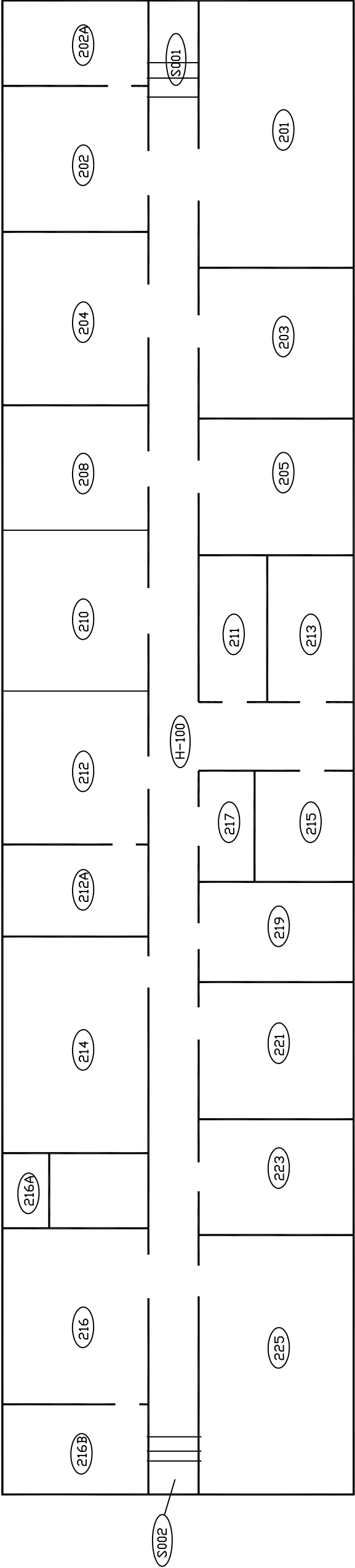
- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC.

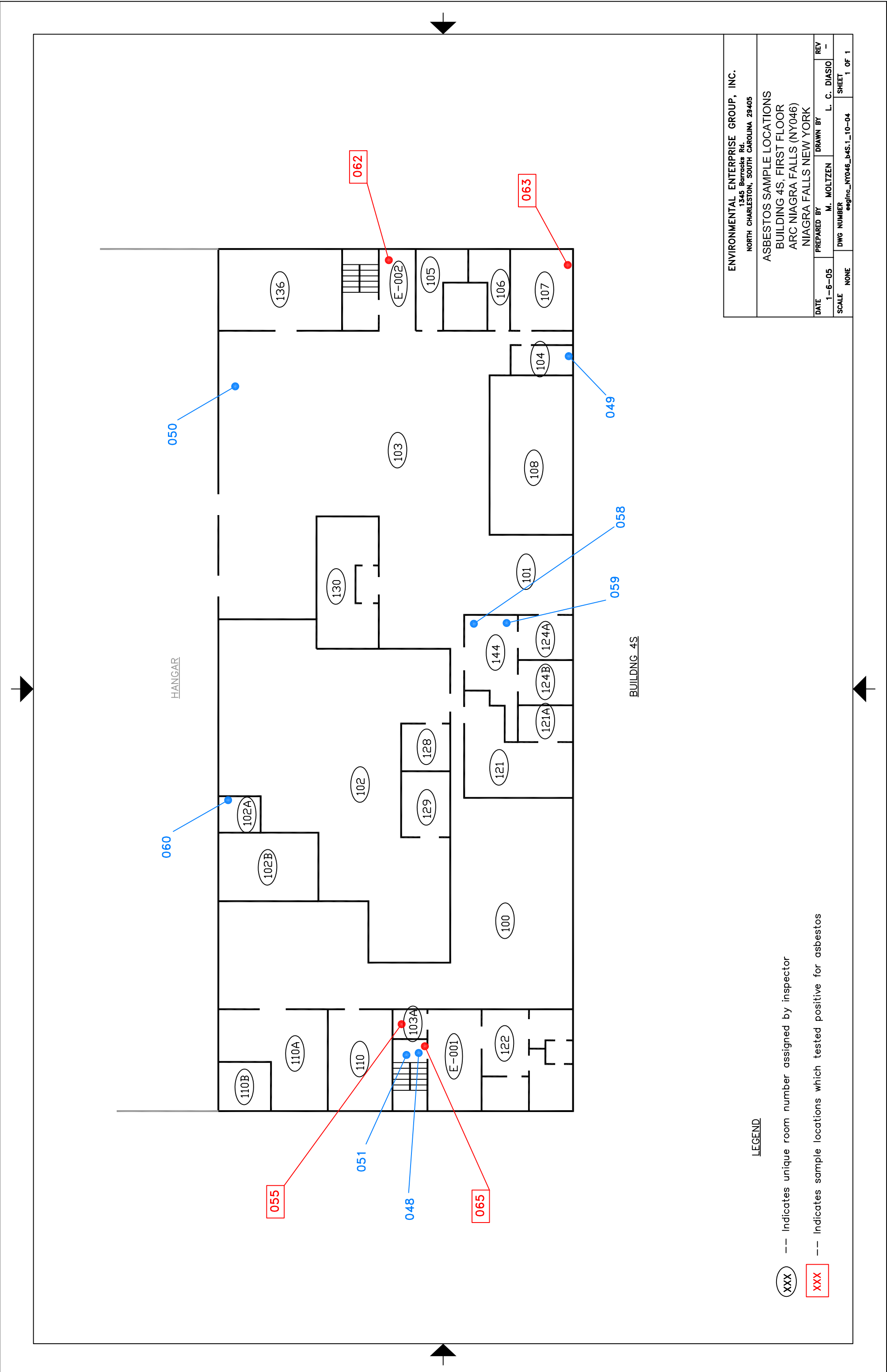
1345 Barracks Rd.
NORTH CHARLESTON, SOUTH CAROLINA 29405

ASBESTOS SAMPLE LOCATIONS
BUILDING 4N, FIRST FLOOR
ARC NIAGRA FALLS (NY046)
NIAGRA FALLS NEW YORK

DATE	12-13-04	PREPARED BY	M. MOLTZEN	DRAWN BY	L. C. DIASIO	REV	-
SCALE	NONE	DWG NUMBER	ee9inc_NY046_b4N.1_10-04	SHEET	1	OF	1



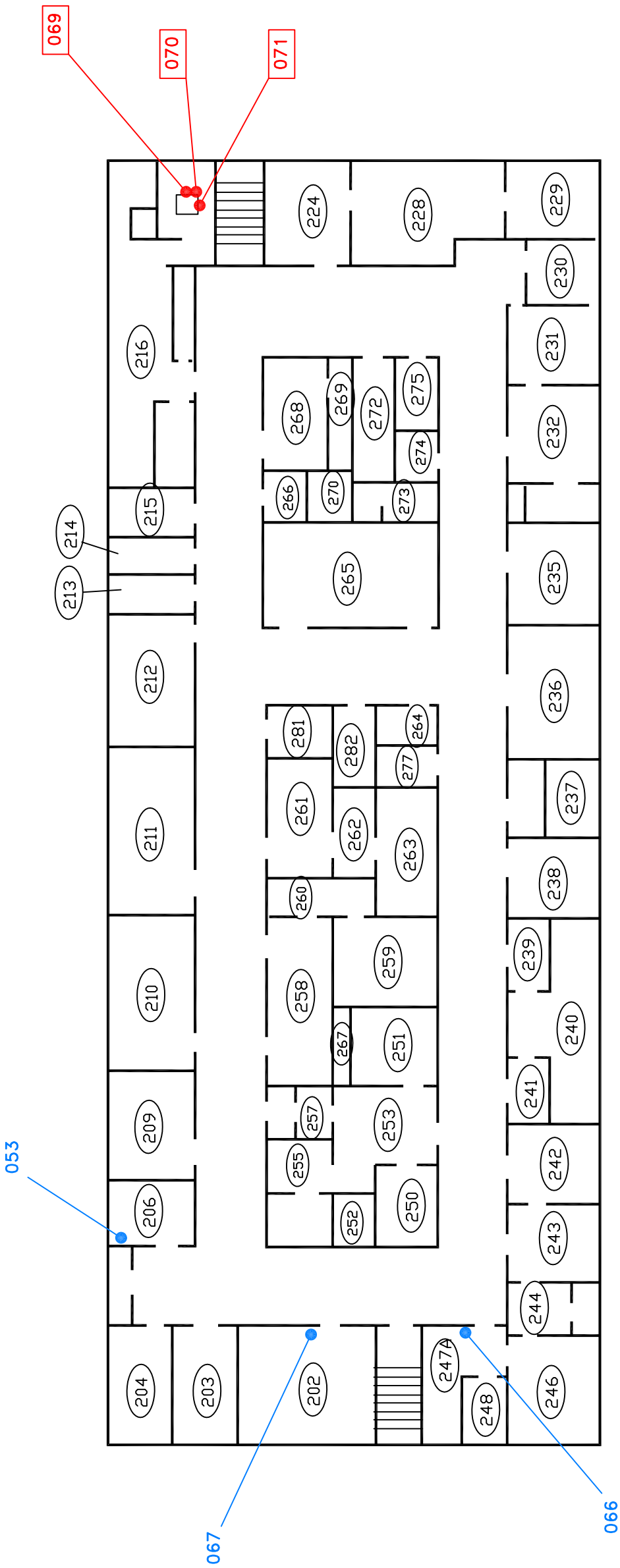
ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 4N, SECOND FLOOR ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 12-13-04	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER ee9inc_NY046_b4N.2_10-04	SHEET 1 OF 1	



LEGEND

- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 4S, FIRST FLOOR ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 1-6-05	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER eeginc_NY046_b4S.1_10-04	SHEET 1 OF 1	



LEGEND

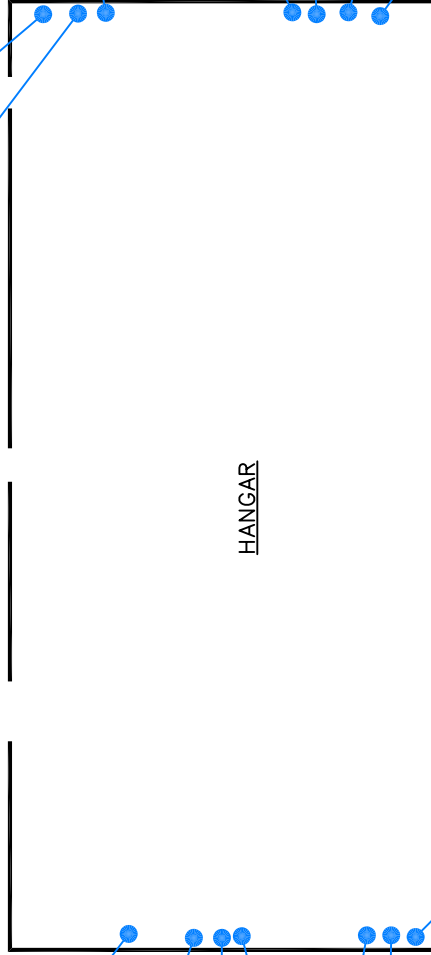
- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 4S, SECOND FLOOR ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE	12-10-04	PREPARED BY	M. MOLTZEN
SCALE	NONE	DWG NUMBER	ee9inc_NY046_b4S.2_10-04
		DRAWN BY	L. C. DIASIO
		REV	-
		SHEET	1 OF 1



BUILDING 4N

083 084



HANGAR

BUILDING 4S

LEGEND

XXX --- Indicates unique room number assigned by inspector

XXX --- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS HANGAR ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 12-10-04	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER ee9lnc_NY046_hangr_10-04	SHEET 1 OF 1	

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Enterprise Group, Inc.
1345 Barracks Road
North Charleston, SC 29405

DATE OF RECEIPT: 19 OCT 2004
DATE OF ANALYSIS: 20 OCT 2004
DATE OF REPORT: 21 OCT 2004

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2882
PROJECT: US Army Reserve Center-Niagara Falls; Building #4

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	ARC-NIAGRFLLS-048/ Dk. Brown/Black Adhes.	NAD	8% Cellulose 5% Fibrous Glass 7% Wollastonite 80% Non-Fibrous
02	ARC-NIAGRFLLS-049/ Dk. Brown/Black Adhes.	NAD	8% Cellulose 5% Fibrous Glass 5% Wollastonite 82% Non-Fibrous
03	ARC-NIAGRFLLS-050/ Pale Gray/Off-White Fib.; Green/ Beige Brittle	NAD	15% Cellulose 40% Fibrous Glass 45% Non-Fibrous
04	ARC-NIAGRFLLS-051/ Pale Gray/Off-White Fib.; Beige/ Green Brittle	NAD	15% Cellulose 45% Fibrous Glass 40% Non-Fibrous
05	ARC-NIAGRFLLS-052/ Pale Gray/Off-White Fib.; Beige/ Green Brittle	NAD	15% Cellulose 45% Fibrous Glass 40% Non-Fibrous
06	ARC-NIAGRFLLS-053/ Pale Gray/Beige Fib.	NAD	25% Cellulose 75% Non-Fibrous
07	ARC-NIAGRFLLS-054/ Pale Gray Fib.; Coarse Powder	NAD	22% Cellulose 78% Non-Fibrous
08	ARC-NIAGRFLLS-055/ Gray/Beige/Tan Fib.; Pale Beige Brittle	8% Chrysotile ★ 8% Total Asbestos ★Present in the various non-woven fibrous layers throughout sample.	80% Cellulose 12% Non-Fibrous
09	ARC-NIAGRFLLS-056/ Gray/Off-White/Tan Fib.; Beige/Green Brittle	7% Chrysotile ★ 7% Total Asbestos ★Present in the various non-woven fibrous layers throughout sample.	80% Cellulose 13% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 42-4515 B

EHS PROJECT #: 10-04-2882

PROJECT: US Army Reserve Center-Niagara Falls; Building #4

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
10	ARC-NIAGRFLLS-057/ Tan/Off-White Fib.; Pale Gray Fib. Beige/Green Brittle	5% Chrysotile ★ 5% Total Asbestos ★ Present in the various non-woven fibrous layers throughout sample.	80% Cellulose 15% Non-Fibrous
11	ARC-NIAGRFLLS-058/ Tan Fib.; White Brittle	NAD	35% Cellulose 45% Fibrous Glass 20% Non-Fibrous
12	ARC-NIAGRFLLS-059/ Tan Fib.; White Brittle	NAD	35% Cellulose 45% Fibrous Glass 20% Non-Fibrous
13	ARC-NIAGRFLLS-060/ Pale Tan Fib.; White Brittle	NAD	40% Cellulose 40% Fibrous Glass 20% Non-Fibrous
14	ARC-NIAGRFLLS-061/ Pale Tan Fib.; White Brittle	NAD	40% Cellulose 40% Fibrous Glass 20% Non-Fibrous
15	ARC-NIAGRFLLS-062/ Off-White Fib.	15% Chrysotile 40% Amosite 55% Total Asbestos	5% Cellulose 40% Non-Fibrous
16	ARC-NIAGRFLLS-063/ Off-White Fib.; Tan/Green Brittle	12% Chrysotile 35% Amosite 47% Total Asbestos ★ ★ Present in the off-white fibrous (main) layer.	18% Cellulose 35% Non-Fibrous
17	ARC-NIAGRFLLS-064/ Off-White Fib.	15% Chrysotile 40% Amosite 55% Total Asbestos	5% Cellulose 40% Non-Fibrous
18A	ARC-NIAGRFLLS-065(a)-Tile/ Brown Gran.	NAD	100% Non-Fibrous
18B	ARC-NIAGRFLLS-065(b)-Mastic/ Black Adhes.	5% Chrysotile 5% Total Asbestos	5% Cellulose 2% Fibrous Glass 88% Non-Fibrous
19A	ARC-NIAGRFLLS-066(a)-Tile/ Brown Gran.	NAD	100% Non-Fibrous
19B	ARC-NIAGRFLLS-066(b)-Mastic/ Pale Yellow/Black Adhes.	NAD	5% Cellulose 3% Fibrous Glass 4% Synthetic 88% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 42-4515 B

EHS PROJECT #: 10-04-2882

PROJECT: US Army Reserve Center-Niagara Falls; Building #4

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
20A	ARC-NIAGRFLLS-067(a)-Tile/ Tan Gran.	NAD	100% Non-Fibrous
20B	ARC-NIAGRFLLS-067(b)-Mastic/ Pale Yellow/Dk. Gray Adhes.	NAD	10% Cellulose 2% Fibrous Glass 3% Synthetic 1% Hair 84% Non-Fibrous
21A	ARC-NIAGRFLLS-068(a)-Tile/ Tan Gran.	NAD	100% Non-Fibrous
21B	ARC-NIAGRFLLS-068(b)-Mastic/ Black Adhes.	NAD	15% Cellulose 3% Fibrous Glass 82% Non-Fibrous
22	ARC-NIAGRFLLS-069/ Off-White Fib.; Pale Green Brittle	75% Chrysotile 75% Total Asbestos	25% Non-Fibrous
23	ARC-NIAGRFLLS-070/ Off-White Fib.; Pale Green Brittle	75% Chrysotile 75% Total Asbestos	25% Non-Fibrous
24	ARC-NIAGRFLLS-071/ Off-White Fib.; Pale Green Brittle	70% Chrysotile 70% Total Asbestos	30% Non-Fibrous
25	ARC-NIAGRFLLS-072/ White Fib.; Black/Gray Brittle	NAD	80% Cellulose 20% Non-Fibrous
26	ARC-NIAGRFLLS-073/ White Fib.; Black/Gray Brittle	NAD	80% Cellulose 20% Non-Fibrous
27	ARC-NIAGRFLLS-074/ White Fib.; Black/Gray Brittle	NAD	80% Cellulose 20% Non-Fibrous
28	ARC-NIAGRFLLS-075/ White Fib.; Black/Gray Brittle	NAD	80% Cellulose 20% Non-Fibrous
29	ARC-NIAGRFLLS-076/ White Fib.; Black/Gray Brittle	NAD	80% Cellulose 20% Non-Fibrous
30	ARC-NIAGRFLLS-077/ White Fib.; Black/Gray Brittle	NAD	80% Cellulose 20% Non-Fibrous
31	ARC-NIAGRFLLS-078/ White Fib.; Black/Gray Brittle	NAD	80% Cellulose 20% Non-Fibrous
32	ARC-NIAGRFLLS-079/ Lt. Gray Fib.	NAD	40% Cellulose 15% Fibrous Glass 45% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 42-4515 B

EHS PROJECT #: 10-04-2882

PROJECT: US Army Reserve Center-Niagara Falls; Building #4

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
33	ARC-NIAGRFLLS-080/ Lt. Gray Fib.	NAD	40% Cellulose 15% Fibrous Glass 45% Non-Fibrous
34	ARC-NIAGRFLLS-081/ Lt. Gray Fib.	NAD	40% Cellulose 15% Fibrous Glass 45% Non-Fibrous
35	ARC-NIAGRFLLS-082/ Lt. Gray Fib.	NAD	40% Cellulose 15% Fibrous Glass 45% Non-Fibrous
36	ARC-NIAGRFLLS-083/ Lt. Gray Fib.	NAD	40% Cellulose 15% Fibrous Glass 45% Non-Fibrous
37	ARC-NIAGRFLLS-084/ Lt. Gray Fib.	NAD	40% Cellulose 15% Fibrous Glass 45% Non-Fibrous
38	ARC-NIAGRFLLS-085/ Lt. Gray Fib.	NAD	40% Cellulose 15% Fibrous Glass 45% Non-Fibrous

QC SAMPLE: M1-1998-4

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Mark Case

Reviewed By Authorized Signatory: _____
Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2882
PROJECT: US Army Reserve Center-Niagara Falls; Building #4

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
 SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR

-- PAGE 05 of 05 -- END OF REPORT --



Building 18 – AMSA 76/Motor Pool Building

Niagara Falls Armed Forces Reserve Center – Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 18: AMSA 76 / Motorpool

1. DESCRIPTION:

Building 18 is a 9,720 square-foot building constructed in 1956 and expanded in the 1980s. It is a metal-framed and concrete block structure with metal and brick exterior. The following information was identified during the survey and from the analysis of the samples taken:

- Two homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- Two of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- No suspected homogeneous areas were confirmed to contain asbestos.
- Two of the suspected homogeneous areas did not contain asbestos.

2. FINDINGS:

Two homogeneous areas with suspected ACM were identified. Four samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in No homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos: **NONE**

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, SHEETROCK/MUD, White
- H-2: MISC, GLAZING, WINDOW INTERIOR, Gray

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS:

Building was renovated in 2000/2001 and all floor tile is non-suspect material. All piping in this building is fiberglass.

4. RECOMMENDED ABATEMENT ACTIONS: NONE

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE: NONE

BUILDING SUMMARY TABLE
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

Building No. 18

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	N	Misc, SHEETROCK/MUD, White	SF	0						
Rooms 100, 114, various										
2	N	Misc, GLAZING, WINDOW INTERIOR, Gray	SF	0						
Rooms 100, 104, 108										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

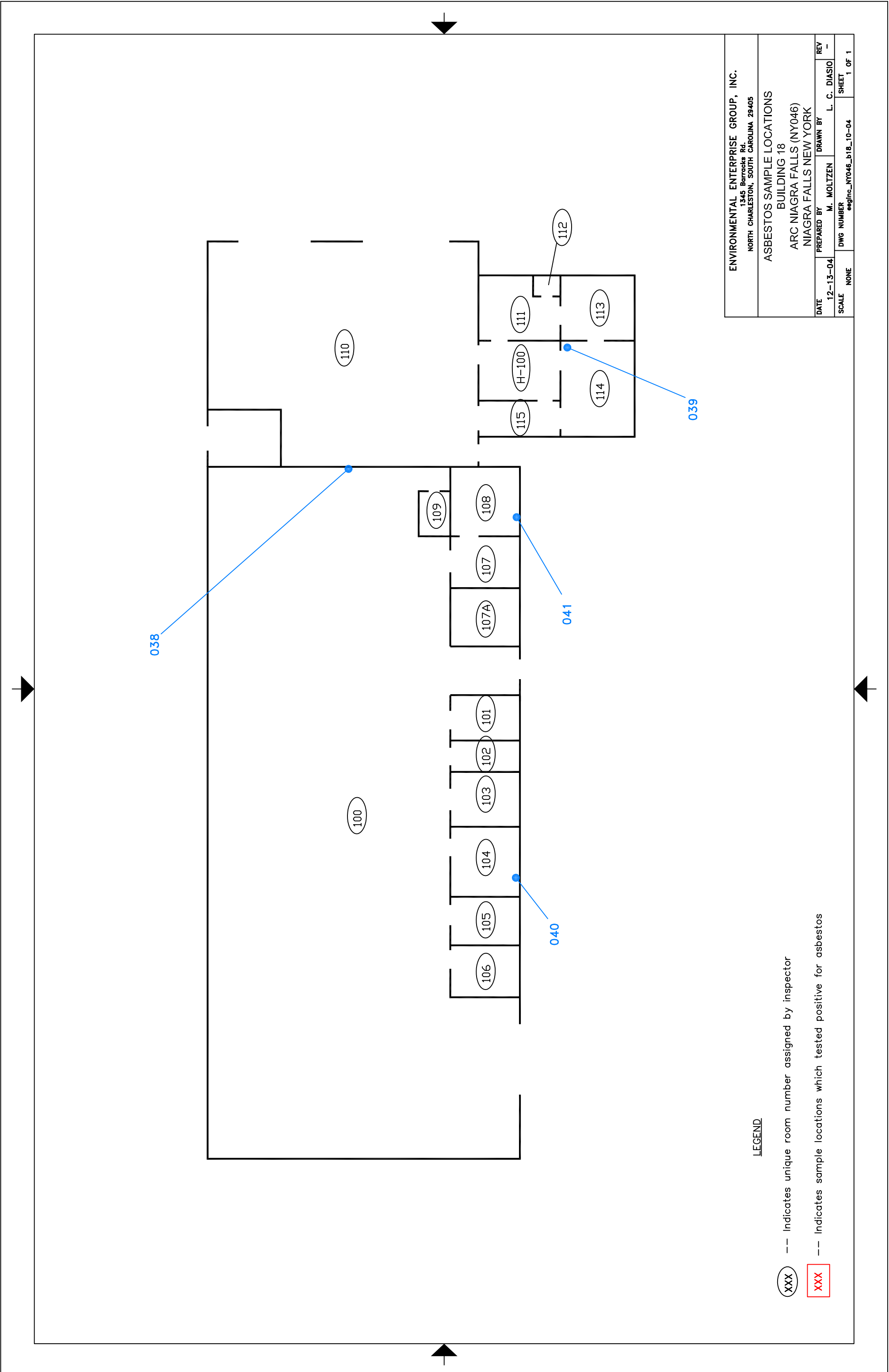
LABORATORY TEST RESULTS TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS ASBESTOS BUILDING INSPECTION INDUSTRIAL LABORATORY TEST REPORT

Building No. 18

Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	NO	Niagrfls-038	100	Misc, SHEETROCK/MUD, White	10/14/04	10/21/04	No Asbestos Detected	0%
1	NO	Niagrfls-039	114	Misc, SHEETROCK/MUD, White	10/14/04	10/21/04	No Asbestos Detected	0%
2	NO	Niagrfls-040	104	Misc, GLAZING, Gray	10/14/04	10/21/04	No Asbestos Detected	0%
2	NO	Niagrfls-041	108	Misc, GLAZING, Gray	10/14/04	10/21/04	No Asbestos Detected	0%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%



ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Enterprise Group, Inc.
1345 Barracks Road
North Charleston, SC 29405

DATE OF RECEIPT: 19 OCT 2004
DATE OF ANALYSIS: 21 OCT 2004
DATE OF REPORT: 21 OCT 2004

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2869
PROJECT: US Army Reserve Center-Niagara Falls; Building #18

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	ARC-Niagrfls-038/ White Powder; Brown Fib.	NAD	20% Cellulose 80% Non-Fibrous
02	ARC-Niagrfls-039/ White Powder; Brown Fib.	NAD	20% Cellulose 80% Non-Fibrous
03	ARC-Niagrfls-040/ Gray Powder	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous
04	ARC-Niagrfls-041/ Gray Powder	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous

QC SAMPLE: M1-1999-1

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Feng Jiang, M.S.

Reviewed By Authorized Signatory:

Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2869
PROJECT: US Army Reserve Center-Niagara Falls; Building #18

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND	NAD = no asbestos detected
	SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ th

-- PAGE 02 of 02 -- END OF REPORT --



Building 19 - Quanset Hut Storage
Niagara Falls Armed Forces Reserve Center - Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 19: Storage Quonset Hut

1. DESCRIPTION:

Building 19 is a 1,600 square-foot building constructed in 1956. It is a metal-framed quonset hut with metal roofing. The following information was identified during the survey and from the analysis of the samples taken:

- Two homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- Two of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Two of the suspected homogeneous areas were confirmed to contain asbestos.

2. FINDINGS:

Two homogeneous areas with suspected ACM were identified. Four samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in No homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos:

- H-1: MISC, SHEETROCK/MUD, White, was Non-friable and Damaged.
- H-2: MISC, ROOFING, MASTIC, Silver/black, was Non-friable and Not Damaged.

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS:

No observations.

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-1: MISC, SHEETROCK/MUD, White: **Remove/O&M**
- H-2: MISC, ROOFING, Silver/black: **O&M**

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY
ASBESTOS INSPECTION REPORT

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance (O&M) recommendations for confirmed and assumed homogeneous materials of ACM are found in the Operations & Maintenance Table of this report. The materials listed below should be maintained following the guidelines in the O&M Plan during regular maintenance and small-scale repair activities, until removed.

MISC SHEETROCK/MUD is Confirmed, Non-friable ACM.

H-1 (SHEETROCK/MUD, White) is located in Rooms 101, 102, 103, 104 and 105.

MISC ROOFING is Confirmed, Non-friable ACM.

H-2 (ROOFING, Silver/black) is located over entire roof.

BUILDING SUMMARY TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

Building No. 19

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	Y	Misc, SHEETROCK/MUD, White	1,520 SF	14	Non	D	5.0	Remove/O&M		Sheetrock mud contains asbestos
Rooms 101, 102, 103, 104, 105										
2	Y	Misc, ROOFING, MASTIC, Silver/black	1,600 SF	10	Non	PD	0.0	O&M		
Rooms Roof										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

**LABORATORY TEST
RESULTS TABLE**

**US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION
INDUSTRIAL LABORATORY TEST REPORT**

Building No. 19

Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	YES	Niagrfils-042	102	Misc, SHEETROCK/MUD, White	10/14/04	10/21/04	Chrysotile	2%
1	YES	Niagrfils-043	103	Misc, SHEETROCK/MUD, White	10/14/04	10/21/04	Chrysotile	2%
2	YES	Niagrfils-044	Roof	Misc, ROOFING, Silver/black	10/14/04	10/21/04	Chrysotile	4%
2	YES	Niagrfils-045	Roof	Misc, ROOFING, Silver/black	10/14/04	10/21/04	Chrysotile	4%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

OPERATIONS AND
MAINTENANCE TABLE

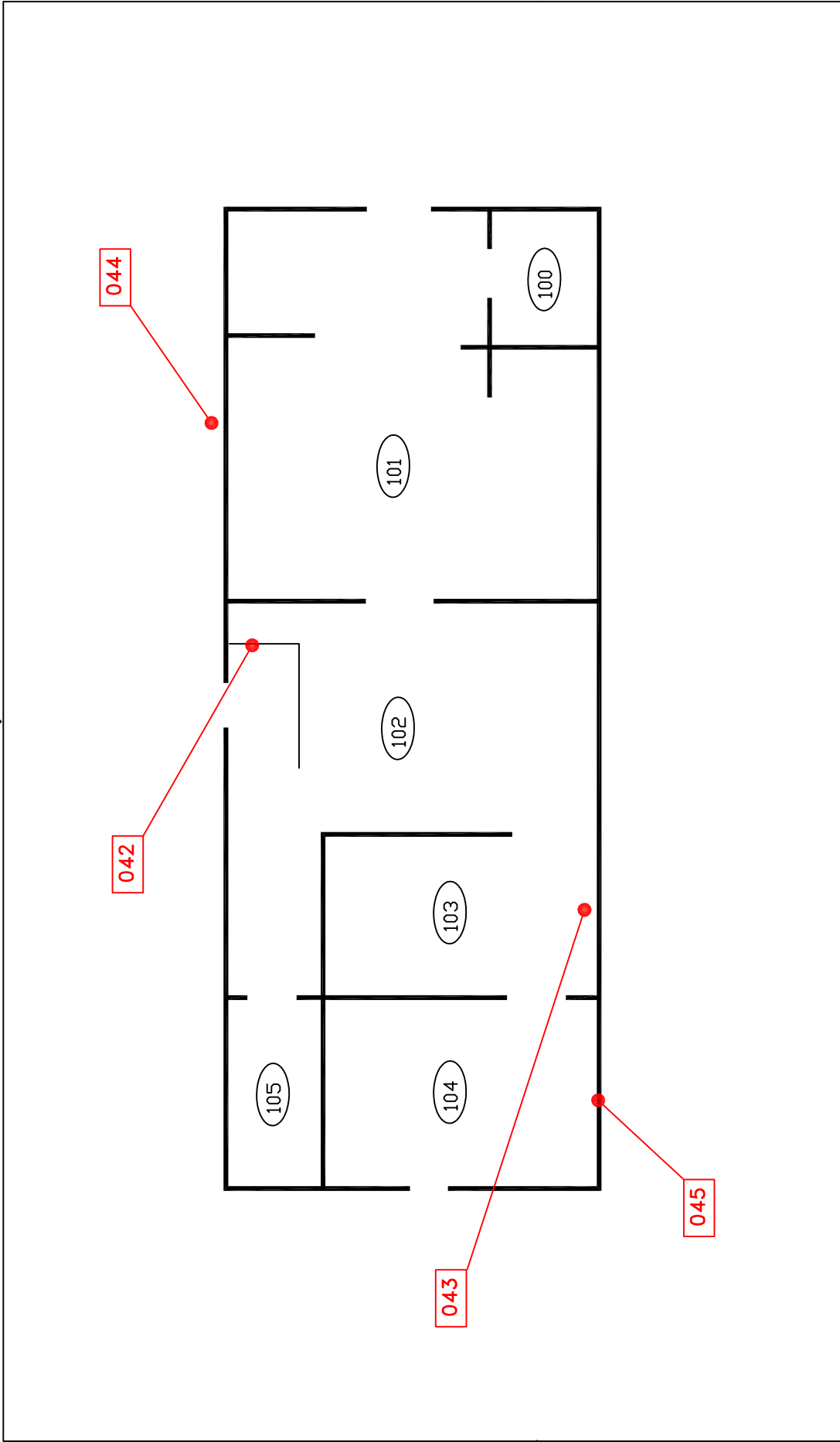
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat- ing	Fria- bility	Condition	% D	Recommended Action
19	1	Misc, SHEETROCK/MUD, White	1,520 SF	14	Non	Damaged	5.00	Remove/O&M
Locations: Rooms 101, 102, 103, 104, 105								
19	2	Misc, ROOFING, MASTIC, Silver/black	1,600 SF	10	Non	Not Damaged	0.00	O&M

Locations: Rooms Roof

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.



LEGEND

- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 19 ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 12-10-04	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER eeginc_NY046_b19_10-04	SHEET 1 OF 1	

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Enterprise Group, Inc.
1345 Barracks Road
North Charleston, SC 29405

DATE OF RECEIPT: 19 OCT 2004
DATE OF ANALYSIS: 21 OCT 2004
DATE OF REPORT: 21 OCT 2004

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2870
PROJECT: US Army Reserve Center-Niagra Falls; Building #19

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	ARC-NiagrFlls-042/ Tan Powder; White Brittle	Trace, <1% Chrysotile ★ <1% Total Asbestos ★2% chrysotile present in the beige joint compound.	3% Cellulose 97% Non-Fibrous
02	ARC-NiagrFlls-043/ White Brittle; Brown Fib.; Gray Powder	Trace, <1% Chrysotile ★ <1% Total Asbestos ★2% chrysotile present in the joint compound.	10% Cellulose 90% Non-Fibrous
03	ARC-NiagrFlls-044/ Silver Brittle; Black Tar-Like; Tan Chalky	4% Chrysotile 4% Total Asbestos	96% Non-Fibrous
04	ARC-NiagrFlls-045/ Silver Brittle; Black Tar-Like; Tan Chalky	4% Chrysotile 4% Total Asbestos	96% Non-Fibrous

QC SAMPLE: M1-1998-2

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Tabitha Jamison

Reviewed By Authorized Signatory:

Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2870
PROJECT: US Army Reserve Center-Niagra Falls; Building #19

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR

-- PAGE 02 of 02 -- END OF REPORT --



Building 20 – Storage Building

Niagara Falls Armed Forces Reserve Center – Niagara Falls, NY (NY046)

US ARMY RESERVE CENTER – NIAGARA FALLS, NY
ASBESTOS INSPECTION REPORT

BUILDING 20: Electronics Storage

1. DESCRIPTION:

Building 20 is a 2,133 square-foot building constructed in 1956. It is a concrete block structure with brick exterior. **Inspection of this building revealed no suspected asbestos containing materials.** The following information was identified during the survey:

- No homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.

2. FINDINGS:

No homogeneous areas with suspected ACM were identified. No samples were collected or analyzed. Building was completely renovated in 2001 and sheetrock, floor tiles and roofing are not suspect material

3. OBSERVATIONS: NO SUSPECT MATERIALS FOUND

4. RECOMMENDED ABATEMENT ACTIONS: NONE

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE: NONE



Building 21 – 277th Quartermaster Co. Building
Niagara Falls Armed Forces Reserve Center – Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 21: 277th Quartermasters HQ

1. DESCRIPTION:

Building 21 is a 13,055 square-foot building constructed in 1956. It is a concrete block structure with brick exterior and shingled roofing. The following information was identified during the survey and from the analysis of the samples taken:

- Eight homogeneous areas were identified during the initial survey.
- One homogeneous area was assumed to contain asbestos.
- Seven of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Two of the suspected homogeneous areas were confirmed to contain asbestos.
- Five of the suspected homogeneous areas did not contain asbestos.

2. FINDINGS:

Seven homogeneous areas with suspected ACM were identified. Fourteen samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in No homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos:

- H-6: MISC, FLOOR TILE, 12" green tile w/black & white streaks, was Non-friable and Not Damaged.
- H-7: MISC, COVING MASTIC, Dark brown/black, was Non-friable and Not Damaged.

Assumed ACM. The following homogeneous areas were assumed to contain asbestos:

- H-3: MISC, FLOOR TILE & MASTIC, 9" brown tile w/red & white streaks/mastic, was Non-friable and Not Damaged.

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, FLOOR TILE & MASTIC, 12" light brown tile w/black & white marbling/mastic
- H-2: MISC, ACOUSTICAL TILE, White smooth w/pinholes
- H-4: MISC, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marbling/mastic
- H-5: MISC, SHEETROCK/MUD, White
- H-8: MISC, ACOUSTICAL TILE MASTIC, Brown

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

3. OBSERVATIONS:

Coving mastic (H-7) may need additional analysis prior to disturbing. Non-suspect roofing was installed in 1993.

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-3: MISC, FLOOR TILE & MASTIC, 9" brown tile w/red & white streaks/mastic: **O&M**
- H-6: MISC, FLOOR TILE, 12" green tile w/black & white streaks: **O&M**
- H-7: MISC, COVING MASTIC, Dark brown/black: **O&M**

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance (O&M) recommendations for confirmed and assumed homogeneous materials of ACM are found in the Operations & Maintenance Table of this report. The materials listed below should be maintained following the guidelines in the O&M Plan during regular maintenance and small-scale repair activities, until removed.

MISC FLOOR TILE & MASTIC is Assumed, Non-friable ACM.

H-3 (FLOOR TILE & MASTIC, 9" brown tile w/red & white streaks/mastic) is located in Room 127.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

H-6 (FLOOR TILE, 12" green tile w/black & white streaks) is located in Room 108.

MISC COVING MASTIC is Confirmed, Non-friable ACM.

H-7 (COVING MASTIC, Dark brown/black) is located in Rooms 100, 101, 103, L-2, 104, 104a, 108, 109b, 112, 115, 117, 118, 120, Entry E-001 and Halls H-100 & H-101.

BUILDING SUMMARY TABLE US ARMY RESERVE CENTER - NIAGARA FALLS Building No. 21

ASBESTOS BUILDING INSPECTION

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	N	Misc, FLOOR TILE & MASTIC, 12" light brown tile w/black & white marb/mastic Rooms 115, 118, various	SF	0						
2	N	Misc, ACOUSTICAL TILE, White smooth w/pinholes Rooms H-100, L-1	SF	0						Located above ceiling tiles.
3	A	Misc, FLOOR TILE & MASTIC, 9" brown tile w/red & white streaks/mastic Rooms 127	210 SF	9	Non	PD	0.0	O&M		
4	N	Misc, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marbling/mastic Rooms 104, 104a, 117	SF	0						
5	N	Misc, SHEETROCK/MUD, White Rooms 109a, 117	SF	0						
6	Y	Misc, FLOOR TILE, 12" green tile w/black & white streaks Rooms 108	415 SF	10	Non	PD	0.0	O&M		Tile contains asbestos, mastic does not.
7	Y	Misc, COVING MASTIC, Dark brown/black Rooms 100, 101, 103, L-2, 104, 104a, 108, 109b, 112, 115, 117, 118, 120, E-001, H-100, H-101	1,177 LF	3	Non	PD	0.0	O&M		See "Observations" section of Building Summary.
8	N	Misc, ACOUSTICAL TILE MASTIC, Brown Rooms H-100, L-1, various	SF	0						Located under acoustical tiles.

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

LABORATORY TEST RESULTS TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS ASBESTOS BUILDING INSPECTION INDUSTRIAL LABORATORY TEST REPORT

Building No. 21

Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	NO	Niagrfls-001	118	Misc, FLOOR TILE & MASTIC, 12" light brown tile w/black & white	10/14/04	10/20/04	No Asbestos Detected	0%
1	NO	Niagrfls-002	115	Misc, FLOOR TILE & MASTIC, 12" light brown tile w/black & white	10/14/04	10/20/04	No Asbestos Detected	0%
2	NO	Niagrfls-003	L-1	Misc, ACOUSTICAL TILE, White smooth w/pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
2	NO	Niagrfls-004	H-100	Misc, ACOUSTICAL TILE, White smooth w/pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
4	NO	Niagrfls-005	104	Misc, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marblin	10/14/04	10/20/04	No Asbestos Detected	0%
4	NO	Niagrfls-006	117	Misc, FLOOR TILE & MASTIC, 12" tan tile w/brown & white marblin	10/14/04	10/20/04	No Asbestos Detected	0%
5	NO	Niagrfls-007	109a	Misc, SHEETROCK/MUD, White	10/14/04	10/20/04	No Asbestos Detected	0%
5	NO	Niagrfls-008	117	Misc, SHEETROCK/MUD, White	10/14/04	10/20/04	No Asbestos Detected	0%
6	YES	Niagrfls-009	108	Misc, FLOOR TILE, 12" green tile w/black & white streaks	10/14/04	10/20/04	Chrysotile	4%
6	YES	Niagrfls-010	108	Misc, FLOOR TILE, 12" green tile w/black & white streaks	10/14/04	10/20/04	Chrysotile	4%
7	YES	Niagrfls-011	H-100	Misc, COVING MASTIC, Dark brown/black	10/14/04	10/20/04	Chrysotile	2%
7	NO	Niagrfls-012	112	Misc, COVING MASTIC, Dark brown/black	10/14/04	10/20/04	No Asbestos Detected	0%
8	NO	Niagrfls-013	L-1	Misc, ACOUSTICAL TILE MASTIC, Brown	10/14/04	10/20/04	No Asbestos Detected	0%
8	NO	Niagrfls-014	H-100	Misc, ACOUSTICAL TILE MASTIC, Brown	10/14/04	10/20/04	No Asbestos Detected	0%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

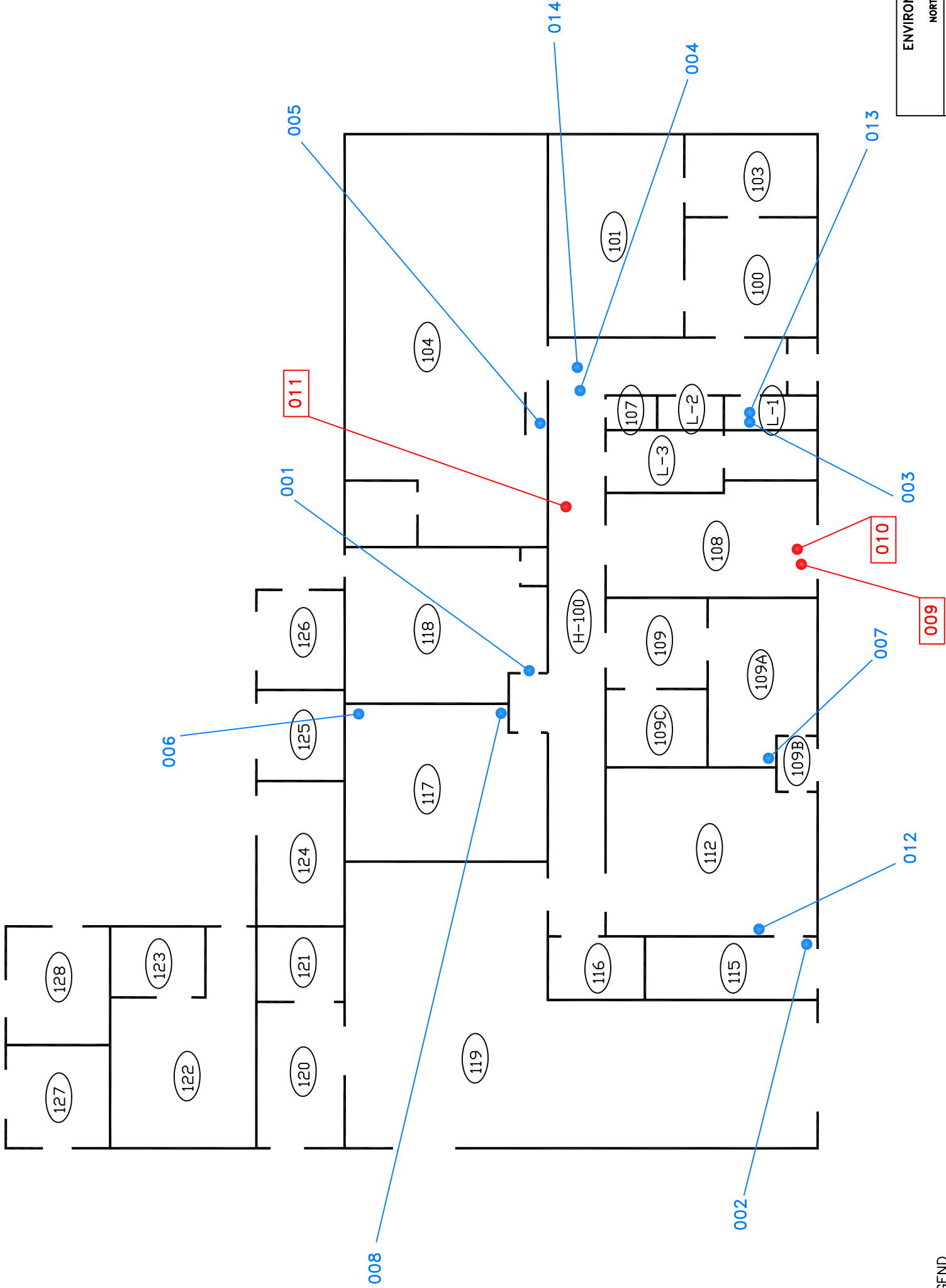
OPERATIONS AND
MAINTENANCE TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat- ing	Fria- bility	Condition	% D	Recommended Action
21	3	Misc, FLOOR TILE & MASTIC, 9" brown tile w/red & white streaks/mastic	210 SF	9	Non	Not Damaged	0.00	O&M
Locations: Rooms 127								
21	6	Misc, FLOOR TILE, 12" green tile w/black & white streaks	415 SF	10	Non	Not Damaged	0.00	O&M
Locations: Rooms 108								
21	7	Misc, COVING MASTIC, Dark brown/black	1,177 LF	3	Non	Not Damaged	0.00	O&M
Locations: Rooms 100, 101, 103, L-2, 104, 104a, 108, 109b, 112, 115, 117, 118, 120, E-001, H-100, H-101								

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.



