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INVESTIGATION RESULTS REPORT
UNDER NYSDEC VOLUNTARY CLEANUP PROGRAM
NATIONAL FUEL GAS DISTRIBUTION CORPORATION
BUFFALO, NEW YORK
IT Corporation Project 805808 JANUARY 15, 2002
VOLUME 2 OF 2

INVESTIGATION RESULTS REPORT
UNDER NYSDEC VOLUNTARY CLEANUP PROGRAM

NATIONAL FUEL GAS DISTRIBUTION CORPORATION
FORMER BUFFALO SERVICES CENTER
BUFFALO, NEW YORK

VOLUME 2 OF 2

January 15, 2002

Prepared For:

TANYA ALEXANDER, CHMM
10 Lafayette Square
Buffalo, New York 14203

Prepared By:

IT Corporation
13 British American Boulevard
Latham, New York 12110-1405

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APPENDIX
A

91B-2-99

1899

14

15

TERRACE

FRONT AV.

COURT

COURT PL.

JACKSON

GASOMETER

WILKESON

Co.

LUMBER NO. NOT SPRINKLED

MONTGOMERY DOOR AND BOX CO.

BUFFALO GAS LIGHT Co.

GASOMETER

GASOMETER

COKE SHED

RETORT HOUSE

BENCHES

OXIDE NO.

OXIDE NO.

METER NO.

PURIFIERS

COAL SHED

FOURTH

W. GENESEE

FISHER MELTING CO.

MONTGOMERY LUMBER

DOOR & BOX CO.

PILES

Slip

Wilkeson

COAL PILE 50' HIGH

R. P. KEHR-STONE CUTTER

CHURCH

Erie Canal

Scale of Feet.

12

1884