LEGEND

- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 21 ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE	12-13-04	PREPARED BY	M. MOLTZEN
SCALE	NONE	DWG NUMBER	eeengine_NY046_b21_10-04
REV	-	DRAWN BY	L. C. DIASIO
REV	-	SHEET	1 OF 1

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Enterprise Group, Inc.
1345 Barracks Road
North Charleston, SC 29405

DATE OF RECEIPT: 19 OCT 2004
DATE OF ANALYSIS: 20 OCT 2004
DATE OF REPORT: 21 OCT 2004

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2881
PROJECT: US Army Reserve Center-Niagara Falls; Building #21

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01A	ARC-Niagara Flls-001(a)-Tile/ Brown Vinyl	NAD	100% Non-Fibrous
01B	ARC-Niagara Flls-001(b)-Mastic/ Black Tar-Like	NAD	5% Cellulose 95% Non-Fibrous
02A	ARC-Niagara Flls-002(a)-Tile/ Brown Vinyl	NAD	100% Non-Fibrous
02B	ARC-Niagara Flls-002(b)-Mastic/ Black Tar-Like	NAD	5% Cellulose 95% Non-Fibrous
03	ARC-Niagara Flls-003/ White/Brown Fib.	NAD	90% Cellulose 10% Non-Fibrous
04	ARC-Niagara Flls-004/ White/Brown Fib.	NAD	90% Cellulose 10% Non-Fibrous
05A	ARC-Niagara Flls-005(a)-Tile/ Brown Vinyl	NAD	100% Non-Fibrous
05B	ARC-Niagara Flls-005(b)-Mastic/ Black Tar-Like	NAD	5% Cellulose 95% Non-Fibrous
06A	ARC-Niagara Flls-006(a)-Tile/ Brown Vinyl	NAD	100% Non-Fibrous
06B	ARC-Niagara Flls-006(b)-Mastic/ Black Tar-Like	NAD	5% Cellulose 95% Non-Fibrous
07	ARC-Niagara Flls-007/ White Powder	NAD	15% Cellulose 85% Non-Fibrous
08	ARC-Niagara Flls-008/ White Powder	NAD	15% Cellulose 85% Non-Fibrous
09A	ARC-Niagara Flls-009(a)-Tile/ Green Vinyl	4% Chrysotile 4% Total Asbestos	96% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 42-4515 B

EHS PROJECT #: 10-04-2881

PROJECT: US Army Reserve Center-Niagara Falls; Building #21

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
09B	ARC-Niagara Flls-009(b)-Mastic/ Black Tar-Like	NAD	5% Cellulose 95% Non-Fibrous
10A	ARC-Niagara Flls-010(a)-Tile/ Green Vinyl	4% Chrysotile 4% Total Asbestos	96% Non-Fibrous
10B	ARC-Niagara Flls-010(b)-Mastic/ Black Tar-Like	NAD	5% Cellulose 95% Non-Fibrous
11	ARC-Niagara Flls-011/ Brown Adhes.; Black Tar-Like	2% Chrysotile 2% Total Asbestos	1% Cellulose 97% Non-Fibrous
12	ARC-Niagara Flls-012/ Brown Adhes.	NAD	2% Cellulose 98% Non-Fibrous
13	ARC-Niagara Flls-013/ Brown Adhes.	NAD	1% Cellulose 99% Non-Fibrous
14	ARC-Niagara Flls-014/ Brown Adhes.	NAD	1% Cellulose 99% Non-Fibrous

QC SAMPLE: M1-1999-1

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Christian H. Schaible

Reviewed By Authorized Signatory: _____
Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2881
PROJECT: US Army Reserve Center-Niagara Falls; Building #21

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
 SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR

-- PAGE 03 of 03 -- END OF REPORT --



Building 22 - Mess Hall and Storage Building
Niagara Falls Armed Forces Reserve Center - Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 22: Dining Hall/Storage

1. DESCRIPTION:

Building 22 is a 20,703 square-foot building constructed in 1956. It is a concrete block structure with brick exterior and shingled and rubber-coated roofing. The following information was identified during the survey and from the analysis of the samples taken:

- Nine homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- Nine of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Two of the suspected homogeneous areas were confirmed to contain asbestos.
- Seven of the suspected homogeneous areas did not contain asbestos.

2. FINDINGS:

Nine homogeneous areas with suspected ACM were identified. Eighteen samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in two of the homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos:

- H-7: MISC, CORK PANELS, Brown/black, was Low-friable and Damaged.
- H-8: TSI, FITTING, MUDDERED, Gray, was Moderately-friable and Not Damaged.

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, SHEETROCK/MUD, White
- H-2: MISC, ACOUSTICAL TILE, White smooth w/small uniform pinholes
- H-3: MISC, ACOUSTICAL TILE MASTIC, Brown
- H-4: MISC, ACOUSTICAL TILE, White w/irregular grooves
- H-5: MISC, ACOUSTICAL TILE, White w/large & small uniform pinholes
- H-6: MISC, ACOUSTICAL TILE, White w/rough texture & tiny pinholes
- H-9: MISC, FLOOR TILE & MASTIC, 12" light brown marbled tile/mastic

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS:

More TSI (H-8) may be inaccessible behind walls/ceilings. Non-suspect shingled roofing and ceiling tiles was installed in the mid-1990s.

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-7: MISC, CORK PANELS, Brown/black: Remove/O&M
- H-8: TSI, FITTING, Gray: Remove/O&M

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance (O&M) recommendations for confirmed and assumed homogeneous materials of ACM are found in the *Operations & Maintenance Table* of this report. The materials listed below should be maintained following the guidelines in the O&M Plan during regular maintenance and small-scale repair activities, until removed.

MISC CORK PANELS is Confirmed, Low-friable ACM.

H-7 (CORK PANELS, Brown/black) are located in Room 210.

TSI FITTING is Confirmed, Moderately-friable ACM.

H-8 (FITTINGS, Gray) are located in Room 103.

BUILDING SUMMARY TABLE
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

Building No. 22

H- No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	N	Misc, SHEETROCK/MUD, White	SF	0						
Rooms 106, 206, various										
2	N	Misc, ACOUSTICAL TILE, White smooth w/small uniform pinholes	SF	0						Located above ceiling tiles.
Rooms 201, 203, various										
3	N	Misc, ACOUSTICAL TILE MASTIC, Brown	SF	0						
Rooms 201, 203, various										
4	N	Misc, ACOUSTICAL TILE, White w/irregular grooves	SF	0						
Rooms 202										
5	N	Misc, ACOUSTICAL TILE, White w/large & small uniform pinholes	SF	0						
Rooms 206, 206b, 212										
6	N	Misc, ACOUSTICAL TILE, White w/rough texture & tiny pinholes	SF	0						
Rooms 212										
7	Y	Misc, CORK PANELS, Brown/black	264 SF	10	Low	D	8.0	Remove/O&M		Located above ceiling tiles.
Rooms 210										
8	Y	TSI, FITTING, MUDDDED, Gray	16 SF	22	Mod	PD	0.0	Remove/O&M		Located above ceiling tiles.
Rooms 103										
9	N	Misc, FLOOR TILE & MASTIC, 12" light brown marbled tile/mastic	SF	0						
Rooms 103										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

LABORATORY TEST RESULTS TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS ASBESTOS BUILDING INSPECTION INDUSTRIAL LABORATORY TEST REPORT

Building No. 22

Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	NO	Niagrfls-015	206	Misc, SHEETROCK/MUD, White	10/14/04	10/20/04	No Asbestos Detected	0%
1	NO	Niagrfls-016	106	Misc, SHEETROCK/MUD, White	10/14/04	10/20/04	No Asbestos Detected	0%
2	NO	Niagrfls-017	201	Misc, ACOUSTICAL TILE, White smooth w/small uniform pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
2	NO	Niagrfls-018	203	Misc, ACOUSTICAL TILE, White smooth w/small uniform pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
3	NO	Niagrfls-019	201	Misc, ACOUSTICAL TILE MASTIC, Brown	10/14/04	10/20/04	No Asbestos Detected	0%
3	NO	Niagrfls-020	203	Misc, ACOUSTICAL TILE MASTIC, Brown	10/14/04	10/20/04	No Asbestos Detected	0%
4	NO	Niagrfls-021	202	Misc, ACOUSTICAL TILE, White w/irregular grooves	10/14/04	10/20/04	No Asbestos Detected	0%
4	NO	Niagrfls-022	202	Misc, ACOUSTICAL TILE, White w/irregular grooves	10/14/04	10/20/04	No Asbestos Detected	0%
5	NO	Niagrfls-023	206	Misc, ACOUSTICAL TILE, White w/large & small uniform pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
5	NO	Niagrfls-024	206b	Misc, ACOUSTICAL TILE, White w/large & small uniform pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
6	NO	Niagrfls-025	212	Misc, ACOUSTICAL TILE, White w/rough texture & tiny pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
6	NO	Niagrfls-026	212	Misc, ACOUSTICAL TILE, White w/rough texture & tiny pinholes	10/14/04	10/20/04	No Asbestos Detected	0%
7	YES	Niagrfls-027	210	Misc, CORK PANELS, Brown/black	10/14/04	10/20/04	Chrysotile	2%
7	YES	Niagrfls-028	210	Misc, CORK PANELS, Brown/black	10/14/04	10/20/04	Chrysotile	2%
8	YES	Niagrfls-029	103	TSI, FITTING, Gray	10/14/04	10/20/04	Chrysotile	80%
8	YES	Niagrfls-030	103	TSI, FITTING, Gray	10/14/04	10/20/04	Chrysotile	80%
8	YES	Niagrfls-031	103	TSI, FITTING, Gray	10/14/04	10/20/04	Chrysotile	80%
9	NO	Niagrfls-032	103	Misc, FLOOR TILE & MASTIC, 12" light brown marbled tile/mastic	10/14/04	10/20/04	No Asbestos Detected	0%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

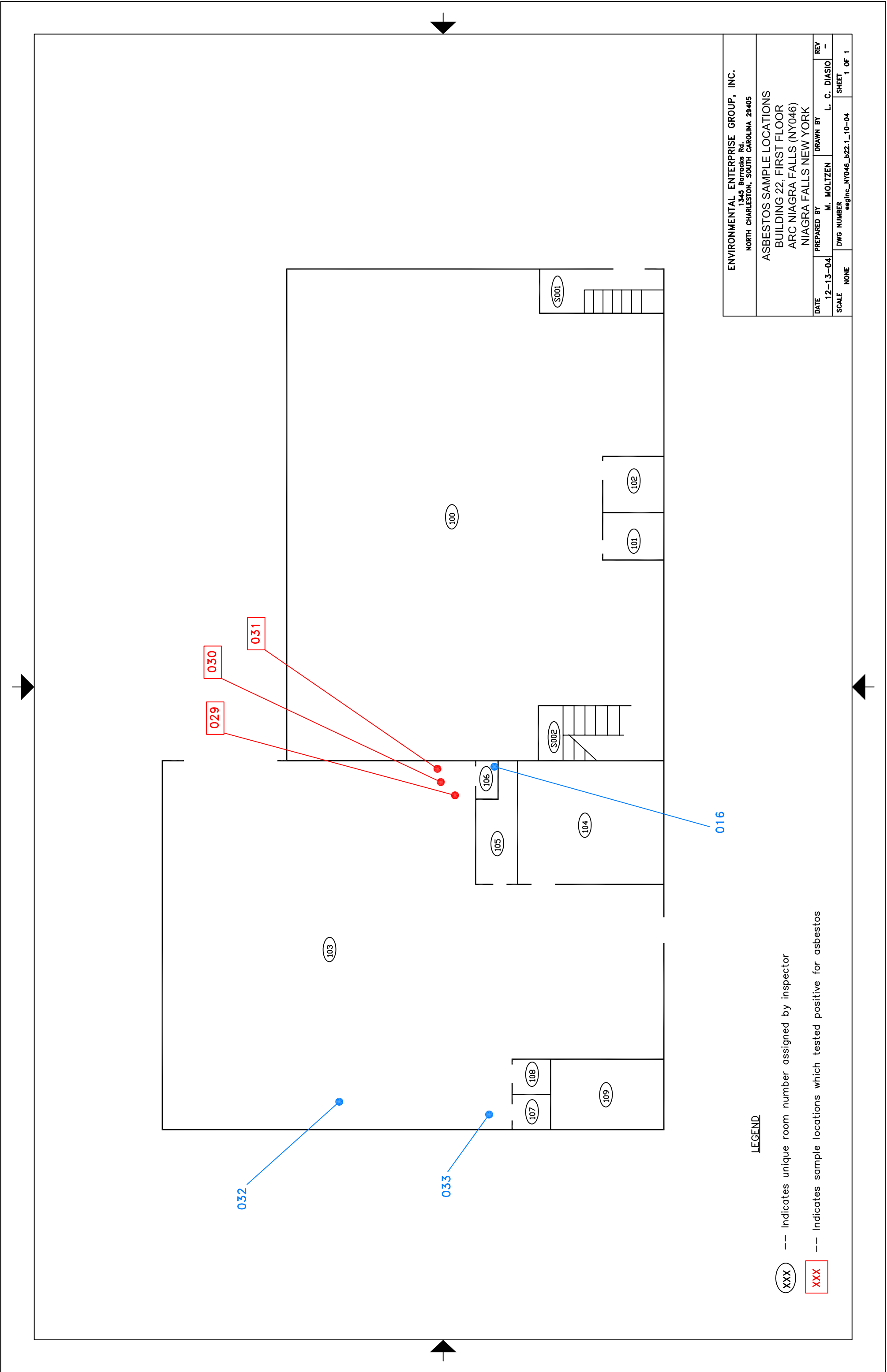
OPERATIONS AND
MAINTENANCE TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

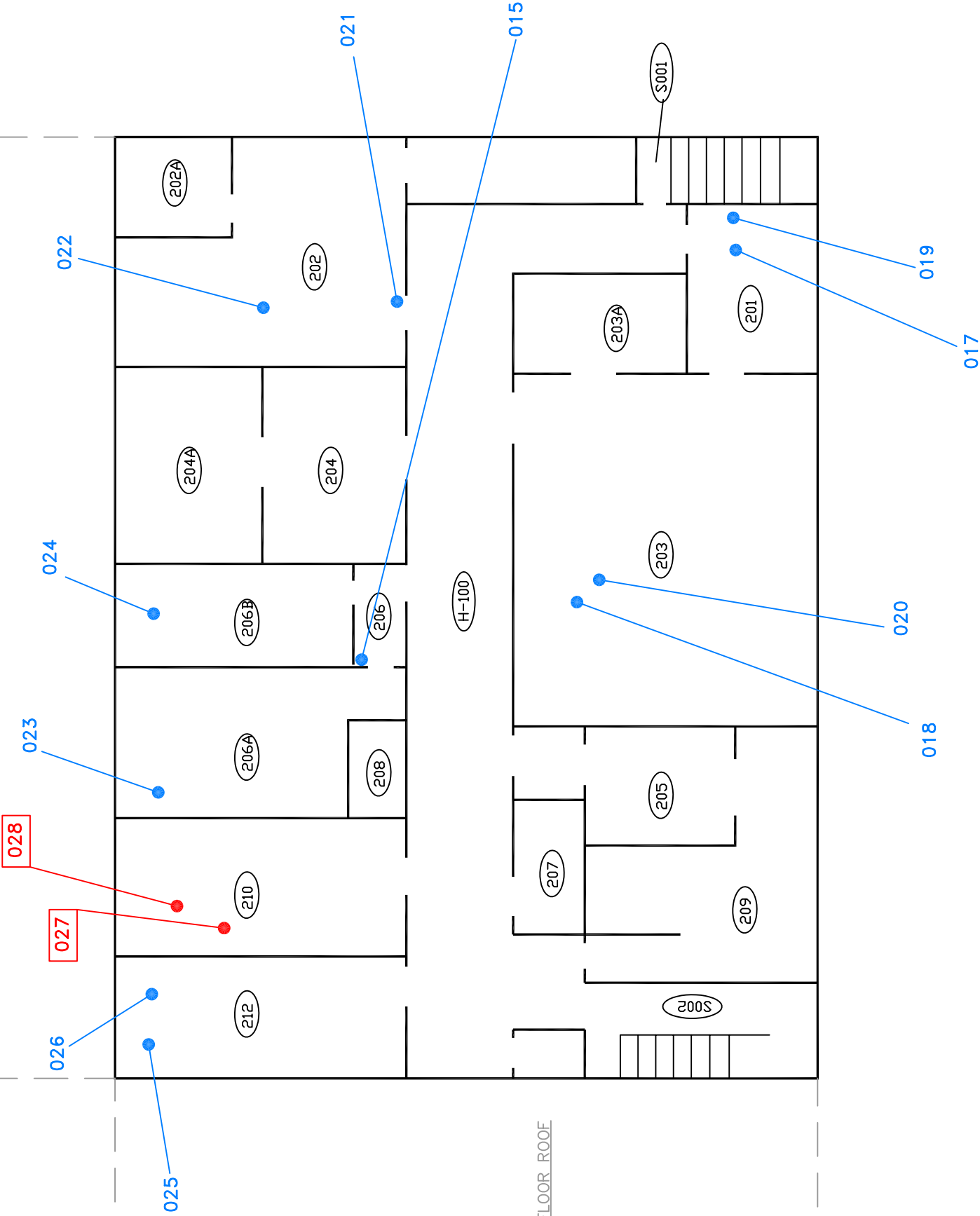
O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat- ing	Fria- bility	Condition	% D	Recommended Action
22	7	Misc, CORK PANELS, Brown/black	264 SF	10	Low	Damaged	8.00	Remove/O&M
Locations: Rooms 210								
22	8	TSI, FITTING, MUDDER, Gray	16 SF	22	Mod	Not Damaged	0.00	Remove/O&M
Locations: Rooms 103								

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.



FIRST FLOOR ROOF



LEGEND

- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC.
1345 Barracks Rd.
NORTH CHARLESTON, SOUTH CAROLINA 29405

ASBESTOS SAMPLE LOCATIONS
BUILDING 22, SECOND FLOOR
ARC NIAGRA FALLS (NY046)
NIAGRA FALLS NEW YORK

DATE	1-6-05	PREPARED BY	M. MOLTZEN	DRAWN BY	L. C. DIASIO	REV	-
SCALE	NONE	DWG NUMBER	ee9inc_NY046_b22N.2_10-04	SHEET	1	OF	1

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Enterprise Group, Inc.
1345 Barracks Road
North Charleston, SC 29405

DATE OF RECEIPT: 19 OCT 2004
DATE OF ANALYSIS: 20 OCT 2004
DATE OF REPORT: 20 OCT 2004

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2883
PROJECT: US Army Reserve Center-Niagara Falls; Building #22

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	ARC-NiagaraFlls-015/ White Powder; Brown Fib.	NAD	40% Cellulose 60% Non-Fibrous
02	ARC-NiagaraFlls-016/ White Powder; Brown Fib.	NAD	10% Cellulose 90% Non-Fibrous
03	ARC-NiagaraFlls-017/ Brown Fib.	NAD	95% Cellulose 5% Non-Fibrous
04	ARC-NiagaraFlls-018/ Brown Fib.	NAD	95% Cellulose 5% Non-Fibrous
05	ARC-NiagaraFlls-019/ Brown Adhes.	NAD	100% Non-Fibrous
06	ARC-NiagaraFlls-020/ Brown Adhes.	NAD	100% Non-Fibrous
07	ARC-NiagaraFlls-021/ Gray Fib.	NAD	40% Cellulose 40% Fibrous Glass 20% Non-Fibrous
08	ARC-NiagaraFlls-022/ Gray Fib.	NAD	40% Cellulose 40% Fibrous Glass 20% Non-Fibrous
09	ARC-NiagaraFlls-023/ Brown Fib.	NAD	95% Cellulose 5% Non-Fibrous
10	ARC-NiagaraFlls-024/ Brown Fib.	NAD	95% Cellulose 5% Non-Fibrous
11	ARC-NiagaraFlls-025/ Brown Fib.	NAD	95% Cellulose 5% Non-Fibrous
12	ARC-NiagaraFlls-026/ Brown Fib.	NAD	95% Cellulose 5% Non-Fibrous

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 42-4515 B

EHS PROJECT #: 10-04-2883

PROJECT: US Army Reserve Center-Niagara Falls; Building #22

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
13	ARC-NiagaraFlls-027/ Brown Foam; Black Tar-Like	2% Chrysotile ★ 2% Total Asbestos ★ Present in the tar-like material.	98% Non-Fibrous
14	ARC-NiagaraFlls-028/ Brown Foam; Black Tar-Like	2% Chrysotile ★ 2% Total Asbestos ★ Present in the tar-like material.	98% Non-Fibrous
15	ARC-NiagaraFlls-029/ Gray Powder; Fib.	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
16	ARC-NiagaraFlls-030/ Gray Powder; Fib.	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
17	ARC-NiagaraFlls-031/ Gray Powder; Fib.	80% Chrysotile 80% Total Asbestos	20% Non-Fibrous
18A	ARC-NiagaraFlls-032(a)-Tile/ Gray Vinyl	NAD	100% Non-Fibrous
18B	ARC-NiagaraFlls-032(b)-Mastic/ Black Adhes.	NAD	100% Non-Fibrous
19A	ARC-NiagaraFlls-033(a)-Tile/ Gray Vinyl	NAD	100% Non-Fibrous
19B	ARC-NiagaraFlls-033(b)-Mastic/ Black Adhes.	NAD	100% Non-Fibrous

QC SAMPLE: M2-1999-2

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Feng Jiang, M.S.

Reviewed By Authorized Signatory: _____
Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2883
PROJECT: US Army Reserve Center-Niagara Falls; Building #22

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
 SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR

-- PAGE 03 of 03 -- END OF REPORT --



Building 23 - Storage Building
Niagara Falls Armed Forces Reserve Center - Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 23: Storage Building

1. DESCRIPTION:

Building 23 is a 2,058 square-foot building constructed in 1956. It is a metal-framed structure with metal siding and roofing. The following information was identified during the survey and from the analysis of the samples taken:

- Two homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- Two of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- One of the suspected homogeneous areas was confirmed to contain asbestos.
- One of the suspected homogeneous areas did not contain asbestos.

2. FINDINGS:

Two homogeneous areas with suspected ACM were identified. Four samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was not found in any homogeneous areas.

Confirmed ACM. The following homogeneous area sampled was confirmed to contain asbestos:

- H-2: MISC, ROOFING, MASTIC, Silver/black, was Non-friable and Not Damaged.

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, SHEETROCK/MUD, White

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: NONE

3. OBSERVATIONS:

No observations.

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-2: MISC, ROOFING, Silver/black: **O&M**

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY
ASBESTOS INSPECTION REPORT

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance (O&M) recommendations for confirmed and assumed homogeneous materials of ACM are found in the *Operations & Maintenance Table* of this report. The materials listed below should be maintained following the guidelines in the O&M Plan during regular maintenance and small-scale repair activities, until removed.

MISC ROOFING is Confirmed, Non-friable ACM.

H-2 (ROOFING, Silver/black) is located on the Roof.

BUILDING SUMMARY TABLE
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

Building No. 23

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	N	Misc, SHEETROCK/MUD, White	SF	0						
Rooms 100										
2	Y	Misc, ROOFING, MASTIC, Silver/black	2,060 SF	9	Non	PD	0.0	O&M		Covers entire roof.
Rooms Roof										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

BUILDING SUMMARY TABLE
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

Building No. 23

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	N	Misc, SHEETROCK/MUD, White	SF	0						
Rooms 100										
2	Y	Misc, ROOFING, MASTIC, Silver/black	2,060 SF	9	Non	PD	0.0	O&M		Covers entire roof.
Rooms Roof										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

OPERATIONS AND
MAINTENANCE TABLE

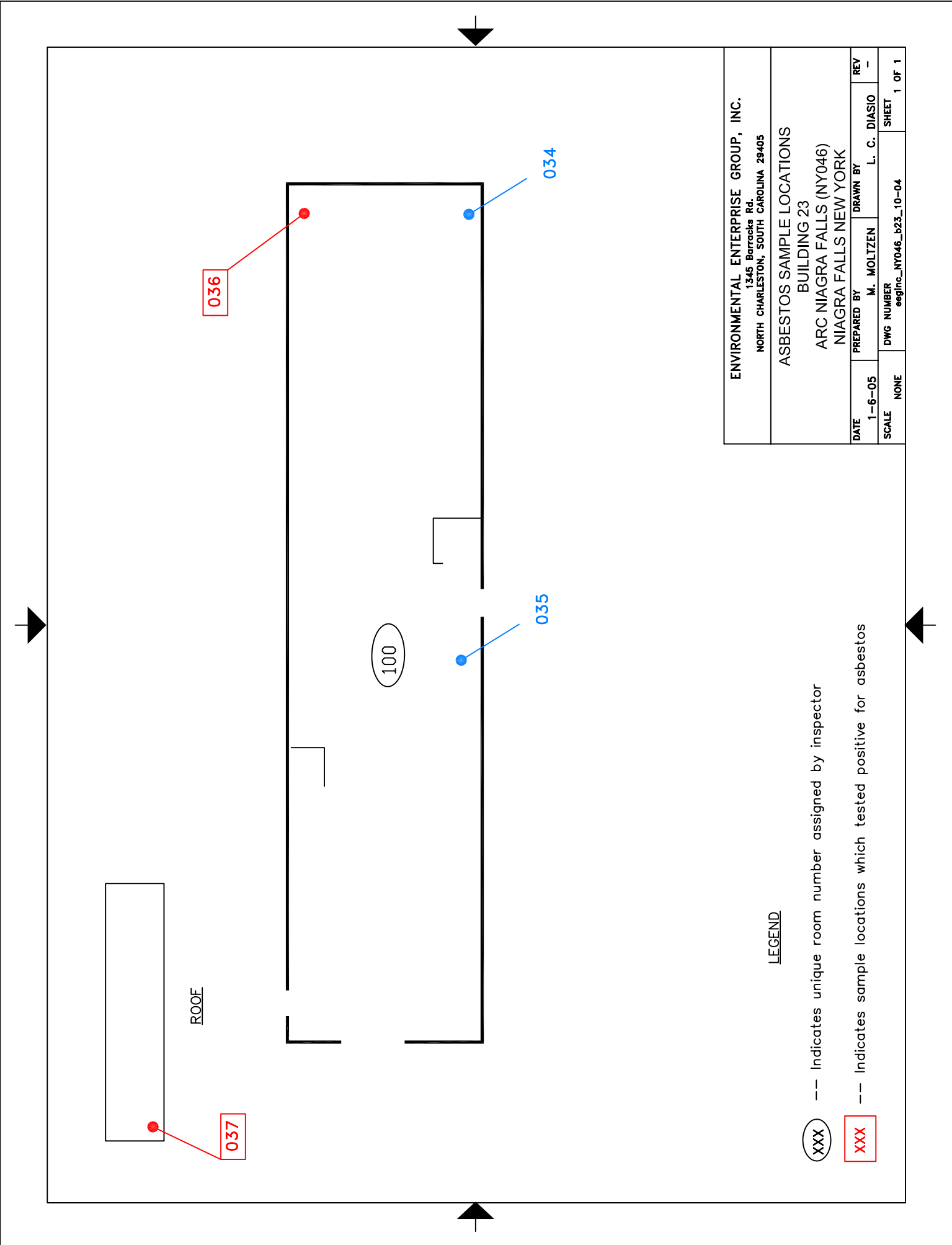
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat-ing	Fria-bility	Condition	% D	Recommended Action
23	2	Misc, ROOFING, MASTIC, Silver/black	2,060 SF	9	Non	Not Damaged	0.00	O&M

Locations: Rooms Roof

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.



ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 23 ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 1-6-05	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER ee9lnc_NY046_b23_10-04	SHEET 1 OF 1	

LEGEND

- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Enterprise Group, Inc.
1345 Barracks Road
North Charleston, SC 29405

DATE OF RECEIPT: 19 OCT 2004

DATE OF ANALYSIS: 21 OCT 2004

DATE OF REPORT: 21 OCT 2004

CLIENT NUMBER: 42-4515 B

EHS PROJECT #: 10-04-2871

PROJECT: US Army Reserve Center-Niagra Falls; Building #23

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	ARC-NiagrFlls-034/ White Chalky; Brown Fib.	NAD	10% Cellulose 90% Non-Fibrous
02	ARC-NiagrFlls-035/ White Chalky; Brown Fib.	NAD	10% Cellulose 90% Non-Fibrous
03	ARC-NiagrFlls-036/ Silver Paint-Like	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
04	ARC-NiagrFlls-037/ Silver Paint-Like	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous

QC SAMPLE: M2-1999-3

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Melissa Boggs Steiniger

Reviewed By Authorized Signatory: _____

Howard Varner, Laboratory Director

Irma Faszewski, Quality Assurance Coordinator

David Xu, MS, Senior Chemist

Feng Jiang, MS, Senior Geologist

Michael A. Mueller, Quality Assurance Manager

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 42-4515 B

EHS PROJECT #: 10-04-2871

PROJECT: US Army Reserve Center-Niagra Falls; Building #23

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND	NAD = no asbestos detected
	SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR

-- PAGE 02 of 02 -- END OF REPORT --



Building 24 - Storage Building
Niagara Falls Armed Forces Reserve Center - Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY
ASBESTOS INSPECTION REPORT

BUILDING 24: Storage Building

1. DESCRIPTION:

Building 24 is a 2,400 square-foot building constructed in 1993. It is a metal-framed structure with metal siding and roofing. **Inspection of this building revealed no suspected asbestos containing materials.** The following information was identified during the survey:

- No homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.

2. FINDINGS:

No homogeneous areas with suspected ACM were identified. No samples were collected or analyzed.

3. OBSERVATIONS: NO SUSPECT MATERIALS FOUND

4. RECOMMENDED ABATEMENT ACTIONS: NONE

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE: NONE



Building 25 - Storage Building

Niagara Falls Armed Forces Reserve Center - Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 25: Former Power Plant

1. DESCRIPTION:

Building 25 is a 1,504 square-foot building constructed 1956. It is a concrete block structure with brick exterior. The following information was identified during the survey and from the analysis of the samples taken:

- One homogeneous area was identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- The homogeneous area was suspected to contain asbestos and sampled to confirm.
- No suspected homogeneous areas were confirmed to contain asbestos.

2. FINDINGS:

One homogeneous area with suspected ACM was identified. Two samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Asbestos was not found in any homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos: **NONE**

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, GLAZING, WINDOW INTERIOR, Gray

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS:

New roofing installed within past 4 years.

4. RECOMMENDED ABATEMENT ACTIONS: NONE

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE: NONE

BUILDING SUMMARY TABLE
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

Building No. 25

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	N	Misc, GLAZING, WINDOW INTERIOR, Gray	SF	0						
Rooms 100										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

**LABORATORY TEST
RESULTS TABLE**

**US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION
INDUSTRIAL LABORATORY TEST REPORT**

Building No. 25

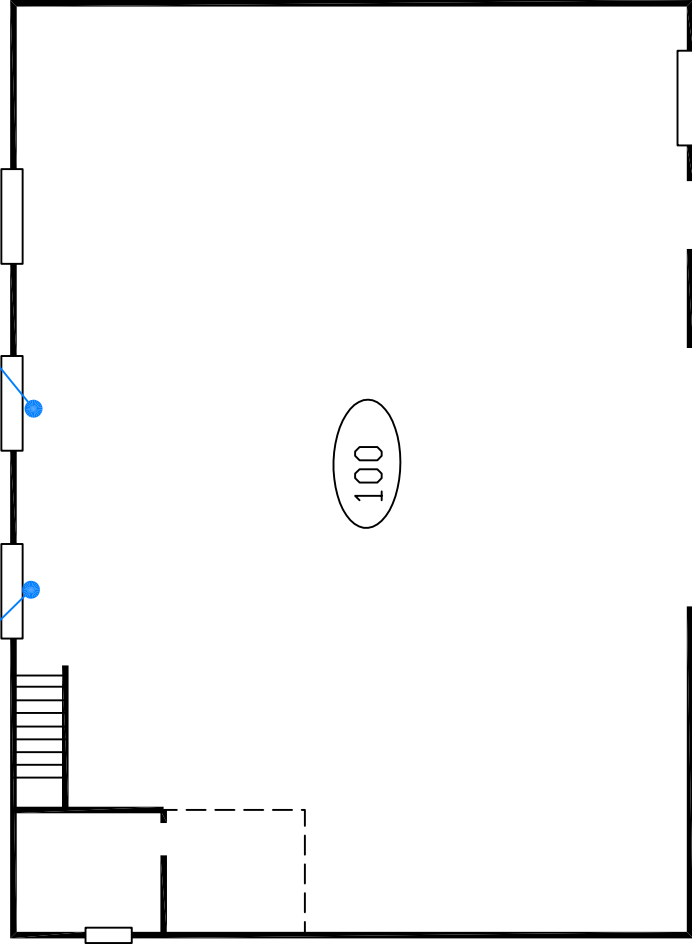
Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	NO	NiagrFils-046	100	Misc, GLAZING, Gray	10/14/04	10/21/04	No Asbestos Detected	0%
1	NO	NiagrFils-047	100	Misc, GLAZING, Gray	10/14/04	10/21/04	No Asbestos Detected	0%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%



046

047



100

LEGEND

- XXX --- Indicates unique room number assigned by inspector
- XXX --- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 25 ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 12-10-04	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER ee9inc_NY046_b25_10-04	SHEET 1 OF 1	

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Environmental Enterprise Group, Inc.
1345 Barracks Road
North Charleston, SC 29405

DATE OF RECEIPT: 19 OCT 2004
DATE OF ANALYSIS: 21 OCT 2004
DATE OF REPORT: 21 OCT 2004

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2872
PROJECT: US Army Reserve Center-Niagra Falls; Building #25

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	ARC-NiagrFlls-046/ Gray Caulk	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous
02	ARC-NiagrFlls-047/ Gray Caulk	Trace, <1% Chrysotile <1% Total Asbestos	100% Non-Fibrous

QC SAMPLE: M1-1998-2

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Tabitha Jamison

Reviewed By Authorized Signatory:

Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR

-- PAGE 01 of 01 -- END OF REPORT --



Building 26 - Storage Building
Niagara Falls Armed Forces Reserve Center - Niagara Falls, NY (NY046)

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY

ASBESTOS INSPECTION REPORT

BUILDING 26: Storage Building

1. DESCRIPTION:

Building 26 is a 2,150 square-foot building constructed in 1960. It is a metal-framed structure with metal siding and roofing. The following information was identified during the survey and from the analysis of the samples taken:

- One homogeneous area was identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- One of the homogeneous areas was suspected to contain asbestos and sampled to confirm.
- One of the suspected homogeneous areas was confirmed to contain asbestos.

2. FINDINGS:

One homogeneous area with suspected ACM was identified. Two samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was not found in any homogeneous areas.

Confirmed ACM. The following homogeneous area sampled was confirmed to contain asbestos:

- H-1: MISC, ROOFING, SEALER, Silver, was Non-friable and Not Damaged.

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS:

No observations.

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-1: MISC, ROOFING, Silver: **O&M**

US ARMED FORCES RESERVE CENTER – NIAGARA FALLS, NY
ASBESTOS INSPECTION REPORT

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance (O&M) recommendations for confirmed and assumed homogeneous materials of ACM are found in the *Operations & Maintenance Table* of this report. The materials listed below should be maintained following the guidelines in the O&M Plan during regular maintenance and small-scale repair activities, until removed.

MISC ROOFING is Confirmed, Non-friable ACM.

H-1 (ROOFING, Silver) is located on the Roof.

BUILDING SUMMARY TABLE
US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

Building No. 26

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Fria- bility	Cond	% D	Recommended Action	Abate Cost	Comments
1	Y	Misc, ROOFING, SEALER, Silver	2,500 SF	10	Non	PD	0.0	O&M		
Rooms Roof										

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

**LABORATORY TEST
RESULTS TABLE**

**US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION
INDUSTRIAL LABORATORY TEST REPORT**

Building No. 26

Homo. Area No.	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	YES	NiagrFalls-086	Roof	Misc, ROOFING, Silver	10/15/04	10/21/04	Chrysotile	2%
1	YES	NiagrFalls-087	Roof	Misc, ROOFING, Silver	10/15/04	10/21/04	Chrysotile	2%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

OPERATIONS AND
MAINTENANCE TABLE

US ARMY RESERVE CENTER - NIAGARA FALLS
ASBESTOS BUILDING INSPECTION

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat- ing	Fria- bility	Condition	% D	Recommended Action
26	1	Misc, ROOFING, SEALER, Silver	2,500 SF	10	Non	Not Damaged	0.00	O&M

Locations: Rooms Roof

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.



086

087

100

LEGEND

- Indicates unique room number assigned by inspector
- Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 Barracks Rd. NORTH CHARLESTON, SOUTH CAROLINA 29405			
ASBESTOS SAMPLE LOCATIONS BUILDING 26 ARC NIAGRA FALLS (NY046) NIAGRA FALLS NEW YORK			
DATE 1-14-05	PREPARED BY M. MOLTZEN	DRAWN BY L. C. DIASIO	REV -
SCALE NONE	DWG NUMBER eeginc_NY046_b26_10-04		SHEET 1 OF 1

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237

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BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

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DATE OF RECEIPT: 19 OCT 2004
DATE OF ANALYSIS: 21 OCT 2004
DATE OF REPORT: 21 OCT 2004

CLIENT NUMBER: 42-4515 B
EHS PROJECT #: 10-04-2873
PROJECT: US Army Reserve Center-Niagra Falls; Building #26

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	ARC-NiagrFalls-086/ Silver Paint-Like	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous
02	ARC-NiagrFalls-087/ Silver Paint-Like	2% Chrysotile 2% Total Asbestos	98% Non-Fibrous

QC SAMPLE: M2-1999-3

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Melissa Boggs Steiniger

Reviewed By Authorized Signatory:

Howard Varner, Laboratory Director
Irma Faszewski, Quality Assurance Coordinator
David Xu, MS, Senior Chemist
Feng Jiang, MS, Senior Geologist
Michael A. Mueller, Quality Assurance Manager

Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
SCF = suspected ceramic fibers

plm1.dot/07JAN2002/ MR



**United States Army Reserve
77th Regional Readiness Command**

Fort Totten, New York

**Storm Water Pollution Prevention Plan
Update**

Contract Number: DNY LOS007917

**Niagara Falls USARC –
NY046
(Niagara Falls, NY)**

**February 9, 2006
Version 2.0**

Updated by:



Bowne AE&T Group
235 East Jericho Turnpike
PO Box 109
Mineola NY 11501-0109
Phone: 516-746-2350
Fax: 516-747-1396
www.bownegroup.com

U.S. Army Reserve - 77th Regional Readiness Command	VERSION: 2.0
Storm Water Pollution Prevention Plan for Niagara Falls USARC – NY046	DATE: Feb. 9, 2006

SWP3 CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

SIGNATURE:

TYPED NAME: Richard C. Ramsdell

TITLE: 77th ARIM, Facility Management Officer

TELEPHONE NUMBERS: 718-352-2091

U.S. Army Reserve - 77th Regional Readiness Command	VERSION: 2.0
Storm Water Pollution Prevention Plan for Niagara Falls USARC – NY046	DATE: Feb. 9, 2006

REVISION LOG

VERSION	DATE	PREPARED BY
2.0	February 9, 2006	Bowne AE&T Group, Mineola, NY
1.0		U.S. Geological Survey, Water Resources Division, Reston, VA

U.S. Army Reserve - 77th Regional Readiness Command	VERSION: 2.0
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ACRONYMS AND ABBREVIATIONS

ABMP	Advanced Best Management Practice
AFRC	Armed Forces Reserve Center
AMSA	Area Maintenance Support Activity
ARIM	Army Reserve Installation Management
ATF	Automatic Transmission Fluid
BBMP	Baseline Best Management Practice
BMA	Branch Maintenance Activity
BMP	Best Management Practice
CFR	Code of Federal Regulations
CUCV	Commercial Utility Combat Vehicle
DCSOPS(T)	Deputy Chief of Staff, Operations (Training Division)
DPW	Department of Public Works
DRMO	Defense Reutilization and Marketing Office
HEMTT	Heavy Expanded Mobility Technical Truck
HMMWV	High Mobility Multi-purpose Wheeled Vehicle
HW	Hazardous Waste
ISCP	Installation Spill Contingency Plan
MEP	Military Equipment Park
MSDS	Material Safety Data Sheet
MVPA	Military Vehicle Parking Area
NYSDEC	New York State Department of Environmental Conservation
NYSPDES	New York State Pollutant Discharge Elimination System
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSWD	Non-stormwater Discharge
OF	Outfall
OMS	Organizational Maintenance Shop
POL	Petroleum, Oil, and Lubricants
POV	Privately Owned Vehicle
PPM	Potentially Polluting Material
PPT	Pollution Prevention Team
RRC	Regional Readiness Command
SOP	Standard Operating Procedure

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SW	S tim W ater
SWP3	S tim W ater P ollution P revention P lan
USARC	U.S. Army Reserve Command
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	U nderground S torage T ank

U.S. Army Reserve - 77th Regional Readiness Command	VERSION: 2.0
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1. INTRODUCTION

The Clean Water Act of 1987 (40 CFR 122) requires Federal installations, which discharge stormwater impacted by industrial activities, to implement plans to control the quality of stormwater discharges. This "*Stormwater Pollution Prevention Plan*" was developed in response to these requirements. The plan identifies sources of potential pollution, describes "*Best Management Practices*" designed to minimize pollution through prevention and source control, and provides recommended actions for this facility.

1.1 Facility Permit

The State of New York, in which McConnell Niagara Falls USARC/AMSA 76 resides, does have NPDES permitting authority (New York General Permit NYR00C441). Stormwater permitting in the state is handled by the New York State Department of Environment Conservation (NYSDEC), Division of Water (Albany, NY)[Stormwater Permit Manual, Thompson Publishing Group Inc., January 1995]. For more information, contact the New York State Department of Environmental Conservation (NYSDEC), Region 9 Water Engineer at (716) 851-7070.

1.2 Facility Description

The Niagara Falls Armed Forces Reserve Center (USARC) and AMSA 76 are located at 9400 Porter Road (Route 182) in Niagara Falls, New York (Figure 1). Geographic coordinates for the USARC/AMSA are the following: 43° 06' 07" Latitude, 78° 57' 23" Longitude. The AMSA compound (shop and surrounding military vehicle parking areas) encompasses 5.5 acres, with an approximate elevation of 575 feet above mean sea level. Administrative, warehouse storage, POV parking, and other training areas of the USARC occupy an additional 13.8 acres (Figure 2).

The primary mission of Niagara Falls USARC/AMSA 76 is to provide organizational and limited direct support maintenance, and technical assistance for supported Army Reserve units located in the region. Maintenance conducted at the site includes support of military vehicles and related equipment that cannot be performed by Army Reserve unit personnel during regularly scheduled weekend training sessions.

The facility includes an AMSA and an OMS.

1.3 Plan Development

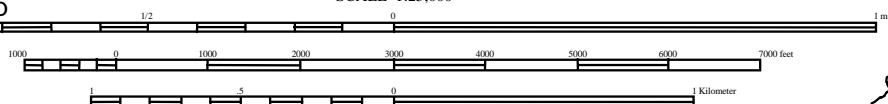
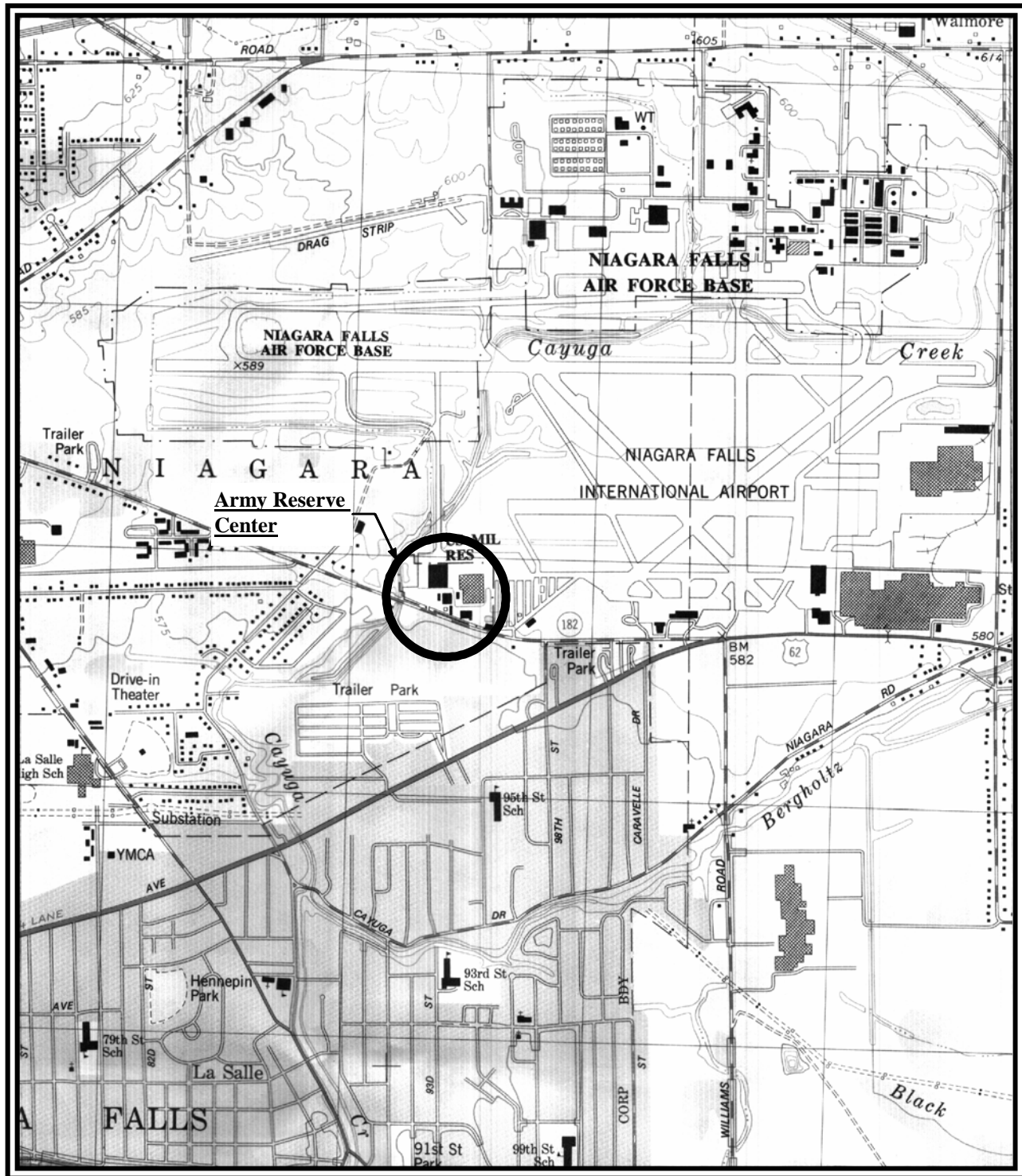
The initial plan was drafted by the U.S. Geological Survey (USGS), Water Resources Division (WRD). Information and illustrations included in the plan were developed from site inspections, and from 77th RRC and USGS databases.

1.4 Plan Revisions

The Niagara Falls USARC/AMSA 76 SWP3 should be updated annually or more often, as necessary, by qualified personnel from the 77th RRC or an outside contractor (FR. Vol. 57, No. 175, September 9, 1992, Part IV.C). Many elements of the plan are

presented in maps and tables describing sites where potential pollution of stormwater can occur, stormwater pollution risks from those sites to Waters of the U.S., and best management practices (BMPs) that prevent or control stormwater pollution. Since these elements are subject to change, to facilitate the annual plan revision, good notes and sketches should be made during periodic stormwater inspections.

Figure 1 – Location Map



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2. POLLUTION PREVENTION TEAM

The Niagara Falls USARC/AMSA 76 Pollution Prevention Team (PPT) is responsible for implementing and evaluating the effectiveness of the SWP3 at this facility. Personnel serving on the team should be officially appointed. Table 1 lists the members of the PPT and shows their respective duties.

Table 1 – Pollution Prevention Team

<p>77TH ARIM, FACILITY MANAGEMENT OFFICER, RICHARD C. RAMSDELL (718) 352-2091. Reviews and approves the SWP3 and any modifications or updates to the plan. Coordinates with State and Federal regulators for modifications to the plan. Provides guidance and information as requested. Performs annual site compliance inspection.</p>
<p>NIAGARA FALLS USARC/AMSA FACILITY MANAGER, RENEE STACK (716) 298-0208. Schedules meetings of the PPT. Signs documents and certificates required in the SWP3. Has overall responsibility for ensuring that the stormwater pollution prevention program is implemented at the facility. Prepares cost estimates for implementation plans for advanced and baseline BMPs at the facility. Submits requisitions and work orders and promotes self-help initiatives. Reviews monthly stormwater inspection checklists. Serves as emergency spill coordinator for the facility when the AMSA Shop Foreman is not present. Coordinates with Shop Foreman during monthly stormwater inspections. Informs Commanding Officer and 77th RRC Facility Management Officer of problems, and equipment and training needs for the AMSA Compound.</p>
<p>AMSA 76 SHOP FOREMAN, CHARLES PAGE (716) 297-7200. Coordinates with Facility Manager on equipment, construction, and training needs. Oversees and delegates responsibilities for implementation of the SWP3 at the facility. Serves as official emergency spill coordinator for the facility. Conducts monthly stormwater inspections and files inspection reports for the AMSA Compound.</p>
<p>NIAGARA FALLS USARC/AMSA 76 MOTORPOOL PERSONNEL. Responsible for implementing good housekeeping and preventive maintenance practices.</p>

U.S. Army Reserve - 77th Regional Readiness Command	VERSION: 2.0
Storm Water Pollution Prevention Plan for Niagara Falls USARC – NY046	DATE: Feb. 9, 2006

3. ASSESSMENT

As required by the General Permit, the site assessment includes a description of potential sources of pollutants that may be reasonably expected to add significant amounts of pollutants to stormwater discharges or which may result in the discharge of pollutants during dry weather from the facility. All activities and materials that may potentially be significant pollutant sources are identified. Pollutant sources are referenced to stormwater outfalls to aid in conducting the risk assessment, implementing BMPs, and updating the SWP3.

3.1 Industrial Activities

The first step in the site assessment is identification of the principal industrial activities at Niagara Falls USARC/AMSA 76 that are subject to stormwater regulations. All pollutant sources at the USARC/AMSA are directly related to (i) vehicle maintenance and washing; (ii) loading and unloading of PPMs; and (iii) exposed temporary storage of PPMs. The use of potentially polluting materials (PPMs) and generation of waste products are results of vehicle maintenance. Table 2 lists industrial activities identified at this facility. Industrial activities shown in this table are discussed in this plan.

Table 2 – Industrial activities (Figure 2, Figure 3, and Figure 4)

INDUSTRIAL ACTIVITY LOCATION	A	B	C	D
AMSA 76 Building	X		X	X
Vehicle Washrack	X			
OMS Building	X		X	X
Military Vehicle Parking Area (MVPA)	X		X	X

Industrial Activity Type:

- A: Motorpool areas where vehicle maintenance, washing and storage of POL occurs
- B: Storage piles of materials containing PPMs exposed to precipitation and/or stormwater runoff
- C: Storage areas used to accumulate hazardous wastes, either permanent or temporary
- D: Sites where loading and unloading of PPMs occurs

3.2 Site Map

The NPDES stormwater regulations require that a facility site map be developed as part of the SWP3. Required elements of the map include locations of industrial activities, stormwater structures, and stormwater runoff drainage pathways. The Niagara Falls USARC site map (Figure 2) shows primary stormwater drainage paths and outfalls, and the location of buildings and facilities. A motorpool map and floor plan of AMSA 76 are included in Figure 3 and Figure 4, respectively. Stormwater control structures, pollutant sources, and high risk areas are labeled with site codes, which are identified in Table 4 through Table 12 and on the site maps.

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3.3 Drainage and Outfalls

The USARC generally drains toward the southwest to Cayuga Creek. Cayuga Creek lies approximately 200 feet west of the site, and flows southward. There is a drainage ditch located along Porter Road (along the front of the property) that flows westward to Cayuga Creek. There is also a drainage ditch along the eastern boundary of the site that flows southward into the ditch along Porter Road.

Site observation of the USARC/AMSA property identified four stormwater outfalls (OF-1, OF-2, OF-4, and OF-5) that could be regulated under NPDES stormwater regulations. Each outfall is associated with a local stormwater sewer line and network of drain inlets ["Drain Inlet (Fac. Plans)"] (Figure 2). A number of inlets were identified during the site assessment on 16 November 2005, also shown on Figure 2. Site grading and the location of some inlets causes stormwater flow to bypass them and sheetflow directly into drainage ditch DD-1.

The northern portion of the facility drains toward a number of inlets of the stormwater system ST-1. System ST-1 flows westward along the northern boundary of the facility to outfall OF-1.

The western half of the MVPA (or AMSA Lot) generally drains southwestward, with a portion of the stormwater runoff entering a branch of storm sewer line ST-2, and the remainder flowing into drainage ditch DD-1. Storm sewer line ST-2 continues west until discharging into Cayuga Creek, a point designated as outfall OF-2. Regulated activities within the drainage of outfall OF-2 include exposed PPM storage and loading and unloading of PPMs (Figure 2 and Figure 3)

Outfall OF-3 (at Cayuga Creek) receives stormwater discharges from storm sewer line ST-3, which drains much of the 865th General Hospital Training Area. No regulated (vehicle maintenance) activities are conducted at this area. The 865th General Hospital practices emergency response drills at makeshift tents on the gravel lot (Figure 2).

Southern portions of the MVPA generally sheetflow southwest, with stormwater runoff either discharging into a branch of storm sewer line ST-1, or continuing southwest, where runoff discharges into storm sewer ST-4 or flows directly into drainage ditch DD-1 (photo 9). Outfall OF-4 is designated as the point where storm sewer ST-4 discharges into ditch DD-1.

Eastern portions of the MVPA (or Unit Lot) generally drain southeast, with stormwater runoff flowing into drainage ditch DD-2. Drainage ditch DD-2 continues south, where it discharges into drainage ditch DD-1, a point designated as outfall OF-5 (photo 8). Drainage ditch DD-1 discharges into Cayuga Creek at a point just north of the Porter Road Bridge. Regulated activities within the drainage of outfall OF-5 include exposed PPM storage (Figure 2 and Figure 3).

Maintenance bay areas within the AMSA Shop drain through a series of trench drains into a branch of storm sewer ST-1, which continues north and west before discharging into Cayuga Creek, a point designated as outfall OF-1. Work bay areas within the Unit Shop also drain into trench drains, which are connected through a sump into a branch

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of storm sewer line ST-2. Regulated activities at the AMSA and Unit shops include vehicle maintenance, exposed PPM storage, and loading/unloading (Figure 4).

The Vehicle Washrack (3A) drains through a single inlet drain into an oil/water separator and local sanitary sewer line S-2. Regulated activities within the washrack include vehicle washing and steam cleaning (Figure 3).

According to facility engineering plans, a number of interior building areas drain directly or indirectly into local stormwater sewer systems. The roof of the National Guard Maintenance Hangar (10) drains directly into the stormwater system. The floor of the AMSA Building (1, 2) has been regraded, pitching north toward a trough, which leads into an oil water separator. The Department of Public Works (DPW) building also drains into an oil/water separator, prior to discharging into the local sanitary sewer. Of this group, only the AMSA Building contains regulated industrial activities (Figure 2, Figure 3, and Figure 4).

The Facility included a stormwater detention basin that has been removed from the site. The area, located near the southeast corner of the site, has been regraded and is now part of the parking area.

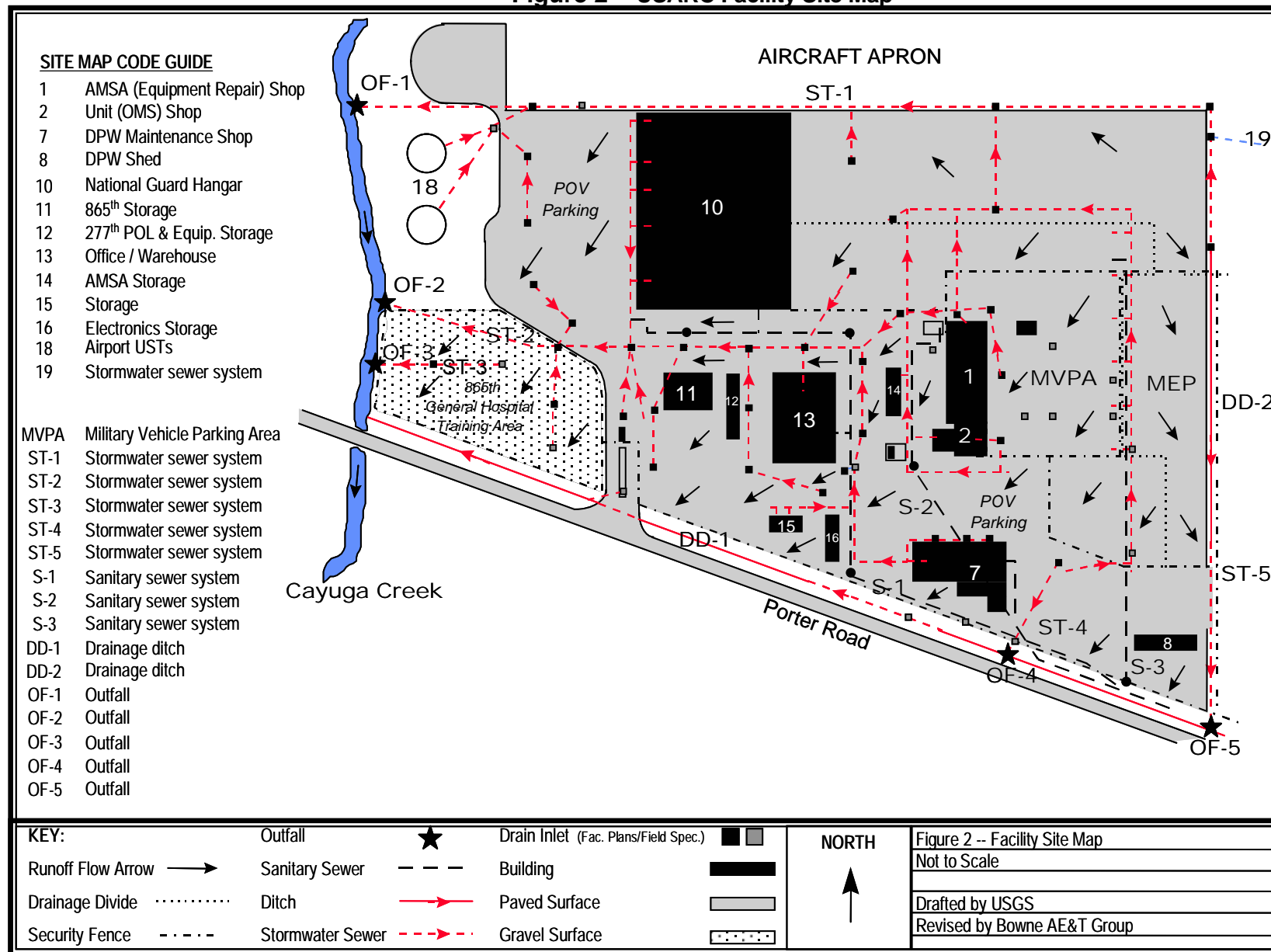
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Table 3 – Stormwater outfalls (Figure 2)

SITE MAP CODE	OUTFALL LOCATION	OUTFALL TYPE	INDUSTRIAL ACTIVITY DRAINED	RECEIVING WATERS
OF-1	Approximately 950 feet northwest of the AMSA Shop	Point at which stormwater sewer line ST-1 discharges into Cayuga Creek	Vehicle maintenance, storage, loading	Cayuga Creek
OF-2	Approximately 850 feet west of the AMSA Shop	Point at which stormwater sewer line ST-2 discharges into Cayuga Creek	Storage, loading	Cayuga Creek
OF-3	Approximately 825 feet west of the AMSA Shop	Point at which stormwater sewer line ST-3 discharges into Cayuga Creek	None	Cayuga Creek
OF-4	Approximately 300 feet south of the OMS	Point at which stormwater sewer line ST-4 discharges into drainage ditch DD-1	Vehicle storage	Cayuga Creek
OF-5	Approximately 525 feet southeast of the OMS	Point at which stormwater sewer line ST-5 discharges into drainage ditch DD-1	Vehicle storage	Cayuga Creek

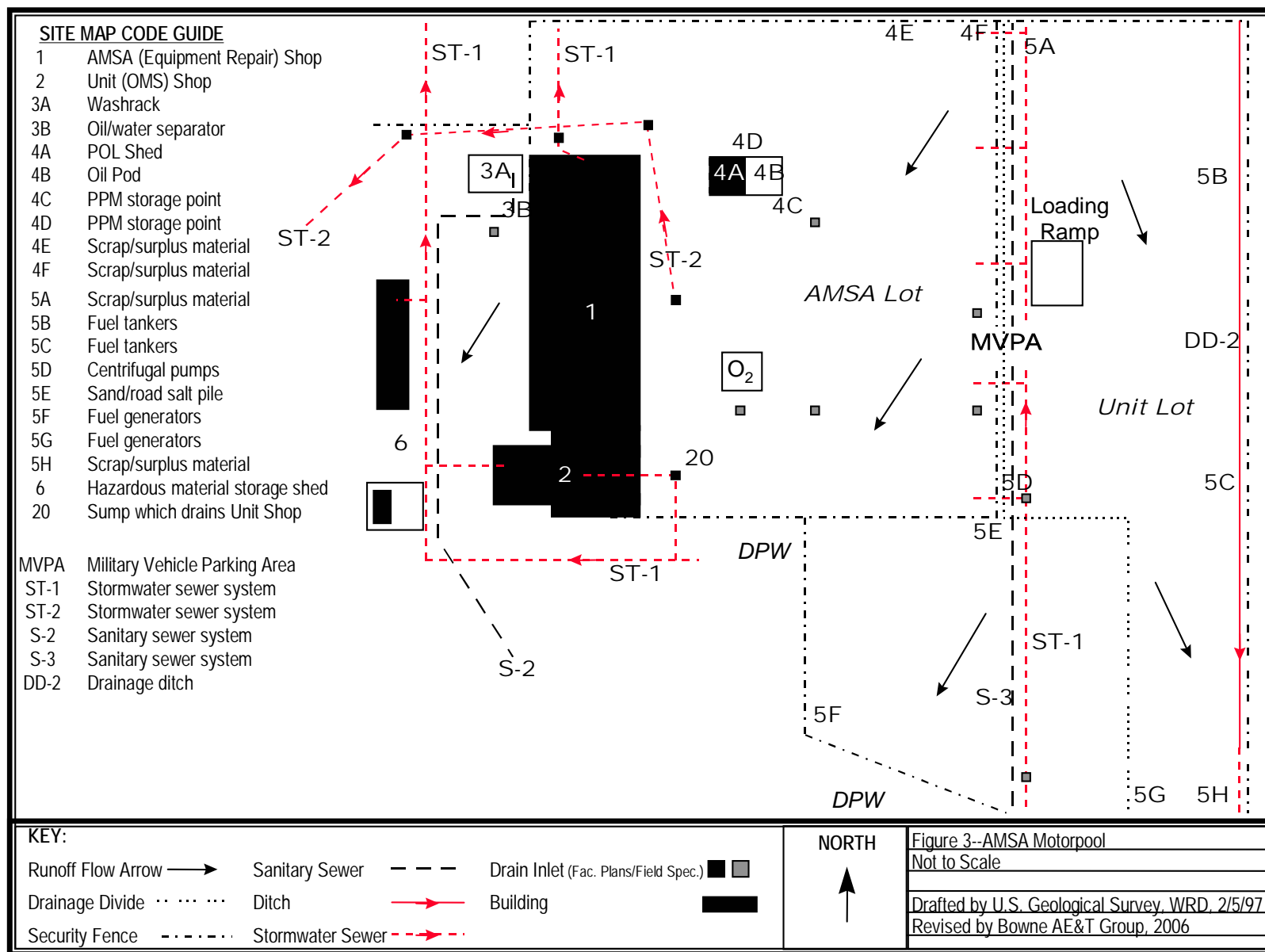
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Figure 2 – USARC Facility Site Map



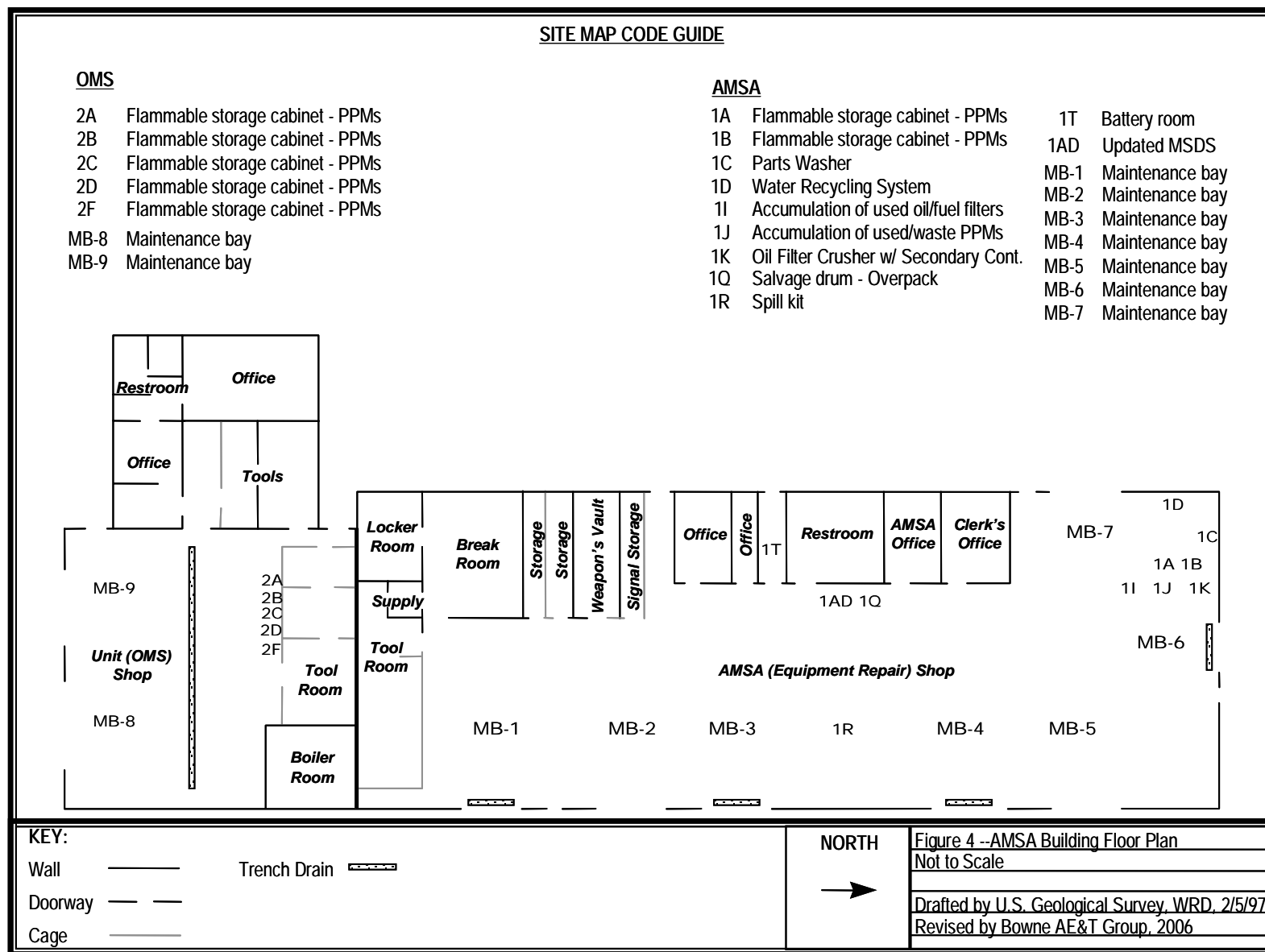
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Figure 3 – AMSA Shop Motorpool



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Figure 4 – AMSA Building Floor Plan



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3.4 Structures

Structures designed to control, direct, or treat stormwater runoff from the USARC/AMSA facility are listed in Table 4 and shown in Figure 2 and Figure 3. Generally, stormwater discharges flow freely through local stormwater sewer lines (ST-1 thru ST-5) and drainage ditches (DD-1 and DD-2) into Cayuga Creek, which is located along the west boundary of the USARC.

Table 4 – Structures to control stormwater pollution (Figure 2 and Figure 3)

SITE MAP CODE	STRUCTURE DESCRIPTION	LOCATION	OUTFALL
DD-1, DD-2	Drainage ditch/swale	Facility-wide	OF-4 and OF-5
S-1 thru S-3	Sanitary Sewer	Washrack, Hangar, DPW Shop	None

3.5 Water Bodies

Stormwater runoff from Niagara Falls USARC/AMSA 76 discharges through local stormwater sewer lines (ST-1 thru ST-5) and drainage ditches (DD-1 and DD-2) into Cayuga Creek, which flows southward along the west boundary of the facility. Cayuga Creek crosses Porter Road and continues approximately two miles south before discharging into the Niagara River (Figure 1).

Table 5 – Water bodies that could be impacted by stormwater runoff (Figure 1 and Figure 2)

RECEIVING WATER BODY	TYPE	LOCATION	OUTFALL
Cayuga Creek	Perennial Stream	Approximately 850 feet west of AMSA	OF-1 thru OF-5
Niagara River	Perennial River	Approximately 2 miles south of the USARC	OF-1 thru OF-5

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3.6 Potentially Polluting Materials

Exposed potentially polluting materials (PPMs) include any hazardous materials that contact precipitation and/or stormwater runoff during their use at the facility (i.e., storage, active use, and/or loading/ unloading). AMSA and unit personnel maintain inventories of PPMs located at the facility. The inventories are continuously updated and include the location of the material and approximate quantity on hand. Table 6 is an excerpt from those inventories, emphasizing exposed PPMs. Exposure to stormwater runoff commonly occurs due to a lack of cover and containment during loading/unloading and storage of PPMs.

Table 6 – Potentially Polluting Materials (Figure 2, Figure 3 and Figure 4)

Building	Location	PPM	Manufacturer	Quantity	Container	Stock_NSN_Num
OMS	Pol Shed	5 Gallon Fuel Can		28	5 gallon	
OMS	Pol Shed	5 Gallon Cleaning Compound Solvent		2	5 gallon	7930-01-350-7034
OMS	Pol Shed	5 Gallon Carbon Removing Compound		2	5 gallon	6850-00-965-2332
OMS	Pol Shed	5 Gallon GAA		2	5 gallon	9150-01-197-7692
OMS	Pol Shed	5 Gallon Aircraft Grease		2	5 gallon	9150-00-935-5851
OMS	Pol Shed	5 Gallon Brake Fluid, Silicone		11	5 gallon	9150-05-123-3152
OMS	Pol Shed	5 Gallon 30W Lube Oil		14	5 gallon	9150-00-188-9858
OMS	Pol Shed	5 Gallon Anti-Freeze		5	5 gallon	6850-01-464-9137
OMS	Pol Shed	5 Gallon 15/40W Lube Oil		14	5 gallon	9150-01-152-4118
OMS	Pol Shed	5 Gallon Hydraulic Fluid, Dextron III		10	5 gallon	9150-00-657-4959
OMS	Pol Shed	5 Gallon 80/90W Lube Oil		9	5 gallon	9150-01-035-5393
OMS	Pol Shed	5 Gallon Methonal		4	5 gallon	6810-00-275-6010
OMS	Pol Shed	5 Gallon 10W Lube Oil		4	5 gallon	9150-00-186-6668
OMS	Pol Shed	55 Gallon 10W Lube Oil		1	5 gallon	9150-00-191-2772
OMS	277th Cabinet #3	Rubbing Alcohol		1	bottle	
OMS	277th Cabinet #3	Degreaser	Greze-Off	6	bottle	
OMS	277th Cabinet #3	Silicone Compound		4	can	6850-00-880-7616
OMS	277th Cabinet #3	Petroleum Jelly		2	tub	
OMS	277th Cabinet #3	Anti-Freeze		1	bottle	
OMS	277th Cabinet #3	Graphite Grease		1	can	9150-00-190-0918
OMS	277th Cabinet #3	White Grease		1	can	

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OMS	277th Cabinet #3	15/40W Lube Engine Oil		37	can	9150-01-152-4117
OMS	277th Cabinet #3	Hydraulic Fluid, Auto Trans		27	can	9150-00-698-2382
OMS	277th Cabinet #3	Dextron III Auto Transmission Fluid		21	can	9150-01-353-4799
OMS	277th Cabinet #3	Propane		2	bottle	
OMS	277th Cabinet #3	Degreaser		2	bottle	20691
OMS	277th Cabinet #3	Odor Controllant		2	bottle	25564
OMS	277th Cabinet #3	GAA, Tube		50	tube	9150-01-197-7693
OMS	277th Cabinet #2	Battery Protector		2	can	
OMS	277th Cabinet #2	Degreaser		2	bottle	
OMS	277th Cabinet #2	Penetrating Lubricator		3	can	6810-00-293-6813
OMS	277th Cabinet #2	Gear and Chain Lubricant		2	can	A00380
OMS	277th Cabinet #2	Brake Parts Cleaner		1	can	
OMS	277th Cabinet #2	Heavy Duty Grease, Clear		1	can	
OMS	277th Cabinet #2	WD-40	WD-40	5	can	8030-00-293-5538
OMS	277th Cabinet #2	Adhesive		7	can	8040-00-264-3848
OMS	277th Cabinet #2	GAA		1	can	8150-01-197-7689
OMS	277th Cabinet #2	Break Free Lubricant	Break Free	2	bottle	9150-01-054-6453
OMS	277th Cabinet #2	Charcoal Lighter Fluid		1	can	
OMS	277th Cabinet #2	Black Walnut Oil Finish Stain		1	can	
OMS	277th Cabinet #2	Paint Thinner		1	bottle	8010-00-837-7969
OMS	277th Cabinet #2	Hydraulic Fluid, Trans Auto		1	5 gallon	9150-00-657-4959
OMS	277th Cabinet #2	Lubricating Oil, Gear 80/90W		2	5 gallon	9150-01-035-5393
OMS	277th Cabinet #2	Alcohol, Denatured		1	5 gallon	6810-00-201-0907
OMS	277th Cabinet #2	Over All Primer		4	can	8010-00-616-9181
OMS	277th Cabinet #2	Primer	Rust-Fix	1	can	
OMS	277th Cabinet #2	Gray Spray Paint		4	can	8010-00-935-7085
OMS	277th Cabinet #2	Black Spray Paint		3	can	8010-00-848-9272

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OMS	277th Cabinet #2	Green Spray Paint		5	can	8010-00-848-9272
OMS	277th Cabinet #2	White Spray Paint		1	can	7510-00-419-9564
OMS	277th Cabinet #2	Multi-Pur Thread Seal	Multi-Pur	1	tub	
OMS	277th Cabinet #2	Celolite Gold Enamel	Celolite	1	can	
OMS	277th Cabinet #2	Rubber Adhesive		1	can	8040-00-266-7429
OMS	277th Cabinet #2	Component B		1	can	MIC-C-46168-9
OMS	277th Cabinet #2	High Gloss Enamel, Blue		1	can	
OMS	277th Cabinet #2	Blue, Green, Yellow, Gray Paint	Rustoleum	4	can	
OMS	277th Cabinet #2	Carb Medic		1	can	
OMS	277th Cabinet #2	Varnish Stain Poly		1	can	
OMS	277th Cabinet #2	Patio and Floor Paint		1	can	
OMS	277th Cabinet #2	Fuel Engine Primer		3	can	6850-01-082-6783
OMS	277th Cabinet #2	Plastic Safe		1	can	
OMS	277th Cabinet #2	Ultra Copper		2	tube	
OMS	277th Cabinet #2	Battery Cleaner		2	can	
OMS	277th Cabinet #1	Grease ACFT		2	can	9150-00-145-0268
OMS	277th Cabinet #1	Anti-Seize Compound		1	can	8030-00-251-3980
OMS	277th Cabinet #1	Simple Green		1	bottle	
OMS	277th Cabinet #1	Silicone		1	tub	9150-01-102-9455
OMS	277th Cabinet #1	Lubricating Oil, Gear		1	can	9150-01-035-5392
OMS	277th Cabinet #1	Hydraulic Fluid, Trans Auto		1	can	9150-00-698-2382
OMS	277th Cabinet #1	Degreaser	Greze-Off	1	bottle	
OMS	277th Cabinet #1	Turpentine		1	bottle	
OMS	277th Cabinet #1	Paint Thinner		1	bottle	
OMS	277th Cabinet #1	Air Compressor Oil		1	bottle	
OMS	277th Cabinet #1	Hydraulic Fluid, Trans		2	5 gallon	9150-00-657-4959
OMS	277th Cabinet #4	Fire Extinguisher		8	bottle	

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OMS	277th Cabinet #4	Cleansing Compound		444	bottle	6850-00-926-2275
AMSA-76	Paint Locker	Red Spray Paint		5	can	
AMSA-76	Paint Locker	White Spray Paint		1	can	
AMSA-76	Paint Locker	Gloss Blue Spray Paint		1	can	
AMSA-76	Paint Locker	Olive Drab Spray Paint		4	can	
AMSA-76	Paint Locker	Gray Spray Paint		1	can	
AMSA-76	Paint Locker	Flat Black Spray Paint		4	can	
AMSA-76	Paint Locker	Yellow Spray Paint		1	can	
AMSA-76	Paint Locker	Ruststop Spray Paint	Ruststop	1	can	
AMSA-76	Paint Locker	No Lead Red Spray Paint		3	can	
AMSA-76	Paint Locker	Spray Cleaner Bottles		4	bottle	
AMSA-76	Paint Locker	Wall Primer		1	gallon	
AMSA-76	Paint Locker	Black, No Skid		1	gallon	
AMSA-76	Paint Locker	Gray		1	quart	
AMSA-76	Paint Locker	Windshield Washer Fluid		2	case	
AMSA-76	Paint Locker	Battery Paint		1	gallon	
AMSA-76	POL Storage Area	CLP		1	gallon	
AMSA-76	POL Storage Area	Anti-Freeze		3	gallon	
AMSA-76	POL Storage Area	Anti-Freeze		1	5 gallon	
AMSA-76	POL Storage Area	Moly Lube		3	spray can	
AMSA-76	POL Storage Area	Penetrating Fluid		2	can	
AMSA-76	POL Storage Area	Anti-Seize		3	can	
AMSA-76	POL Storage Area	15/40		2	quart	

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AMSA-76	POL Storage Area	Graphite Dry Lube		1	can	
AMSA-76	POL Storage Area	Isopropyl Alcohol		1	can	
AMSA-76	POL Storage Area	Grease		4	case	
AMSA-76	POL Storage Area	Hydraulic Fluid		7	quarts	
AMSA-76	POL Storage Area	Hydraulic Fluid		2	gallon	
AMSA-76	POL Storage Area	Dextron III		1	5 gallon	
AMSA-76	POL Storage Area	30W Oil		1	5 gallon	
AMSA-76	POL Storage Area	90W Oil		1	5 gallon	
AMSA-76	POL Storage Area	40W Oil		1	5 gallon	
AMSA-76	POL Storage Area	Parts Washer Soap		1	5 gallon	
AMSA-76	POL Storage Area	Silicone Brake Fluid		1	5 gallon	
	865th Cabinet	Solder Paste	Coppermate		4 oz.	
	865th Cabinet	Solder Flux		5	4 oz.	343900-255-4566
	865th Cabinet	Flux Brazing		2	10 oz.	243900-944-8390
	865th Cabinet	Oil Base Paint		9	gallon	
	865th Cabinet	Spray Paint	So Sure	17	10 oz.	
	865th Cabinet	Lube oil		1	quart	
	865th Cabinet	Glass Cleaner		8	oz.	
	865th Cabinet	Lighter Fluid		3	quart	
	865th Cabinet	Gasket Spray		2	9 oz.	
	865th Cabinet	Penetrating Fluid	So Sure	2	8 oz	
	865th Cabinet	Unlabeled Spray Bottle		1	bottle	

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	865th Cabinet	Spr-tool Crown		13	oz.	
	865th Cabinet	Fuel Injector Cleaner		8	oz.	
	865th Cabinet	Propane Fuel		16	oz.	
	865th Cabinet	Insecticide		4	oz.	
	865th Cabinet	Repellant	Permanone	6	oz.	
	865th Cabinet	Anti-Seize Compound		1	pint	
	865th Cabinet	Break Free Lubricant	Break Free	2	oz.	
	865th Cabinet	Isopropyl Alcohol		6	oz.	
	865th Cabinet	Anti-Freeze		2	12 oz.	
	865th Cabinet	Coater				4130-00-860-0042

3.7 Significant Spills and Leaks

There have been no significant spills or leaks during the last three years at Niagara Falls USARC/AMSA 76.

3.8 Potential Sources of Pollutants

An inventory of areas at Niagara Falls USARC/AMSA 76 where industrial activities could potentially pollute stormwater runoff was compiled from existing facility plans, staff interviews, and field reconnaissance.

3.8.1 Fueling/Refueling

Fueling for military vehicles does not occur at Niagara Falls USARC/AMSA 76. Only occasional emergency fueling of vehicles from 5-gallon jerry cans occurs at the vehicle parking areas or in the AMSA.

At the time of the site investigation (16 November 2005), three fueling tankers were parked in the MVPA. All three tankers were empty.

3.8.2 Vehicle Maintenance and Washing

Maintenance of vehicles and equipment primarily occurs inside the AMSA Building, within nine service bays (MB-1 thru MB-9). Bays MB-1 thru MB-7, known as the AMSA (photos 2&12) (or Equipment Repair) Shop (1), are operated and maintained by AMSA staff; bays MB-8 and MB-9, known as the Unit (or OMS) (photo 1) Shop (2), are utilized by the units. AMSA 76 staff and unit personnel conduct organizational (i.e., servicing oil

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filters and fuel filters, conducting minor oil changes, replacing small parts) and limited direct support (i.e., servicing hydraulic system seals and spot painting) maintenance. Military equipment serviced at the AMSA by motorpool staff include CUCVs, cargo trucks, HMMWVs, 2.5, 5 and 10 ton trucks, forklifts, fuel generators, trailers, low-boys, fueling tankers, and tractor trailers. Maintenance on such vehicles and equipment may be conducted during the week by AMSA personnel or on drill weekends by Reservists. All major work, including servicing of engines and transmissions, is delegated to the Support Maintenance Activity Shop at Fort Drum. Army Reserve units operating at the USARC include the 277th Quartermaster Company and the 865th General Hospital. AMSA staff and unit personnel operate separate offices and supply cages (Figure 4).

Neat, orderly conditions, adequate work space, a spill containment kit, sorbent, sorbent socks and updated material safety data sheets were observed in the shop. Spills and leaks are treated with sorbent, which is collected and stored as hazardous waste. Work bay floors are routinely swept (by an automotive sweeper) and any residue is run through the oil/water separator that is connected to the sanitary sewer system.

The AMSA Shop work bays drain into a series of grated trench drains that have been plugged so that any liquid in the drains would be discharged into the oil/water separator and the sanitary sewer system.

No vehicle maintenance is conducted at the Military Vehicle Parking Area (MVPA) (photos 4, 6&7). Upon reaching the AMSA Compound, incoming vehicles are immediately inspected for leaks. Drip pans are placed under any vehicle with a leak. No drip pans were noted in the MVPA.

Military vehicle and equipment washing and steam cleaning occurs at the Vehicle Washrack (3A). The rack, which is equipped with concrete curbing, slopes eastward into a concrete box drain. Washwater discharges continue through the drain into an oil/water separator and the local sanitary sewer system.

Unregulated vehicle and equipment maintenance is conducted at the DPW Maintenance Shop (7), located south of the AMSA. The shop provides custodial support for facility buildings and grounds at supported Reserve Centers throughout the region, including Niagara Falls USARC.

Table 7 – Vehicle maintenance and washing (Figure 2, Figure 3 and Figure 4)

SITE MAP CODE	LOCATION	ACTIVITY TYPE	PPM	OUTFALL
1 and 2	AMSA/Unit Shops	Vehicle maintenance	Paint, solvent, lube oil, grease, detergent, antifreeze, sulfuric acid, brake fluid	OF-1
3	Vehicle Wash Area	Vehicle washing	POL residues	None

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3.8.3 Loading/Unloading

Exposed loading and unloading of PPMs occurs primarily at the AMSA Building (1 and 2) and POL shed. Loading and unloading of smaller items, including those of 5 gallons or less, is conducted by hand. Larger containers (55-gallons) are usually transferred by forklift.

New PPMs utilized at the AMSA Shop are generally stored at the shop POL shed, located at the MVPA (photo 7). The shed consists of two parts; one fully enclosed, and the other, open-sided and covered. Room 4A houses much of the new product, including lube oil, hydraulic fluid, fuel, grease, and solvent. Area 4B, which is curbed, consists of a 600-gallon waste oil tank and other collected used materials (photo 2). Areas outside the shed, yet fully enclosed and containing secondary containment, are also used for storing new and used PPMs, including oil, fuel, and antifreeze. As a result, exposed loading and unloading is conducted at any outside areas around the shed. No spill kits or other equipment are located nearby.

Most PPMs in use within the AMSA Shop are temporarily stored in/around flammable storage cabinets at the northwest corner of the shop (photo 11). Items stored within the cabinets include lube oil, hydraulic fluid, antifreeze, sulfuric acid, solvent, paint, and grease. Small quantities of hazardous products are also stored within the bays, including degreaser, penetrating oil, dry cleaning solvent, spray paint, diesel, and deicing fluid. Bulk POL products, mostly in 55-gallon containers, are stored on the floor or in the cabinet at the northwest corner of the shop. Other areas are used for the temporary collection, processing, or recycling of used PPMs. Used antifreeze is drained and collected into 5 and 55-gallon drums at the north end of the shop and is saved for recycling. Other waste products are also temporarily accumulated, before being removed to the POL shed, notably motor oil, oil/fuel filters, brake fluid, diesel, and antifreeze. Many of these containers rest directly on the shop floor or on metal shelving near the bay MB-6 access door. Loading and unloading of products utilized within the AMSA maintenance bays generally occurs in/around shop storage areas and at the bay access doors, as new and used products are being transferred between the shop and POL shed. Spill kits and equipment are located nearby.

Other PPMs are stored and utilized within the Unit (OMS) Shop service bays (MB-8 and MB-9), most within a series of flammable cabinets located at the shop's north end (photo 15). Such materials include lube oil, paint, antifreeze, grease, ATF, brake fluid, and solvent. Loading and unloading of stored PPMs is conducted in/around the flammable cabinets or at the bay access doors. In either case, spills/leaks of such materials pose a risk to local stormwater conveyances (ST-1).

The 277th Quartermaster Company maintains a double-floored hazardous material shed just west of the Unit Shop. The shed houses lube oil and JP-8 fuel. Loading and unloading of enclosed materials occurs at the access door of the shed, where PPMs are fully exposed to falling precipitation and stormwater runoff.

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Table 8 – Loading/unloading of PPMs (Figure 2, Figure 3 and Figure 4)

SITE MAP CODE	LOCATION	PPM	OUTFALL
1	AMSA Shop Bays	Paint, solvent, lube oil, antifreeze, sulfuric acid, fuel, detergent, grease, brake fluid	OF-1
2	Unit Shop Bays	Paint, solvent, lube oil, antifreeze, detergent, grease, brake fluid	OF-1
4A thru 4D	AMSA POL Shed	Paint, solvent, lube oil, antifreeze, fuel	OF-2
6	Unit Storage Shed	Lube oil, fuel	OF-2

3.8.4 Potential Exposure During Storage

Exposed potentially polluting materials (PPMs) at Niagara Falls USARC/AMSA 76 include new and used petroleum/oil/lubricant (POL) products, paints, solvents, and antifreeze. Exposure of PPMs usually occurs during material storage and/or transfer. Most PPMs utilized for maintenance operations at Niagara Falls USARC/AMSA 76 are stored inside the AMSA Building and POL storage shed.

Areas where PPMs are stored within the motorpool include the AMSA Building (1 and 2), POL storage shed, and other scattered locations at the MVPA. Most new and used PPMs are temporarily stored in/around the AMSA POL storage shed, which consists of two rooms. Room 4A is fully enclosed; room 4B is covered and curbed, but open on three sides (photo 2). New materials are generally stored in room 4A, including lube oil, methanol, hydraulic fluid, dry cleaning solvent, gasoline, diesel, grease, turpentine, brake fluid, ATF, and denatured alcohol. A 600-gallon waste oil tank is located in room 4B, along with containers of contaminated fuel. Two secondary containment units have been placed along the north side of the shed, each of which contains two 55-gallon drums of engine oil. With respect to material storage, locations 4B and 4C are fully or partially exposed to falling precipitation and stormwater runoff; materials stored within the secondary containment units and room 4A are fully protected.

Most PPMs actively being utilized inside the AMSA Shop are stored at the shop's northwest corner, either in flammable cabinets or nearby. Such materials, which are stored in small (5 gallon) or large containers (55 gallons), include lube oil, antifreeze (used & new), sulfuric acid, grease, turpentine, paint, brake fluid, and hydraulic fluid. Flammable storage cabinets 1A and 1B are equipped with secondary containment trays. Materials stored on the shop floor nearby lack secondary containment. Waste products are sometimes temporarily accumulated at the shop before being transferred to the POL shed. Spent motor oil, antifreeze, diesel, brake fluid, and fuel/oil filters are often collected at the north end of the shop, near the bay MB-6 access door. Most of these materials are accumulated in small containers resting on shelves or directly on the shop floor, with no secondary containment. Other PPMs are scattered throughout the maintenance bays or work rooms/cages as they are needed, most resting on tables

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or directly on the shop floor. Areas inside the shop work bays drain through a series of trench drains into a branch of stormwater sewer line ST-1. As a result, storage areas that do not provide secondary containment are fully exposed to shop trench drains, which connect with local stormwater conveyances (ST-1).

Situated at the southern end of the AMSA Building, the Unit Organizational Maintenance Shop (OMS) also drains into stormwater sewer ST-1, through a single trench drain and sump. PPMs, including lube oil, antifreeze, grease, ATF, brake fluid, paint, solvent, and turpentine, are primarily stored within flammable cabinets located along the shop's north inside wall and in front of the tool room. As with the AMSA bays, materials stored at locations without secondary containment are fully exposed to the shop trench drain, which connects to local stormwater conveyances (ST-1).

Other smaller concentrations of exposed PPMs are located outside the AMSA Building, at the AMSA Lot of the MVPA (Figure 3). The 277th Quartermaster Company stores lube oil and JP-8 fuel inside a small double-floor shed located just west of the shop. Equipment may contain exposed batteries, lubricant, grease, and/or fuel. Aside from the double-floored shed, none of these items is protected from falling precipitation or stormwater runoff.

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Table 9 – Storage areas (Figure 2, Figure 3, and Figure 4)

SITE MAP CODE	LOCATION	PPM	METHOD OF EXPOSURE	OUTFALL
1	AMSA Shop Bays	Paint, solvent, lube oil, antifreeze, sulfuric acid, fuel, detergent, grease, brake fluid	Storage, loading,	OF-1
2	Unit Shop Bays	Paint, solvent, lube oil, antifreeze, detergent, grease, brake fluid	Storage, loading	OF-1
4A thru 4D	AMSA POL Shed	Paint, solvent, lube oil, antifreeze, fuel	Storage, loading	OF-2
4E thru 4J	MVPA	Diesel, antifreeze, battery (sulfuric) acid, grease, lubricant, leached metals	Storage	OF-2
5	MVPA	Diesel, leached metals/ preservatives	Storage	OF-1, OF-4, OF-5
6	Unit Storage Shed	Lube oil, fuel	Loading	OF-2

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3.8.5 Hazardous Waste Storage

Niagara Falls USARC/AMSA 76 is considered a small-quantity hazardous waste generator by NYSDEC. The USARC/AMSA has been issued a generation number from NYSDEC: NY8210424273. An Environmental Protection Plan discusses and provides guidance on the handling and disposal of hazardous wastes. The plan, which covers the AMSA and its subshop in Webster, includes hazardous waste communication standing operating procedures (SOP), hazardous material/waste SOP, and a spill prevention control and countermeasures plan (SPCCP).

“Spent” materials, including batteries, antifreeze, oil, fuel, solvent, brake fluid, and oil/fuel filters are generated at the facility in non-significant quantities (see Table 10) and disposed of by a variety of means. Most used or waste products are temporarily stored inside the AMSA Shop or at the POL storage shed until they are accumulated in sufficient quantities to be removed under contract through the 77th RRC.

Used POL, including oil, brake fluid, and fuel are disposed of through a private contract arranged by Fort Drum Department of Public Works (DPW), Environmental Division on a demand basis. Such materials are temporarily accumulated inside the shop, and transferred to the POL shed. Waste oil is collected in a 600-gallon above-ground storage tank, which rests within secondary containment curbing within the shed. Antifreeze and other used POL are typically collected into 55-gallon drums (4C) which rest in/around shed room 4B. The 77th RRC and DPW Maintenance Shop are presently coordinating an effort to enclose shed room 4B and replace the existing waste oil tank with a new one. New and used batteries are typically accumulated at the AMSA Shop battery room. Used batteries are accumulated until they are removed as part of a one for one exchange program. Oil and fuel filters are drained and crushed inside the AMSA Shop and stored in 55-gallon drums for disposal through the 77th Hazardous Materials removal contract. The parts-washing machine uses an aqueous system and no solvents are involved.

The AMSA Shop conducts an in-house recycling program for much of its generated antifreeze, thereby reducing quantities of waste antifreeze requiring collection. AMSA staff empty old antifreeze from vehicles, test and improve it, then replace it back into the vehicle, depending on conditions. Any antifreeze that cannot be used is recycled through a contractor who comes on site.

The AMSA Shop Foreman at Niagara Falls USARC/AMSA 76 will inspect hazardous material and waste areas, and update records on those areas and waste generation. These tasks will include tracking hazardous material and waste transfer among units.

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Table 10 – Hazardous waste storage areas (Figure 3 and Figure 4)

LOCATION	PPM	AMOUNT ACCUMULATED (Annually)	OUTFALL
AMSA/ Military Vehicle Parking Area	Oil (mixed)	500 gal	OF-1, OF-2
	Fuel	100 gal	
	Brake Fluid	10 gal	
	Antifreeze	20 gal	
	Batteries	50 total	
	Solvent	360 gal	

3.8.6 Non-Stormwater Discharges

Unauthorized connections discharging pollutants to stormwater runoff or inappropriate management practices result in non-stormwater discharges (NSWDs) to stormwater sewer systems, open drainage ditches, and outfalls. Except for flows provided in Part III.A.2 of the USEPA General Permit, sources of unauthorized NSWDs must be identified and permitted, or eliminated. Where necessary to minimize pollutants in these discharges, pollution prevention measures should be adopted and implemented.

As part of the Niagara Falls USARC/AMSA 76 site assessment conducted by Bowne AE&T Group, outfalls OF-4 & OF-5 were observed for NSWDs on 16 November 2005. No dry-weather discharges were observed at the outfalls. The formerly reported illicit connections of trench drains to the stormwater system have been plugged pursuant to the initial stormwater management inspection in 1996.

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Table 11 – Non-stormwater discharge certification (Figure 2)

NON-STORMWATER DISCHARGE ASSESSMENT AND CERTIFICATION			COMPLETED BY: <u>James Antonelli</u> AGENCY: <u>Bowne</u> DATE: <u>9 February 2006</u>			
DATE OF TEST OR EVALUATION	OUTFALL DIRECTLY OBSERVED DURING THE TEST	METHOD USED TO TEST OR EVALUATE DISCHARGE	DESCRIBE RESULTS FROM TEST FOR THE PRESENCE OF NON-STORMWATER DISCHARGE	IDENTIFY POTENTIAL SIGNIFICANT SOURCES	AGENCY CONDUCTING TEST OR EVALUATION	RECOMMENDED ACTION
11/16/05	OF-4	Visual	No NSWD	NA	Bowne	NA
11/16/05	OF-5	Visual	No NSWD	NA	Bowne	NA
<p>I certify that periodic NSWD inspections will be performed at Niagara Falls USARC/AMSA 76 and conducted in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information that is collected. Additionally, I certify the NSWD information listed in this table is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</p>						
A. Name and Title of Certifying Authority			B. Area Code and Telephone Number			
C. Signature Certifying Authority			D. Date Signed			

It should be noted that outfalls 1, 2 and 3 were not accessible during the field check in November 2005 because they are only visible from offsite properties and permission was not obtained to trespass.

3.9 Stormwater Monitoring Data

There is no record of any stormwater quality data having been obtained at this facility. Currently there are no plans to collect stormwater quality data at Niagara Falls USARC/AMSA 76. Sampling of stormwater, if required, should be conducted only at regulated outfalls as mandated by NYSDEC. Any stormwater sampling and analytical analysis must be performed by qualified individuals adhering to a specific quality assurance/quality control program. In USEPA-regulated states and most states with NPDES permitting authority, stormwater monitoring is currently not required for vehicle maintenance activities.

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3.10 Risk Summary

An initial assessment of areas at Niagara Falls USARC/AMSA 76 with the highest potential for stormwater runoff pollution has been prepared as part of the SWP3. The assessment should be considered a "snapshot" in time and must be updated annually or more often, as necessary. The following narratives summarize conditions observed during the 16 November 2005 site assessment. Sites identified as having the highest pollution potential are listed in Table 12. Locations of these sites are shown in Figure 2, Figure 3, and Figure 4.

3.10.1 Area Maintenance Support Activity 76 (Figure 3 and Figure 4)

AMSA and unit personnel conduct limited direct support and organizational maintenance on a variety of military vehicles, CUCVs, cargo trucks, HMMWVs, bulldozers, forklifts, fuel generators, trailers, low-boys, fueling tankers, and tractor trailers. Vehicle maintenance is conducted at nine service bays (MB-1 thru MB-9) inside the AMSA Building, which is divided into two parts. The AMSA (Equipment Repair) Shop (1) is comprised of offices, storage rooms, cages, and work bays (MB-1 thru MB-7) at the northern portion of the Building. AMSA and unit personnel work in the area. The Unit (OMS) Shop (2) is situated at the southern end of the AMSA Building. Units, including the 277th Quartermaster Company and 865th General Hospital, operate offices, storage rooms, cages, and bays (MB-8 and MB-9) within the shop.

"Active-use" PPMs utilized at the AMSA Shop are primarily stored in/around flammable cabinets located at the shop's northwest corner. Such PPMs include lube oil, antifreeze, sulfuric acid, grease, turpentine, paint, brake fluid, and hydraulic fluid. Cabinets are equipped with secondary containment trays. Most materials stored within the cabinets are in small containers of 5 gallons or less. Other PPMs are stored in the shop work bays. Waste products generated during maintenance operations are temporarily accumulated inside the shop before being transferred to the POL shed, where they await collection by contract. Most wastes are collected and temporarily stored at the north end of the shop, near the bay MB-6 access door. Such wastes include spent motor oil, antifreeze, diesel, brake fluid, and fuel/oil filters. An active antifreeze recycling program has been implemented at the AMSA. New and old batteries are often stored inside the shop work bays, on wooden pallets. Since the maintenance shop bay trench drains have been plugged, PPMs within the shop are not exposed to local stormwater conveyances. Shop staff apply sorbent to spills/leaks and collect the residues as hazardous waste. Observed BMPs include updated MSDSs, spill kits/equipment, environmental plans, secondary containment trays, visual inspections, and preventive maintenance. Recommended BMPs include, additional labeling, good housekeeping, drip pans, and continued training.

Aside from the AMSA Shop, vehicle maintenance is also conducted at the Unit Shop, albeit less frequently (on drill weekends). PPMs utilized within the shop are primarily stored within a series of flammable cabinets located along the shop's north inside wall, in front of the tool cage. Such materials include lube oil, antifreeze, grease, ATF, brake fluid, paint, solvent, and turpentine. Cabinets are equipped with secondary containment trays. Observed BMPs include good overall housekeeping, updated MSDSs, spill kits/equipment, improved localized housekeeping, labeling, training and posted

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environmental plans. Recommended BMPs include and additional spill containment trays.

The AMSA and Unit Shops poses a low risk to surface waters of the State of New York, primarily due to training and that the recommendation of disconnecting the illicit connections from maintenance shop trench drain inlets to local stormwater conveyances have been carried out. As a result, spills/leaks from PPMs transferred, stored, and used within the shop bays do not impact local stormwater sewers if they contact the drains.

3.10.2 Vehicle Washrack (Figure 3)

Located off the northwest corner of the AMSA Shop, the Vehicle Washrack (3A) is utilized for rinsing small and large military vehicles. The concrete-paved rack slopes into a trough drain, which connects through an oil/water separator (3B) into local sanitary sewer line S-2. The washrack is rarely used, mainly on drill weekends. It is surrounded by concrete curbing, and is equipped with a water recycling system to prevent discharges to the stormwater system.

Observed BMPs include concrete curbing and good housekeeping. Recommended BMPs include covering, posted washrack SOP, preventive maintenance, and visual inspections.

The Vehicle Washrack poses a low risk to surface waters of the State of New York, primarily due the small number of washing operations that occur there annually.

3.10.3 Military Vehicle Parking Area (Figure 3)

The Military Vehicle Parking Area (MVPA) at Niagara Falls USARC is divided into two vehicle/equipment storage lots. The AMSA lot serves as a storage area for vehicles and equipment awaiting maintenance at the AMSA Building. The 277th Quartermaster Company also uses the area for additional storage space. Much of the lot was formerly overlain by a large World War II-era hangar, which was destroyed by fire. Facility engineering plans reveal that drain lines within the hangar discharged into a branch of storm sewer ST-1. Only a fraction of the drain line inlets currently remain, many of which are clogged with sediment and inoperable. Areas within the lot drain southwest into a branch of stormwater sewer ST-2, or sheetflow directly into drainage ditch DD-1 (photo 9). Locally, some areas of the AMSA lot may also drain into the Unit Shop sump inlet, which connects with stormwater sewer ST-1. Observed BMPs include good housekeeping, the use of secondary containment (around the oil pod, for example) and preventive maintenance. Recommended BMPs include localized improved housekeeping, spill kits/equipment and the use of drip pans.

The Unit Lot of the MVPA serves as the primary vehicle/equipment storage area for the 277th Quartermaster Company and 865th General Hospital. Southern areas of Unit Lot primarily drain southwest, either into storm sewers ST-1 and ST-4, or directly into ditch DD-1 (via sheetflow). Northern areas of the lot drain southeastward into ditch DD-2 and storm sewer pipe ST-5. Observed BMPs include good housekeeping and preventive maintenance. Recommended BMPs include localized improved housekeeping and the use of drip pans.

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The POL shed, which is located in the AMSA Lot (photo 2), serves as a primary storage area for new and used PPMs used at the AMSA Shop. It is divided into two rooms. Room 4A, which is fully enclosed, serves as a storage point for new products, notably lube oil, methanol, hydraulic fluid, dry cleaning solvent, diesel, grease, turpentine, brake fluid, ATF, and denatured alcohol. Areas outside the shed generally drain southwest, into a branch of stormwater sewer line ST-2. Observed BMPs include curbing, covering, and visual inspections. Recommended BMPs include good housekeeping, preventive maintenance, labeling, spill kits, hazardous waste tracking, and door lips.

The 277th Quartermaster Company maintains a double-floored shed outside, just west of the Unit Shop. The shed fully protects enclosed PPMs during storage, including lube oil and JP-8 fuel. Stormwater risks for the shed are limited to material transfer operations, which occur at the shed's access door. Areas outside the shed drain southwest into a branch of storm sewer ST-2. Observed BMPs include secondary containment, good housekeeping, MSDS, environmental plans and a spill kit. Recommended BMPs include improved labeling and visual inspections.

The MVPA poses a low risk to surface waters of the State of New York, primarily due to housekeeping, SOPs and preventative measures.

3.10.4 Outlying Areas (Figure 2)

Several outlying areas at the USARC were mentioned in the initial plan and therefore the following is provided for the purposes of an update.

In the late 1990's, the Airport Authority removed two large underground storage tanks (18) that they owned. Little is known about remediation efforts connected to the tanks. The tanks formerly had drain line connections into stormwater sewer line ST-1 (Figure 2). The 77th RRC should investigate and track the removal of the tanks, remaining aware of any way the tanks might affect local stormwater sewers and outfalls.

The initial plan reported a large fenced storage area of 55-gallon drums situated off the northwest corner of the USARC. The area is maintained by the Airport Authority. The drums were reported to be fully exposed to falling precipitation and stormwater runoff. The 77th RRC should remain aware the area's risk potential and should investigate regarding any impact PPMs might have on local stormwater conveyances and Army property.

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Table 12 – Risk summary (Figure 2, Figure 3, and Figure 4)

SITE MAP CODE	LOCATION	PPM	OUTFALL/ RECEIVING WATERS	RATING/ REASON¹
1, 2	AMSA Building	Paint, solvent, lube oil, antifreeze, sulfuric acid, detergent, grease, brake fluid	OF-1, OF-2/ Cayuga Creek	Low/1, 14
3	Vehicle Washrack	POL residues	None/Sanitary	Low/4, 11, 15
4, 5	MVPA	Paint, solvent, lube oil, antifreeze	OF-1, OF-2, OF-4, OF-5/ Cayuga Creek	Low/1, 3, 4, 7,

¹RATING/REASON KEY:

- 1 - Close proximity to a stormwater sewer drain (<20')
- 2 - Particularly hazardous nature of stored and/or used material
- 3 - Lack of containment, preventing exposure to stormwater runoff
- 4 - Lack of covering, preventing exposure to precipitation
- 5 - Lack of employee training and/or awareness
- 6 - Lack of environmental plans (standard operating procedures, spill plans)
- 7 - Lack of spill kits, drip pans, sorbent, and/or other spill equipment
- 8 - Vehicle maintenance at exposed locations
- 9- Past evidence of significant spills/leaks
- 10-Particularly large amount of hazardous material stored and/or transferred
- 11-Not a point-source discharge to surface waters of the U.S.
- 12-Illicit discharges
- 13-Damaged or partially constructed protection devices (i.e., berms, covers, drip pans, flooring)
- 14-Use of secondary containment
- 15-Use of oil/water separator
- 16-Use of spill kits, drip pans and spill equipment and devices

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4. BEST MANAGEMENT PRACTICES PLAN

Best Management Practices (BMPs) are measures and controls that can reduce potential stormwater pollution from industrial activity pollutant sources. These BMPs can be classified as "*baseline*" or "*advanced*" and they may be inexpensive or costly to implement. Baseline BMPs include inspection programs and contingency plans that attempt to identify and eliminate conditions and practices that could cause stormwater pollution. Advanced BMPs are techniques, equipment, or structures that eliminate contact between stormwater runoff and PPMs.

In the following sections, foundations will be established for a BMPs program at Niagara Falls USARC/AMSA 76. Baseline and advanced BMPs necessary for the implementation of the facility stormwater program will be discussed and listed. BMPs are also inventoried to assess whether the facility is already implementing certain BMPs. The BMPs inventory will be used in determining recommended BMPs in section 5.0. The stormwater inspection checklist in section 5.0 should be used to monitor potential problems and to select measures and controls (BMPs) in concert with tables in sections 4.1 and 4.2.

4.1 Baseline Best Management Practices

Baseline BMPs are relatively simple inspection programs and contingency plans that are implemented at a facility. The Shop Foreman will perform monthly stormwater inspections. The 77th RRC is responsible for updating the ISCP, ensuring motorpool personnel receive environmental training, and conducting an annual compliance inspection of the facility. The following baseline programs are briefly discussed in this chapter and are included in the stormwater inspection checklist provided in Table 21.

4.1.1 Good Housekeeping

Good housekeeping addresses cleanliness and orderliness of work and storage areas. Common sense guides the continued use of or the appropriate implementation of good housekeeping practices. The following is a list of common good housekeeping practices and the degree in which they have been implemented at the facility.

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Table 13 – Good housekeeping BMPs

BEST MANAGEMENT PRACTICE	IMPLE- MENTED	NOT IMPLE- MENTED
Work areas and outside areas should be clean, organized, free of easily spilled materials, and free of sediment and eroded soils that could pollute stormwater runoff.	X	
Maintenance, washing and painting should be performed at authorized areas.	X	
Spilled materials should be cleaned with dry sweep or rags, not with water.	X	
Proper handling, storage, disposal, and accountability of hazardous materials and wastes should be enforced.	X	
Good housekeeping visual aids should be posted at the motorpool.	X	
Personnel should be formally trained in good housekeeping practices.	X	

4.1.2 Preventive Maintenance

Preventive maintenance addresses technically inspecting all vehicles and equipment for conditions that could lead to leaks or spills of PPMs. All incoming vehicles and equipment should be technically inspected for fluid leaks or drips. Vehicles and equipment stored at the facility should be inspected daily for fluid leaks and drips. Maintenance equipment, oil/water separators, storage tanks and drums, pipes, and pumps should be included in the technical inspection. Table 14 is a list of common preventive maintenance practices and their implementation at the facility.

Table 14 – Preventive maintenance BMPs

BEST MANAGEMENT PRACTICE	IMPLE- MENTED	NOT IMPLE- MENTED
Provide technical inspection for all incoming vehicles and equipment.	X	
Vehicles, oil/water separators, or any equipment located at the motorpool should be inspected daily for malfunctions, fluid leaks, or improper operation.	X	

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4.1.3 Spill Prevention and Response

The ISCP should be reviewed and revised by the 77th RRC for Niagara Falls USARC/AMSA 76. The Shop Foreman has the responsibility to serve as emergency coordinator in the event of a spill. The Facility Manager should be designated as emergency spill coordinator at the facility when the Shop Foreman is not present. The Shop Foreman has the responsibility to ensure the spill is immediately contained, proper spill reporting procedures are followed, and the 77th RRC is immediately informed. Table 15 includes key elements that are required as part of the spill prevention and response program.

Table 15 – Spill prevention and response BMPs

BEST MANAGEMENT PRACTICE	IMPLE- MENTED	NOT IMPLE- MENTED
An updated ISCP, emergency coordinator, and spill equipment must be readily available at the facility during working hours.	X	
After normal duty hours (0700-1700) and on weekends, in the event of a significant spill or leak, the AMSA Shop Foreman should refer to his/her environmental SOP	X	
Formal training in emergency spill response must be provided to all motorpool personnel, including units.	X	

4.1.4 Visual Inspections

A formal visual inspection program is used to ensure that good housekeeping and preventive maintenance are being actively practiced, and that a spill plan and spill containment equipment are readily available at the facility. The Shop Foreman will conduct monthly visual inspections of the motorpool using the stormwater inspection checklist. The 77th RRC will perform annual compliance inspections using the stormwater inspection checklist. Table 16 highlights the important aspects of the visual inspection program and their degree of implementation at Niagara Falls USARC/AMSA 76.

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Table 16 – Visual inspection BMPs

BEST MANAGEMENT PRACTICE	IMPLE- MENTED	NOT IMPLE- MENTED
Conduct a monthly visual inspection of the motorpool using the stormwater inspection checklist. Sign, date, and keep monthly inspection checklists for future reference.	X	
Verify that good housekeeping and preventive maintenance are being actively practiced at the motorpool.	X	
Verify that an updated ISCP and containment equipment are readily available at the motorpool.	X	
Identify conditions that could cause stormwater pollution and report potential problems to the Facility Manager	X	
The 77th RRC will perform an annual stormwater compliance inspection.	X	

4.1.5 Sediment and Erosion Control

The USEPA General Permit (Part IV.D.1.a) requires identification of areas having a high potential for significant soil erosion and selection of measures (BMPs) to remediate those sites. No such areas were identified at Niagara Falls USARC/AMSA 76.

4.2 Advanced Best Management Practices

Advanced BMPs are techniques, equipment, structures, or construction practices that prevent hazardous materials or wastes from reaching the environment in stormwater runoff. All Army Reserve maintenance facilities employ various advanced BMPs. Implementation of new advanced BMPs or maintenance and upkeep of existing advanced BMPs usually requires requisitions, work orders, or self-help initiatives. Identification, implementation, and upkeep of advanced BMPs involve coordination between the Facility Manager, Shop Foreman, shop personnel, senior officers, and 77th RRC staff. The Facility Manager has a responsibility to work with AMSA, unit, and 77th RRC staff to identify needed advanced BMPs and provide proper maintenance and upkeep for existing advanced BMPs. Also, the Facility Manager has the responsibility to inform senior officers of advanced BMP needs, and submit and follow up on requisitions and work orders. Table 17 identifies common advanced BMPs and their degree of implementation at the facility.

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Table 17 – Advanced BMPs

BEST MANAGEMENT PRACTICE	IMPLE- MENTED	NOT IMPLE- MENTED
Facility maintenance and hazardous material storage buildings should be in good condition. Rainfall should not leak through the roof and stormwater should not enter the building.	X	
Stormwater runoff should not pond on the motorpool grounds. Stormwater runoff should be conveyed from the motorpool by properly maintained open channels or stormwater sewer systems.		X ¹
Outdoor storage structures must be secure, provide secondary containment, and prevent any contact between hazardous materials or wastes and precipitation and stormwater runoff.	X	
Washracks and oil/water separators should be properly operated and maintained, and should not discharge into stormwater conveyances.	X	
Sources of NSWDS must be identified and eliminated by corrective actions.	X	
Drip pans should be used at motorpool parking areas.		X ²
Spill containment equipment should be requisitioned and readily accessible at all areas of motorpool.	X	
Trash dumpsters should have lids to prevent accumulation of precipitation within them.	X	

1. Note that some areas are unpaved, and pavement is broken and uneven in areas, causing minor local ponding.
2. Note that dip pans have been obtained but were not in use due to high winds. The base should consider the use of a ballast weight in the drip pan such as a brick.

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5. IMPLEMENTATION

An effective SWP3 for a facility requires establishment, implementation, and maintenance of the following primary elements: Pollution Prevention Team (Section 2.0); facility assessment (Section 3.0); BMPs plan (Section 4.0); and recommended BMPs, coupled with an inspection and record keeping program that allows for continuous improvement (Section 5.0).

The object of section 4.0 is to introduce, discuss, and inventory baseline and advanced BMPs available to Niagara Falls USARC/AMSA 76. Section 5.0 builds on this information and recommends measures that supplement the existing BMPs that will bring the USARC/AMSA into compliance. Included in this chapter are recommended BMPs for reducing the potential for stormwater runoff pollution at the USARC/AMSA facility, a stormwater activity log sheet for record keeping, and a stormwater inspection checklist to be used when performing monthly and annual stormwater inspections.

The stormwater activity log sheet is a permanent record that documents significant stormwater management activities performed at the facility. Log sheet entries should be dated and initialed. Items such as stormwater inspections, PPM spills, or activities related to implementation and maintenance of BMPs should be recorded on the log sheet.

The stormwater inspection checklist is a standard form that can be used at the USARC/AMSA to implement the stormwater management program. Elements of baseline and advanced BMPs are incorporated into the inspection checklist. The checklist is designed to reinforce the existing BMP program by assessing the effectiveness of implemented measures and controls. The checklist should also be used by the AMSA Shop Foreman to conduct monthly visual inspections and by 77th RRC personnel to perform the annual compliance evaluation. Table 18 presents key elements required to implement and evaluate the stormwater management program. Additional columns are provided in Table 18 to allow for approval and scheduling of such activities by senior officials.

The SWP3 will be updated annually, or more often, as required. The 77th RRC will be charged with conducting compliance evaluations and updating the plan. Major tasks include reinspecting industrial activity and pollutant source areas and outfalls, updating information about those areas and the PPMs inventory, conducting non-stormwater discharge inspections of outfalls, reevaluating the use of BMPs and recommending additional controls (if necessary), and convening the PPT to review stormwater issues and problems. The compliance update also allows the PPT to assess and update training needs. Table 22 provides information on conducting the evaluations.

Adequate pollution prevention training is an important component to the success of the stormwater management program at Niagara Falls USARC/AMSA 76. AMSA staff have attended environmental training courses provided by the 77th RRC. Lectures, practical exercises and self-help sessions are key training mediums. Table 5.4 details training needs and outlines training direction.

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Table 18 – Key elements to implement and evaluate the stormwater management program

ELEMENT TO IMPLEMENT SW PROGRAM	BY	DATE
Assign top priority to: (1) correcting problems identified during the initial site assessment; and (2) establishing stormwater inspection and personnel training program.		
Record significant stormwater management activities on the stormwater log sheet.		
Monthly inspections will be performed by the AMSA Shop Foreman. Any problems identified will be reported to the Facility Manager for corrective action. If the problem cannot be corrected by the Facility Manager, recommendations for corrective actions will be made to the 77th RRC.		
Monthly inspection checklists will be reviewed, signed and dated by the Facility Manager, and filed by the AMSA Shop Foreman for future reference by compliance inspectors.		
Periodic stormwater inspection reviews will be performed by the 77th RRC. Recommended corrective actions and employee training needs should be discussed.		
The Facility Manager should discuss equipment, construction, and training needs with the AMSA Shop Foreman, senior officers and the 77th RRC. Requisitions and work orders should be submitted through proper channels by the Facility Manager.		
Employee training should be conducted.		
Advanced BMPs should be implemented.		
The annual stormwater management program compliance evaluation and stormwater plan review will be conducted by 77th RRC personnel.		

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5.1 Recommended Best Management Practices

Building on information in section 4.0, Table 19 identifies recommended BMPs that should be endorsed by the Niagara Falls USARC/AMSA 76 PPT as goals for 1997. The Facility Manager should initial and date the block indicating if the recommended best management practice is accepted and is being implemented.

Table 19 – Recommended BMPs (Figure 2, Figure 3, Figure 4, and 3.2d)

BEST MANAGEMENT PRACTICE TO BE IMPLEMENTED	TYPE	SITE MAP CODE	BY	DATE
Continue stormwater training for all facility personnel	BBMP	Facility-wide		
Update ISCP and Environmental SOPs every two years or more often as required.	BBMP	Facility-wide		
Maintain updated MSDSs and PPMs inventory for AMSA and units, and centralize filing.	BBMP	Facility-wide		
Contract removal of obsolete scrap/surplus materials	ABMP	4E thru 4F, 5A, 5H		
Provide curbing, covering, and SOP for washrack	ABMP	3A and 3B		
Service and improve storm sewer inlets if needed.	ABMP	Facility-wide		
Continue good housekeeping	BBMP	1, 2, 4, and 5		
Improve visual inspection and preventive maintenance	BBMP	3, 4, 5		
Improve spill prevention and drip pan program	BBMP	Facility-wide		
Maintain secondary containment features	BBMP	1, 2, 4, and 5		
Encourage units to conduct self-help initiatives to improve conditions at the facility	BBMP	Facility-wide		
Maintain spill kits and/or sorbent pads	BBMP	2, 3, 4, and 6		
Post signs near where discharges are entering public waters	BBMP	Facility-wide		

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UNIT NAME:			BUILDING NAME:	DATE:
PROBLEMS NOTED:				
INSPECTORS NAME:			SIGNATURE:	
YES	NO	TYPE ¹	INSPECTION ITEM	
		GH	Do you see any evidence of recently spilled materials, either solid or liquid?	
		GH	Do you see any evidence of illegal dumping in drainage channels or stormwater sewers?	
		GH	Are potentially polluting materials exposed to precipitation and stormwater runoff?	
		GH	Are drums, POL storage structures, and secondary containment units secure and properly labeled?	
		GH	Are vehicles and equipment stored outdoors free of excessive amounts of mud and dirt?	
		GH	Do you see excess trash, unswept or cluttered work areas, or materials that can be easily spilled?	
		PM	Are there spots, pools, puddles, or other traces of oil, grease, or other chemicals on the ground?	
		PM	Do you see any leaking vehicles, drums, tanks, dumpsters, or other equipment?	
		PM	Does standing water have oil sheens or discoloration?	
		PM	Is vehicle washing or steam cleaning performed at any area of this motorpool other than a washrack?	
		SPR	Is the facility spill plan or SOP posted on the maintenance bay bulletin board?	
		SPR	Is spill containment equipment readily accessible?	
		VI	Are monthly visual inspections performed at this motorpool?	
		AP	Does precipitation or stormwater runoff enter and cause problems inside shop and storage buildings?	
		AP	Are there any sites of active soil erosion at this motorpool?	
		AP	Do you see any standing water at the motorpool?	
		AP	Do you see any non-stormwater discharges entering the stormwater sewer or drainage ditches?	
		AP	Do outdoor POL storage structures prevent contact with precipitation or stormwater runoff?	
		AP	Are secondary containment units used at waste accumulation areas?	
		AP	Are drip pans in use at this motorpool? Estimated percentage of vehicles with drip pans: ____%.	
		AP	Are conex boxes or milvans used to store new or used POL at this motorpool? If yes, please give the number of conex boxes or milvans in use. _____	
		AP	Are visual aids such as stormwater posters and warning signs displayed at this motorpool?	
		AP	Is environmental training provided for personnel working at this motorpool?	
CORRECTIVE ACTIONS NEEDED:				
REVIEWERS NAME:			SIGNATURE:	DATE:

¹Inspection Item Types:

GH: Good Housekeeping
PM: Preventive Maintenance

SPR: Spill Prevention and Response
VI: Visual Inspection

AP: Advanced Practice

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5.3 Annual Compliance Inspection

The 77th RRC will utilize the stormwater inspection checklist to conduct an annual compliance evaluation of Niagara Falls USARC/AMSA 76. The compliance evaluation will include reviewing updated site information (including stormwater log sheets and inspection forms completed by the AMSA Shop Foreman during monthly inspections), updating the stormwater pollution prevention plan, and conducting a non-stormwater discharge certification. Upon being covered by the NYSPDES General Permit, stormwater sampling will not be required at Niagara Falls USARC/AMSA 76 unless specifically requested by NYSDEC.

Table 22 – Annual compliance schedule

COMPLIANCE ELEMENT	CONDUCTED BY	START DATE	COMPLETION DATE
Review monthly stormwater inspection checklists completed by the AMSA Shop Foreman			
Review site assessment in SWP3 and update as necessary (outfalls, sources, PPMs, site map)			
Review implementation status of BMPs in SWP3 and update as necessary			
Based on updated implemented BMPs, update recommended BMPs			
Review and update regulatory information in the SWP3 if necessary			
Conduct NSWDC assessment and certification			
If permitted, conduct stormwater sampling of regulated outfalls (consult NYSDEC and NYSPDES General Permit for information)			
Complete report of compliance findings and sampling results, and file			

5.4 Environmental Training

Employees at Niagara Falls USARC/AMSA 76 are required to attend annual, formal environmental training offered by the 77th RRC. Facility staff are also informally trained during periodic site visits by the 77th RRC. All civilian personnel who work within regulated areas are also required to attend the training.

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6. STORM WATER POLLUTION PREVENTION PLAN PHOTOGRAPHS

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6. STORM WATER POLLUTION PREVENTION PLAN PHOTOGRAPHS



Photo 1 – OMS

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Photo 2 – AMSA 76, PPM Storage Room & Used Oil Pod

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Photo 3 – Used Oil Pod

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Photo 4 – MVPA

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Photo 5 – MEP

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Photo 6 – MVPA

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Photo 7 – MVPA w/ POL Shed

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Photo 8 – Facility Outfall, OF-5

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Photo 9 – Drainage Ditch, DD-1

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Photo 10 – Parts Washer within AMSA

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Photo 11 – POL Storage Area within AMSA

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Photo 12 – Maintenance Bays within AMSA

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Photo 13 - Flammable Cabinets within OMS

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Photo 14 – Maintenance Bay within OMS



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PETROLEUM BULK STORAGE REGISTRATION CERTIFICATE

NYS DEC - REGION 9
 270 MICHIGAN AVE
 BUFFALO, NY 14203-2999
 (716) 851-7220



Page 1 of 1

TANK NUMBER	DATE INSTALLED	TANK TYPE	CAPACITY (GALLONS)	DATE LAST TESTED	TESTING DUE DATE	OWNER
WO9	09/01/1999	Steel/Carbon Steel	528		*	77TH REGIONAL SUPPORT COMMAND AFRC-CNY-EN, BLDG 200 FT TOTTEN, NY 11359-1016
						SITE NIAGARA FALLS AFRC/AMSA #76(G) 9400 PORTER RD NIAGARA FALLS, NY 14304-1698
						OPERATOR (Name and Telephone Number) MR HOGAN (716) 297-7200
						EMERGENCY CONTACT (Name and Telephone Number) PAUL BERTRAND (718) 352-2092
<p>* Aboveground tanks require monthly visual inspections and may need documented internal inspections as described in 6NYCRR Pt. 613.</p>						<p>As an authorized representative of the above named facility, I affirm under penalty of perjury that the information displayed on this form is correct to the best of my knowledge. Additionally, I recognize that I am responsible for assuring that this facility is in compliance with all sections of 6 NYCRR Parts 612, 613 and 614, and applicable sections of 6 NYCRR Subpart 360-14 (used oil tanks only), not just those cited below:</p> <ul style="list-style-type: none"> • The facility must be re-registered if there is a transfer of ownership. • The Department must be notified within 30 days prior to adding, replacing, reconditioning, or permanently closing a stationary tank. • The facility must be operated in accordance with the code for storing petroleum, 6 NYCRR Part 613. • Any new facility or substantially modified facility must comply with 6 NYCRR Part 614. • This certificate must be posted on the premises at all times. Posting must be at the tank, at the entrance of the facility, or the main office where the storage tanks are located. • Any person with knowledge of a spill, leak or discharge must report the incident to DEC within two hours (1-800-457-7362).
ISSUED BY: Commissioner John P. Cahill			MAILING CORRESPONDENCE			Signature of Authorized Representative/Owner _____ Date _____ Name of Authorized Representative/Owner (Please Print) _____ Title _____
PETROLEUM BULK STORAGE ID NUMBER 9-008877			ENVIRONMENTAL DIVISION 77TH REGIONAL SUPPORT COMMAND AFRC-CNY-EN BUILDING 200 FT TOTTEN, NY 11359-1016			
DATE ISSUED 01/19/2001		EXPIRATION DATE 01/17/2006				
FEE PAID \$ 0						

THIS REGISTRATION CERTIFICATE IS NON-TRANSFERABLE

Federal Agency Hazardous Waste Compliance Docket Listings
in EPA Region 2 through Update #21
(published October 25, 2005)

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
AIR FORCE	BOMARC/MCGUIRE MSL	RT 539	NEW EGYPT	NJ	08533	103c	N	N	11/16/1988
AIR FORCE	MCGUIRE AIR FORCE BASE	WRIGHTSTOWN-COOKSTOWN RD	WRIGHTSTOWN	NJ	08562	3005 3010 3016 103c	U	F	2/12/1988
AIR FORCE	NEW JERSEY AIR NATIONAL GUARD 177FW	400 LANGLEY RD	EGG HARBOR TWP	NJ	08234-9500	3010			7/1/2002
ARMY	BAYONNE MILITARY OCEAN TERMINAL	FOOT OF 32ND STREET	BAYONNE	NJ	07002	3005 3010 3016 103c 103a	N	N	2/12/1988
ARMY	BRITTON ARMY RESERVE CENTER	39TH ST & FEDERAL ST	CAMDEN	NJ	08105	3010 103c	N	N	2/12/1988
ARMY	CAVEN POINT ARMY RESERVE CENTER	1 CHAPEL AVENUE	JERSEY CITY	NJ	07305	3010 103c	N	N	9/27/1991
ARMY	FORT MONMOUTH	TINTON & PINEBROOK	TINTON FALLS	NJ	07724	3010 3016 103c 103a	N	N	2/12/1988
ARMY	FORT MONMOUTH EVANS AREA #1	MARCONI ROAD	WALL TOWNSHIP	NJ	07719	3010 3016 103c	N	N	7/17/1992
ARMY	KILMER ARMY RESERVE CENTER	BLDG 1007	EDISON	NJ	08817	3010	N	N	2/5/1993
ARMY	PEDRICKTOWN SUPPORT FACILITY	ROUTE 130 & ARTILLERY AVE	PEDRICKTOWN	NJ	08067	3010 103c	N	N	12/15/1989
ARMY	PICATINNY ARSENAL	OFF ROUTE 15	DOVER	NJ	07801	3005 3010 3016 103c	U	F	2/12/1988
ARMY	STORCH ARMY RESERVE CENTER	SHORE RD & DOLPHIN NORTHFIELD	NORTHFIELD	NJ	08225	3010 103c	N	N	2/12/1988
ARMY	STRYKER ARMY RESERVE CENTER	2150 NOTTINGHAM WAY	TRENTON	NJ	08619	3010 103c	N	N	2/12/1988
ARMY	TRAINING CENTER & FORT DIX	JULIUSTOWN - BROWNS MILLS ROAD	WRIGHTSTOWN	NJ	08562	3005 3010 3016 103c	U	F	2/12/1988
COMMERCE	NOAA/NMFS/NEFC	SANDY HOOK LABORATORY	HIGHLANDS	NJ	07732	3005 3010 103c	N	N	2/12/1988
ENERGY	MAYWOOD INTERIM STORAGE SITE	ROUTE 17 AND GROVE STREET	MAYWOOD/ROCHELLE PARK	NJ	07662	3016 103c 3010	U	F	2/12/1988
ENERGY	MIDDLESEX SAMPLING PLANT	239 MOUNTAIN AVE	MIDDLESEX BOROUGH	NJ	08846	3010 3016 103c	U	F	2/12/1988

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
ENERGY	NEW BRUNSWICK LABORATORY-ERDA	986 JERSEY AVENUE	NEW BRUNSWICK	NJ	08903	3016 103c	N	N	2/12/1988
ENERGY	PRINCETON PLASMA PHYSICS LABORATORY	FORRESTAL CAMPUS	PRINCETON	NJ	08544	103c 3010 3016	U	N	2/5/1993
ENERGY	WAYNE INTERIM STORAGE	868 BLACK OAK RIDGE RD	WAYNE	NJ	07470	3016 103c	U	F	2/12/1988
EPA	RARITAN DEPOT	4700 WOODBRIDGE AVENUE	EDISON	NJ	08817	3005 3010 3016 103c	N	N	11/16/1988
GENERAL SERVICES ADMINISTRATION	BELLE MEAD SUPPLY DEPOT	#1 RT 206	BELLE MEAD	NJ	08502	3010 103c 103a	U	N	2/12/1988
GENERAL SERVICES ADMINISTRATION	CLARKSON FISHER FEDERAL BUILDING & COURTHOUSE	402 E STATE ST	TRENTON	NJ	08608	3010	N	N	11/23/1998
GENERAL SERVICES ADMINISTRATION	RARITAN DEPOT	4700 WOODBRIDGE AVENUE	EDISON	NJ	08817	3005 3010 3016 103c	N	N	2/12/1988
GENERAL SERVICES ADMINISTRATION	SOMERVILLE DEPOT	ROUTE 206	SOMERVILLE	NJ	08876	103c 3010	N	N	11/16/1988
HOMELAND SECURITY	SANDY HOOK COAST GUARD STATION	HARTSHORNE DRIVE	HIGHLANDS	NJ	07732	3010 103c	N	N	11/16/1988
INTERIOR	FWS-BARNEGAT DIVISION, EDWIN B. FORSYTHE NWR	PO BOX 544	BARNEGAT	NJ	08005	3016 103c	N	N	2/12/1988
INTERIOR	FWS-GREAT SWAMP NATIONAL WILDLIFE REFUGE	152 PLEASANT PLAINS ROAD	BASKING RIDGE	NJ	07920-9615	3016 103c 3010	N	N	2/12/1988
INTERIOR	NPS-GATEWAY NATIONAL RECREATIONAL AREA	FORT HANCOCK	SANDY HOOK - BROOKLYN	NJ	07732	3010 3016 103c	N	N	2/12/1988
INTERIOR	NPS-MORRISTOWN NATIONAL HISTORICAL PARK	WASHINGTON PLACE	MORRISTOWN	NJ	07960	103c	N	N	11/10/1993
NAVY	EARLE NAVAL WEAPONS STATION	201 HWY 34 S	COLTS NECK	NJ	07722	3005 3010 3016 103c	U	F	2/12/1988
NAVY	LAKEHURST NAVAL AIR ENGINEERING CENTER	HANCOCK ROAD OFF ROUTE 547	LAKEHURST	NJ	08733	3005 3010 3016 103c	U	F	2/12/1988
NAVY	TRENTON NAVAL AIR WARFARE CENTER, AIRCRAFT DIV	PARKWAY AVE	TRENTON	NJ	08628	3005 3010 3016 103c 103a	N	N	2/12/1988

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
POSTAL SERVICE	BELLMAWR VEHICLE MAINTENANCE FACILITY	421 BENIGNO BLVD & HAAG AVE	BELLMAWR	NJ	08099	3010	N	N	11/23/1998
TRANSPORTATION	FAA-TECHNICAL CENTER	ROUTES 563 AND 575	POMONA	NJ	08405	3016 103c 103a 3010	U	F	2/12/1988
VETERANS AFFAIRS	EAST ORANGE MEDICAL CENTER	TREMONT AVE.	EAST ORANGE	NJ	07019	3010 103c	N	N	2/12/1988
VETERANS AFFAIRS	LYONS HOSPITAL	KNOLL CRAFT ROAD	LYONS	NJ	07939	3010 103c	N	N	2/12/1988
VETERANS AFFAIRS	VA ASSET MANAGEMENT SERVICE	152 ROUTE 206 SOUTH	HILLSBOROUGH	NJ	08844	103c 3010	N	N	2/12/1988
AIR FORCE	GRIFFISS AIR FORCE BASE	153 BROOKS RD	ROME	NY	13441	3005 3010 3016 103c	U	F	2/12/1988
AIR FORCE	HANCOCK FIELD	TAFT AND THOMPSON ROADS	NORTH SYRACUSE	NY	13212	3010 3016 103c 3005	N	N	11/16/1988
AIR FORCE	NIAGARA FALLS AIR FORCE RESERVE FACILITY	914 TAG/DE PO BOX F LASALLE STATION	NIAGARA FALLS IAP	NY	14304	3005 3010 3016 103c	N	N	2/12/1988
AIR FORCE	PLANT #38	PORTER & BALMER RDS	PORTER TWP	NY	14131	3005 3010 3016 103c	N	N	2/12/1988
AIR FORCE	PLANT #59	600 MAIN STREET	JOHNSON CITY	NY	13790	3016 103c 3010	N	N	2/12/1988
AIR FORCE	PLATTSBURGH AIR FORCE BASE	308 CSG/CC	PLATTSBURGH AFB	NY	12901-5000	3005 3010 3016 103c	U	F	2/12/1988
AIR FORCE	STEWART AIR NATIONAL GUARD BASE	STEWART INTERNATIONAL AIRPORT	NEWBURGH	NY	12550	103c 3010 3016	N	N	2/5/1993
AIR FORCE	WESTHAMPTON BEACH AIR NATIONAL GUARD FACILITY	SUFFOLK COUNTY AIRPORT	WESTHAMPTON BEACH	NY	11978	3010	U	U	2/5/1993
AIR FORCE	YOUNGSTOWN TEST ANNEX	BALMER RD	PORTER CENTER	NY	14131	103c 3016	N	N	2/12/1988
ARMY	AMHERST ARMY RESERVE CENTER	100 N FOREST RD	BUFFALO	NY	14221	3010 103c	N	N	8/22/1990
ARMY	BELLMORE MAINTENANCE FACILITY	2755 MAPLE AVE	BELLMORE	NY	11710	3010 3016 103c	N	N	2/12/1988
ARMY	ELIHU ROOT ARMY RESERVE CENTER	96 BURRSTONE RD	UTICA	NY	13502	3010 103c	N	N	9/27/1991
ARMY	FARMINGDALE ORGANIZATIONAL MAINTENANCE SHOP #43	25 BAITING PLACE ROAD	FARMINGDALE	NY	11735	3010 103c	N	N	2/5/1993
ARMY	FLOYD ANNEX SITE	KOENING ROAD	FLOYD	NY	13440	103c	N	N	4/11/1995

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
ARMY	FORT DRUM #8	BTWN RTS 3 & 11	WATERTOWN	NY	13601	3005 3010 3016 103c 103a	U	N	2/12/1988
ARMY	FORT HAMILTON	FT HAMILTON	BROOKLYN	NY	11252	3010 103c 3016	N	N	2/12/1988
ARMY	FORT TOTTEN	BAYSIDE	QUEENS	NY	11359	3010 103c 3016	N	N	2/12/1988
ARMY	MAJ J O'DONOVAN AFR CENTER	90 N MAIN AVE	ALBANY	NY	12203	3010			7/1/2002
ARMY	NIAGARA FALLS FACILITY	9400 PORTER ROAD	NIAGARA FALLS	NY		103a	N	N	2/5/1993
ARMY	PFC CHARLES DEGLOPPER ARMY RESERVE CENTER	2393 COLVIN BLVD	TONAWANDA	NY	14150	3010 103c	N	N	8/22/1990
ARMY	ROCHESTER COMBINED SUPPORT SHOP & US FISCAL OFFICE	1500 HENRIETTA RD	ROCHESTER	NY	14623	103c 3010	N	N	6/27/1997
ARMY	ROOSEVELT ARMY RESERVE CENTER	101 OAK ST	HEMPSTEAD	NY	11550	3010 103c	N	N	2/12/1988
ARMY	SAGE COMPLEX	510 STEWART DR W	NORTH SYRACUSE	NY	13212	3010 103c	N	N	11/10/1993
ARMY	SENECA ARMY DEPOT	5786 STATE ROUTE 96	ROMULUS	NY	14541	3005 3010 3016 103c	U	F	2/12/1988
ARMY	STEWART ANNEX/SUBPOST	USMA NEWBURG LANDFILL, STEWART AIRPORT, RT 17	NEWBURG	NY	12550	3016 3010 103c	N	N	11/16/1988
ARMY	TSG H.C. LOCKWOOD ARMY RESERVE CENTER	111 FINNEY BLVD	MALONE	NY	12953	3010 103c	N	N	9/27/1991
ARMY	WATERVLIET ARSENAL	BROADWAY	WATERVLIET	NY	12189	3005 3010 3016 103a 103c	N	N	2/12/1988
ARMY	WEBSTER ARMY MAINTENANCE SUPPORT ACTIVITY-7	517 OLD RIDGE ROAD	WEBSTER	NY	14580	3010 103c	N	N	9/27/1991
ARMY	WEST POINT MILITARY ACADEMY	RT 9W - BLDG 733	WEST POINT	NY	10996	3005 3010 3016 103c 103a	N	N	2/12/1988
ARMY	YOUNGSTOWN WEEKEND TRAINING SITE	BALMER RD	YOUNGSTOWN	NY	14174	103c 3016	N	N	6/27/1997
DEFENSE LOGISTICS AGENCY	VERONA DEFENSE FUEL SUPPORT POINT	MAIN ST.	VERONA	NY	13478	3010 3016 103c	N	N	2/12/1988

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
ENERGY	BROOKHAVEN NATIONAL LABORATORY	53 BELL AVE BLDG 464	UPTON	NY	11973	3005 3010 3016 103a 103c	U	F	2/12/1988
ENERGY	COLONIE INTERIM STORAGE SITE	1130 CENTRAL AVE	COLONIE	NY	12205	3005 3010 3016 103c	N	N	2/12/1988
ENERGY	KNOLLS ATOMIC POWER LABORATORY	2401 RIVER RD	NISKAYUNA	NY	12309	3005 3010 3016 103c	N	N	2/12/1988
ENERGY	KNOLLS ATOMIC POWER LABORATORY-KESSELRING SITE	ATOMIC PROJECT ROAD	WEST MILTON	NY	12020	3005 3010 3016 103c 103a	N	N	2/12/1988
ENERGY	NIAGARA FALLS STORAGE SITE	1397 PLETCHER ROAD	LEWISTOWN	NY	14092	3016 103c	N	N	11/16/1988
GENERAL SERVICES ADMINISTRATION	BROOKLYN INFORMATION AGENCY	29TH & 3RD AVE, DOOR 15	BROOKLYN	NY	11232	3010 103c	N	N	2/12/1988
GENERAL SERVICES ADMINISTRATION	DLA/DNSC SCOTIA DEPOT	ROUTE 5	SCOTIA	NY	12302-1039	3016 103c		N	12/29/2000
GENERAL SERVICES ADMINISTRATION	EMMANUEL CELLARD FEDERAL BUILDING	225 CADMAN PLAZA	BROOKLYN	NY	11201	3010 103c	N	N	2/12/1988
GENERAL SERVICES ADMINISTRATION	FEDERAL BUILDING	252 7TH AVE	NEW YORK	NY	10001	3010 103c	N	N	2/12/1988
GENERAL SERVICES ADMINISTRATION	MERCHANDISE CONTROL SALES SECTION	6 WORLD TRADE CENTER	NEW YORK	NY	10048	3010 103c	N	N	2/12/1988
GENERAL SERVICES ADMINISTRATION	NEW YORK	201 VARICK ST	NEW YORK	NY	10014	3010 103c	N	N	2/12/1988
GENERAL SERVICES ADMINISTRATION	PBS DLA DNSC VOORHEESVILLE DEPOT	5850 DEPOT RD	ALTAMONT	NY	12009	3010			6/12/2000
HOMELAND SECURITY	AIDS TO NAVIGATION TEAM	7063 LIGHTHOUSE DRIVE	SAUGERTIES	NY	12477	3010 103c	N	N	2/12/1988
HOMELAND SECURITY	MORICHES COAST GUARD GROUP	100 MORICHES ISLAND RD	EAST MORICHES	NY	11940	3010 103c	N	N	12/15/1989
HOMELAND SECURITY	PLUM ISLAND ANIMAL DISEASE CENTER	ROUTE 25	ORIENT POINT	NY	11957	3016 103c 3010	N	N	2/12/1988

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
HOMELAND SECURITY	SHINNECOCK COAST GUARD STATION	SHINNECOCK STATION	HAMPTON BAYS	NY	11946	3010 103c	N	N	12/15/1989
HOMELAND SECURITY	SUPPORT CENTER GOVERNOR'S ISLAND	C/O US COAST GUARD GROUP	GOVERNOR'S ISLAND	NY	10004	3010 103c	N	N	2/12/1988
INTERIOR	FWS-IROQUOIS NATIONAL WILDLIFE REFUGE	PO BOX 517	ALABAMA	NY	14003	3016 103c	N	N	2/12/1988
INTERIOR	FWS-MONTEZUMA NATIONAL WILDLIFE REFUGE	3395 ROUTE 5 & 20 EAST	SENECA FALLS	NY	13148	3010 3016 103c	N	N	2/12/1988
INTERIOR	NPS-FIRE ISLAND NATIONAL SEASHORE	120 LAUREL STREET	PATCHOGUE	NY	11772	3016 3010 103c	N	N	11/16/1988
INTERIOR	NPS-GATEWAY NATIONAL RECREATIONAL AREA	FLOYD BENNETT FIELD	BROOKLYN	NY	11234	103c 3010	N	N	8/22/1990
INTERIOR	NPS-SARATOGA NATIONAL HISTORICAL PARK	648 RT 32	STILLWATER	NY	12170	103c	N	N	11/10/1993
INTERIOR	NPS-STATUE OF LIBERTY NATL MONUMENT: ELLIS ISLAND	LIBERTY ISLAND	NEW YORK	NY	10004	3010 103c	N	N	11/10/1993
INTERIOR	NPS-UNITED NUCLEAR	OLD RTE. 55	PAWLING	NY	12564	103c 3010	N	N	2/12/1988
INTERIOR	PENNSYLVANIA AVE/FOUNTAIN AVE LANDFILLS	PENNSYLVANIA AVE, SHORE PKWY	BROOKLYN	NY	11207	3010 103c	N	N	2/12/1988
NAVY	BETHPAGE NAVAL WEAPONS INDUSTRIAL RESERVE PLANT	S. OYSTER BAY RD.	BETHPAGE	NY	11714	3016 103c	U	N	2/12/1988
NAVY	BROOKLYN NAVAL AND MARINE CORPS RESERVE CENTER	FLOYD BENNETT FIELD	BROOKLYN	NY	11234	103c	N	N	2/12/1988
NAVY	FISHER'S ISLAND NAVAL UNDERWATER SYSTEMS CENTER	FISHER'S ISLAND	FISHER'S ISLAND	NY	06380	3010 3016 103c	U	N	2/12/1988
NAVY	FORT WADSWORTH	FT. WADSWORTH	STATEN ISLAND	NY	10305	3010 103c	N	N	11/16/1988
NAVY	MITCHEL FIELD HOUSING FACILITY	NAVSTA NEW YORK HOUSING OFFICE, BLDG. 19, WEST ROAD, MITCHEL FIELD	GARDEN CITY	NY	11530	103c 3010	N	N	9/27/1991
NAVY	MITCHEL MANOR HOUSING FACILITY	NAVSTA NEW YORK HOUSING OFFICE, 85 A MITCHEL AVENUE	EAST MEADOW	NY	11554	103c	N	N	9/27/1991

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
NAVY	NAVAL WEAPONS INDUSTRIAL RESERVE PLANT CALVERTON	GRUMMAN BLVD	CALVERTON	NY	11933	103c 3016	U	N	2/12/1988
NAVY	NEW YORK NAVAL STATION	207 FLUSHING AVE	BROOKLYN	NY	11251	3010 103c	N	N	2/12/1988
NAVY	ROCHESTER NAVAL INDUSTRIAL RESERVE ORDINANCE PLANT	121 LINCOLN AVENUE	ROCHESTER	NY	14653	103c	N	N	7/17/1992
NAVY	STAPLETON NAVAL STATION	STAPLETON	STATEN ISLAND	NY	10304	3010 103c	N	N	9/27/1991
POSTAL SERVICE	BINGHAMTON POST OFFICE	111 HENRY STREET	BINGHAMTON	NY	13902	3010 103c	N	N	2/5/1993
POSTAL SERVICE	MANHATTAN GENERAL MAIL FACILITY	WEST 29TH ST AND 9TH AVE	NEW YORK	NY	10001	3010 103c	N	N	7/17/1992
POSTAL SERVICE	US POSTAL SERVICE - JAF BLDG	8TH AVE & 33RD STREET	NEW YORK	NY	10199	3010	N	N	12/29/2000
TRANSPORTATION	WEST SAYVILLE IFS TRANSMITTER	CHERRY AVE	WEST SAYVILLE	NY	11796	3010 3016 103c	N	N	9/27/1991
VETERANS AFFAIRS	CASTLE POINT HOSPITAL	RTE. 9D	CASTLE PT.	NY	12511	3010 103c	N	N	2/12/1988
ARMY	FORT ALLEN	ROUTE 1	JUANA DIAZ	PR	00665	103c 3010 3016	N	N	2/12/1988
ARMY	FORT BUCHANAN	ROUTE 28	SAN JUAN	PR	00934	3005 3010 103c 3016	N	N	2/12/1988
ARMY	NEW ARMY AVIATION SUPPORT	ISLA GRANDE ROAD OFF HACIA FERNANDEZ	SAN JUAN	PR		103c	N	N	12/29/2000
ARMY	PUERTO RICO ARMY NATIONAL GUARD - CAMP SANTIAGO	RD 1 KM 3.6 - TRAINING SITE	SALINAS	PR	00751	103c 3010 3016	N	N	11/16/1988
ENERGY	CENTER FOR ENERGY AND ENVIRONMENTAL RESEARCH	ROAD 108 KM 1.1	MAYAQUEZ	PR	00708	3016 103c 3010	N	N	11/16/1988
GENERAL SERVICES ADMINISTRATION	SAN JUAN POST OFFICE & COURTHOUSE	COMERCIO ST & TANCA ST	SAN JUAN	PR	00906	3010 103c	N	N	11/23/1998
HOMELAND SECURITY	BORINQUEN COAST GUARD AIR STATION	RAMEY AIR FORCE BASE	AQUADILLA	PR	00604	3010 103c	N	N	2/12/1988
INTERIOR	FWS-CULEBRA NATIONAL WILDLIFE REFUGE	P.O. BOX 190	CULEBRA	PR	00775	3016			7/11/2003

Agency	Facility Name	Facility Address	City	State	Zip Code	Reporting Mechanism	NFRAP Status*	NPL Status**	Date Added to Docket
INTERIOR	FWS-DESECHEO NATIONAL WILDLIFE REFUGE	P.O. BOX 510	BOQUERON	PR	00622-0510	3016			7/11/2003
NAVY	CEIBA NAVAL STATION	ROOSEVELT ROADS	CEIBA	PR	00635	3005 3010 3016 103c	N	N	2/12/1988
NAVY	ROOSEVELT ROADS NAVAL STATION	VILLA VERDE STREET DRYDOCK & REPAIR FACILITY	MIRAMAR	PR	00903	3005 3010 3016 103c	N	N	2/12/1988
NAVY	SABANA SECA NAVAL SECURITY GROUP ACTIVITY	ROUTE 866	SABANA SECA	PR	00952	3010 3016 103c	U	D	2/12/1988
NAVY	SAN JUAN NAS HANGAR 21	PORT OF SAN JUAN HARBOR	SAN JUAN	PR	906	3016 103c	N	N	4/11/1995
NAVY	VIEQUES EAST	VIEQUES	VIEQUES	PR	00765	103c 3005 3010 3016	N	N	2/12/1988
NAVY	VIEQUES NAVAL AMMUNITION FACILITY	ROUTE 70	VIEQUES	PR	00765	3005 3010 3016 103c	N	N	2/12/1988
ARMY	BLAIR HANGAR ARMY AIR SUPPORT FACILITY	ALEX HAMILTON AIRPORT	ST. CROIX	VI	00850	3016 103c	N	N	4/11/1995
INTERIOR	FLAMINGO BAY ARMY TEST AREAS-FORMER FORT SEGARRA	WATER ISLAND	ST. THOMAS	VI	00802	103c		N	6/12/2000

*NFA Status Codes:

NFA = No further action

U = Status undetermined

**NPL Status Codes:

N = Not on NPL

F = Final on NPL

A = Combined with another site. Site is part of NPL site

D = Deleted from final NPL

O = Not a CERCLIS report

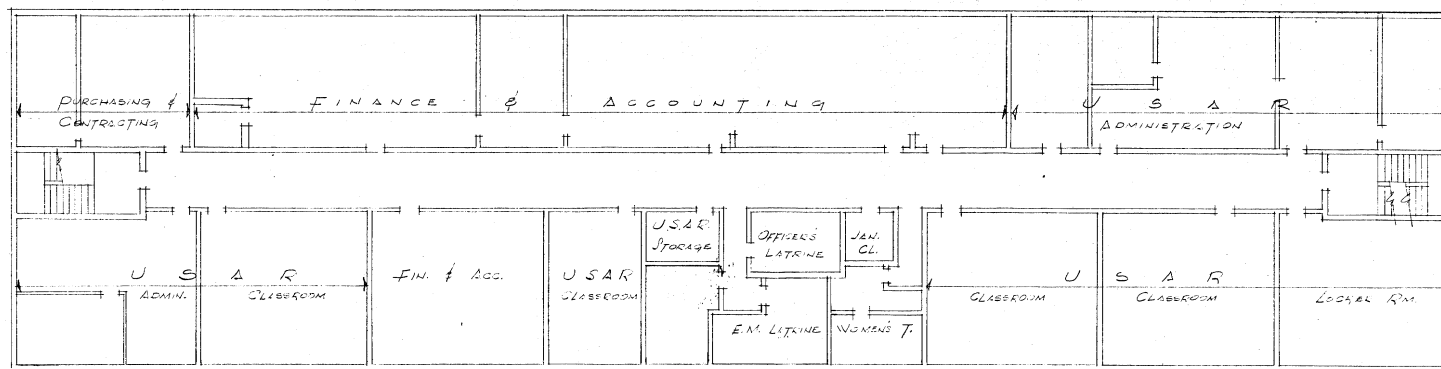
P = Proposed for NPL

R = Removed from the proposed NPL and no longer considered for the final NPL

S = Pre-proposal site for the NPL

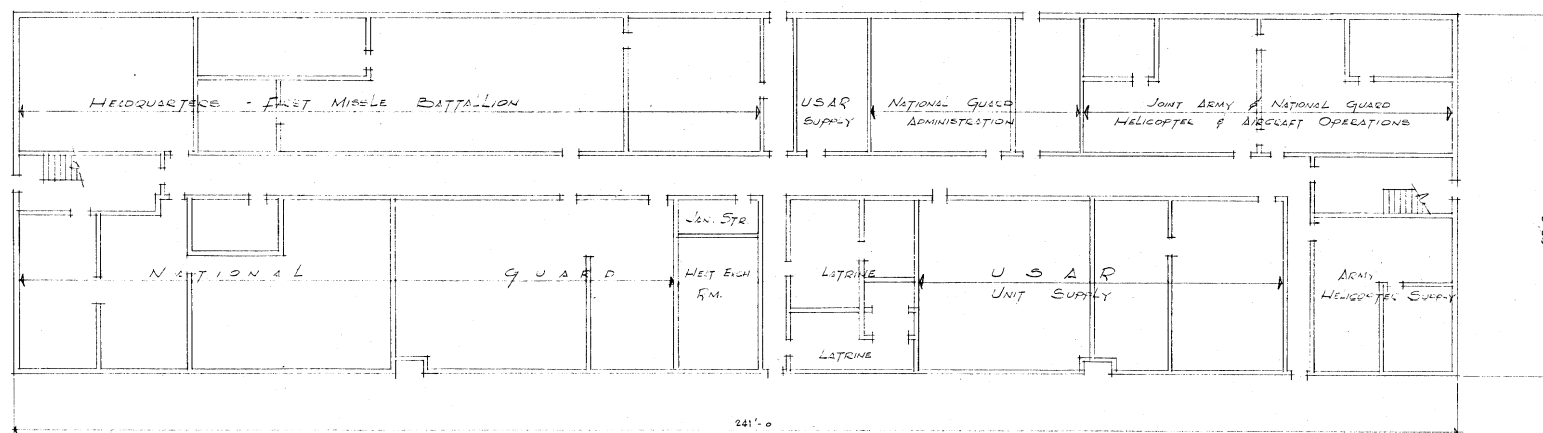
W = Withdrawn

U = Status undetermined



SECOND FLOOR PLAN

SCALE 1/8" = 1'-0"



FIRST FLOOR PLAN

BUILDING #4 NORTH LEANTO



NO.	DATE	ITEM
U. S. ARMY SUPPORT CENTER NIAGARA FALLS NIAGARA FALLS, NEW YORK		
UTILIZATION OF AREAS IN BUILDING #4 - NORTH LEANTO		
U. S. ARMY SUPPORT CENTER NIAGARA FALLS		
OFFICE OF THE POST ENGINEER		
Drawn By: A.E.Y.	Check By: A.E.Y.	Scale: 1/8" = 1'-0"
Approved By: A.E.Y.	Drawn By: A.E.Y.	Sheet: 1 OF 1

Appendix E

Regulatory Database Search Reports



The EDR Radius Map with GeoCheck®

**Niagara Falls USARC/AMSA 76, NY
9400 PORTER ROAD
NIAGARA FALLS, NY 14304**

Inquiry Number: 01714247.26r

July 13, 2006

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Physical Setting Source Records Searched	A-23

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

9400 PORTER ROAD
NIAGARA FALLS, NY 14304

COORDINATES

Latitude (North): 43.100200 - 43° 6' 0.7"
Longitude (West): 78.954900 - 78° 57' 17.6"
Universal Transverse Mercator: Zone 17
UTM X (Meters): 666428.7
UTM Y (Meters): 4773757.0
Elevation: 577 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 43078-A8 TONAWANDA WEST, NY
Most Recent Revision: 1980

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
9400 PORTER ROAD 9400 PORTER ROAD NIAGRA FALLS, NY	ERNS	N/A
NYARNG NYARNG AASF 2 9400 PORTER RD - AFRC NIAGARA FALLS, NY 14304	RCRA-SQG FINDS NY MANIFEST	NY5210524273
ARMED FORCES RESERVE CENTER 9400 PORTER RD NIAGARA FALLS, NY 14304	RCRA-SQG CERC-NFRAP NY MANIFEST	NY8210424273
US ARMY VEHICLE WASH 9400 PORTER RD NIAGARA FALLS, NY 14304	FINDS	110019236940
NIAGARA FALLS AFRC/AMSA #76(G) 9400 PORTER RD NIAGARA FALLS, NY 14304	UST AST NY Spills Date Closed: 02/22/00 NY Hist Spills	N/A

EXECUTIVE SUMMARY

NIAGARA FALLS RESERVE CENTER 9400 PORTER RD NIAGARA FALLS, NY 14304	RCRA-SQG	NYD981875206
ARMY RESERVES 9400 PORTER ROAD NIAGARA FALLS, NY	NY Spills Date Closed: 03/06/92 NY Hist Spills	N/A
NIAGARA FALLS AIRPORT 9400 PORTER ROAD NFAFB NIAGARA FALLS, NY	NY Spills Date Closed: 11/15/93 Date Closed: 03/28/00 NY Hist Spills	N/A
FORT DRUM ARM SERVICES 9400 PORTER RD NIAGARA FALLS, NY 14304	NY MANIFEST	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL RECOVERY	Federal Superfund Liens
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS	Corrective Action Report
RCRA-TSDF	Resource Conservation and Recovery Act Information
RCRA-LQG	Resource Conservation and Recovery Act Information
HMIRS	Hazardous Materials Information Reporting System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
US BROWNFIELDS	A Listing of Brownfields Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

EXECUTIVE SUMMARY

SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
RAATS	RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

HSWDS	Hazardous Substance Waste Disposal Site Inventory
SHWS	Inactive Hazardous Waste Disposal Sites in New York State
DEL SHWS	Delisted Registry Sites
SWF/LF	Facility Register
SWRCY	Registered Recycling Facility List
SWTIRE	Registered Waste Tire Storage & Facility List
CBS UST	Chemical Bulk Storage Database
MOSF UST	Major Oil Storage Facilities Database
CBS AST	Chemical Bulk Storage Database
MOSF AST	Major Oil Storage Facilities Database
ENG CONTROLS	Registry of Engineering Controls
INST CONTROL	Registry of Institutional Controls
VCP	Voluntary Cleanup Agreements
DRYCLEANERS	Registered Drycleaners
BROWNFIELDS	Brownfields Site List
SPDES	State Pollutant Discharge Elimination System
AIRS	Air Emissions Data

TRIBAL RECORDS

INDIAN RESERV	Indian Reservations
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EDR PROPRIETARY RECORDS

Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations	EDR Proprietary Historic Gas Stations
EDR Historical Cleaners	EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

FEDERAL RECORDS

CERCLIS-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 02/01/2006 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
DIBACC0 LF SITE 1	PORTER & TUSCARORA RDS	1/4 - 1/2WNW 16		45

STATE AND LOCAL RECORDS

LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the LTANKS list, as provided by EDR, and dated 04/05/2006 has revealed that there are 7 LTANKS sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CAYUGA VILLAGE Date Closed: 05/01/91	512 B STREET	1/4 - 1/2SSW	12	32
RAUSMANN RESIDENCE Date Closed: 06/08/95	431 A STREET	1/4 - 1/2S	13	35
DUNN TIRE Date Closed: 11/12/04	9540 NIAGARA FALLS BLVD	1/4 - 1/2SSE	14	37
CAYUGA VILLAGE Date Closed: 02/22/91	640 C STREET	1/4 - 1/2SW	15	42
CAYUGA VILL. MOBILE PARK Date Closed: 08/22/89	NIAGARA FALLS BLVD.	1/4 - 1/2S	17	45
RAINBOW TIRE Date Closed: 07/22/96	9340 NIAGARA FALLS BLVD	1/4 - 1/2S	18	47
MARIA HEALEY (HOME) Date Closed: 02/22/91	9200 NIAGARA FALLS BLVD	1/4 - 1/2SSW	19	50

HIST LTANKS: A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database.

A review of the HIST LTANKS list, as provided by EDR, and dated 01/01/2002 has revealed that there

EXECUTIVE SUMMARY

are 7 HIST LTANKS sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CAYUGA VILLAGE	512 B STREET	1/4 - 1/2 SSW	12	32
RAUSMANN RESIDENCE	431 A STREET	1/4 - 1/2 S	13	35
DUNN TIRE	9540 NIAGARA FALLS BLVD	1/4 - 1/2 SSE	14	37
CAYUGA VILLAGE	640 C STREET	1/4 - 1/2 SW	15	42
CAYUGA VILL. MOBILE PARK	NIAGARA FALLS BLVD.	1/4 - 1/2 S	17	45
RAINBOW TIRE	9340 NIAGARA FALLS BLVD	1/4 - 1/2 S	18	47
MARIA HEALEY (HOME)	9200 NIAGARA FALLS BLVD	1/4 - 1/2 SSW	19	50

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the UST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CECOS INTERNATIONAL INC	BOX 340 L P O	0 - 1/8 ENE	11	24

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the AST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CECOS INTERNATIONAL INC	BOX 340 L P O	0 - 1/8 ENE	11	24

SPILLS: Data collected on spills reported to NYSDEC. is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list, as provided by EDR, and dated 04/05/2006 has revealed that there is 1 NY Spills site within approximately 0.125 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
NIAGARA MOHAWK POLE Date Closed: 05/19/99	9401 PORTER ROAD	0 - 1/8 W	A10	22

HIST SPILLS: This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database.

A review of the NY Hist Spills list, as provided by EDR, and dated 01/01/2002 has revealed that there

EXECUTIVE SUMMARY

is 1 NY Hist Spills site within approximately 0.125 miles of the target property.

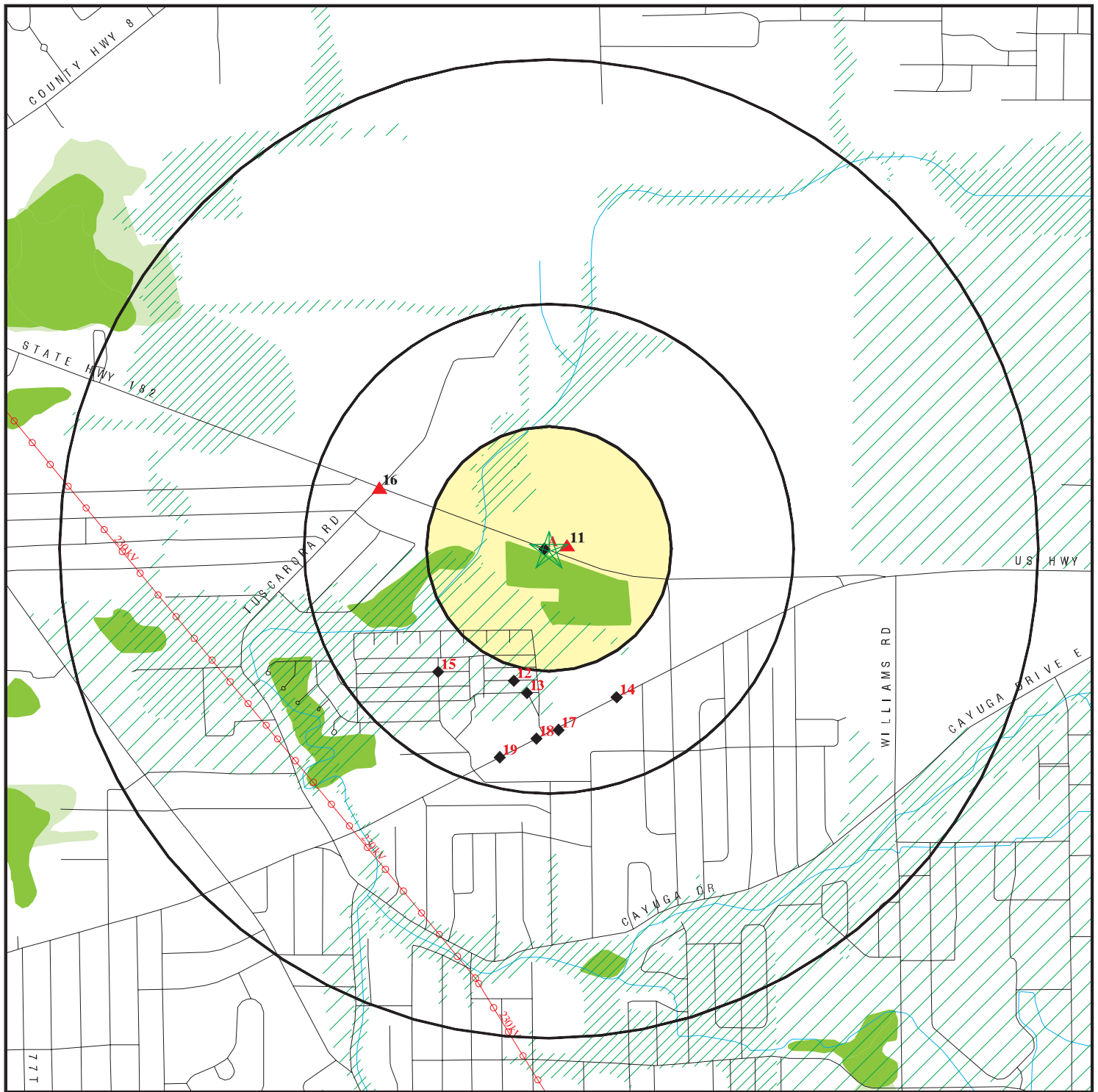
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
NIAGARA MOHAWK POLE	9401 PORTER ROAD	0 - 1/8 W	A10	22

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
NIAGARA RECYCLING	NY MANIFEST
NYS DOT LA SALLE ARTERIAL EXPRESSWAY	RCRA-LQG, NY MANIFEST
UNITED STATES MILITARY	NY MANIFEST
NIAGARA RECYCLING	NY MANIFEST
SABRE PARK - ANTHONY DRIVE AREA	SHWS
HOOKER-102ND STREET LANDFILL	SHWS
102ND STREET LANDFILL (OLIN)	SHWS
NEW ROAD LF	CERC-NFRAP
NIAGARA COUNTY CIVIC BUILDING	LTANKS
NIAGARA ST CORNER OF 25TH ST	ERNS
NIAGARA FALLS INTERNATIONAL AIRPORT	FINDS
NIAGARA STREET OVER GILL CREEK	FINDS
UNI-MART STORE #5010	NY Spills, NY Hist Spills
SATARIAN AUTO PARTS	NY Spills, NY Hist Spills
NIAGARA MOHAWK	NY Spills, NY Hist Spills
NIAGARA FALLS AFB	NY Spills
LEAKING TANKER TRUCK	NY Spills
NIAGARA MOHAWK	NY Spills, NY Hist Spills
CAYUGA CREEK	NY Spills
SIMON OIL	NY Spills, NY Hist Spills
OIL FROM UNKNOWN TRUCK	NY Spills, NY Hist Spills
UNKNOWN VEHICLE ON I190	NY Spills, NY Hist Spills
NIAGARA MOHAWK	NY Spills, NY Hist Spills

OVERVIEW MAP - 01714247.26r



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

⚙ Manufactured Gas Plants

🏠 National Priority List Sites

🗑 Landfill Sites

🏢 Dept. Defense Sites

🏠 Indian Reservations BIA

⚡ Power transmission lines

🛢 Oil & Gas pipelines

🌊 100-year flood zone

🌊 500-year flood zone

🌿 National Wetland Inventory

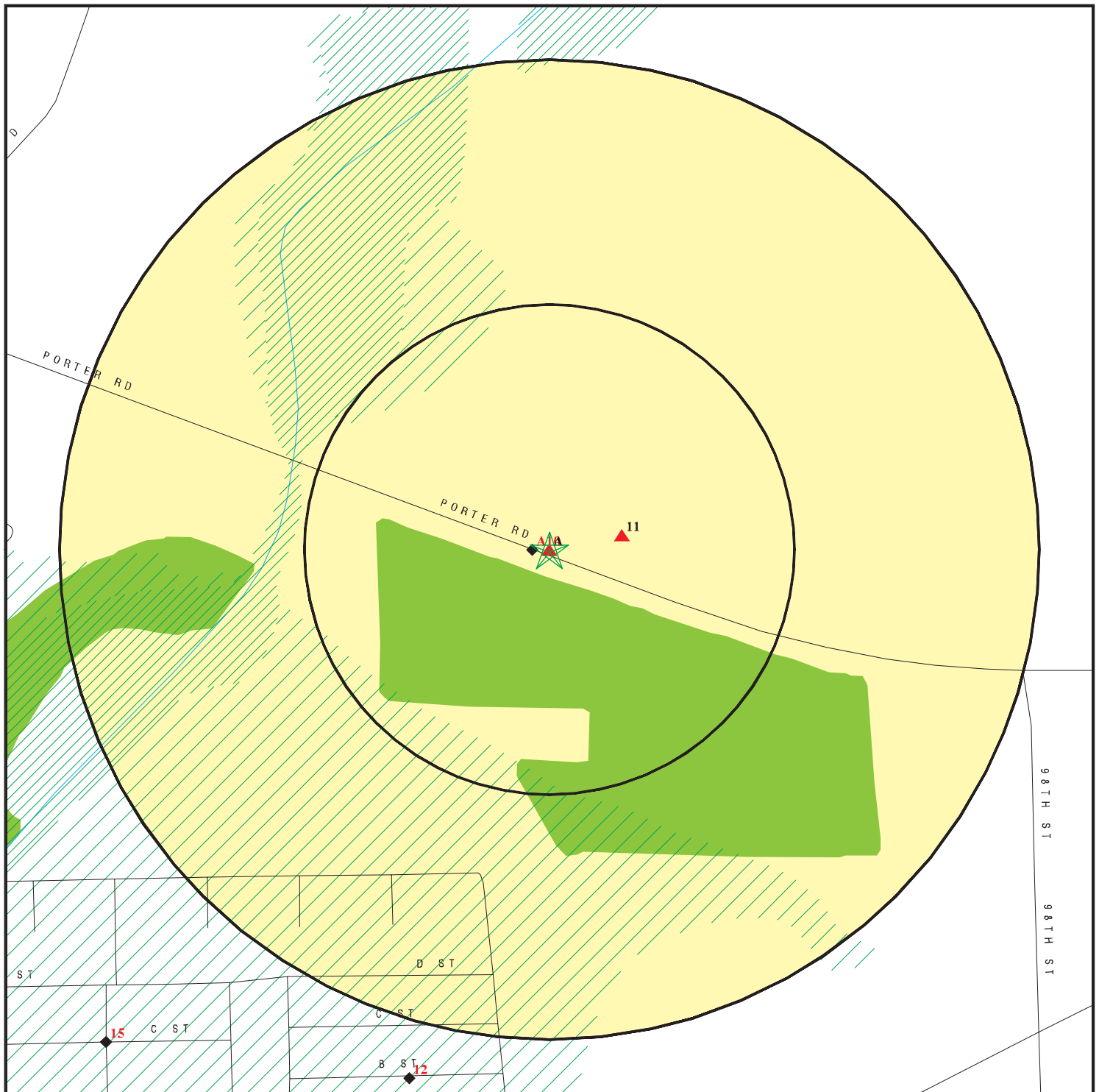
🌿 State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Niagara Falls USARC/AMSA 76, NY
ADDRESS: 9400 PORTER ROAD
NIAGARA FALLS NY 14304
LAT/LONG: 43.1002 / 78.9549

CLIENT: CH2M Hill
CONTACT: Mary Beth Jacques
INQUIRY #: 01714247.26r
DATE: July 13, 2006

DETAIL MAP - 01714247.26r



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚙ Manufactured Gas Plants
- ⚠ Sensitive Receptors
- 🚚 National Priority List Sites
- 🗑 Landfill Sites
- 🏠 Dept. Defense Sites

- 🏠 Indian Reservations BIA
- 🛢 Oil & Gas pipelines
- 🌊 100-year flood zone
- 🌊 500-year flood zone
- 🌿 National Wetland Inventory
- 🌿 State Wetlands

0 1/16 1/8 1/4 Miles



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Niagara Falls USARC/AMSA 76, NY
 ADDRESS: 9400 PORTER ROAD
 NIAGARA FALLS NY 14304
 LAT/LONG: 43.1002 / 78.9549

CLIENT: CH2M Hill
 CONTACT: Mary Beth Jacques
 INQUIRY #: 01714247.26r
 DATE: July 13, 2006

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL RECORDS</u>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY		TP	NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP	X	0.500	0	0	1	NR	NR	1
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.	X	0.250	0	0	NR	NR	NR	0
ERNS	X	TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
<u>STATE AND LOCAL RECORDS</u>								
HSWDS		0.500	0	0	0	NR	NR	0
State Haz. Waste		1.000	0	0	0	0	NR	0
DEL SHWS		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
SWTIRE		0.500	0	0	0	NR	NR	0
LTANKS		0.500	0	0	7	NR	NR	7
HIST LTANKS		0.500	0	0	7	NR	NR	7
UST	X	0.250	1	0	NR	NR	NR	1
CBS UST		0.250	0	0	NR	NR	NR	0
MOSF UST		0.500	0	0	0	NR	NR	0
AST	X	0.250	1	0	NR	NR	NR	1
CBS AST		0.250	0	0	NR	NR	NR	0
MOSF AST		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MANIFEST	X	0.250	0	0	NR	NR	NR	0
NY Spills	X	0.125	1	NR	NR	NR	NR	1
NY Hist Spills	X	0.125	1	NR	NR	NR	NR	1
ENG CONTROLS		0.500	0	0	0	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
BROWNFIELDS		0.500	0	0	0	NR	NR	0
SPDES		TP	NR	NR	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
<u>TRIBAL RECORDS</u>								
INDIAN RESERV		1.000	0	0	0	0	NR	0
<u>EDR PROPRIETARY RECORDS</u>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		TP	NR	NR	NR	NR	NR	0
EDR Historical Cleaners		TP	NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1
Target
Property

9400 PORTER ROAD
9400 PORTER ROAD
NIAGRA FALLS, NY

ERNS **91231394**
N/A

Actual:
577 ft.

Site 1 of 10 in cluster A

[Click this hyperlink](#) while viewing on your computer to access additional ERNS detail in the EDR Site Report.

A2
Target
Property

NYARNG NYARNG AASF 2
9400 PORTER RD - AFRC
NIAGARA FALLS, NY 14304

RCRA-SQG **1000226530**
FINDS **NY5210524273**
NY MANIFEST

Actual:
577 ft.

Site 2 of 10 in cluster A

RCRAInfo:
Owner: US DEPT OF ARMY
(212) 555-1212
EPA ID: NY5210524273
Contact: Not reported
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NY MANIFEST:

Document ID: NYA7305138
Manifest Status: C
Trans1 State ID: 000000000
Trans2 State ID: 000000000
Generator Ship Date: 890802
Trans1 Recv Date: 890802
Trans2 Recv Date: Not reported
TSD Site Recv Date: 890808
Part A Recv Date: 890809
Part B Recv Date: 890816
Generator EPA ID: NY5210524273
Trans1 EPA ID: MDD980554653
Trans2 EPA ID: Not reported
TSD ID: NCD000648451
Waste Code: D008 - LEAD 5.0 MG/L TCLP
Quantity: 00855
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 016
Container Type: DF - Fiberboard or plastic drums (glass)
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 100
Year: 89
Facility Type: Generator
EPA ID: NY5210524273
Facility Name: UNITED STATES MILITARY-AASF #2
Facility Address: P. O. BOX F-LASALLE STATION

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NYARNG NYARNG AASF 2 (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000226530

Facility City: NIAGARA FALLS
Facility Zip 4: Not reported
Country: Not reported
County: ERIE
Mailing Name: UNITED STATES MILITARY
Mailing Contact: Not reported
Mailing Address: AASF #2-P.O. BOX F-LASALLE
Mailing City: STATION-NIAGARA FALLS
Mailing State: NY
Mailing Zip: 14304
Mailing Zip4: Not reported
Mailing Country: Not reported
Mailing Phone: 716-694-1477

[Click this hyperlink](#) while viewing on your computer to access
22 additional NY MANIFEST: record(s) in the EDR Site Report.

A3
Target
Property

ARMED FORCES RESERVE CENTER
9400 PORTER RD
NIAGARA FALLS, NY 14304

RCRA-SQG
CERC-NFRAP
NY MANIFEST
NJ MANIFEST
CT MANIFEST

1000557597
NY8210424273

Actual:
577 ft.

Site 3 of 10 in cluster A

CERCLIS-NFRAP Classification Data:

Federal Facility: Not a Federal Facility
Non NPL Code: NFRAP
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment: DISCOVERY
Assessment: PRELIMINARY ASSESSMENT
Assessment: ARCHIVE SITE

Completed: 12/13/1994
Completed: 02/15/1997
Completed: 09/30/1997

CERCLIS-NFRAP Alias Name(s):

NIAGARA FALLS FACILITY

RCRAInfo:

Owner: HQ 10TH MTN DIV LI & FT DRUM
(315) 772-5708
EPA ID: NY8210424273
Contact: DONNA HERMAN
(716) 297-7909

Classification: Conditionally Exempt Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

NY MANIFEST:

Document ID: NYB8186391
Manifest Status: Not reported
Trans1 State ID: NYD980769947
Trans2 State ID: NJD080631369
Generator Ship Date: 10/11/2002
Trans1 Recv Date: 10/11/2002
Trans2 Recv Date: 10/11/2002
TSD Site Recv Date: 10/15/2002
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY8210424273

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

ARMED FORCES RESERVE CENTER (Continued)

1000557597

Trans1 EPA ID: OHD093945293
Trans2 EPA ID: Not reported
TSDF ID: 2382B7NY
Waste Code: F003 - UNKNOWN
Quantity: 00040
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: B Incineration, heat recovery, burning.
Specific Gravity: 01.00
Year: 02
Facility Type: Generator
EPA ID: NYP000907187
Facility Name: UNITED STATES MILITARY
Facility Address: 9400 PORTER ROAD
Facility City: NIAGARA FALLS
Facility Zip 4: Not reported
Country: Not reported
County: NIAGARA
Mailing Name: UNITED STATES MILITARY
Mailing Contact: JAMES HAYNES
Mailing Address: 9400 PORTER ROAD
Mailing City: NIAGARA FALLS
Mailing State: NY
Mailing Zip: 14301
Mailing Zip4: Not reported
Mailing Country: Not reported
Mailing Phone: 716-297-7615
Facility Type: Generator
EPA ID: NY8210424273
Facility Name: UNITED STATES MILITARY
Facility Address: 9400 PORTER ROAD
Facility City: NIAGARA FALLS
Facility Zip 4: Not reported
Country: Not reported
County: NIAGARA
Mailing Name: UNITED STATES MILITARY
Mailing Contact: PATRICK A PATTERSON
Mailing Address: 9400 PORTER ROAD
Mailing City: NIAGARA FALLS
Mailing State: NY
Mailing Zip: 14304
Mailing Zip4: Not reported
Mailing Country: Not reported
Mailing Phone: 716-297-7615

[Click this hyperlink](#) while viewing on your computer to access
33 additional NY MANIFEST: record(s) in the EDR Site Report.

NJ MANIFEST:

Manifest Code: NJA3092096
EPA ID: NY8210424273
Date Shipped: 20040429
TSDF EPA ID: NJD980536593
TSDF Received Date: 040512
Transporter EPA ID: NJD080631369
Transporter Received Date: 040429

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

ARMED FORCES RESERVE CENTER (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000557597

Waste Code: D003
Quantity Shipped: 40.00000
Unit of Measure: P
Method Code: S01

CT MANIFEST:

Year: 1996
Manifest ID: CTF0486227
TSDF EPA ID: CTD000604488
TSDF Name: CLEAN HARBORS OF CONNECTICUT, INC.
TSDF Address: 51 BRODERICK RD
TSDF City,St,Zip: BRISTOL, CT 06010
TSDF Country: USA
TSDF Telephone: Not reported
Transport Date: 04/04/96
Transporter EPA ID: NYD980769947
Transporter Name: HAZMAT ENVIRONMENTAL GROUP
Transporter Country: USA
Transporter Phone: Not reported
Trans 2 Date: / /
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
Trans 2 Address: Not reported
Trans 2 City,St,Zip: CT
Trans 2 Country: USA
Trans 2 Phone: Not reported
Generator EPA ID: NY8210424273
Generator Phone: 7162977909
Generator Address: Not reported
Generator City,State,Zip: Not reported
Generator Country: Not reported
Special Handling: Not reported
Discrepancies: Yes
Date Shipped: 04/04/96
Date Received: 04/09/96
Last modified date: 04/26/04
Last modified by: IG
Comments: Not reported

[Click this hyperlink](#) while viewing on your computer to access additional CT MANIFEST: detail in the EDR Site Report.

A4
Target
Property

US ARMY VEHICLE WASH
9400 PORTER RD
NIAGARA FALLS, NY 14304

FINDS **1007761275**
110019236940

Site 4 of 10 in cluster A

Actual:
577 ft.

FINDS:

Other Pertinent Environmental Activity Identified at Site:
FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A5
Target
Property

NIAGARA FALLS AFRC/AMSA #76(G)
9400 PORTER RD
NIAGARA FALLS, NY 14304

UST
AST
NY Spills
NY Hist Spills

U003316292
N/A

Actual:
577 ft.

Site 5 of 10 in cluster A

SPILLS:

DER Facility ID :	202076	CID :	29
Site ID :	246072	Region of Spill:	9
Spill Number:	9907461	SWIS:	3211
Investigator:	SACALAND	Caller Agency:	ARMY RESERVES
Caller Name:	RAVI AJODAH	Caller Extension:	Not reported
Caller Phone:	(718) 352-5155	Notifier Agency:	ARMY RESERVES
Notifier Name:	DICK RAMSDELL	Notifier Extension:	Not reported
Notifier Phone:	(718) 352-5155	Reported to Dept:	09/21/99
Spill Date:	09/21/99		
Facility Address 2:	Not reported		
Facility Type:	ER		
Referred To :	NIAGARA CNTY HEALTH DEPT	DEC Region :	9
Remediation Phase :	0		
Program Number :	9907461		
Spill Cause:	OTHER		
Water Affected:	Not reported	Spill Source:	INSTITUTIONAL, EDUCATIONAL, GOV., OTHER
Contact Name:	RAVI AJODAH	Facility Tele:	(718) 352-5155
Spill Notifier:	RESPONSIBLE PARTY		
Spiller:	Not reported		
Spiller Company :	DEPARTMENT OF THE ARMY		
Spiller Address:	FORT TOTEN		
	FLUSHING, NY 11359		
Spiller County :	001		
Spill Class:	Known release with minimal potential for fire or hazard. DEC Response.		
	Willing Responsible Party. Corrective action taken.		

Spill Closed Dt: 02/22/00

Cleanup Ceased: / /

Last Inspection: 09/21/99

Cleanup Meets Std:True

Recommended Penalty: Penalty Not Recommended

UST Trust: False

Regional Use: Not reported

Spill Record Last Update: 02/25/00

Date Spill Entered In Computer Data File: 09/21/99

Material

Material ID :	300164
Site ID :	246072
Operable Unit :	01
Operable Unit ID :	1086052
Material Code :	0022
Material Name :	Waste Oil/Used Oil (Not Fuel)
Case No. :	Not reported
Material FA :	Petroleum
Quantity :	0.00
Units :	G
Recovered :	No
Resource Affected - Soil :	Yes
Resource Affected - Air :	No
Resource Affected - Indoor Air :	No
Resource Affected - Groundwater :	No
Resource Affected - Surface Water :	No
Resource Affected - Drinking Wtr :	No
Resource Affected - Sewer :	No

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA FALLS AFRC/AMSA #76(G) (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003316292

Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "SAC-NCHD" 09/21/99: SAC TELECON DAVE DRUST NOTIFYING HIM OF THE SPILL, CHECKED PBS COMPUTER RECORDS & TWO 550 GALLON WASTE OIL TANKS ARE SCHEDULED TO BE REMOVED PER AES, MR. DRUST WILL FOLLOW UP, FAXED COPY OF THE REPORT TO HIM. 09/21/99: SAC TELECON DAVE DRUST, HE IS RESPONDING TO THE REPORT. 09/21/99: SAC TELECON LINDA GRIMMER, EP&S & CONTRACTOR DOING THE REMOVAL, MS. GRIMMER SAID THE TANKS BEING REMOVED ARE ASSOCIATED WITH AND PIPED FROM THE OIL/WATER SEPARATOR, WHEN THEY REMOVED THE TANKS AND THE SEPARATOR NO CONTAMINATED SOIL WAS OBSERVED AND EP&S PUMPED OUT THE SEPARATOR, BUT WHILE REMOVING THE SEPARATOR THE TANK WAS CRACKED AND A SMALL AMOUNT OF GROUNDWATER LEACHED INTO THE TANK AND LEACHED BACK OUT PRODUCING A SHEEN, THEY PUMPED THE SMALL AMOUNT OF GROUNDWATER INTO A 55 GALLON DRUM ALONG WITH THE SEPARATOR CONTENTS THAT WERE PREVIOUSLY PUMPED INTO THE DRUMS, NO CONTAMINATED SOIL WAS OBSERVED DURING THE TANK REMOVAL SO NO SOIL HAS BEEN STAGED FOR DISPOSAL, SOIL SAMPLES HAVE BEEN TAKEN AND NO GROUNDWATER LEACHED BACK INTO THE EXCAVATION SINCE IT WAS PUMPED OUT SO NO GROUNDWATER SAMPLE WAS TAKEN, DAVE MARTIN WAS AT THE SITE DURING THE TELECON, EXCAVATION HAS BEEN PARTIALLY BACKFILLED. 09/22/99: SAC TELECON DAVE MARTIN, NCHD, HE INSPECTED SITE YESTERDAY AND SPOKE WITH RICHARD RAND FROM J.M. WILLER, SPILL WAS CAUSED WHEN TANK SPLIT WHILE BEING REMOVED, THEY HAD ABOUT SIX DRUMS OF GROUNDWATER FROM PUMPING, AND TEN DRUMS OF MATERIAL WERE PUMPED FROM THE TANK ORIGINALLY. 02/03/00: SAC RECEIVED NCHD INSPECTION REPORT FROM DAVE MARTIN, SMALL SPILL THAT AFFECTED THE GROUNDWATER IN THE EXCAVATION, ALL WATER WAS PUMPED OUT AND 16 DRUMS OF WASTE WERE DISPOSED BY ONYX ENVIRONMENTAL SERVICES, SINCE NO CONTAMINATED SOIL WAS FOUND, NO SOIL DISPOSAL OR RECEIPTS, THERE ARE NO CONFIRMATORY SAMPLES RESULTS EITHER. 02/15/00: SAC DISCUSSED SITE WITH RNL, SINCE THIS WAS AN OIL/WATER SEPARATOR THAT WAS REMOVED, CONFIRMATORY SAMPLING IS NOT REQUIRED, SITE CAN BE CLOSED PER RNL. 02/18/00: RECEIVED DISPOSAL RECEIPTS FOR THE CRUSHED FIBERGLASS SEPARATOR TANK AND CONTAMINATED WATER.

Remark: during a tank pull some oil leaked out they are running test

HIST SPILLS:

Spill Number:	9907461	Region of Spill:	9
Investigator:	SAC-NCHD	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spill Date:	09/21/1999 11:00	Reported to Dept:	09/21/99 12:45
Spill Cause:	Other	Resource Affected:	On Land
Water Affected:	Not reported	Spill Source:	Other Non Commercial/Industrial
Facility Contact:	Not reported	Facility Tele:	() -
Spill Notifier:	Responsible Party	PBS Number:	Not reported
Spiller Contact:	RAVI AJODAH	Spiller Phone:	(718) 352-5155
Spiller:	DEPARTMENT OF THE ARMY		
Spiller Address:	FORT TOTEN FLUSHING, NY 11359		

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

NIAGARA FALLS AFRC/AMSA #76(G) (Continued)

U003316292

DEC Remarks : 09/21/99: SAC TELECON DAVE DRUST NOTIFYING HIM OF THE SPILL, CHECKED PBS COMPUTER RECORDS TWO 550 GALLON WASTE OIL TANKS ARE SCHEDULED TO BE REMOVED PER AES, MR. DRUST WILL FOLLOW UP, FAXED COPY OF THE REPORT TO HIM. 09/21/99: SAC TELECON DAVE DRUST, HE IS RESPONDING TO THE REPORT. 09/21/99: SAC TELECON LINDA GRIMMER, EP S CONTRACTOR DOING THE REMOVAL, MS. GRIMMER SAID THE TANKS BEING REMOVED ARE ASSOCIATED WITH AND PIPED FROM THE OIL/WATER SEPARATOR, WHEN THEY REMOVED THE TANKS AND THE SEPARATOR NO CONTAMINATED SOIL WAS OBSERVED AND EP S PUMPED OUT THE SEPARATOR, BUT WHILE REMOVING THE SEPARATOR THE TANK WAS CRACKED AND A SMALL AMOUNT OF GROUNDWATER LEACHED INTO THE TANK AND LEACHED BACK OUT PRODUCING A SHEEN, THEY PUMPED THE SMALL AMOUNT OF GROUNDWATER INTO A 55 GALLON DRUM ALONG WITH THE SEPARATOR CONTENTS THAT WERE PREVIOUSLY PUMPED INTO THE DRUMS, NO CONTAMINATED SOIL WAS OBSERVED DURING THE TANK REMOVAL SO NO SOIL HAS BEEN STAGED FOR DISPOSAL, SOIL SAMPLES HAVE BEEN TAKEN AND NO GROUNDWATER LEACHED BACK INTO THE EXCAVATION SINCE IT WAS PUMPED OUT SO NO GROUNDWATER SAMPLE WAS TAKEN, DAVE MARTIN WAS AT THE SITE DURING THE TELECON, EXCAVATION HAS BEEN PARTIALLY BACKFILLED. 09/22/99: SAC TELECON DAVE MARTIN, NC HD, HE INSPECTED SITE YESTERDAY AND SPOKE WITH RICHARD RAND FROM J.M. WILLER, SPILL WAS CAUSED WHEN TANK SPLIT WHILE BEING REMOVED, THEY HAD ABOUT SIX DRUMS OF GROUNDWATER FROM PUMPING, AND TEN DRUMS OF MATERIAL WERE PUMPED FROM THE TANK ORIGINALLY. 02/03/00: SAC RECEIVED NCHD INSPECTION REPORT FROM DAVE MARTIN, SMALL SPILL THAT AFFECTED THE GROUNDWATER IN THE EXCAVATION, ALL WATER WAS PUMPED OUT AND 16 DRUMS OF WATER WAS DISPOSED BY ONYX ENVIRONMENTAL SERVICES, SINCE NO CONTAMINATED SOIL WAS FOUND, NO SOIL DISPOSAL OR RECEIPTS, THERE ARE NO CONFIRMATORY SAMPLES RESULTS EITHER. 02/15/00: SAC DISCUSSED SITE WITH RNL, SINCE THIS WAS AN OIL/WATER SEPARATOR THAT WAS REMOVED, CONFIRMATORY SAMPLING IS NOT REQUIRED, SITE CAN BE CLOSED PER RNL. 02/18/00: RECEIVED DISPOSAL RECEIPTS FOR THE CRUSHED FIBERGLASS SEPARATOR TANK AND CONTAMINATED WATER.

Remark: during a tank pull some oil leaked out they are running test

Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

Material:

Material Class Type: 1
Quantity Spilled: 0
Units: Gallons
Unknown Qty Spilled: No
Quantity Recovered: 0
Unknown Qty Recovered: True
Material: WASTE OIL
Class Type: Petroleum
Chem Abstract Service Number: WASTE OIL
Last Date: 09/27/1994
Num Times Material Entry In File: 9509

Spill Closed Dt: 02/22/00

Cleanup Ceased: / /

Last Inspection: 09/21/99

Recommended Penalty: Penalty Not Recommended

Spiller Cleanup Dt/ /

Invstgn Complete:/ /

Spill Record Last Update: 02/25/00

Is Updated: False

Cleanup Meets Std:True

Enforcement Date: / /

UST Involvement: False

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA FALLS AFRC/AMSA #76(G) (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003316292

Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 09/21/99
Date Region Sent Summary to Central Office: / /

PBS UST:

PBS Number:	9-008877	CBS Number:	Not reported
SPDES Number:	Not reported	SWIS ID:	2911
Operator:	MR HOGAN (716) 297-7200		
Emergency Contact:	PAUL BERTRAND (718) 352-2092		
Total Tanks:	1		
Owner:	77TH REGIONAL SUPPORT COMMAND AFRC-CNY-EN, BLDG 200 FT TOTTEN, NY 11359 (718) 352-5624		
Owner Type:	Corporate/Commercial		
Owner Mark:	First Owner		
Owner Subtype:	Not reported		
Mailing Address:	77TH REGIONAL SUPPORT COMMAND ATTN: ENVIRONMENTAL DIVISION AFRC-CNY-EN BUILDING 200 FT TOTTEN, NY 11359 (718) 352-2092		
Tank Status:	Closed - Removed		
Capacity (gals):	3000		
Tank Location:	UNDERGROUND		
Tank Id:	RA1	Install Date:	06/01/1966
Tank Type:	Steel/carbon steel	Product Stored:	UNLEADED GASOLINE
Tank Internal:	Not reported	Pipe Internal:	Not reported
Pipe Location:	1	Pipe Type:	STEEL/IRON
Tank External:	Not reported		
Missing Data for Tank:	Minor Data Missing		
Pipe External:	Not reported		
Second Containment:	NONE		
Leak Detection:	NONE		
Overfill Prot:	Product Level Gauge	Dispenser:	Suction
Date Tested:	Not reported	Next Test Date:	Not reported
Date Closed:	07/01/1990	Test Method:	Not reported
Deleted:	False	Updated:	True
Dead Letter:	False	Owner Screen:	Minor data missing
FAMT:	Fiscal amount for registration fee is correct		
Total Capacity:	528	Renewal Date:	Not reported
Tank Screen:	No data missing	Federal ID:	Not reported
Renew Flag:	Renwal has not been printed	Facility Screen:	No data missing
Certification Flag:	False	Certification Date:	01/19/2001
Old PBS Number:	Not reported	Expiration Date:	01/17/2006
Inspected Date:	07/09/1990	Inspector:	JFO
Inspection Result:	Not reported		
Lat/long:	Not reported		
Facility Type:	OTHER		
Town or City:	NIAGARA FALLS (C)		
Town or City Code:	11		
County Code:	29		
Region:	9		

PBS Number: 9-008877 CBS Number: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA FALLS AFRC/AMSA #76(G) (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003316292

SPDES Number:	Not reported	SWIS ID:	2911
Operator:	MR HOGAN (716) 297-7200		
Emergency Contact:	PAUL BERTRAND (718) 352-2092		
Total Tanks:	1		
Owner:	77TH REGIONAL SUPPORT COMMAND AFRC-CNY-EN, BLDG 200 FT TOTTEN, NY 11359 (718) 352-5624		
Owner Type:	Corporate/Commercial		
Owner Mark:	First Owner		
Owner Subtype:	Not reported		
Mailing Address:	77TH REGIONAL SUPPORT COMMAND ATTN: ENVIRONMENTAL DIVISION AFRC-CNY-EN BUILDING 200 FT TOTTEN, NY 11359 (718) 352-2092		
Tank Status:	Closed - Removed		
Capacity (gals):	10000		
Tank Location:	UNDERGROUND, VAULTED, WITH ACCESS		
Tank Id:	RA2	Install Date:	06/01/1965
Tank Type:	Steel/carbon steel	Product Stored:	NOS 1,2, OR 4 FUEL OIL
Tank Internal:	Not reported	Pipe Internal:	Not reported
Pipe Location:	1	Pipe Type:	STEEL/IRON
Tank External:	Not reported		
Missing Data for Tank:	Minor Data Missing		
Pipe External:	Not reported		
Second Containment:	NONE/VAULT		
Leak Detection:	NONE		
Overfill Prot:	Product Level Gauge	Dispenser:	Suction
Date Tested:	Not reported	Next Test Date:	Not reported
Date Closed:	10/01/1991	Test Method:	Not reported
Deleted:	False	Updated:	True
Dead Letter:	False	Owner Screen:	Minor data missing
FAMT:	Fiscal amount for registration fee is correct		
Total Capacity:	528	Renewal Date:	Not reported
Tank Screen:	No data missing	Federal ID:	Not reported
Renew Flag:	Renwal has not been printed	Facility Screen:	No data missing
Certification Flag:	False	Certification Date:	01/19/2001
Old PBS Number:	Not reported	Expiration Date:	01/17/2006
Inspected Date:	07/09/1990	Inspector:	JFO
Inspection Result:	Not reported		
Lat/long:	Not reported		
Facility Type:	OTHER		
Town or City:	NIAGARA FALLS (C)		
Town or City Code:	11		
County Code:	29		
Region:	9		
PBS Number:	9-008877	CBS Number:	Not reported
SPDES Number:	Not reported	SWIS ID:	2911
Operator:	MR HOGAN (716) 297-7200		
Emergency Contact:	PAUL BERTRAND (718) 352-2092		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA FALLS AFRC/AMSA #76(G) (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003316292

Total Tanks:	1		
Owner:	77TH REGIONAL SUPPORT COMMAND		
	AFRC-CNY-EN, BLDG 200		
	FT TOTTEN, NY 11359		
	(718) 352-5624		
Owner Type:	Corporate/Commercial		
Owner Mark:	First Owner		
Owner Subtype:	Not reported		
Mailing Address:	77TH REGIONAL SUPPORT COMMAND		
	ATTN: ENVIRONMENTAL DIVISION		
	AFRC-CNY-EN		
	BUILDING 200		
	FT TOTTEN, NY 11359		
	(718) 352-2092		
Tank Status:	Closed - Removed		
Capacity (gals):	20000		
Tank Location:	UNDERGROUND, VAULTED, WITH ACCESS		
Tank Id:	RA3	Install Date:	06/01/1965
Tank Type:	Steel/carbon steel	Product Stored:	NOS 1,2, OR 4 FUEL OIL
Tank Internal:	Not reported	Pipe Internal:	Not reported
Pipe Location:	1	Pipe Type:	STEEL/IRON
Tank External:	Not reported		
Missing Data for Tank:	Minor Data Missing		
Pipe External:	Not reported		
Second Containment:	NONE/VAULT		
Leak Detection:	NONE		
Overfill Prot:	Product Level Gauge	Dispenser:	Suction
Date Tested:	Not reported	Next Test Date:	Not reported
Date Closed:	10/01/1991	Test Method:	Not reported
Deleted:	False	Updated:	True
Dead Letter:	False	Owner Screen:	Minor data missing
FAMT:	Fiscal amount for registration fee is correct		
Total Capacity:	528	Renewal Date:	Not reported
Tank Screen:	No data missing	Federal ID:	Not reported
Renew Flag:	Renwal has not been printed	Facility Screen:	No data missing
Certification Flag:	False	Certification Date:	01/19/2001
Old PBS Number:	Not reported	Expiration Date:	01/17/2006
Inspected Date:	07/09/1990	Inspector:	JFO
Inspection Result:	Not reported		
Lat/long:	Not reported		
Facility Type:	OTHER		
Town or City:	NIAGARA FALLS (C)		
Town or City Code:	11		
County Code:	29		
Region:	9		
PBS AST:			
PBS Number:	9-008877	CBS Number:	Not reported
SPDES Number:	Not reported	SWIS Code:	2911
Federal ID:	Not reported	Previous PBS#:	Not reported
Facility Status:	4 - Subpart 360-14 only (active)		
Facility Type:	OTHER		
Owner Type:	Corporate/Commercial		
Owner Sub Type:	Not reported		
Owner:	77TH REGIONAL SUPPORT COMMAND		
	AFRC-CNY-EN, BLDG 200		
	FT TOTTEN, NY 11359		
Owner Phone:	(718) 352-5624		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA FALLS AFRC/AMSA #76(G) (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003316292

Facility Phone: (716) 297-7200
Operator: MR HOGAN
Emergency Name: PAUL BERTRAND
Emergency Phone: (718) 352-2092
Total Tanks: 1
Total Capacity: 528
Tank ID: WO9
Capacity (Gal): 528
Missing Data for Tank : No data missing
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Product Stored: USED OIL
Tank Type: Steel/carbon steel
Install Date: 09/01/1999
Tank Internal: NONE
Tank External: NONE/PAINTED/ASPHALT COATING
Tank Containment: NONE/DOUBLED-WALLED TANK
Pipe Type: NONE
Pipe Location: None
Pipe Internal: NONE
Pipe External: NONE/NONE
Leak Detection: NONE/OTHER
Overfill Protection: Product Level Gauge
Dispenser Method: Suction
Date Tested: / /
Date Closed: / /
Updated: True
Date Inspected: 07/09/1990
Result of Inspection: Not reported
Mailing Name: 77TH REGIONAL SUPPORT COMMAND
Mailing Address: AFRC-CNY-EN
BUILDING 200
FT TOTTEN, NY 11359
Mailing Contact: ENVIRONMENTAL DIVISION
Mailing Telephone: (718) 352-2092
Owner Mark: First Owner
Certification Flag: False
Renew Flag: False
Lat/Long: Not reported
Dead Letter: False
Facility Screen: No data missing
Owner Screen: Minor data missing
Tank Screen: No data missing
Town or City: NIAGARA FALLS (C)
Town or City Code: 11
County Code: 29
Region: 9
Fiscal Amount for Registration Fee is Correct: True

Next Test Date: / /
Test Method: Not reported
Deleted: False
Inspector: JFO

Expiration Date: 01/17/2006
Certification Date: 01/19/2001
Renew Date: / /

A6
Target
Property
NIAGARA FALLS RESERVE CENTER
9400 PORTER RD
NIAGARA FALLS, NY 14304

RCRA-SQG 1000232912
NYD981875206

Actual:
577 ft.
Site 6 of 10 in cluster A

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA FALLS RESERVE CENTER (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000232912

RCRAInfo:

Owner: FT DRUM
(212) 555-1212
EPA ID: NYD981875206
Contact: Not reported
Classification: Small Quantity Generator
TSDF Activities: Not reported
Violation Status: No violations found

A7
Target
Property

ARMY RESERVES
9400 PORTER ROAD
NIAGARA FALLS, NY

NY Spills S104498022
NY Hist Spills N/A

Site 7 of 10 in cluster A

Actual:
577 ft.

SPILLS:

DER Facility ID : 202076
Site ID : 246071
Spill Number: 9107717
Investigator: COOKE
Caller Name: CHARLES MURDOUGH
Caller Phone: (716) 675-7780
Notifier Name: Not reported
Notifier Phone: Not reported
Spill Date: 10/18/91
Facility Address 2: Not reported
Facility Type: ER
Referred To : Not reported
Remediation Phase : 0
Program Number : 9107717
Spill Cause: OTHER
Water Affected: Not reported
Contact Name: Not reported
Spill Notifier: OTHER
Spiller: Not reported
Spiller Company : UNITED STATES ARMY
Spiller Address: ZZ
Spiller County : 001
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.

CID : 29
Region of Spill: 9
SWIS: 3211
Caller Agency: POLLUTION ASSESSMENT
Caller Extension: Not reported
Notifier Agency: Not reported
Notifier Extension: Not reported
Reported to Dept: 10/18/91

DEC Region : 9

Spill Source: INSTITUTIONAL, EDUCATIONAL, GOV., OTHER
Facility Tele: Not reported

Spill Closed Dt: 03/06/92
Cleanup Ceased: 03/06/92
Last Inspection: / /
Recommended Penalty: Penalty Not Recommended
UST Trust: False
Regional Use: Not reported
Spill Record Last Update: 04/09/93
Date Spill Entered In Computer Data File: 10/25/91

Cleanup Meets Std: True

Material

Material ID : 419909
Site ID : 246071
Operable Unit : 01
Operable Unit ID : 961792
Material Code : 0001
Material Name : #2 Fuel Oil
Case No. : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

ARMY RESERVES (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104498022

Material FA : Petroleum
Quantity : 200.00
Units : G
Recovered : No
Resource Affected - Soil : No
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : Yes
Resource Affected - Surface Water : No
Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "JDC"
10/18/91: TANK RUPTURED WHILE BEING REMOVED. SILLAGE HELD IN CONCRETE
VAULT AND SORBENTS. CLEANUP UNDERWAY ACCORDING TO MR MURDOUGH. NCHD
NOTIFIED AND WILL FOLLOWUP. 03/06/92
: SORBENTS USED AND DISPOSED OF. NO FURTHER ACTION REQUIRED.
Remark: TANK RUPTURED WHILE BEING REMOVED

HIST SPILLS:

Spill Number:	9107717	Region of Spill:	9
Investigator:	JDC	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spill Date:	10/18/1991 11:50	Reported to Dept:	10/18/91 12:20
Spill Cause:	Other	Resource Affected:	Groundwater
Water Affected:	Not reported	Spill Source:	Other Non Commercial/Industrial
Facility Contact:	Not reported	Facility Tele:	(716) 297-7909
Spill Notifier:	Other	PBS Number:	Not reported
Spiller Contact:	Not reported	Spiller Phone:	Not reported
Spiller:	UNITED STATES ARMY		
Spiller Address:	Not reported		

DEC Remarks : 10/18/91: TANK RUPTURED WHILE BEING REMOVED. SILLAGE HELD IN CONCRETE
VAULT AND SORBENTS. CLEANUP UNDERWAY ACCORDING TO MR MURDOUGH. NCHD
NOTIFIED AND WILL FOLLOWUP. 03/06/92: SORBENTS USED AND DISPOSED OF.
NO FURTHER ACTION REQUIRED.
Remark: TANK RUPTURED WHILE BEING REMOVED
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

Material:

Material Class Type: 1
Quantity Spilled: 200
Units: Gallons
Unknown Qty Spilled: 200
Quantity Recovered: 0
Unknown Qty Recovered: False
Material: #2 FUEL OIL
Class Type: Petroleum
Chem Abstract Service Number: #2 FUEL OIL
Last Date: 12/07/1994
Num Times Material Entry In File: 24464
Spill Closed Dt: 03/06/92

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

ARMY RESERVES (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104498022

Cleanup Ceased: 03/06/92
Last Inspection: / /
Recommended Penalty: Penalty Not Recommended
Spiller Cleanup Dt/ /
Invstgn Complete:/ /
Spill Record Last Update: 04/09/93
Is Updated: False
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 10/25/91
Date Region Sent Summary to Central Office: / /

Cleanup Meets Std:True
Enforcement Date: / /
UST Involvement: False

A8
Target
Property

NIAGARA FALLS AIRPORT
9400 PORTER ROAD NFAFB
NIAGARA FALLS, NY

NY Spills
NY Hist Spills

S102178092
N/A

Site 8 of 10 in cluster A

Actual:
577 ft.

SPILLS:

DER Facility ID : 283127
Site ID : 156906
Spill Number: 9975739
Investigator: SACALAND
Caller Name: PAUL DICKY
Caller Phone: (716) 851-7443
Notifier Name: Not reported
Notifier Phone: Not reported
Spill Date: 12/03/99
Facility Address 2:Not reported
Facility Type: ER
Referred To : NIAGARA CNTY HEALTH DEPT
Remediation Phase : 0
Program Number : 9975739
Spill Cause: EQUIPMENT FAILURE
Water Affected: Not reported
Contact Name: MELVIN SHAKHAN
Spill Notifier: HEALTH DEPARTMENT
Spiller: MELVIN SHAKHAN
Spiller Company : TECH AVIATION
Spiller Address: 9900 PORTER ROAD
NIAGARA FALLS, NY 14304
Spiller County : 001
Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

CID : Not reported
Region of Spill: 9
SWIS: 3200
Caller Agency: NCHD
Caller Extension: Not reported
Notifier Agency: Not reported
Notifier Extension: Not reported
Reported to Dept: 12/03/99
DEC Region : 9
Spill Source: NON MAJOR FACILITY > 1,100 GAL
Facility Tele: (716) 298-9307

Spill Closed Dt: 03/28/00

Cleanup Ceased: / /
Last Inspection: 12/09/99
Recommended Penalty: Penalty Not Recommended
UST Trust: False
Regional Use: Not reported
Spill Record Last Update: 03/31/00
Date Spill Entered In Computer Data File: 03/23/00

Cleanup Meets Std:True

Material
Material ID : 290287
Site ID : 156906
Operable Unit : 01
Operable Unit ID : 1091874
Material Code : 0011
Material Name : Jet Fuel
Case No. : Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA FALLS AIRPORT (Continued)

EDR ID Number
EPA ID Number

Database(s)

S102178092

Material FA : Petroleum
Quantity : 50.00
Units : G
Recovered : 50
Resource Affected - Soil : Yes
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : No
Resource Affected - Surface Water : No
Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was
"SAC-NCHD" 12/03/00: SAC TELECON PAUL DICKY, NCHD, HE WAS NOTIFIED OF
THE SPILL BY THURMAN JAMES, NFTA GROUND FOREMAN, HE IS FOLLOWING UP.
03/23/00: SAC TELECON PAUL DICKY, HE SAI
D SPILL CLEANED UP AND HE HAS DISPOSAL RECEIPTS AND WILL SEND IN
INSPECTION REPORT FOR CLOSEOUT. 03/27/00: SAC RECEIVED NCHD
INSPECTION REPORT FROM PAUL DICKY, INCLUDING DISPOSAL RECEIPTS, SPILL
CLEANED UP.

Remark: WHILE FILLING FUEL TRUCK FOR AIRCRAFT AUTOSHUT OFF ON FUEL TRUCK FAILED
TO SHUT OFF
This is the most recent NY SPILLS record for this site.

[Click this hyperlink](#) while viewing on your computer to access
additional NY SPILLS detail in the EDR Site Report.

HIST SPILLS:

Spill Number:	9975739	Region of Spill:	9
Investigator:	SAC-NCHD	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spill Date:	12/02/1999 22:00	Reported to Dept:	12/03/99 13:10
Spill Cause:	Equipment Failure	Resource Affected:	On Land
Water Affected:	Not reported	Spill Source:	Non Major Facility > 1,100 gallons
Facility Contact:	MELVIN SHAKHAN	Facility Tele:	(716) 298-9307
Spill Notifier:	Health Department	PBS Number:	Not reported
Spiller Contact:	MELVIN SHAKHAN	Spiller Phone:	(716) 298-9307
Spiller:	TECH AVIATION		
Spiller Address:	9900 PORTER ROAD NIAGARA FALLS, NY 14304		

DEC Remarks : 12/03/00: SAC TELECON PAUL DICKY, NCHD, HE WAS NOTIFIED OF THE SPILL BY
THURMAN JAMES, NFTA GROUND FOREMAN, HE IS FOLLOWING UP. 03/23/00: SAC
TELECON PAUL DICKY, HE SAID SPILL CLEANED UP AND HE HAS DISPOSAL
RECEIPTS AND WILL SEND IN INSPECTION RE
PORT FOR CLOSEOUT. 03/27/00: SAC RECEIVED NCHD INSPECTION REPORT FROM
PAUL DICKY, INCLUDING DISPOSAL RECEIPTS, SPILL CLEANED UP.

Remark: WHILE FILLING FUEL TRUCK FOR AIRCRAFT AUTOSHUT OFF ON FUEL TRUCK FAILED
TO SHUT OFF

Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

Material:

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

NIAGARA FALLS AIRPORT (Continued)

S102178092

Material Class Type: 1
Quantity Spilled: 50
Units: Gallons
Unknown Qty Spilled: 50
Quantity Recovered: 50
Unknown Qty Recovered: False
Material: JET FUEL
Class Type: Petroleum
Chem Abstract Service Number: JET FUEL
Last Date: 07/28/1994
Num Times Material Entry In File: 1264
Spill Closed Dt: 03/28/00
Cleanup Ceased: / /
Last Inspection: 12/09/99
Recommended Penalty: Penalty Not Recommended
Spiller Cleanup Dt/ /
Invstgn Complete:/ /
Spill Record Last Update: 03/31/00
Is Updated: False
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 03/23/00 10:22
Date Region Sent Summary to Central Office: / /

Cleanup Meets Std:True

Enforcement Date: / /

UST Involvement: False

This is the most recent NY HISTORIC SPILLS record for this site.

[Click this hyperlink](#) while viewing on your computer to access additional NY HIST SPILLS detail in the EDR Site Report.

A9 FORT DRUM ARM SERVICES
Target 9400 PORTER RD
Property NIAGARA FALLS, NY 14304

NY MANIFEST 1009226225
 N/A

Site 9 of 10 in cluster A

Actual:
577 ft.

NY MANIFEST:
Document ID: NYC2407645
Manifest Status: K
Trans1 State ID: NYCL9286
Trans2 State ID: Not reported
Generator Ship Date: 930708
Trans1 Recv Date: 930708
Trans2 Recv Date: Not reported
TSD Site Recv Date: 930708
Part A Recv Date: Not reported
Part B Recv Date: 930816
Generator EPA ID: NYD010424273
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDF ID: NYD981556541
Waste Code: D001 - NON-LISTED IGNITABLE WASTES
Quantity: 00006
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: R Material recovery of more than 75 percent of the total material.
Specific Gravity: 100
Year: 93
Facility Type: Generator
EPA ID: NYD010424273
Facility Name: FORT DRUM ARM SERVICES

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

FORT DRUM ARM SERVICES (Continued)

EDR ID Number
EPA ID Number

Database(s)

1009226225

Facility Address: 9400 PORTER RD
Facility City: NIAGARA FALLS
Facility Zip 4: Not reported
Country: Not reported
County: NIAGARA
Mailing Name: FORT DRUM ARM FORCES CENTER
Mailing Contact: EDMUND ZIEZINSKI
Mailing Address: 9400 PORTER ROAD, BLDG 18
Mailing City: NIAGARA FALLS
Mailing State: NY
Mailing Zip: 14304
Mailing Zip4: Not reported
Mailing Country: Not reported
Mailing Phone: 716-297-7200

[Click this hyperlink](#) while viewing on your computer to access additional NY MANIFEST: detail in the EDR Site Report.

**A10
West
< 1/8
46 ft.**

**NIAGARA MOHAWK POLE
9401 PORTER ROAD
NIAGARA FALLS, NY**

**NY Spills S103937442
NY Hist Spills N/A**

Site 10 of 10 in cluster A

**Relative:
Lower**

SPILLS:

**Actual:
576 ft.**

DER Facility ID : 174152
Site ID : 210076
Spill Number: 9901922
Investigator: BRENNAN
Caller Name: WILLIAM HESSON
Caller Phone: (716) 236-2710
Notifier Name: Not reported
Notifier Phone: Not reported
Spill Date: 05/19/99
Facility Address 2: Not reported
Facility Type: ER
Referred To : Not reported
Remediation Phase : 0
Program Number : 9901922
Spill Cause: OTHER
Water Affected: Not reported
Contact Name: Not reported
Spill Notifier: RESPONSIBLE PARTY
Spiller: WILLIAM HESSON
Spiller Company : NIAGARA MOHAWK
Spiller Address: 1720 NEW ROAD
NIAGARA FALLS, NY 14304
Spiller County : 001
Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.
Spill Closed Dt: 05/19/99
Cleanup Ceased: / /
Last Inspection: / /
Recommended Penalty: Penalty Not Recommended
UST Trust: False
Regional Use: Not reported
Spill Record Last Update: 06/01/99
CID : 29
Region of Spill: 9
SWIS: 3211
Caller Agency: NIAGARA MOHAWK
Caller Extension: Not reported
Notifier Agency: Not reported
Notifier Extension: Not reported
Reported to Dept: 05/19/99
DEC Region : 9
Spill Source: COMMERCIAL/INDUSTRIAL
Facility Tele: Not reported
Cleanup Meets Std: True

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA MOHAWK POLE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103937442

Date Spill Entered In Computer Data File: 05/19/99

Material

Material ID : 305449
Site ID : 210076
Operable Unit : 01
Operable Unit ID : 1080688
Material Code : 0020A
Material Name : TRANSFORMER OIL
Case No. : Not reported
Material FA : Petroleum
Quantity : 3.00
Units : G

Recovered : 3
Resource Affected - Soil : Yes
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : No
Resource Affected - Surface Water : No
Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "KAB"
05/19/99: KAB RECEIVED REPORT OF MINOR SPILLAGE OF 3 GALLONS OF
TRANSFORMER OIL. SPILLAGE WAS CLEANED UP BY NIAGARA MOHAWK CREW. FAXED
COPY OF REPORT TO NCHD. NO FURTHER ACTION
NECESSARY. CLOSE OUT.

Remark: possible that transformer was struck by lightning causing transformer to
leak. cleanup in progress now.

HIST SPILLS:

Spill Number:	9901922	Region of Spill:	9
Investigator:	KAB	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spill Date:	05/19/1999 10:30	Reported to Dept:	05/19/99 14:06
Spill Cause:	Other	Resource Affected:	On Land
Water Affected:	Not reported	Spill Source:	Other Commercial/Industrial
Facility Contact:	WILLIAM HESSON	Facility Tele:	(716) 236-2710
Spill Notifier:	Responsible Party	PBS Number:	Not reported
Spiller Contact:	Not reported	Spiller Phone:	Not reported
Spiller:	NIAGARA MOHAWK		
Spiller Address:	1720 NEW ROAD NIAGARA FALLS, NY 14304		

DEC Remarks : 05/19/99: KAB RECEIVED REPORT OF MINOR SPILLAGE OF 3 GALLONS OF
TRANSFORMER OIL. SPILLAGE WAS CLEANED UP BY NIAGARA MOHAWK CREW. FAXED
COPY OF REPORT TO NCHD. NO FURTHER ACTION NECESSARY. CLOSE OUT.

Remark: possible that transformer was struck by lightning causing transformer to
leak. cleanup in progress now.

Spill Class: Possible release with minimal potential for fire or hazard or Known
release with no damage. DEC Response. Willing Responsible Party.
Corrective action taken.

Material:

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NIAGARA MOHAWK POLE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103937442

Material Class Type: 1
Quantity Spilled: 3
Units: Gallons
Unknown Qty Spilled: 3
Quantity Recovered: 3
Unknown Qty Recovered: False
Material: TRANSFORMER OIL
Class Type: Petroleum
Chem Abstract Service Number: TRANSFORMER OIL
Last Date: 09/26/1994
Num Times Material Entry In File: 533
Spill Closed Dt: 05/19/99
Cleanup Ceased: / /
Last Inspection: / /
Recommended Penalty: Penalty Not Recommended
Spiller Cleanup Dt: / /
Invstgn Complete: / /
Spill Record Last Update: 06/01/99
Is Updated: False
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 05/19/99
Date Region Sent Summary to Central Office: / /
Cleanup Meets Std: True
Enforcement Date: / /
UST Involvement: False

11
ENE
< 1/8
200 ft.

CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304

UST U003079275
AST N/A

Relative:
Higher

Actual:
578 ft.

PBS UST:
PBS Number: 9-040452 CBS Number: 9-000212
SPDES Number: Not reported SWIS ID: 2911
Operator: CECOS INTERNATIONAL INC
(716) 282-2676
Emergency Contact: SAM RICOTTA
(716) 754-7753
Total Tanks: 0
Owner: CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304
(716) 282-2676
Owner Type: Not reported
Owner Mark: First Owner
Owner Subtype: Not reported
Mailing Address: CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304
(716) 282-2676
Tank Status: Closed Prior to 04/91 (Either Closed In-Place or Removed)
Capacity (gals): 6000
Tank Location: UNDERGROUND
Tank Id: CS1 Install Date: Not reported
Tank Type: Steel/carbon steel Product Stored: DIESEL
Tank Internal: Not reported Pipe Internal: Not reported
Pipe Location: 2 Pipe Type: GALVANIZED STEEL
Tank External: Not reported
Missing Data for Tank: Minor Data Missing
Pipe External: Not reported
Second Containment: NONE
Leak Detection: NONE

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003079275

Overfill Prot:	2	Dispenser:	Suction
Date Tested:	12/01/1987	Next Test Date:	Not reported
Date Closed:	Not reported	Test Method:	PETRO-TITE
Deleted:	False	Updated:	False
Dead Letter:	False	Owner Screen:	Minor data missing
FAMT:	Fiscal amount for registration fee is correct		
Total Capacity:	0	Renewal Date:	Not reported
Tank Screen:	0	Federal ID:	Not reported
Renew Flag:	Renwal has not been printed	Facility Screen:	No data missing
Certification Flag:	False	Certification Date:	11/14/1986
Old PBS Number:	Not reported	Expiration Date:	11/14/1991
Inspected Date:	Not reported	Inspector:	Not reported
Inspection Result:	Not reported		
Lat/long:	Not reported		
Facility Type:	TRUCKING/TRANSPORTATION, OTHER		
Town or City:	NIAGARA FALLS (C)		
Town or City Code:	11		
County Code:	29		
Region:	9		
PBS Number:	9-040452	CBS Number:	9-000212
SPDES Number:	Not reported	SWIS ID:	2911
Operator:	CECOS INTERNATIONAL INC (716) 282-2676		
Emergency Contact:	SAM RICOTTA (716) 754-7753		
Total Tanks:	0		
Owner:	CECOS INTERNATIONAL INC BOX 340 L P O NIAGARA FALLS, NY 14304 (716) 282-2676		
Owner Type:	Not reported		
Owner Mark:	First Owner		
Owner Subtype:	Not reported		
Mailing Address:	CECOS INTERNATIONAL INC BOX 340 L P O NIAGARA FALLS, NY 14304 (716) 282-2676		
Tank Status:	Closed Prior to 04/91 (Either Closed In-Place or Removed)		
Capacity (gals):	2000		
Tank Location:	UNDERGROUND		
Tank Id:	CS2	Install Date:	Not reported
Tank Type:	Steel/carbon steel	Product Stored:	DIESEL
Tank Internal:	Not reported	Pipe Internal:	Not reported
Pipe Location:	2	Pipe Type:	GALVANIZED STEEL
Tank External:	Not reported		
Missing Data for Tank:	Minor Data Missing		
Pipe External:	Not reported		
Second Containment:	NONE		
Leak Detection:	NONE		
Overfill Prot:	2	Dispenser:	Suction
Date Tested:	12/01/1987	Next Test Date:	Not reported
Date Closed:	Not reported	Test Method:	PETRO-TITE
Deleted:	False	Updated:	False
Dead Letter:	False	Owner Screen:	Minor data missing
FAMT:	Fiscal amount for registration fee is correct		
Total Capacity:	0	Renewal Date:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003079275

Tank Screen:	0	Federal ID:	Not reported
Renew Flag:	Renwal has not been printed	Facility Screen:	No data missing
Certification Flag:	False	Certification Date:	11/14/1986
Old PBS Number:	Not reported	Expiration Date:	11/14/1991
Inspected Date:	Not reported	Inspector:	Not reported
Inspection Result:	Not reported		
Lat/long:	Not reported		
Facility Type:	TRUCKING/TRANSPORTATION, OTHER		
Town or City:	NIAGARA FALLS (C)		
Town or City Code:	11		
County Code:	29		
Region:	9		
PBS Number:	9-040452	CBS Number:	9-000212
SPDES Number:	Not reported	SWIS ID:	2911
Operator:	CECOS INTERNATIONAL INC (716) 282-2676		
Emergency Contact:	SAM RICOTTA (716) 754-7753		
Total Tanks:	0		
Owner:	CECOS INTERNATIONAL INC BOX 340 L P O NIAGARA FALLS, NY 14304 (716) 282-2676		
Owner Type:	Not reported		
Owner Mark:	First Owner		
Owner Subtype:	Not reported		
Mailing Address:	CECOS INTERNATIONAL INC BOX 340 L P O NIAGARA FALLS, NY 14304 (716) 282-2676		
Tank Status:	Closed Prior to 04/91 (Either Closed In-Place or Removed)		
Capacity (gals):	1000		
Tank Location:	UNDERGROUND		
Tank Id:	CS3	Install Date:	Not reported
Tank Type:	Steel/carbon steel	Product Stored:	UNLEADED GASOLINE
Tank Internal:	Not reported	Pipe Internal:	Not reported
Pipe Location:	2	Pipe Type:	GALVANIZED STEEL
Tank External:	Not reported		
Missing Data for Tank:	Minor Data Missing		
Pipe External:	Not reported		
Second Containment:	NONE		
Leak Detection:	NONE		
Overfill Prot:	2	Dispenser:	Suction
Date Tested:	Not reported	Next Test Date:	Not reported
Date Closed:	Not reported	Test Method:	Not reported
Deleted:	False	Updated:	False
Dead Letter:	False	Owner Screen:	Minor data missing
FAMT:	Fiscal amount for registration fee is correct		
Total Capacity:	0	Renewal Date:	Not reported
Tank Screen:	0	Federal ID:	Not reported
Renew Flag:	Renwal has not been printed	Facility Screen:	No data missing
Certification Flag:	False	Certification Date:	11/14/1986
Old PBS Number:	Not reported	Expiration Date:	11/14/1991
Inspected Date:	Not reported	Inspector:	Not reported
Inspection Result:	Not reported		
Lat/long:	Not reported		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003079275

Facility Type: TRUCKING/TRANSPORTATION, OTHER
Town or City: NIAGARA FALLS (C)
Town or City Code: 11
County Code: 29
Region: 9

PBS AST:
PBS Number: 9-040452 CBS Number: 9-000212
SPDES Number: Not reported SWIS Code: 2911
Federal ID: Not reported Previous PBS#: Not reported
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons) and Subpart 360-14.

Facility Type: TRUCKING/TRANSPORTATION
OTHER

Owner Type: Not reported
Owner Sub Type: Not reported
Owner: CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304

Owner Phone: (716) 282-2676
Facility Phone: (716) 282-2676
Operator: CECOS INTERNATIONAL INC
Emergency Name: SAM RICOTTA
Emergency Phone: (716) 754-7753
Total Tanks: 0
Total Capacity: 0
Tank ID: CS4
Capacity (Gal): 250
Missing Data for Tank : Minor data missing
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Product Stored: DIESEL
Tank Type: Steel/carbon steel
Install Date: / /
Tank Internal: Not reported
Tank External: Not reported
Tank Containment: NONE
Pipe Type: GALVANIZED STEEL
Pipe Location: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Leak Detection: NONE
Overfill Protection: Not reported
Dispenser Method: Gravity
Date Tested: / / Next Test Date: / /
Date Closed: / / Test Method: Not reported
Updated: False Deleted: False
Date Inspected: Not reported Inspector: Not reported
Result of Inspection: Not reported
Mailing Name: CECOS INTERNATIONAL INC
Mailing Address: BOX 340 L P O
NIAGARA FALLS, NY 14304

Mailing Contact: Not reported
Mailing Telephone: (716) 282-2676
Owner Mark: First Owner Expiration Date: 11/14/1991
Certification Flag: False Certification Date: 11/14/1986
Renew Flag: False Renew Date: / /
Lat/Long: Not reported
Dead Letter: False

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003079275

Facility Screen: No data missing
Owner Screen: Minor data missing
Tank Screen: 0
Town or City: NIAGARA FALLS (C)
Town or City Code: 11
County Code: 29
Region: 9
Fiscal Amount for Registration Fee is Correct: True

PBS Number: 9-040452 CBS Number: 9-000212
SPDES Number: Not reported SWIS Code: 2911
Federal ID: Not reported Previous PBS#: Not reported
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons) and
Subpart 360-14.

Facility Type: TRUCKING/TRANSPORTATION
OTHER

Owner Type: Not reported
Owner Sub Type: Not reported
Owner: CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304

Owner Phone: (716) 282-2676
Facility Phone: (716) 282-2676
Operator: CECOS INTERNATIONAL INC
Emergency Name: SAM RICOTTA
Emergency Phone: (716) 754-7753
Total Tanks: 0
Total Capacity: 0
Tank ID: CS5
Capacity (Gal): 250
Missing Data for Tank : Minor data missing
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Product Stored: OTHER
Tank Type: Steel/carbon steel
Install Date: / /
Tank Internal: Not reported
Tank External: Not reported
Tank Containment: NONE
Pipe Type: GALVANIZED STEEL
Pipe Location: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Leak Detection: NONE
Overfill Protection: Not reported
Dispenser Method: Gravity
Date Tested: / / Next Test Date: / /
Date Closed: / / Test Method: Not reported
Updated: False Deleted: False
Date Inspected: Not reported Inspector: Not reported
Result of Inspection: Not reported

Mailing Name: CECOS INTERNATIONAL INC
Mailing Address: BOX 340 L P O
NIAGARA FALLS, NY 14304

Mailing Contact: Not reported
Mailing Telephone: (716) 282-2676
Owner Mark: First Owner Expiration Date: 11/14/1991
Certification Flag: False Certification Date: 11/14/1986

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003079275

Renew Flag: False Renew Date: / /
Lat/Long: Not reported
Dead Letter: False
Facility Screen: No data missing
Owner Screen: Minor data missing
Tank Screen: 0
Town or City: NIAGARA FALLS (C)
Town or City Code: 11
County Code: 29
Region: 9
Fiscal Amount for Registration Fee is Correct: True

PBS Number: 9-040452 CBS Number: 9-000212
SPDES Number: Not reported SWIS Code: 2911
Federal ID: Not reported Previous PBS#: Not reported
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons) and Subpart 360-14.
Facility Type: TRUCKING/TRANSPORTATION
OTHER
Owner Type: Not reported
Owner Sub Type: Not reported
Owner: CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304
Owner Phone: (716) 282-2676
Facility Phone: (716) 282-2676
Operator: CECOS INTERNATIONAL INC
Emergency Name: SAM RICOTTA
Emergency Phone: (716) 754-7753
Total Tanks: 0
Total Capacity: 0
Tank ID: CS6
Capacity (Gal): 250
Missing Data for Tank : Minor data missing
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Product Stored: OTHER
Tank Type: Steel/carbon steel
Install Date: / /
Tank Internal: Not reported
Tank External: Not reported
Tank Containment: NONE
Pipe Type: GALVANIZED STEEL
Pipe Location: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Leak Detection: NONE
Overfill Protection: Not reported
Dispenser Method: Gravity
Date Tested: / / Next Test Date: / /
Date Closed: / / Test Method: Not reported
Updated: False Deleted: False
Date Inspected: Not reported Inspector: Not reported
Result of Inspection: Not reported
Mailing Name: CECOS INTERNATIONAL INC
Mailing Address: BOX 340 L P O
NIAGARA FALLS, NY 14304
Mailing Contact: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003079275

Mailing Telephone: (716) 282-2676
Owner Mark: First Owner
Certification Flag: False
Renew Flag: False
Lat/Long: Not reported
Dead Letter: False
Facility Screen: No data missing
Owner Screen: Minor data missing
Tank Screen: 0
Town or City: NIAGARA FALLS (C)
Town or City Code: 11
County Code: 29
Region: 9
Fiscal Amount for Registration Fee is Correct: True

PBS Number: 9-040452
SPDES Number: Not reported
Federal ID: Not reported
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons) and Subpart 360-14.

CBS Number: 9-000212
SWIS Code: 2911
Previous PBS#: Not reported

Facility Type: TRUCKING/TRANSPORTATION
OTHER

Owner Type: Not reported
Owner Sub Type: Not reported
Owner: CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304

Owner Phone: (716) 282-2676
Facility Phone: (716) 282-2676
Operator: CECOS INTERNATIONAL INC
Emergency Name: SAM RICOTTA
Emergency Phone: (716) 754-7753
Total Tanks: 0
Total Capacity: 0
Tank ID: CS7
Capacity (Gal): 250
Missing Data for Tank : Minor data missing
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Product Stored: OTHER
Tank Type: Steel/carbon steel
Install Date: / /
Tank Internal: Not reported
Tank External: Not reported
Tank Containment: NONE
Pipe Type: GALVANIZED STEEL
Pipe Location: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Leak Detection: NONE
Overfill Protection: Not reported
Dispenser Method: Gravity
Date Tested: / /
Date Closed: / /
Updated: False
Date Inspected: Not reported
Result of Inspection: Not reported
Mailing Name: CECOS INTERNATIONAL INC

Expiration Date: 11/14/1991
Certification Date: 11/14/1986
Renew Date: / /

Next Test Date: / /
Test Method: Not reported
Deleted: False
Inspector: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

U003079275

Mailing Address: BOX 340 L P O
NIAGARA FALLS, NY 14304

Mailing Contact: Not reported
Mailing Telephone: (716) 282-2676

Owner Mark: First Owner
Certification Flag: False
Renew Flag: False
Lat/Long: Not reported
Dead Letter: False
Facility Screen: No data missing
Owner Screen: Minor data missing
Tank Screen: 0
Town or City: NIAGARA FALLS (C)
Town or City Code: 11
County Code: 29
Region: 9
Expiration Date: 11/14/1991
Certification Date: 11/14/1986
Renew Date: / /

Fiscal Amount for Registration Fee is Correct: True

PBS Number: 9-040452
SPDES Number: Not reported
Federal ID: Not reported
Facility Status: 2 - Unregulated by PBS (the total capacity is less than 1,101 gallons) and Subpart 360-14.

CBS Number: 9-000212
SWIS Code: 2911
Previous PBS#: Not reported

Facility Type: TRUCKING/TRANSPORTATION
OTHER

Owner Type: Not reported
Owner Sub Type: Not reported
Owner: CECOS INTERNATIONAL INC
BOX 340 L P O
NIAGARA FALLS, NY 14304

Owner Phone: (716) 282-2676
Facility Phone: (716) 282-2676
Operator: CECOS INTERNATIONAL INC
Emergency Name: SAM RICOTTA
Emergency Phone: (716) 754-7753
Total Tanks: 0
Total Capacity: 0
Tank ID: CS8
Capacity (Gal): 300
Missing Data for Tank : Minor data missing
Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE
Product Stored: OTHER
Tank Type: Steel/carbon steel
Install Date: / /
Tank Internal: Not reported
Tank External: Not reported
Tank Containment: NONE
Pipe Type: GALVANIZED STEEL
Pipe Location: Not reported
Pipe Internal: Not reported
Pipe External: Not reported
Leak Detection: NONE
Overfill Protection: Not reported
Dispenser Method: Submersible
Date Tested: / /
Date Closed: / /
Updated: False
Next Test Date: / /
Test Method: Not reported
Deleted: False

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CECOS INTERNATIONAL INC (Continued)

EDR ID Number
EPA ID Number

U003079275

Date Inspected: Not reported
Result of Inspection: Not reported
Mailing Name: CECOS INTERNATIONAL INC
Mailing Address: BOX 340 L P O
NIAGARA FALLS, NY 14304
Mailing Contact: Not reported
Mailing Telephone: (716) 282-2676
Owner Mark: First Owner
Certification Flag: False
Renew Flag: False
Lat/Long: Not reported
Dead Letter: False
Facility Screen: No data missing
Owner Screen: Minor data missing
Tank Screen: 0
Town or City: NIAGARA FALLS (C)
Town or City Code: 11
County Code: 29
Region: 9
Fiscal Amount for Registration Fee is Correct: True

Inspector: Not reported
Expiration Date: 11/14/1991
Certification Date: 11/14/1986
Renew Date: / /

12
SSW
1/4-1/2
1473 ft.

**CAYUGA VILLAGE
512 B STREET
NIAGARA FALLS, NY**

**LTANKS S100155498
HIST LTANKS N/A**

**Relative:
Lower**

**Actual:
573 ft.**

LTANKS:

Spill Number: 9012106
Facility ID: 9012106
Site ID: 282777
Spill Date: 02/20/91
Referred To: Not reported
Water Affected: Not reported
Spill Cause: TANK FAILURE
Facility Address 2: Not reported
Investigator: SORGI
Caller Name: DAVE EISENBART
Caller Phone: (716) 297-1770
Notifier Name: Not reported
Notifier Phone: Not reported
Spiller Contact: Not reported
Spiller: Not reported
Spiller Company: BOB DUSCAVAGE
Spiller Address: 512 B STREET
NIAGARA FALLS, NY
Spiller County: 001
Spill Class: Not reported
Spill Closed Dt: 05/01/91
Spill Notifier: AFFECTED PERSONS
Cleanup Ceased: 05/01/91
Last Inspection: 02/26/91
Cleanup Meets Standard: True
Recommended Penalty: Penalty Not Recommended
UST Trust: False
Spill Record Last Update: 05/01/91
Date Spill Entered In Computer Data File: 02/21/91
Remediation Phase: 0
Program Number: 9012106
Regional Use: Not reported

Region of Spill: 9
DER Facility ID: 229559
CID: 29
Reported to Dept: 02/20/91
DEC Region: 9
Spill Source: PRIVATE DWELLING
Facility Tele: Not reported
SWIS: 3211
Caller Agency: CAYUGA VILLAGE
Caller Extension: Not reported
Notifier Agency: Not reported
Notifier Extension: Not reported
Spiller Phone: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CAYUGA VILLAGE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S100155498

Material
Material ID : 428616
Site ID : 282777
Operable Unit : 01
Operable Unit ID : 951954
Material Code : 0001
Material Name : #2 Fuel Oil
Case No. : Not reported
Material FA : Petroleum
Quantity : 25.00
Units : G
Recovered : No
Resource Affected - Soil : Yes
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : No
Resource Affected - Surface Water : No
Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

Tank Test
Spill Tank Test : Not reported
Site ID : Not reported
Tank Number : Not reported
Tank Size : Not reported
Test Method : Not reported
Leak Rate : Not reported
Gross Fail : Not reported
Modified By : Not reported
Last Modified : Not reported
Test Method : Not reported

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "MJS"
02/20/91: MJS NOTIFIED NCHD. THEY WILL SEND INSPECTOR OUT. 02/26/91:
MJS SITE INSPECTION. SOIL STAGED NEAR MAINTENENCE GARAGE. SOIL TO BE
TESTED AND DISPOSED OF AT MODERN LAN
DFILL. EXCAVATION LOOKED OK. CAYUGA VILLAGE TO BACKFILL. 03/18/91: MJS
RECEIVED REPORT FROM NCHD. WAITING FOR TESTING AND DISPOSAL FROM DAVID
EISENBART. 05/01/91: MJS RECEIVED ANALYTICAL RESULTS AND DISPOSAL
RECEIPTS FROM DAVID EISENBART. 0.97
TONS OF SOIL DISPOSED OF AT MODERN LANDFILL.

Remark: TENANTS TANK LEAKED TO SOIL. TANK HAS BEEN PUMPED OUT. WILL EXCAVATE
SOIL AND DISPOSE.

HIST LTANKS:

Spill Number: 9012106
Spill Date: 02/20/1991 13:00
Water Affected: Not reported
Resource Affectd: On Land
Spill Cause: Tank Failure
Facility Contact: Not reported
Investigator: MJS
Caller Name: Not reported
Caller Phone: Not reported
Notifier Name: Not reported

Region of Spill: 9
Reported to Dept: 02/20/91 14:27
Spill Source: Private Dwelling
Facility Tele: Not reported
SWIS: 29
Caller Agency: Not reported
Caller Extension: Not reported
Notifier Agency: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CAYUGA VILLAGE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S100155498

Notifier Phone: Not reported
Spiller Contact: Not reported
Spiller: BOB DUSCAVAGE
Spiller Address: 512 B STREET
NIAGARA FALLS, NY
Spill Class: Not reported
Spill Closed Dt: 05/01/91
Spill Notifier: Affected Persons
Cleanup Ceased: 05/01/91
Last Inspection: 02/26/91
Cleanup Meets Standard: True
Recommended Penalty: Penalty Not Recommended
Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: False
Spill Record Last Update: 05/01/91
Is Updated: False
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 02/21/91
Date Region Sent Summary to Central Office: / /
Tank Test:
PBS Number: Not reported
Tank Number: Not reported
Test Method: Not reported
Capacity of Failed Tank: Not reported
Leak Rate Failed Tank: Not reported
Gross Leak Rate: Not reported
Material:
Material Class Type: 1
Quantity Spilled: 25
Units: Gallons
Unknown Qty Spilled: 25
Quantity Recovered: 0
Unknown Qty Recovered: False
Material: #2 FUEL OIL
Class Type: Petroleum
Chem Abstract Service Number: #2 FUEL OIL
Last Date: 12/07/1994
Num Times Material Entry In File: 24464

DEC Remarks: 02/20/91: MJS NOTIFIED NCHD. THEY WILL SEND INSPECTOR OUT. 02/26/91: MJS SITE INSPECTION. SOIL STAGED NEAR MAINTENENCE GARAGE. SOIL TO BE TESTED AND DISPOSED OF AT MODERN LANDFILL. EXCAVATION LOOKED OK. CAYUGA VILLAGE TO BACKFILL. 03/18/91: MJS RECEIVED REPORT FROM NCHD. WAITING FOR TESTING AND DISPOSAL FROM DAVID EISENBART. 05/01/91: MJS RECEIVED ANALYTICAL RESULTS AND DISPOSAL RECEIPTS FROM DAVID EISENBART. 0.97 TONS OF SOIL DISPOSED OF AT MODERN LANDFILL.

Spill Cause: TENANTS TANK LEAKED TO SOIL. TANK HAS BEEN PUMPED OUT. WILL EXCAVATE SOIL AND DISPOSE.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

13
South
1/4-1/2
1573 ft.

RAUSMANN RESIDENCE
431 A STREET
NIAGARA FALLS, NY

LTANKS
HIST LTANKS

S101659211
N/A

Relative:
Lower

LTANKS:

Actual:
572 ft.

Spill Number:	9500110	Region of Spill:	9
Facility ID:	9500110	DER Facility ID:	156140
Site ID:	186820	CID:	29
Spill Date:	12/19/94	Reported to Dept:	12/19/94
Referred To:	NIAGARA CNTY HEALTH DEPT	DEC Region:	9
Water Affected:	Not reported	Spill Source:	PRIVATE DWELLING
Spill Cause:	TANK FAILURE		
Facility Address 2:	Not reported	Facility Tele:	Not reported
Investigator:	SACALAND	SWIS:	3211
Caller Name:	BOB BUZZELLI	Caller Agency:	NCHD
Caller Phone:	(716) 278-8790	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spiller Contact:	Not reported	Spiller Phone:	Not reported
Spiller:	Not reported		
Spiller Company:	ROBERT KRAUSMANN		
Spiller Address:	431 A STREET		
	NIAGARA FALLS, NY 14304		
Spiller County:	001		
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.		

Spill Closed Dt: 06/08/95

Spill Notifier: OTHER
Cleanup Ceased: 06/08/95
Last Inspection: 12/19/94
Cleanup Meets Standard: True
Recommended Penalty: Penalty Not Recommended
UST Trust: False
Spill Record Last Update: 11/12/99
Date Spill Entered In Computer Data File: 04/04/95
Remediation Phase: 0
Program Number: 9500110
Regional Use: Not reported
Material
Material ID : 368728
Site ID : 186820
Operable Unit : 01
Operable Unit ID : 1010868
Material Code : 0001
Material Name : #2 Fuel Oil
Case No. : Not reported
Material FA : Petroleum
Quantity : 0.00
Units : G
Recovered : No
Resource Affected - Soil : Yes
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : No
Resource Affected - Surface Water : No
Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RAUSMANN RESIDENCE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S101659211

Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

Tank Test

Spill Tank Test : Not reported
Site ID : Not reported
Tank Number : Not reported
Tank Size : Not reported
Test Method : Not reported
Leak Rate : Not reported
Gross Fail : Not reported
Modified By : Not reported
Last Modified : Not reported
Test Method : Not reported

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was
"SAC-NCHD" 04/05/95: RECEIVED NCHD INSPECTION REPORT & ANALYTICAL
RESULTS FROM B.BUZZELLI,LOW-LEVEL EXCEEDANCES FOR
PHENATHRENE,N-BUTYLBENZENE AND NAPHTHALENE.HIGHER THAN NORMAL DETE
CTION LIMITS FOR 8021. 04/10/95: RECEIVED NCHD
INSPECT.REPORT&ANAL.RESULTS FROM B.BUZZELLI,LOW-LEVEL EXCEED.FOR
PHENATHRENE,N-BUTYLBENZENE&NAPHTHALENE.HIGH 8021 DETECT.
LIMITS.B.BUZZELLI SENT LETTER ASKING FOR RESAMPLING BY 8021&8270.
06/08/95: R
ECEIVED NCHD INSPECTION REPORT AND RETEST RESULTS FROM B.BUZZELLI,ALL
PARAMETERS WERE BQL.

Remark: TANK FAILURE AT CAYUGA VILLAGE MOBILE HOME PARK.

HIST LTANKS:

Spill Number: 9500110 Region of Spill: 9
Spill Date: 12/19/1994 06:00 Reported to Dept: 12/19/94 09:00
Water Affected: Not reported Spill Source: Private Dwelling
Resource Affectd: On Land
Spill Cause: Tank Failure
Facility Contact: Not reported Facility Tele: Not reported
Investigator: SAC-NCHD SWIS: 29
Caller Name: Not reported Caller Agency: Not reported
Caller Phone: Not reported Caller Extension: Not reported
Notifier Name: Not reported Notifier Agency: Not reported
Notifier Phone: Not reported Notifier Extension: Not reported
Spiller Contact: Not reported Spiller Phone: Not reported
Spiller: ROBERT KRAUSMANN
Spiller Address: 431 A STREET
NIAGARA FALLS, NY 14304
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.
Spill Closed Dt: 06/08/95
Spill Notifier: Other PBS Number: Not reported
Cleanup Ceased: 06/08/95
Last Inspection: 12/19/94
Cleanup Meets Standard: True
Recommended Penalty: Penalty Not Recommended
Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: False
Spill Record Last Update: 11/12/99
Is Updated: False

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RAUSMANN RESIDENCE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S101659211

Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 04/04/95
Date Region Sent Summary to Central Office: / /

Tank Test:

PBS Number: Not reported
Tank Number: Not reported
Test Method: Not reported
Capacity of Failed Tank: Not reported
Leak Rate Failed Tank: Not reported
Gross Leak Rate: Not reported

Material:

Material Class Type: 1
Quantity Spilled: 0
Units: Gallons
Unknown Qty Spilled: No
Quantity Recovered: 0
Unknown Qty Recovered: True
Material: #2 FUEL OIL
Class Type: Petroleum
Chem Abstract Service Number: #2 FUEL OIL
Last Date: 12/07/1994
Num Times Material Entry In File: 24464

DEC Remarks: 04/05/95: RECEIVED NCHD INSPECTION REPORT ANALYTICAL RESULTS FROM B.BUZZELLI, LOW-LEVEL EXCEEDANCES FOR PHENATHRENE, N-BUTYLBENZENE AND NAPHTHALENE. HIGHER THAN NORMAL DETECTION LIMITS FOR 8021. 04/10/95: RECEIVED NCHD INSPECTION REPORT ANALYTICAL RESULTS FROM B.BUZZELLI, LOW-LEVEL EXCEEDANCE FOR PHENATHRENE, N-BUTYLBENZENE, NAPHTHALENE. HIGH 8021 DETECT. LIMITS. B.BUZZELLI SENT LETTER ASKING FOR RESAMPLING BY 8021 8270. 06/08/95: RECEIVED NCHD INSPECTION REPORT AND RETEST RESULTS FROM B.BUZZELLI, ALL PARAMETERS WERE BQL

Spill Cause: TANK FAILURE AT CAYUGA VILLAGE MOBILE HOME PARK.

14
SSE
1/4-1/2
1761 ft.

DUNN TIRE
9540 NIAGARA FALLS BLVD
NIAGARA FALLS, NY 14304

LTANKS
HIST LTANKS
S104950830
N/A

Relative:
Lower

LTANKS:

Actual:
574 ft.

Spill Number: 0075561
Facility ID: 0075561
Site ID: 81054
Spill Date: 01/16/01
Referred To: Not reported
Water Affected: Not reported
Spill Cause: TANK FAILURE
Facility Address 2: Not reported
Investigator: RMCROSSE
Caller Name: JIM WEHNER
Caller Phone: (716) 298-5297
Notifier Name: Not reported
Notifier Phone: Not reported
Spiller Contact: BILL REUTER (CONTRACTOR)
Spiller: FRANK AMENDOLA
Spiller Company: FRANK AMENDOLA
Spiller Address: POB 408
NIAGARA FALLS, NY 14303
Spiller County: 001
Spill Class: Known release that creates potential for fire or hazard. DEC Response.
Willing Responsible Party. Corrective action taken.

Region of Spill: 9
DER Facility ID: 75044
CID: 29
Reported to Dept: 01/16/01
DEC Region: 9
Spill Source: COMMERCIAL/INDUSTRIAL
Facility Tele: (716) 285-5050
SWIS: 3211
Caller Agency: GREEN ENVIRONMENT
Caller Extension: Not reported
Notifier Agency: Not reported
Notifier Extension: Not reported
Spiller Phone: (716) 754-4148

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

DUNN TIRE (Continued)

S104950830

Spill Closed Dt: 11/12/04

Spill Notifier: OTHER

Cleanup Ceased: / /

Last Inspection: 01/29/03

Cleanup Meets Standard: False

Recommended Penalty: Penalty Not Recommended

UST Trust: True

Spill Record Last Update: 11/12/04

Date Spill Entered In Computer Data File: 01/16/01

Remediation Phase: 0

Program Number: 0075561

Regional Use: Not reported

Material

Material ID : 539137

Site ID : 81054

Operable Unit : 01

Operable Unit ID : 836926

Material Code : 0009

Material Name : Gasoline

Case No. : Not reported

Material FA : Petroleum

Quantity : 0.00

Units : G

Recovered : No

Resource Affected - Soil : Yes

Resource Affected - Air : No

Resource Affected - Indoor Air : No

Resource Affected - Groundwater : No

Resource Affected - Surface Water : No

Resource Affected - Drinking Wtr : No

Resource Affected - Sewer : No

Resource Affected - Impervious Surface : No

Resource Affected - Subway : No

Resource Affected - Utility : No

Resource Affected - Impervious Surface : No

Oxygenate : False

Tank Test

Spill Tank Test : Not reported

Site ID : Not reported

Tank Number : Not reported

Tank Size : Not reported

Test Method : Not reported

Leak Rate : Not reported

Gross Fail : Not reported

Modified By : Not reported

Last Modified : Not reported

Test Method : Not reported

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "RMC"
1/24/01:SAC TELECON JIM WEHNER - GREEN ENVIRONMENTAL SPECIALISTS, HE
HAS REMOVED THE TANKS AND STAGED CONTAMINATED SOIL ON THE PROPERTY, HE
HAS EXCAVATED TO THE FOUNDATION AND
BELIEVES SOME HAS GONE UNDERNEATH THE BUILDING, HE WILL CONTINUE TO
EXCAVATE WHERE HE CAN BUT REQUESTED AN INSPECTION, SAC SAID HE WOULD
ARRANGE TO HAVE THE NIAGARA COUNTY HEALTH DEPARTMENT INSPECT THE SITE.
1/24/01:SAC TELECON PAUL DICKY - N
CHD REGARDING THE SITE AND ASKED IF HE COULD DO AN INSPECTION AT THE
SITE, MR. DICKY RECOGNIZED WHERE THE SITE WAS AND INDICATED THAT THIS

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

DUNN TIRE (Continued)

S104950830

SITE HAD SOME LOW LEVEL RADIOACTIVE CONTAMINATION AT THE SITE THAT HAD RESTRICTIONS REGARDING EXCAVATION OF THE SOIL AT THE SITE, MR. DICKY WILL INSPECT ALONG WITH JOHN ARCHIBALD FROM THE NCHD WHO IS INVOLVED WITH RADIOACTIVE MATTERS FOR THE COUNTY, SAC THEN CALLED JIM WEHNER TO NOTIFY HIM OF THE SITUATION AND TO HAVE HIM STOP THE EXCAVATING AND THAT THE NC HD WAS GOING TO INSPECT THE SITE. 1/24/01:SAC TELECON PAUL DICKY - THEY INSPECTED THE SITE BUT THEY DID NOT HAVE A METER TO TELL IF THE SOIL WAS OF CONCERN, THE PROBLEM AT THE SITE IS THAT THE RADIOACTIVE MATERIAL WAS IN THE SLAG THAT WAS USED JUST BELOW THE PAVED AREA ON THE SITE, THIS MATERIAL WAS NOW MIXED IN WITH THE PETROLEUM CONTAMINATED SOIL AND NOW COULD NOT BE SEGREGATED EASILY SO THAT IT COULD BE TAKEN TO MODERN DISPOSAL AS WAS ORIGINALLY PLANNED, IT WOULD HAVE TO GO TO A FACILITY THAT TAKES MIXED WASTE BASED ON THE LEVEL OF RADIOACTIVITY AND THAT WOULD MEAN IT WOULD HAVE TO BE TRANSPORTED TO UTAH, THEY WILL CONTACT BARB IGNATZ WITH THE NYS HEALTH DEPT TO NOTIFY HER OF THE SITUATION, SAC NOTIFIED PJB REGARDING THE SITE. 1/24/01:SAC TELECON BARB IGNATZ - NYS HEALTH DEPT. AND DISCUSSED SITE, MS. IGNATZ WILL CONTACT ALBANY CENTRAL OFFICE OF HEALTH DEPARTMENT TO FIND OUT THEIR RECOMMENDATIONS AND GET BACK TO SAC. 1/26/01:SAC TELECON JIM WEHNER - MR. WEHNER WANTED TO KNOW WHAT WAS STATUS OF THE PROJECT, EXCAVATION REMAINS OPEN AND CONTRACTOR IS CONCERNED THAT THE FOUNDATION BEING EXPOSED FOR A LONG TIME COULD CAUSE STRUCTURAL DAMAGE, MR. WEHNER SAID THAT HE WAS IN CONTACT WITH BUTCH EGAN OF ZEBRA TECHNOLOGIES TO PROPOSE A PLAN ABOUT THE USE OF ORCS ON THE SITE SINCE THERE WAS A POSSIBILITY THE SOIL MIGHT HAVE TO BE PLACED IN THE EXCAVATION AND BECAUSE THEY WERE LOOKING INTO THIS REMEDIAL OPTION BECAUSE OF THE CONTAMINATION THAT WAS UNDER THE FLOOR, SAC TRIED TO CONTACT BARB IGNATZ AND JOHN ARCHIBALD BUT BOTH WERE UNAVAILABLE TODAY, WILL HAVE TO WAIT UNTIL NEXT WEEK, SAC CALLED PAUL DICKY ABOUT THIS AND MR. DICKY SAID HE WOULD SPEAK TO MR. ARCHIBALD WHEN HE CAME BACK AND CALL SAC TO LET HIM KNOW WHAT THEY RECOMMENDED, SAC LATER RECEIVED MESSAGE FROM BARB YOUNGBERG - WHO IS IN DEC DIV OF SOLID AND HAZARDOUS MATERIALS - RADIATION BUREAU TO SEE IF THEY COULD BE OF ANY HELP, SAC WILL CONTACT HER NEXT WEEK. 1/29/01:SAC TELECON PAUL DICKY, MR. DICKY SPOKE TO JOHN ARCHIBALD WHO HAD SPOKEN TO BARB IGNATZ, THE HEALTH DEPARTMENT RECOMMENDED THE SOIL BE PLACED BACK IN THE EXCAVATION, SAC LATER SPOKE TO BARB YOUNGBERG ABOUT THE REMEDIAL OPTIONS AND ABOUT THE HEALTH DEPT. RECOMMENDATION ABOUT BACKFILLING THE EXCAVATION WITH THE CONTAMINATED SOIL, MS. YOUNGBERG DID NOT HAVE A PROBLEM WITH THIS AT THE TIME, SAC HAD DISCUSSED THIS WITH PJB AND IT WAS AGREED THAT IN THIS SPECIAL CASE BECAUSE OF THE POTENTIAL OF RADIOACTIVE MATERIAL IN THE SOIL THAT THIS WOULD TAKE PRECEDENCE AND THAT SOIL WOULD BE ALLOWED TO BE BACKFILLED, SAC CONTACTED JIM WEHNER TO LET HIM KNOW IT WAS OKAY TO BACKFILL THE MATERIAL ON THE SITE. 1/30/01:SAC TELECON BARB YOUNGBERG, MS. YOUNGBERG WANTED TO KNOW IF THE SOIL HAD BEEN BACKFILLED SINCE THEY MAY WANT TO INSPECT IT, SAC TOLD HER HE BELIEVES IT HAD BUT WOULD FIND OUT FOR SURE IF IT HAD BEEN, SAC CALLED JIM WEHNER WHO TOLD HIM THAT THE EXCAVATION HAD BEEN BACKFILLED BUT THEY WERE UNABLE TO BACKFILL ALL THE MATERIAL INTO THE EXCAVATION SO THERE IS STILL SOME THAT THEY STAGED ON AND COVERED WITH PLASTIC. 2/1/01:SAC TELECON BARB YOUNGBERG TO LET HER KNOW ABOUT THE SITE. 2/2/01:SAC

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

DUNN TIRE (Continued)

S104950830

RECEIVED MESSAGE FROM BARB YOUNGBERG THAT REPRESENTATIVES FROM THEIR GROUP WERE COMING TO THE SITE ON 2/6/01 TO INSPECT THE SITE WITH THE HEALTH DEPT., SAC e-MAILED HER BACK TO LET HER KNOW HE WOULD BE UNABLE TO ATTEND DUE TO PREVIOUS APPOINTMENT BUT THAT SHE MAY WANT TO CONTACT JIM WEHNER TO ATTEND THE MEETING. 2/7/01:SAC TELECON PAUL DICKY, MR. DICKY SAID THAT AT THE MEETING THE REPRESENTATIVES FROM ALBANY DETERMINED THAT THE SOIL THAT REMAINED ON-SITE WOULD HAVE TO BE DISPOSED AT A MIXED WASTE FACILITY DUE TO THE RADIOACTIVITY OF THE SOIL, HE SAID THAT ALBANY WOULD BE CONTACTING SAC TO DISCUSS THE SITE FURTHER. 3/14/01:SAC TELECON JIM WEHNER - GREEN ENVIRONMENT, REGARDING THE SITE, MR. WEHNER IS STILL ARRANGING FOR THE DISPOSAL OF THE MATERIAL THAT IS PRESENTLY STOCKPILED ON-SITE, DUE TO THE COST INVOLVED IT MAY NOT BE SETTLED SOON, MR. WEHNER WILL SEND IN WORKPLAN ONCE THIS HAS BEEN SETTLED. 5/22/01:SAC TELECON JIM WEHNER, HE WAS GIVEN APPROVAL TO BACKFILL REMAINDER OF THE SOIL BY NYSDOH BY LETTER BUT LETTER INDICATED REMOVAL COULD BE REQUIRED AT A LATER DATE, HE ASKED IF HE COULD INJECT ORCS AROUND THE SITE TO ENCAPSULATE THE AREA UNTIL REMOVAL IS ARRANGED AT SOME LATER DATE, SAC DISCUSS WITH PJB, BASED ON THE NYSDOH LETTER REMOVAL OF SOIL DOES NOT HAVE A DEFINITE TIME REQUIRED SO THEREFORE TREATMENT IS REQUIRED ON THE SOIL ITSELF, SAC TELECON JIM WEHNER INFORMING HIM OF THIS, MR. WEHNER WILL PUT TOGETHER WORKPLAN FOR THE SITE. 01/28/03 RMC/FILE. REASSIGNED SITE FROM SAC. REVIEWED FILE. FOUR USTS REMOVED FROM THE SITE. AN AMOUNT OF PETROLEUM CONTAMINATED SOIL WAS STOCKPILED ON SITE. SOIL WAS LATER PUT BACK IN THE EXCAVATION DUE TO POTENTIAL LOW LEVEL RADIOACTIVITY OF THE AREA FROM SHALLOW BACKFILL USED IN THE PAST. ONE COMPOSITE EXCAVATION SAMPLE TAKEN 1/16/01 SHOWED NO EXCEEDANCES BUT NOT ALL THE STARS COMPOUNDS WERE REPORTED. ALSO NOTE THAT NO SAMPLES WERE TAKEN OF THE MATERIAL PLACED BACK IN THE EXCAVATION. DEC NEEDS THE FOLLOWING FOR PETROLEUM CLOSURE. 1. FOUR BORINGS OUTSIDE THE ORIGINAL EXCAVATION FOR STARS 8021/8270 COMPOUNDS. 2. TWO SAMPLES OF THE MATERIAL PUT BACK IN THE HOLE FOR 8021/8270 STARS COMPOUNDS. DRAFTED LETTER. UPDATE 2/28/03 01/29/03 RMC/SITE. NO SOILS FOUND TO BE STOCKPILED ON SITE. NO OPEN EXCAVATIONS NOTE. UPDATE 2/28/03 04/08/03 RMC/FILE. NO RESPONSE LETTER, RESPONSE DUE 4/28/03 05/27/03 RMC/FILE. LETTER TO RPS ATTORNEY, AS REQUESTED, RESPONDED TO 4/15/03 LETTER, RESPONSE DUE 7/30/03 10/09/03 RMC/FILE. NO RESPONSE LETTER, TO LEGAL IF NO RESPONSE BY 10/30/03 10/16/03 RMC/FRANK A/PHONE. HE WILL LOOK INTO GETTING PETROLEUM SAMPLING DONE, UPDATE 11/30/03 12/16/03 RMC/FILE. NOT RECEIVED, ANOTHER LETTER TO THE RP AND HIS ATTORNEY, RESPONSE DUE 12/30/03. 01/15/04 RMC/FILE. NO RESPONSE. LEFT MESSAGE FOR PRP. CALL DUE 1/20/04. 01/26/04 RMC/FRANK A/PHONE. HE CONTACTED AN ENVIRONMENTAL FIRM. RMC ADVISED DEC HAS NOT RECEIVED ANYTHING, HE SAID HE WOULD LOOK INTO AND CALL RIGHT BACK. CALL DUE 1/31/04. 01/26/04 RMC/FRANK A/PHONE. HE SAID HE CALLED TOM OMALLI. RMC ADVISED THAT WORK NEEDS TO BE DONE AND DOCUMENTED, UPDATE 1/31/04. 02/24/04 RMC/FILE. CONTRACTOR HAS CONTACTED NYSDOH RE H AND S, REPORT DUE 3/30/04. 05/01/04 RMC/FILE. RECEIVED MESSAGE THAT HAZARD EVALUATION HAS BEEN HIRED AND THAT THEY ARE WORKING ON H AND S PLAN WITH DOH, UPDATE 5/30/04. 05/24/04 RMC/FILE. RECEIVED WORK PLAN FROM HEI. PLAN ON OBTAINING SIX SETS OF LAB RESULTS.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

DUNN TIRE (Continued)

S104950830

FOUR OUTSIDE THE PREVIOUS EXCAVATION, TWO INSIDE THE PREVIOUS EXCAVATION.
PLAN OK WITH DEC, RESULTS DUE 7/30/04. 08/01/04 RMC/FILE. SAC IS
WORKING ON PLAN OF ACTION WITH DK, UPDATE 9/1/04. 8/2/04:DKK, SAC
TELECON MARK VIRGIL - NYSDOH.
DISCUSS COMMENTS BY NYSDOH FOR CONTRACTOR WORKPLAN. MR. VIRGIL WILL
DISCUSS W/STEVE GAVITTS OF HIS OFFICE AND GET BACK TO DEC WITH
RECOMMENDATIONS. MARK VIRGIL/STEVE GAVITTS - (518) 402-7556
8/24/04:SAC TELECON MARK VIRGIL. MR. VIRGIL
WANTED TO KNOW WHERE DEC SPILLS WANTS TO INSTALL BORINGS AND HE WAS
LOOKING AT HIS DATA TO DETERMINE RECOMMENDATIONS. SAC FAXED COPY OF SITE
DRAWING TO MR. VIRGIL SHOWING WHERE TANKS WERE LOCATED.
8/25/04:SAC TELECON MARK VIRGIL. FURTHER DIS-
CUSSED SITE. A TECHNICIAN FROM HIS DIVISION WILL BE IN THE AREA THIS WEEK
OR NEXT ON ANOTHER MATTER. HE WILL HAVE HIM INSPECT SITE TO HELP WITH
RECOMMENDATIONS. HE WILL CONTINUE TO EVALUATE HIS DATA AND WILL CALL DEC
BACK ONCE EVALUATION IS COMPLETED
9/29/04:SAC RECEIVED PHONE MESSAGE FROM SCOTT OVERHOFF - HAZARD
EVALUATIONS. MR. OVERHOFF SPOKE TO NYSDOH AND THEY ANTICIPATE HAVING AN
ANSWER REGARDING THE ON-SITE SOMETIME NEXT WEEK. 11/12/04 RMC/FILE.
AFTER HAVING CONFERENCE CALL WITH
H KING, SAC, AND STATE DOH IN OCTOBER DEC THOUGHT BORINGS OUTSIDE THE
RADIATION ZONE WERE GOING TO MOVE FORWARD. LETTER DATED 10/22/04 TO DAN
KING FROM STATE DOH BACKTRACKED ON THAT PLAN. DUE TO COST AND SEEMINGLY
MOVING TARGET OF REQUIREMENTS BY ST-
ATE DOH, DEC WILL NOT PURSUE ACTION AT THIS TIME DUE TO RADIATION RISK
VS COST. PETROLEUM TANKS (SOURCE) IS GONE, NO FREE PRODUCT NOTED, NO GW
NOTED, RADIATION RISK UNKNOWN IF EXCAVATED, SITE TO BE MADE INACTIVE,
LETTER.

Remark: during removal of 4 u/s (two 1,000-gal. gasoline; one 300-gal. waste
oil; one 500-gal. heating oil tank, contamination noted around gasoline
and waste oil tanks.

HIST LTANKS:

Spill Number:	0075561	Region of Spill:	9
Spill Date:	01/16/2001 11:00	Reported to Dept:	01/16/01 13:00
Water Affected:	Not reported	Spill Source:	Other Commercial/Industrial
Resource Affected:	On Land		
Spill Cause:	Tank Failure		
Facility Contact:	FRANK AMENDOLA	Facility Tele:	(716) 285-5050
Investigator:	SAC-NCHD	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spiller Contact:	BILL REUTER (CONTRACTOR)	Spiller Phone:	(716) 754-4148
Spiller:	FRANK AMENDOLA		
Spiller Address:	NIAGARA BLDG., THIRD ST. NIAGARA FALLS, NY 14304		
Spill Class:	Known release that creates potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.		
Spill Closed Dt:	/ /		
Spill Notifier:	Other	PBS Number:	Not reported
Cleanup Ceased:	/ /		
Last Inspection:	/ /		
Cleanup Meets Standard:	False		
Recommended Penalty:	Penalty Not Recommended		
Spiller Cleanup Date:	/ /		
Enforcement Date:	/ /		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

DUNN TIRE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104950830

Investigation Complete: / /
UST Involvement: True
Spill Record Last Update: 05/29/01
Is Updated: False
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 01/16/01 13:16
Date Region Sent Summary to Central Office: / /
Tank Test:
PBS Number: Not reported
Tank Number: Not reported
Test Method: Not reported
Capacity of Failed Tank: Not reported
Leak Rate Failed Tank: Not reported
Gross Leak Rate: Not reported
Material:
Material Class Type: 1
Quantity Spilled: 0
Units: Gallons
Unknown Qty Spilled: No
Quantity Recovered: 0
Unknown Qty Recovered: True
Material: GASOLINE
Class Type: Petroleum
Chem Abstract Service Number: GASOLINE
Last Date: 09/29/1994
Num Times Material Entry In File: 21329
Spill Cause: during removal of 4 ust s two 1,000-gal. gasoline; one 300-gal. waste oil; one 500-gal. heating oil tank, contamination noted around gasoline and waste oil tanks.

[Click this hyperlink](#) while viewing on your computer to access additional HIST LTANKS detail in the EDR Site Report.

15
SW
1/4-1/2
1785 ft.

**CAYUGA VILLAGE
640 C STREET
NIAGARA FALLS, NY**

**LTANKS
HIST LTANKS**

**S103038163
N/A**

**Relative:
Lower**

LTANKS:

**Actual:
572 ft.**

Spill Number:	9012112	Region of Spill:	9
Facility ID:	9012112	DER Facility ID:	180660
Site ID:	218375	CID:	29
Spill Date:	02/20/91	Reported to Dept:	02/20/91
Referred To:	Not reported	DEC Region:	9
Water Affected:	Not reported	Spill Source:	PRIVATE DWELLING
Spill Cause:	TANK OVERFILL		
Facility Address 2:	Not reported	Facility Tele:	Not reported
Investigator:	SORGI	SWIS:	3211
Caller Name:	MICHELE PHARO	Caller Agency:	CITIZEN
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spiller Contact:	Not reported	Spiller Phone:	Not reported
Spiller:	Not reported		
Spiller Company:	TRUCK DRIVER (DELIVERY)		
Spiller Address:	ZZ		
Spiller County:	001		
Spill Class:	Not reported		
Spill Closed Dt:	02/22/91		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CAYUGA VILLAGE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S103038163

Spill Notifier: HEALTH DEPARTMENT
Cleanup Ceased: 02/22/91
Last Inspection: 01/16/91
Cleanup Meets Standard: True
Recommended Penalty: Penalty Not Recommended
UST Trust: False
Spill Record Last Update: 02/26/91
Date Spill Entered In Computer Data File: 02/21/91
Remediation Phase: 0
Program Number: 9012112
Regional Use: Not reported
Material
Material ID : 428622
Site ID : 218375
Operable Unit : 01
Operable Unit ID : 951960
Material Code : 0001
Material Name : #2 Fuel Oil
Case No. : Not reported
Material FA : Petroleum
Quantity : 2.00
Units : G

Recovered : 2
Resource Affected - Soil : Yes
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : No
Resource Affected - Surface Water : No
Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

Tank Test

Spill Tank Test : Not reported
Site ID : Not reported
Tank Number : Not reported
Tank Size : Not reported
Test Method : Not reported
Leak Rate : Not reported
Gross Fail : Not reported
Modified By : Not reported
Last Modified : Not reported
Test Method : Not reported

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "MJS"
02/20/91: CLEANUP DONE BY MAINTENENCE CREW FROM CAYUGA VILLAGE. CAUSED
BY TANK OVERFILL DURING DELIVERY.
Remark: TRUCK DRIVER OVERFILLED A/G #2 F.O. TANK DURING DELIVERY. SPILLED ON
CONCRETE PAD UNDER TANK. NO OIL APPEARED TO REACH GROUND. MAINTENENCE
CREW FROM CAYUGA VILLAGE CLEANED UP.

HIST LTANKS:

Spill Number: 9012112
Spill Date: 01/15/1991 17:00
Water Affected: Not reported
Resource Affectd: On Land
Region of Spill: 9
Reported to Dept: 02/20/91 12:00
Spill Source: Private Dwelling

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

CAYUGA VILLAGE (Continued)

S103038163

Spill Cause:	Tank Overfill	Facility Tele:	Not reported
Facility Contact:	Not reported	SWIS:	29
Investigator:	MJS	Caller Agency:	Not reported
Caller Name:	Not reported	Caller Extension:	Not reported
Caller Phone:	Not reported	Notifier Agency:	Not reported
Notifier Name:	Not reported	Notifier Extension:	Not reported
Notifier Phone:	Not reported	Spiller Phone:	Not reported
Spiller Contact:	Not reported		
Spiller:	TRUCK DRIVER (DELIVERY)		
Spiller Address:	Not reported		
Spill Class:	Not reported		
Spill Closed Dt:	02/22/91		
Spill Notifier:	Health Department	PBS Number:	Not reported
Cleanup Ceased:	02/22/91		
Last Inspection:	01/16/91		
Cleanup Meets Standard:	True		
Recommended Penalty:	Penalty Not Recommended		
Spiller Cleanup Date:	/ /		
Enforcement Date:	/ /		
Investigation Complete:	/ /		
UST Involvement:	False		
Spill Record Last Update:	02/26/91		
Is Updated:	False		
Corrective Action Plan Submitted:	/ /		
Date Spill Entered In Computer Data File:	02/21/91		
Date Region Sent Summary to Central Office:	/ /		
Tank Test:			
PBS Number:	Not reported		
Tank Number:	Not reported		
Test Method:	Not reported		
Capacity of Failed Tank:	Not reported		
Leak Rate Failed Tank:	Not reported		
Gross Leak Rate:	Not reported		
Material:			
Material Class Type:	1		
Quantity Spilled:	2		
Units:	Gallons		
Unknown Qty Spilled:	2		
Quantity Recovered:	2		
Unknown Qty Recovered:	False		
Material:	#2 FUEL OIL		
Class Type:	Petroleum		
Chem Abstract Service Number:	#2 FUEL OIL		
Last Date:	12/07/1994		
Num Times Material Entry In File:	24464		
DEC Remarks:	02/20/91: CLEANUP DONE BY MAINTENENCE CREW FROM CAYUGA VILLAGE. CAUSED B Y TANK OVERFILL DURING DELIVERY.		
Spill Cause:	TRUCK DRIVER OVERFILLED A/G 2 F.O. TANK DURING DELIVERY. SPILLED ON CON CRETE PAD UNDER TANK. NO OIL APPEARED TO REACH GROUND. MAINTENENCE CREW FROM CAYUGA VILLAGE CLEANED UP.		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

16
WNW
1/4-1/2
1941 ft.

DIBACC0 LF SITE 1
PORTER & TUSCARORA RDS
NIAGARA FALLS, NY 14304

CERC-NFRAP **1003863725**
NYD980508097

Relative:
Higher

CERCLIS-NFRAP Classification Data:

Federal Facility: Not a Federal Facility
Non NPL Code: NFRAP

Actual:
580 ft.

NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	04/01/1980
Assessment:	PRELIMINARY ASSESSMENT	Completed:	11/01/1981
Assessment:	SITE INSPECTION	Completed:	11/01/1981
Assessment:	SITE INSPECTION	Completed:	02/01/1992
Assessment:	ARCHIVE SITE	Completed:	02/01/1992

17
South
1/4-1/2
1957 ft.

CAYUGA VILL. MOBILE PARK
NIAGARA FALLS BLVD.
NIAGARA FALLS, NY

LTANKS **S100117626**
HIST LTANKS **N/A**

Relative:
Lower

LTANKS:

Spill Number: 8809760

Facility ID: 8809760

Site ID: 205018

Spill Date: 03/17/89

Referred To: Not reported

Water Affected: Not reported

Spill Cause: TANK FAILURE

Facility Address 2: Not reported

Investigator: MJHINTON

Caller Name: TOM ALMONTE

Caller Phone: (716) 437-4707

Notifier Name: Not reported

Notifier Phone: Not reported

Spiller Contact: Not reported

Spiller: Not reported

Spiller Company: MARIA HEALY

Spiller Address: 526-C CAYUGA VILLAGE
NIAGARA FALLS, NY 14304

Spiller County: 001

Spill Class: Not reported

Spill Closed Dt: 08/22/89

Spill Notifier: OTHER

Cleanup Ceased: 08/22/89

Last Inspection: 03/20/89

Cleanup Meets Standard: True

Recommended Penalty: Penalty Not Recommended

UST Trust: False

Spill Record Last Update: 09/05/89

Date Spill Entered In Computer Data File: 03/21/89

Remediation Phase: 0

Program Number: 8809760

Regional Use: Not reported

Material

Material ID : 450935

Site ID : 205018

Operable Unit : 01

Operable Unit ID : 925822

Material Code : 0001

Material Name : #2 Fuel Oil

Region of Spill: 9

DER Facility ID: 170323

CID: Not reported

Reported to Dept: 03/17/89

DEC Region: 9

Spill Source: PRIVATE DWELLING

Facility Tele: (716) 298-5226

SWIS: 3211

Caller Agency: FOREMOST INS CO

Caller Extension: Not reported

Notifier Agency: Not reported

Notifier Extension: Not reported

Spiller Phone: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

CAYUGA VILL. MOBILE PARK (Continued)

S100117626

Case No. : Not reported
Material FA : Petroleum
Quantity : 250.00
Units : G
Recovered : 225
Resource Affected - Soil : Yes
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : No
Resource Affected - Surface Water : No
Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

Tank Test

Spill Tank Test : Not reported
Site ID : Not reported
Tank Number : Not reported
Tank Size : Not reported
Test Method : Not reported
Leak Rate : Not reported
Gross Fail : Not reported
Modified By : Not reported
Last Modified : Not reported
Test Method : Not reported

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "MJH"
03/21/89: SPILLERS INSURANCE COMPANY TO PROCEED WITH CLEANUP. 05/04/89:
LETTER SENT REQUESTING REPORT ON CLEANUP AND DISPOSAL RECIEPTS.
08/22/89: DISPOSAL RECIEPTS SUBMITTED
FROM CLEANUP CONTRACTOR NO FURTHER ACTION NEEDED BY SPILL UNIT.
Remark: LEAK FROM FUEL TANK FOR TRAILER REPORTEDLY WENT UNDER TRAILER

HIST LTANKS:

Spill Number:	8809760	Region of Spill:	9
Spill Date:	03/10/1989 12:00	Reported to Dept:	03/17/89 16:35
Water Affected:	Not reported	Spill Source:	Private Dwelling
Resource Affectd:	On Land		
Spill Cause:	Tank Failure		
Facility Contact:	Not reported	Facility Tele:	(716) 298-5226
Investigator:	MJH	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spiller Contact:	Not reported	Spiller Phone:	Not reported
Spiller:	MARIA HEALY		
Spiller Address:	526-C CAYUGA VILLAGE NIAGARA FALLS, NY 14304		
Spill Class:	Not reported		
Spill Closed Dt:	08/22/89		
Spill Notifier:	Other	PBS Number:	Not reported
Cleanup Ceased:	08/22/89		
Last Inspection:	03/20/89		
Cleanup Meets Standard:	True		
Recommended Penalty:	Penalty Not Recommended		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

CAYUGA VILL. MOBILE PARK (Continued)

EDR ID Number
EPA ID Number

Database(s)

S100117626

Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: False
Spill Record Last Update: 09/05/89
Is Updated: False
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 03/21/89
Date Region Sent Summary to Central Office: / /

Tank Test:

PBS Number: Not reported
Tank Number: Not reported
Test Method: Not reported
Capacity of Failed Tank: Not reported
Leak Rate Failed Tank: Not reported
Gross Leak Rate: Not reported

Material:

Material Class Type: 1
Quantity Spilled: 250
Units: Gallons
Unknown Qty Spilled: 250
Quantity Recovered: 225
Unknown Qty Recovered: False
Material: #2 FUEL OIL
Class Type: Petroleum
Chem Abstract Service Number: #2 FUEL OIL
Last Date: 12/07/1994
Num Times Material Entry In File: 24464

DEC Remarks: 03/21/89: SPILLERS INSURANCE COMPANY TO PROCEED WITH CLEANUP. 05/04/89:
LETTER SENT REQUESTING REPORT ON CLEANUP AND DISPOSAL RECIEPTS. 08/22/8
9: DISPOSAL RECIEPTS SUBMITTED FROM CLEANUP CONTRACTOR NO FURTHER ACTION
NEEDED BY SPILL UNIT.

Spill Cause: LEAK FROM FUEL TANK FOR TRAILER REPORTEDLY WENT UNDER TRAILER

18
South
1/4-1/2
2053 ft.

RAINBOW TIRE
9340 NIAGARA FALLS BLVD
NIAGARA FALLS, NY

LTANKS S102619449
HIST LTANKS N/A

Relative:
Lower

LTANKS:

Actual:
572 ft.

Spill Number: 9516572
Facility ID: 9516572
Site ID: 129557
Spill Date: 03/25/96
Referred To: NIAGARA CNTY HEALTH DEPT
Water Affected: Not reported
Spill Cause: TANK FAILURE
Facility Address 2: Not reported
Investigator: SACALAND
Caller Name: ANONYMOUS
Caller Phone: Not reported
Notifier Name: Not reported
Notifier Phone: Not reported
Spiller Contact: Not reported
Spiller: Not reported
Spiller Company: RAINBOW TIRE
Spiller Address: 9340 NIAGARA FALLS BLVD
NIAGARA FALLS, NY
Spiller County: 001

Region of Spill: 9
DER Facility ID: 111677
CID: 29
Reported to Dept: 03/25/96
DEC Region: 9
Spill Source: GASOLINE STATION

Facility Tele: Not reported
SWIS: 3211
Caller Agency: CITIZEN
Caller Extension: Not reported
Notifier Agency: Not reported
Notifier Extension: Not reported
Spiller Phone: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

RAINBOW TIRE (Continued)

S102619449

Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.

Spill Closed Dt: 07/22/96

Spill Notifier: CITIZEN

Cleanup Ceased: / /

Last Inspection: 03/25/96

Cleanup Meets Standard: True

Recommended Penalty: Penalty Not Recommended

UST Trust: True

Spill Record Last Update: 11/04/98

Date Spill Entered In Computer Data File: 03/25/96

Remediation Phase: 0

Program Number: 9516572

Regional Use: Not reported

Material

Material ID : 353084

Site ID : 129557

Operable Unit : 01

Operable Unit ID : 1031063

Material Code : 0009

Material Name : Gasoline

Case No. : Not reported

Material FA : Petroleum

Quantity : 0.00

Units : G

Recovered : No

Resource Affected - Soil : No

Resource Affected - Air : No

Resource Affected - Indoor Air : No

Resource Affected - Groundwater : Yes

Resource Affected - Surface Water : No

Resource Affected - Drinking Wtr : No

Resource Affected - Sewer : No

Resource Affected - Impervious Surface : No

Resource Affected - Subway : No

Resource Affected - Utility : No

Resource Affected - Impervious Surface : No

Oxygenate : False

Tank Test

Spill Tank Test : Not reported

Site ID : Not reported

Tank Number : Not reported

Tank Size : Not reported

Test Method : Not reported

Leak Rate : Not reported

Gross Fail : Not reported

Modified By : Not reported

Last Modified : Not reported

Test Method : Not reported

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "SAC-NCHD" 3/23/96:SAC TELECON BOB BUZZELLI,NCHD-BOB WILL FOLLOW UP. 7/22/96:RECEIVED NCHD INSPECTION REPORT FROM BOB BUZZELLI, EXCAVATION CONFIRMATORY SAMPLE RESULTS ARE BELOW GUIDANCE VALUES, NO CONTAMINATION OBSERVED THEREFORE NO DISPOSAL RECEIPTS NECESSARY. NO FURTHER ACTION, SITE IS CLOSED.

Remark: citizen reported tank removal with contaminated soil & gasoline odor

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RAINBOW TIRE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S102619449

behind building

HIST LTANKS:

Spill Number:	9516572	Region of Spill:	9
Spill Date:	03/23/1996 09:00	Reported to Dept:	03/25/96 11:36
Water Affected:	Not reported	Spill Source:	Gas Station
Resource Affectd:	Groundwater		
Spill Cause:	Tank Failure		
Facility Contact:	Not reported	Facility Tele:	Not reported
Investigator:	SAC-NCHD	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spiller Contact:	Not reported	Spiller Phone:	Not reported
Spiller:	RAINBOW TIRE		
Spiller Address:	9340 NIAGARA FALLS BLVD		
	NIAGARA FALLS, NY		

Spill Class: Possible release with minimal potential for fire or hazard or Known release with no damage. DEC Response. Willing Responsible Party. Corrective action taken.

Spill Closed Dt:	07/22/96		
Spill Notifier:	Citizen	PBS Number:	Not reported
Cleanup Ceased:	/ /		
Last Inspection:	03/25/96		
Cleanup Meets Standard:	True		
Recommended Penalty:	Penalty Not Recommended		
Spiller Cleanup Date:	/ /		
Enforcement Date:	/ /		
Investigation Complete:	/ /		
UST Involvement:	True		
Spill Record Last Update:	11/04/98		
Is Updated:	False		
Corrective Action Plan Submitted:	/ /		
Date Spill Entered In Computer Data File:	03/25/96		
Date Region Sent Summary to Central Office:	/ /		

Tank Test:

PBS Number:	Not reported
Tank Number:	Not reported
Test Method:	Not reported
Capacity of Failed Tank:	Not reported
Leak Rate Failed Tank:	Not reported
Gross Leak Rate:	Not reported

Material:

Material Class Type:	1
Quantity Spilled:	0
Units:	Gallons
Unknown Qty Spilled:	No
Quantity Recovered:	0
Unknown Qty Recovered:	False
Material:	GASOLINE
Class Type:	Petroleum
Chem Abstract Service Number:	GASOLINE
Last Date:	09/29/1994
Num Times Material Entry In File:	21329

DEC Remarks: 3/23/96:SAC TELECON BOB BUZZELLI,NCHD-BOB WILL FOLLOW UP. 7/22/96:RECEIVED NCHD INSPECTION REPORT FROM BOB BUZZELLI, EXCAVATION CONFIRMATORY SAMPLE RESULTS ARE BELOW GUIDANCE VALUES, NO CONTAMINATION OBSERVED THEREFO

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

RAINBOW TIRE (Continued)

S102619449

Spill Cause: RE NO DISPOSAL RECEIPTS NECESSARY. NO FURTHER ACTION, SITE IS CLOSED.
citi en reported tank removal with contaminated soil gasoline odor behin
d building

19
SSW
1/4-1/2
2309 ft.

MARIA HEALEY (HOME)
9200 NIAGARA FALLS BLVD
NIAGARA, NY

LTANKS S100120667
HIST LTANKS N/A

Relative:
Lower

Actual:
572 ft.

LTANKS:

Spill Number: 9010878
Facility ID: 9010878
Site ID: 177549
Spill Date: 01/11/91
Referred To: Not reported
Water Affected: Not reported
Spill Cause: TANK FAILURE
Facility Address 2: Not reported
Investigator: SORGI
Caller Name: DAVID EISENBART
Caller Phone: (716) 297-1770
Notifier Name: Not reported
Notifier Phone: Not reported
Spiller Contact: Not reported
Spiller: Not reported
Spiller Company: MARIA HEALEY
Spiller Address: 633 C STREET
NIAGARA FALLS, NY
Spiller County: 001
Spill Class: Not reported
Spill Closed Dt: 02/22/91
Spill Notifier: AFFECTED PERSONS
Cleanup Ceased: 02/22/91
Last Inspection: 01/16/91
Cleanup Meets Standard: True
Recommended Penalty: Penalty Not Recommended
UST Trust: False
Spill Record Last Update: 02/26/91
Date Spill Entered In Computer Data File: 01/11/91
Remediation Phase: 0
Program Number: 9010878
Regional Use: Not reported
Material
Material ID : 430989
Site ID : 177549
Operable Unit : 01
Operable Unit ID : 947984
Material Code : 0001
Material Name : #2 Fuel Oil
Case No. : Not reported
Material FA : Petroleum
Quantity : 250.00
Units : G
Recovered : No
Resource Affected - Soil : Yes
Resource Affected - Air : No
Resource Affected - Indoor Air : No
Resource Affected - Groundwater : No
Resource Affected - Surface Water : No

Region of Spill: 9
DER Facility ID: 149191
CID: Not reported
Reported to Dept: 01/11/91
DEC Region: 9
Spill Source: PRIVATE DWELLING

Facility Tele: (716) 298-5861
SWIS: 3230
Caller Agency: CAYUGA VILLAGE MNGR.
Caller Extension: Not reported
Notifier Agency: Not reported
Notifier Extension: Not reported
Spiller Phone: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s)
EDR ID Number
EPA ID Number

MARIA HEALEY (HOME) (Continued)

S100120667

Resource Affected - Drinking Wtr : No
Resource Affected - Sewer : No
Resource Affected - Impervious Surface : No
Resource Affected - Subway : No
Resource Affected - Utility : No
Resource Affected - Impervious Surface : No
Oxygenate : False

Tank Test

Spill Tank Test : Not reported
Site ID : Not reported
Tank Number : Not reported
Tank Size : Not reported
Test Method : Not reported
Leak Rate : Not reported
Gross Fail : Not reported
Modified By : Not reported
Last Modified : Not reported
Test Method : Not reported

DEC Remarks : Prior to Sept, 2004 data translation this spill Lead DEC Field was "MJS"
01/11/91: MJS CONTACTED NCHD. THEY WILL SEND INSPECTOR OUT TO SITE THIS AFTERNOON. REPRESENTATIVE OF INSURANCE COMPANY TO BE ON SITE.
01/11/91: MJS TELECON WITH RUDY MAIDA (NCHD). MOBILE HOME WILL HAVE TO BE MOVED TO GET AT CONCRETE PADS UNDERNEATH. F/O SEEPED INTO GROUND THRU JOINTS AND CRACKS. 01/16/91: MJS SITE INSPECTION WITH RUDY MAIDA (NCHD). REMOVAL OF PADS IS ONGOING. ALL CONTAMINATION WILL BE STAGED ON PLAS
TIC AT MAINTENENCE GARAGA. TENTATIVELY CONTAMINATION WILL BE TAKEN TO MODERN. 02/15/91: MJS TELECON WITH DAVE EISENBART. TESTING WAS DONE AND RESULTS HAVE COME BACK. MR EISENBART WAITING FOR DATE FROM MODERN. BENZENE - BQL. 02/20/91: MJS RECEIVE
D REPORT FROM NCHD. NEED RECEIPTS WHEN DISPOSED OF. 02/22/91: MJS RECEIVED INCIDENT REPORT, LAB RESULTS, AND DISPOSAL RECEIPTS FROM DAVE EISENBART.

Remark: A/G 275 GAL F/O TANK TIPPED OVER. SPILLED ON GROUND AROUND TRAILER HOME. MRS HEALEY CONTACTED INSURANCE COMPANY.

HIST LTANKS:

Spill Number:	9010878	Region of Spill:	9
Spill Date:	01/05/1991 12:00	Reported to Dept:	01/11/91 12:06
Water Affected:	Not reported	Spill Source:	Private Dwelling
Resource Affected:	On Land		
Spill Cause:	Tank Failure		
Facility Contact:	Not reported	Facility Tele:	(716) 298-5861
Investigator:	MJS	SWIS:	29
Caller Name:	Not reported	Caller Agency:	Not reported
Caller Phone:	Not reported	Caller Extension:	Not reported
Notifier Name:	Not reported	Notifier Agency:	Not reported
Notifier Phone:	Not reported	Notifier Extension:	Not reported
Spiller Contact:	Not reported	Spiller Phone:	Not reported
Spiller:	MARIA HEALEY		
Spiller Address:	633 C STREET NIAGARA FALLS, NY		
Spill Class:	Not reported		
Spill Closed Dt:	02/22/91		
Spill Notifier:	Affected Persons	PBS Number:	Not reported
Cleanup Ceased:	02/22/91		
Last Inspection:	01/16/91		
Cleanup Meets Standard:	True		

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

MARIA HEALEY (HOME) (Continued)

S100120667

Recommended Penalty: Penalty Not Recommended
Spiller Cleanup Date: / /
Enforcement Date: / /
Investigation Complete: / /
UST Involvement: False
Spill Record Last Update: 02/26/91
Is Updated: False
Corrective Action Plan Submitted: / /
Date Spill Entered In Computer Data File: 01/11/91
Date Region Sent Summary to Central Office: / /

Tank Test:

PBS Number: Not reported
Tank Number: Not reported
Test Method: Not reported
Capacity of Failed Tank: Not reported
Leak Rate Failed Tank: Not reported
Gross Leak Rate: Not reported

Material:

Material Class Type: 1
Quantity Spilled: 250
Units: Gallons
Unknown Qty Spilled: 250
Quantity Recovered: 0
Unknown Qty Recovered: False
Material: #2 FUEL OIL
Class Type: Petroleum
Chem Abstract Service Number: #2 FUEL OIL
Last Date: 12/07/1994
Num Times Material Entry In File: 24464

DEC Remarks: 01/11/91: MJS CONTACTED NCHD. THEY WILL SEND INSPECTOR OUT TO SITE THIS AFTERNOON. REPRESENTATIVE OF INSURANCE COMPANY TO BE ON SITE. 01/11/91: MJS TELECON WITH RUDY MAIDA (NCHD). MOBILE HOME WILL HAVE TO BE MOVED TO GET AT CONCRETE PADS UNDERNEATH. F/O SEEPED INTO GROUND THRU JOINTS AND CRACKS. 01/16/91: MJS SITE INSPECTION WITH RUDY MAIDA (NCHD). REMOVAL OF PADS IS ONGOING. ALL CONTAMINATION WILL BE STAGED ON PLASTIC AT MAINTENANCE GARAGE. TENTATIVELY CONTAMINATION WILL BE TAKEN TO MODERN. 02/15/91: MJS TELECON WITH DAVE EISENBART. TESTING WAS DONE AND RESULTS HAVE COME BACK. MR EISENBART WAITING FOR DATE FROM MODERN. BENZENE - BQL. 02/20/91: MJS RECEIVED REPORT FROM NCHD. NEED RECEIPTS WHEN DISPOSED OF. 02/22/91: MJS RECEIVED INCIDENT REPORT, LAB RESULTS, AND DISPOSAL RECEIPTS FROM DAVE EISENBART.

Spill Cause: A/G 275 GAL F/O TANK TIPPED OVER. SPILLED ON GROUND AROUND TRAILER HOME. MRS HEALEY CONTACTED INSURANCE COMPANY.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NIAGARA	1007739645	NIAGARA FALLS INTERNATIONAL AIRPOR	NIAGARA FALLS BLVD	14304	FINDS
NIAGARA	S106905196	SABRE PARK - ANTHONY DRIVE AREA	1705 THIRD STREET	14304	SHWS
NIAGARA FALLS	S105586508	HOOKE-102ND STREET LANDFILL	102ND STREET, SOUTH OF RIVER R	14304	SHWS
NIAGARA FALLS	S106152828	102ND STREET LANDFILL (OLIN)	102ND STREET	14304	SHWS
NIAGARA FALLS	S103573070	UNI-MART STORE #5010	ROUTE 31 / MILITARY ROAD		NY Spills, NY Hist Spills
NIAGARA FALLS	1009230796	NIAGARA RECYCLING	56TH ST / NIAGARA FALLS BLVD	14304	NY MANIFEST
NIAGARA FALLS	S102177809	SATARIAN AUTO PARTS	ROUTE 62 / TUSCARORA ROAD		NY Spills, NY Hist Spills
NIAGARA FALLS	1007264873	NYSDOT LA SALLE ARTERIAL EXPRESSWA	RTE 951 A MILEPOST 5401 1005	14304	RCRA-LQG, NY MANIFEST
NIAGARA FALLS	S103561959	NIAGARA MOHAWK	7619 GREENFIELD ST.		NY Spills, NY Hist Spills
NIAGARA FALLS	1003863682	NEW ROAD LF	NEW RD NORTH OF PORTER	14304	CERC-NFRAP
NIAGARA FALLS	S106010930	NIAGARA FALLS AFB	NIAGARA FALL BLVD./PORTER		NY Spills
NIAGARA FALLS	1007739667	NIAGARA STREET OVER GILL CREEK	NIAGARA STREET AT HYDE PARK BL		FINDS
NIAGARA FALLS	99641506	NIAGARA ST CORNER OF 25TH ST	NIAGARA ST CORNER OF 25TH ST		ERNS
NIAGARA FALLS	S106013195	LEAKING TANKER TRUCK	I190S PACKARD/PORTER EXIT		NY Spills
NIAGARA FALLS	S102174715	NIAGARA MOHAWK	PORTER ROAD		NY Spills, NY Hist Spills
NIAGARA FALLS	S107658296	CAYUGA CREEK	PORTER ROAD	14304	NY Spills
NIAGARA FALLS	S103562403	SIMON OIL	PORTER AVENUE		NY Spills, NY Hist Spills
NIAGARA FALLS	S104953241	OIL FROM UNKNOWN TRUCK	PORTER PACKET ROAD/I190		NY Spills, NY Hist Spills
NIAGARA FALLS	S102569852	UNKNOWN VEHICLE ON I190	I190 RAMP AT ROUTE 62		NY Spills, NY Hist Spills
NIAGARA FALLS	1009232989	UNITED STATES MILITARY	RESERVE CENTER 9400 PORTER RD	14304	NY MANIFEST
NIAGARA FALLS	1009227125	NIAGARA RECYCLING	56 ST/NIAGARA FALLS BLVD	14304	NY MANIFEST
NIAGARA FALLS	S103562826	NIAGARA MOHAWK	65 101ST STREET		NY Spills, NY Hist Spills
NIAGARA FALLS	S105997144	NIAGARA COUNTY CIVIC BUIL	775 THIRD STREET		LTANKS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 8
Telephone: 303-312-6774

EPA Region 4
Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

NPL RECOVERY: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 05/23/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 06/22/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 06/23/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006	Source: EPA
Date Data Arrived at EDR: 03/17/2006	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 05/21/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/09/2006	Source: EPA
Date Data Arrived at EDR: 04/27/2006	Telephone: 800-424-9346
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/12/2006	Telephone: 202-260-2342
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 04/26/2006
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/24/2006
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-366-4555
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/14/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 07/17/2006
	Data Release Frequency: Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 703-692-8801
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 05/12/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/05/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 01/19/2006	Telephone: 202-528-4285
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 04/26/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/27/2006	Telephone: 202-566-2777
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/12/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/11/2006
	Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/2005	Telephone: Varies
Date Made Active in Reports: 04/25/2005	Last EDR Contact: 03/13/2006
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/24/2006
	Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/13/2006	Source: EPA
Date Data Arrived at EDR: 04/28/2006	Telephone: 703-416-0223
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/06/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/28/2005	Telephone: 505-845-0011
Date Made Active in Reports: 01/30/2006	Last EDR Contact: 06/21/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2003

Date Data Arrived at EDR: 07/13/2005

Date Made Active in Reports: 08/17/2005

Number of Days to Update: 35

Source: EPA

Telephone: 202-566-0250

Last EDR Contact: 06/22/2006

Next Scheduled EDR Contact: 09/18/2006

Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002

Date Data Arrived at EDR: 04/14/2006

Date Made Active in Reports: 05/30/2006

Number of Days to Update: 46

Source: EPA

Telephone: 202-260-5521

Last EDR Contact: 04/12/2006

Next Scheduled EDR Contact: 07/17/2006

Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/29/2006

Date Data Arrived at EDR: 04/26/2006

Date Made Active in Reports: 05/30/2006

Number of Days to Update: 34

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667

Last EDR Contact: 06/19/2006

Next Scheduled EDR Contact: 09/18/2006

Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 03/31/2006

Date Data Arrived at EDR: 04/26/2006

Date Made Active in Reports: 05/30/2006

Number of Days to Update: 34

Source: EPA

Telephone: 202-566-1667

Last EDR Contact: 06/19/2006

Next Scheduled EDR Contact: 09/18/2006

Data Release Frequency: Quarterly

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004

Date Data Arrived at EDR: 05/11/2006

Date Made Active in Reports: 05/22/2006

Number of Days to Update: 11

Source: EPA

Telephone: 202-564-4203

Last EDR Contact: 03/06/2006

Next Scheduled EDR Contact: 07/17/2006

Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006

Date Data Arrived at EDR: 04/21/2006

Date Made Active in Reports: 05/11/2006

Number of Days to Update: 20

Source: Environmental Protection Agency

Telephone: 202-564-5088

Last EDR Contact: 04/11/2006

Next Scheduled EDR Contact: 07/17/2006

Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/27/2005	Source: EPA
Date Data Arrived at EDR: 02/08/2006	Telephone: 202-566-0500
Date Made Active in Reports: 02/27/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 19	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/12/2006	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 04/26/2006	Telephone: 301-415-7169
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Quarterly

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2006	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 03/29/2006	Telephone: 303-231-5959
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 09/25/2006
	Data Release Frequency: Semi-Annually

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/27/2006	Source: EPA
Date Data Arrived at EDR: 05/02/2006	Telephone: N/A
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/03/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/05/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2003
Date Data Arrived at EDR: 06/17/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 48

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/30/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

HSWDS: Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 09/01/2002
Date Data Arrived at EDR: 10/15/2002
Date Made Active in Reports: 10/30/2002
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-9564
Last EDR Contact: 05/30/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: No Update Planned

SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 12/30/2005
Date Data Arrived at EDR: 01/23/2006
Date Made Active in Reports: 02/07/2006
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 06/15/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Annually

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 12/30/2005
Date Data Arrived at EDR: 01/23/2006
Date Made Active in Reports: 02/07/2006
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 06/15/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Annually

SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/03/2006
Date Data Arrived at EDR: 05/03/2006
Date Made Active in Reports: 05/17/2006
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-457-2051
Last EDR Contact: 05/01/2006
Next Scheduled EDR Contact: 07/31/2006
Data Release Frequency: Semi-Annually

SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 05/03/2006
Date Data Arrived at EDR: 05/03/2006
Date Made Active in Reports: 05/17/2006
Number of Days to Update: 14

Source: Department of Environmental Conservation
Telephone: 518-402-8705
Last EDR Contact: 05/01/2006
Next Scheduled EDR Contact: 07/31/2006
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SWTIRE: Registered Waste Tire Storage & Facility List

Date of Government Version: 04/01/2004
Date Data Arrived at EDR: 05/19/2004
Date Made Active in Reports: 06/25/2004
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8694
Last EDR Contact: 05/19/2006
Next Scheduled EDR Contact: 08/14/2006
Data Release Frequency: Annually

LTANKS: Spills Information Database

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 04/05/2006
Date Data Arrived at EDR: 04/06/2006
Date Made Active in Reports: 05/17/2006
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/22/2006
Next Scheduled EDR Contact: 08/21/2006
Data Release Frequency: Varies

HIST LTANKS: Listing of Leaking Storage Tanks

A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST: Petroleum Bulk Storage (PBS) Database

Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/02/2006
Next Scheduled EDR Contact: 07/24/2006
Data Release Frequency: No Update Planned

CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 10/24/2005
Next Scheduled EDR Contact: 01/23/2006
Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Petroleum Bulk Storage
Registered Aboveground Storage Tanks.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/02/2006
Next Scheduled EDR Contact: 07/24/2006
Data Release Frequency: No Update Planned

CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/02/2006
Date Data Arrived at EDR: 05/31/2006
Date Made Active in Reports: 06/27/2006
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/31/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Annually

SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 04/05/2006
Date Data Arrived at EDR: 04/06/2006
Date Made Active in Reports: 05/17/2006
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 06/22/2006
Next Scheduled EDR Contact: 08/21/2006
Data Release Frequency: Varies

HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 12/30/2005
Date Data Arrived at EDR: 01/23/2006
Date Made Active in Reports: 02/07/2006
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 06/15/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 12/30/2005
Date Data Arrived at EDR: 01/23/2006
Date Made Active in Reports: 02/07/2006
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 06/15/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Quarterly

VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 12/30/2005
Date Data Arrived at EDR: 01/05/2006
Date Made Active in Reports: 02/07/2006
Number of Days to Update: 33

Source: Department of Environmental Conservation
Telephone: 518-402-9711
Last EDR Contact: 06/15/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Semi-Annually

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 06/15/2004
Date Data Arrived at EDR: 06/15/2004
Date Made Active in Reports: 07/29/2004
Number of Days to Update: 44

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 05/21/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 12/30/2005
Date Data Arrived at EDR: 01/23/2006
Date Made Active in Reports: 02/07/2006
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-9764
Last EDR Contact: 06/15/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Semi-Annually

SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 05/11/2006
Date Data Arrived at EDR: 05/11/2006
Date Made Active in Reports: 06/27/2006
Number of Days to Update: 47

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 05/09/2006
Next Scheduled EDR Contact: 08/07/2006
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AIRS: Air Emissions Data

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 09/13/2004
Date Made Active in Reports: 10/18/2004
Number of Days to Update: 35

Source: Department of Environmental Conservation
Telephone: 518-402-8452
Last EDR Contact: 06/05/2006
Next Scheduled EDR Contact: 08/21/2006
Data Release Frequency: Annually

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/08/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 177

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 05/12/2006
Next Scheduled EDR Contact: 08/07/2006
Data Release Frequency: Semi-Annually

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

CORTLAND COUNTY:

Cortland County Storage Tank Listing

Date of Government Version: 03/28/2006
Date Data Arrived at EDR: 04/03/2006
Date Made Active in Reports: 04/27/2006
Number of Days to Update: 24

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 05/30/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Quarterly

Cortland County Storage Tank Listing

Date of Government Version: 03/28/2006
Date Data Arrived at EDR: 04/03/2006
Date Made Active in Reports: 04/27/2006
Number of Days to Update: 24

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 05/30/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Quarterly

NASSAU COUNTY:

Registered Tank Database

Date of Government Version: 05/21/2003
Date Data Arrived at EDR: 05/27/2003
Date Made Active in Reports: 06/09/2003
Number of Days to Update: 13

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 05/01/2006
Next Scheduled EDR Contact: 07/31/2006
Data Release Frequency: No Update Planned

Storage Tank Database

Date of Government Version: 05/25/2004
Date Data Arrived at EDR: 06/08/2004
Date Made Active in Reports: 07/29/2004
Number of Days to Update: 51

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 06/07/2006
Next Scheduled EDR Contact: 08/07/2006
Data Release Frequency: Varies

Storage Tank Database

Date of Government Version: 05/25/2004
Date Data Arrived at EDR: 06/08/2004
Date Made Active in Reports: 07/29/2004
Number of Days to Update: 51

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 06/07/2006
Next Scheduled EDR Contact: 08/07/2006
Data Release Frequency: Varies

Registered Tank Database

Date of Government Version: 05/21/2003
Date Data Arrived at EDR: 05/27/2003
Date Made Active in Reports: 06/09/2003
Number of Days to Update: 13

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 05/01/2006
Next Scheduled EDR Contact: 07/31/2006
Data Release Frequency: No Update Planned

ROCKLAND COUNTY:

Petroleum Bulk Storage Database

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/21/2006
Date Data Arrived at EDR: 04/24/2006
Date Made Active in Reports: 05/24/2006
Number of Days to Update: 30

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 07/03/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Quarterly

Petroleum Bulk Storage Database

Date of Government Version: 04/21/2006
Date Data Arrived at EDR: 04/24/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 28

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 07/03/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Quarterly

SUFFOLK COUNTY:

Storage Tank Database

Date of Government Version: 06/21/2005
Date Data Arrived at EDR: 09/19/2005
Date Made Active in Reports: 11/03/2005
Number of Days to Update: 45

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 06/02/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Annually

Storage Tank Database

Date of Government Version: 06/21/2005
Date Data Arrived at EDR: 09/19/2005
Date Made Active in Reports: 11/03/2005
Number of Days to Update: 45

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 06/02/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Annually

WESTCHESTER COUNTY:

Listing of Storage Tanks

Listing of aboveground storage tanks in Westchester County.

Date of Government Version: 05/05/2005
Date Data Arrived at EDR: 05/31/2005
Date Made Active in Reports: 06/30/2005
Number of Days to Update: 30

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 05/31/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Varies

Listing of Storage Tanks

Listing of underground storage tanks in Westchester County.

Date of Government Version: 05/05/2005
Date Data Arrived at EDR: 05/31/2005
Date Made Active in Reports: 06/30/2005
Number of Days to Update: 30

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 05/31/2006
Next Scheduled EDR Contact: 08/28/2006
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/17/2006
Date Made Active in Reports: 04/07/2006
Number of Days to Update: 49

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 06/14/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 04/24/2006
Date Made Active in Reports: 05/02/2006
Number of Days to Update: 8

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/05/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 05/04/2006
Date Made Active in Reports: 06/06/2006
Number of Days to Update: 33

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/12/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 09/30/2005
Date Data Arrived at EDR: 05/09/2006
Date Made Active in Reports: 05/24/2006
Number of Days to Update: 15

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 06/19/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 05/17/2006
Number of Days to Update: 61

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 05/15/2006
Next Scheduled EDR Contact: 08/14/2006
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 05/02/2006
Number of Days to Update: 46

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 07/11/2006
Next Scheduled EDR Contact: 10/09/2006
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers

Source: Department of Health

Telephone: 212-676-2444

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NIAGARA FALLS USARC/AMSA 76, NY
9400 PORTER ROAD
NIAGARA FALLS, NY 14304

TARGET PROPERTY COORDINATES

Latitude (North):	43.10020 - 43° 6' 0.7"
Longitude (West):	78.9549 - 78° 57' 17.6"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	666428.7
UTM Y (Meters):	4773757.0
Elevation:	577 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	43078-A8 TONAWANDA WEST, NY
Most Recent Revision:	1980

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

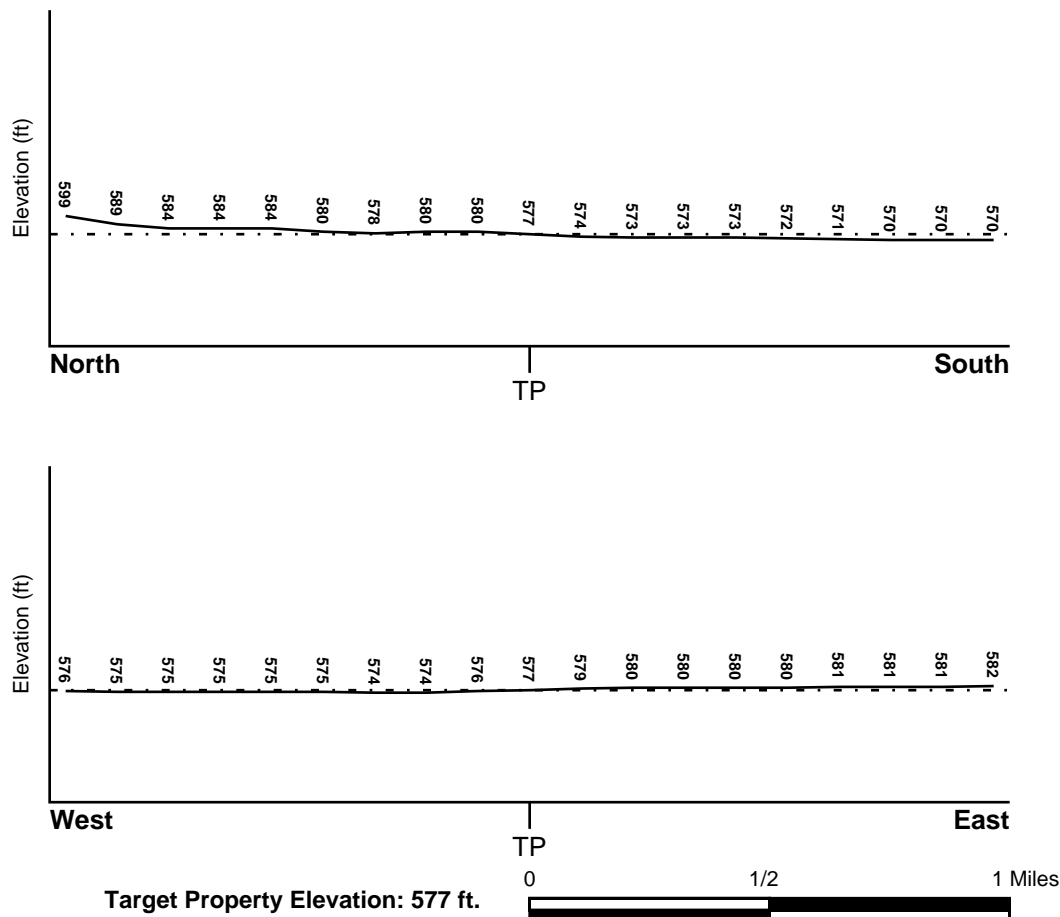
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County
NIAGARA, NY

FEMA Flood
Electronic Data
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 3605070004B

Additional Panels in search area: 3605070002B
3605130001B
3605130004D
3605060003C

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
TONAWANDA WEST

NWI Electronic
Data Coverage
YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data:*

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u> <u>FROM TP</u>	<u>GENERAL DIRECTION</u> <u>GROUNDWATER FLOW</u>
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Silurian
Series:	Middle Silurian (Niagoaran)
Code:	S2 (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: LAKEMONT

Soil Surface Texture: silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Not reported

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	8 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 6.10
2	8 inches	26 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.06 Min: 0.00	Max: 7.30 Min: 6.10
3	26 inches	60 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.06 Min: 0.00	Max: 8.40 Min: 7.40

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam
mucky - silt loam
loamy fine sand
fine sandy loam

Surficial Soil Types: silt loam
mucky - silt loam
loamy fine sand
fine sandy loam

Shallow Soil Types: loamy fine sand

Deeper Soil Types: silt loam
fine sand
gravelly - loam

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS2242961	0 - 1/8 Mile NNW
2	USGS2242955	1/8 - 1/4 Mile East
3	USGS2242949	1/4 - 1/2 Mile ESE
4	USGS2242964	1/4 - 1/2 Mile WNW
5	USGS2242945	1/4 - 1/2 Mile WSW
6	USGS2242794	1/4 - 1/2 Mile NNW
7	USGS2242965	1/4 - 1/2 Mile West
8	USGS2242941	1/2 - 1 Mile WSW
9	USGS2242786	1/2 - 1 Mile WNW
10	USGS2242929	1/2 - 1 Mile WSW
A11	USGS2242948	1/2 - 1 Mile East
A12	USGS2242947	1/2 - 1 Mile East
13	USGS2242897	1/2 - 1 Mile SW
14	USGS2242933	1/2 - 1 Mile WSW
15	USGS2242953	1/2 - 1 Mile East
16	USGS2242890	1/2 - 1 Mile SSE
17	USGS2242827	1/2 - 1 Mile NNE
18	USGS2242773	1/2 - 1 Mile West
19	USGS2242822	1/2 - 1 Mile NNE
20	USGS2242879	1/2 - 1 Mile South
21	USGS2242816	1/2 - 1 Mile NW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

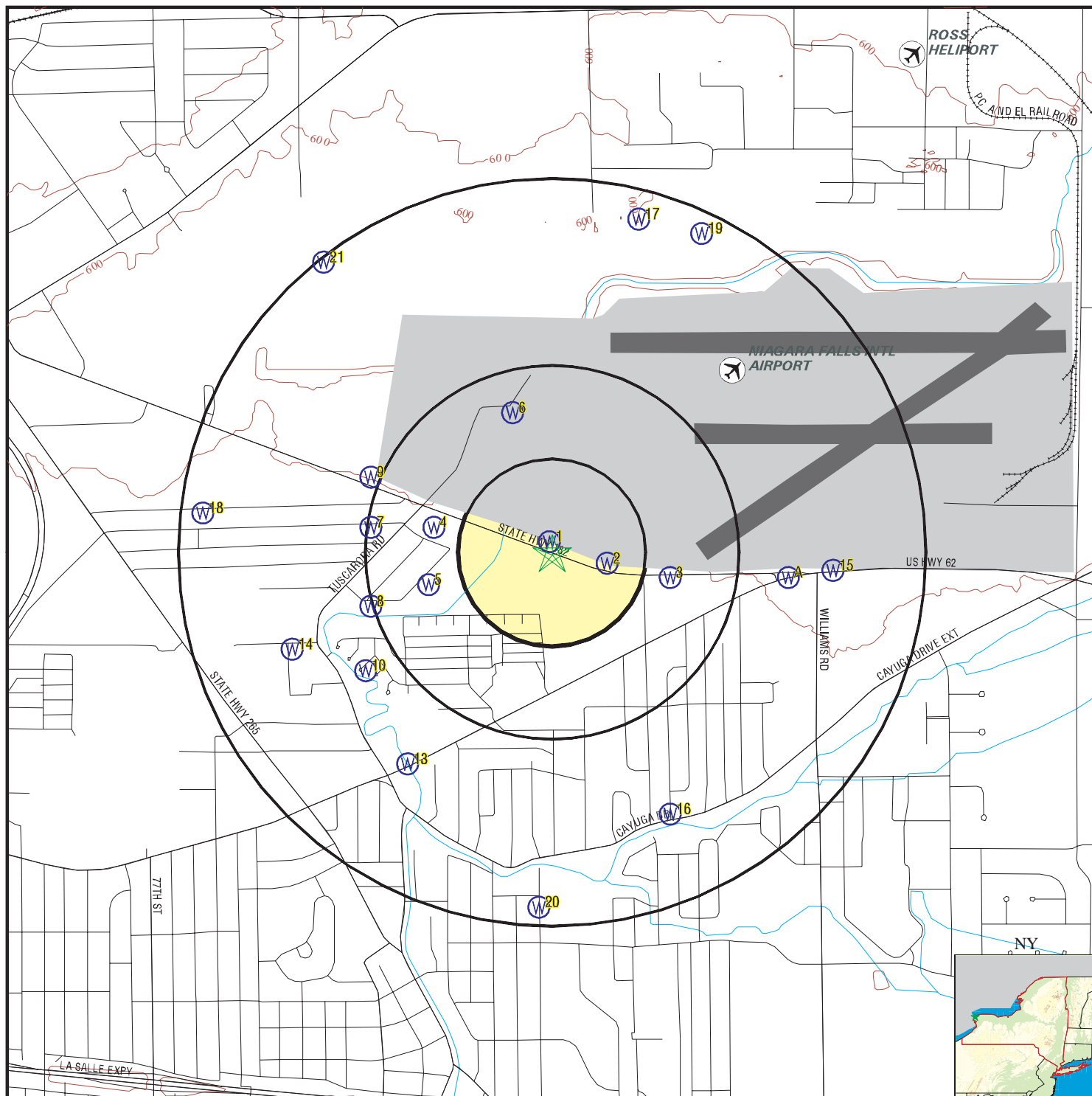
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 01714247.26r



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data

SITE NAME: Niagara Falls USARC/AMSA 76, NY
 ADDRESS: 9400 PORTER ROAD
 NIAGARA FALLS NY 14304
 LAT/LONG: 43.1002 / 78.9549

CLIENT: CH2M Hill
 CONTACT: Mary Beth Jacques
 INQUIRY #: 01714247.26r
 DATE: July 13, 2006

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
NNW
0 - 1/8 Mile
Higher

FED USGS USGS2242961

Agency cd:	USGS	Site no:	430602078571901
Site name:	NI 216		
Latitude:	430602		
Longitude:	0785719	Dec lat:	43.1006116
Dec lon:	-78.95504108	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	581	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported		
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data end date:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

2
East
1/8 - 1/4 Mile
Higher

FED USGS USGS2242955

Agency cd:	USGS	Site no:	430559078570801
Site name:	NI 213		
Latitude:	430559		
Longitude:	0785708	Dec lat:	43.09977829
Dec lon:	-78.95198539	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	581	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

3
ESE
1/4 - 1/2 Mile
Higher

FED USGS USGS2242949

Agency cd:	USGS	Site no:	430557078565601
Site name:	NI 211		
Latitude:	430557		
Longitude:	0785656	Dec lat:	43.09922275
Dec lon:	-78.94865192	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	577	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

4
WNW
1/4 - 1/2 Mile
Higher

FED USGS USGS2242964

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	430604078574101
Site name:	NI 219		
Latitude:	430604		
Longitude:	0785741	Dec lat:	43.10116711
Dec lon:	-78.96115243	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	581	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

5

WSW

1/4 - 1/2 Mile

Lower

FED USGS

USGS2242945

Agency cd:	USGS	Site no:	430556078574201
Site name:	NI 207		
Latitude:	430556		
Longitude:	0785742	Dec lat:	43.0989449
Dec lon:	-78.96143019	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	573	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported
Water quality data end date: Not Reported
Ground water data begin date: Not Reported
Ground water data count: Not Reported

Water quality data begin date: Not Reported
Water quality data count: Not Reported
Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

6

NNW
1/4 - 1/2 Mile
Higher

FED USGS USGS2242794

Agency cd:	USGS	Site no:	430620078572601
Site name:	NI 240		
Latitude:	430620		
Longitude:	0785726	Dec lat:	43.10561156
Dec lon:	-78.95698566	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	250000
Altitude:	596	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

7

West
1/4 - 1/2 Mile
Higher

FED USGS USGS2242965

Agency cd:	USGS	Site no:	430604078575301
Site name:	NI 220		
Latitude:	430604		
Longitude:	0785753	Dec lat:	43.10116709
Dec lon:	-78.96448589	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	580	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

8

WSW

1/2 - 1 Mile

Lower

FED USGS

USGS2242941

Agency cd:	USGS	Site no:	430553078575301
Site name:	NI 203		
Latitude:	430553		
Longitude:	0785753	Dec lat:	43.09811156
Dec lon:	-78.96448585	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	573	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

9

WNW
1/2 - 1 Mile
Higher

FED USGS USGS2242786

Agency cd:	USGS	Site no:	430611078575301
Site name:	NI 232		
Latitude:	430611		
Longitude:	0785753	Dec lat:	43.10311153
Dec lon:	-78.96448592	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	583	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported		
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data end date:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

10

WSW
1/2 - 1 Mile
Lower

FED USGS USGS2242929

Agency cd:	USGS	Site no:	430544078575401
Site name:	NI 192		
Latitude:	430544		
Longitude:	0785754	Dec lat:	43.09561157
Dec lon:	-78.9647636	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	574	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

A11
East
1/2 - 1 Mile
Higher

FED USGS USGS2242948

Agency cd:	USGS	Site no:	430557078563401
Site name:	NI 210		
Latitude:	430557		
Longitude:	0785634	Dec lat:	43.09922279
Dec lon:	-78.94254058	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	Not Reported
Altitude:	Not Reported	Altitude method:	Not Reported
Altitude accuracy:	Not Reported	Altitude datum:	Not Reported
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1982-10-13
Water quality data end date:	1982-10-13	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

A12
East
1/2 - 1 Mile
Higher

FED USGS USGS2242947

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	430557078563301
Site name:	NI 209		
Latitude:	430557		
Longitude:	0785633	Dec lat:	43.09922279
Dec lon:	-78.94226279	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	575	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**13
SW
1/2 - 1 Mile
Lower**

FED USGS USGS2242897

Agency cd:	USGS	Site no:	430531078574601
Site name:	NI 178		
Latitude:	430531		
Longitude:	0785746	Dec lat:	43.09200049
Dec lon:	-78.96254125	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	575	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported
Water quality data end date: Not Reported
Ground water data begin date: Not Reported
Ground water data count: Not Reported

Water quality data begin date: Not Reported
Water quality data count: Not Reported
Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

14 WSW 1/2 - 1 Mile Lower

FED USGS USGS2242933

Agency cd:	USGS	Site no:	430547078580801
Site name:	NI 196		
Latitude:	430547		
Longitude:	0785808	Dec lat:	43.09644488
Dec lon:	-78.96865265	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	563	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

15 East 1/2 - 1 Mile Higher

FED USGS USGS2242953

Agency cd:	USGS	Site no:	430558078562501
Site name:	NI 212		
Latitude:	430558		
Longitude:	0785625	Dec lat:	43.09950058
Dec lon:	-78.94004048	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	580	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

16
SSE
1/2 - 1 Mile
Lower

FED USGS USGS2242890

Agency cd:	USGS	Site no:	430524078565601
Site name:	NI 171		
Latitude:	430524		
Longitude:	0785656	Dec lat:	43.09005614
Dec lon:	-78.9486518	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	574	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

17
NNE
1/2 - 1 Mile
Higher

FED USGS USGS2242827

Agency cd:	USGS	Site no:	430647078570201
Site name:	NI 273		
Latitude:	430647		
Longitude:	0785702	Dec lat:	43.11311155
Dec lon:	-78.95031884	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	600	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported		
Source of depth data:	Not Reported		
Real time data flag:	Not Reported		
Daily flow data begin date:	Not Reported		
Daily flow data end date:	Not Reported		
Peak flow data begin date:	Not Reported		
Peak flow data count:	Not Reported		
Water quality data begin date:	Not Reported		
Water quality data end date:	Not Reported		
Ground water data begin date:	Not Reported		
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

18
West
1/2 - 1 Mile
Higher

FED USGS USGS2242773

Agency cd:	USGS	Site no:	430606078582501
Site name:	NI 223		
Latitude:	430606		
Longitude:	0785825	Dec lat:	43.10172259
Dec lon:	-78.97337513	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	579	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

19
NNE
1/2 - 1 Mile
Higher

FED USGS USGS2242822

Agency cd:	USGS	Site no:	430645078565001
Site name:	NI 267		
Latitude:	430645		
Longitude:	0785650	Dec lat:	43.11255602
Dec lon:	-78.94698537	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	595	Altitude method:	M
Altitude accuracy:	100	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

20
South
1/2 - 1 Mile
Lower

FED USGS USGS2242879

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	430511078572101
Site name:	NI 144		
Latitude:	430511		
Longitude:	0785721	Dec lat:	43.08644501
Dec lon:	-78.95559646	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	573	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

21
NW
1/2 - 1 Mile
Higher

FED USGS USGS2242816

Agency cd:	USGS	Site no:	430641078580201
Site name:	NI 263		
Latitude:	430641		
Longitude:	0785802	Dec lat:	43.1114448
Dec lon:	-78.96698613	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	063
Country:	US	Land net:	Not Reported
Location map:	TONAWANDA W I-05-4	Map scale:	25000
Altitude:	586	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Niagara. New York. Area = 774 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	NY86-16400
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported
Water quality data end date: Not Reported
Ground water data begin date: Not Reported
Ground water data count: Not Reported

Water quality data begin date: Not Reported
Water quality data count: Not Reported
Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: NY Radon

Radon Test Results

Zip	Num Sites	< 4 Pci/L	>= 4 Pci/L	>= 20 Pci/L	Avg > 4 Pci/L	Max Pci/L
14304	118	111 (94.1%)	7 (5.9%)	0 (0%)	1.25	10.6

Federal EPA Radon Zone for NIAGARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for NIAGARA COUNTY, NY

Number of sites tested: 177

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.800 pCi/L	98%	2%	0%
Basement	1.130 pCi/L	95%	5%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

New York Public Water Wells

Source: New York Department of Health

Telephone: 518-458-6731

OTHER STATE DATABASE INFORMATION

RADON

State Database: NY Radon

Source: Department of Health

Telephone: 518-402-7556

Radon Test Results

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Fax To: CH2M Hill
Contact: Mary Beth Jacques
Fax : 404-229-9152
Date: 07/13/2006

Fax From: Bart Sobieralski
EDR
Phone: 1-800-352-0050

EDR PUR-IQ[®] Report

"the intelligent way to conduct historical research"

for
Niagara Falls USARC/AMSA 76, NY
9400 PORTER ROAD
NIAGARA FALLS, NY 14304
Lat./Long. 43.10020 / 78.95490
EDR Inquiry # 01714247.26r

The EDR PUR-IQ report facilitates historical research planning required to complete the Phase I ESA process. The report identifies the *likelihood* of prior use coverage by searching proprietary EDR-Prior Use Reports[®] comprising nationwide information on: city directories, fire insurance maps, aerial photographs, historical topographic maps, flood maps and National Wetland Inventory maps.

Potential for EDR Historical (Prior Use) Coverage - Coverage in the following historical information sources may be used as a guide to develop your historical research strategy:

- 1. City Directory:** Coverage may exist for portions of Niagara County, NY.
- 2. Fire Insurance Map:** When you order online any EDR Package or the EDR Radius Map with EDR Sanborn Map Search/Print, you receive site specific Sanborn Map coverage information at no charge.
- 3. Aerial Photograph:** Aerial photography coverage may exist for portions of Niagara County. Please contact your EDR Account Executive for information about USGS photos available through EDR.
- 4. Topographic Map:** The USGS 7.5 min. quad topo sheet(s) associated with this site:

Historical:	Coverage exists for Niagara County	
Current:	Target Property:	TP 1980 43078-A8 Tonawanda West, NY

EDR's network of professional researchers, located throughout the United States, accesses the most extensive national collections of city directory, fire insurance maps, aerial photographs and historical topographic map resources available for NIAGARA FALLS, NY. These collections may be located in multiple libraries throughout the country. To ensure maximum coverage, EDR will often assign researchers at these multiple locations on your behalf. Please call or fax your EDR representative to authorize a search.



EDR - HISTORICAL SOURCE(S) ORDER FORM

CH2M Hill
Mary Beth Jacques
Account # 1592163

Niagara Falls USARC/AMSA 76, NY
9400 PORTER ROAD
NIAGARA FALLS, NY 14304
Niagara County
Lat./Long. 43.10020 / 78.95490
EDR Inquiry # 01714247.26r

Should you wish to change or add to your order, fax this form to your EDR account executive:

Bart Sobieralski
Ph: 1-800-352-0050 Fax: 1-800-231-6802

Reports

- ☐ EDR Sanborn Map® Search/Print
- ☐ EDR Fire Insurance Map Abstract
- ☐ EDR Multi-Tenant Retail Facility® Report
- ☐ EDR City Directory Abstract
- ☐ EDR Aerial Photo Decade Package
- ☐ USGS Aerial 5 Package
- ☐ USGS Aerial 3 Package
- ☐ EDR Historical Topographic Maps
- ☐ Paper Current USGS Topo (7.5 min.)
- ☐ Environmental Lien Search
- ☐ Chain of Title Search
- ☐ NJ MacRaes Industrial Directory Report
- ☐ EDR Telephone Interview

Shipping:

- ☐ Email
- ☐ Express, Next Day Delivery
- ☐ Express, Second Day Delivery
- ☐ Express, Next day Delivery
- ☐ Express, Second Day Delivery
- ☐ U.S. Mail

Customer Account
Customer Account

RUSH SERVICE IS AVAILABLE

Acct # _____
Acct # _____

Thank you



"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Mary Beth Jacques

CH2M Hill

1569 Stampmill Way

Lawrenceville, GA 30043

Order Date: 7/12/2006 **Completion Date:** 7/12/2006

Inquiry #: 1714247.27

P.O. #: NA

Site Name: Niagara Falls USARC/AMSA 76, NY

Address: 9400 PORTER ROAD

City/State: NIAGARA FALLS, NY 14304

Cross Streets:

Customer Project: NA

1592163BAS 770-338-1589

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

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EDR® Environmental
Data Resources Inc

The EDR-City Directory *Abstract*

**Niagara Falls USARC/AMSA 76, NY
9400 PORTER ROAD
NIAGARA FALLS, NY 14304**

Inquiry Number: 1714247.30

Monday, July 24, 2006

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening report designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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SUMMARY

- ***City Directories:***

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1961 through 2005. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

Date EDR Searched Historical Sources: July 24, 2006

TargetProperty:

9400 PORTER ROAD
NIAGARA FALLS, NY 14304

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1961	Address Not Listed in Research Source	Polk's City Directory
1966	Address Not Listed in Research Source	Polk's City Directory
1970	Address Not Listed in Research Source	Polk's City Directory
1975	Armed Forces Reserve Center of Niagara Falls	Polk's City Directory
1980	Armed Forces Reserve Center of Niagara Falls	Polk's City Directory
1985	Armed Forces Reserve Center of Niagara Falls	Polk's City Directory
1990	Armed Forces Reserve Center of Niagara Falls	Polk's City Directory
1995	Address Not Listed in Research Source	Haines Criss-Cross Directory
2000	Address Not Listed in Research Source	Haines Criss-Cross Directory
2005	Address Not Listed in Research Source	Haines Criss-Cross Directory

Adjoining Properties

SURROUNDING

Multiple Addresses
NIAGARA FALLS, NY 14304

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1961	Address Not Listed in Research Source	Polk's City Directory
1966	Address Not Listed in Research Source	Polk's City Directory
1970	Address Not Listed in Research Source	Polk's City Directory
1975	Address Not Listed in Research Source	Polk's City Directory
1980	Address Not Listed in Research Source	Polk's City Directory
1985	Address Not Listed in Research Source	Polk's City Directory

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1990	Address Not Listed in Research Source	Polk's City Directory
1995	Address Not Listed in Research Source	Haines Criss-Cross Directory
2000	Address Not Listed in Research Source	Haines Criss-Cross Directory
2005	Address Not Listed in Research Source	Haines Criss-Cross Directory



The EDR Aerial Photo Decade Package

**Niagara Falls USARC/AMSA 76, NY
9400 PORTER ROAD
NIAGARA FALLS, NY 14304**

Inquiry Number: 1714247.29

July 31, 2006

The Standard in Environmental Risk Management Information

**440 Wheelers Farms Road
Milford, Connecticut 06461**

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

This document reports that EDR searched its own collection or select outside repository collections of aerial photography, and based on client-supplied target property information, aerial photography, including the target property was not deemed reasonably ascertainable by Environmental Data Resources, Inc. (EDR). This no coverage determination reflects a search only of aerial photography repository collections that EDR accessed. It can not be concluded from this search that no coverage for the target property exists anywhere, in any collection.

NO COVERAGE

Thank you for your business.

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EDR® Environmental
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EDR Historical Topographic Map Report

**Niagara Falls USARC/AMSA 76, NY
9400 PORTER ROAD
NIAGARA FALLS, NY 14304**

Inquiry Number: 1714247.28

July 13, 2006

The Standard in Environmental Risk Management Information

**440 Wheelers Farms Road
Milford, Connecticut 06461**

Nationwide Customer Service

Telephone: 1-800-352-0050

Fax: 1-800-231-6802

Internet: www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900's.

Thank you for your business.

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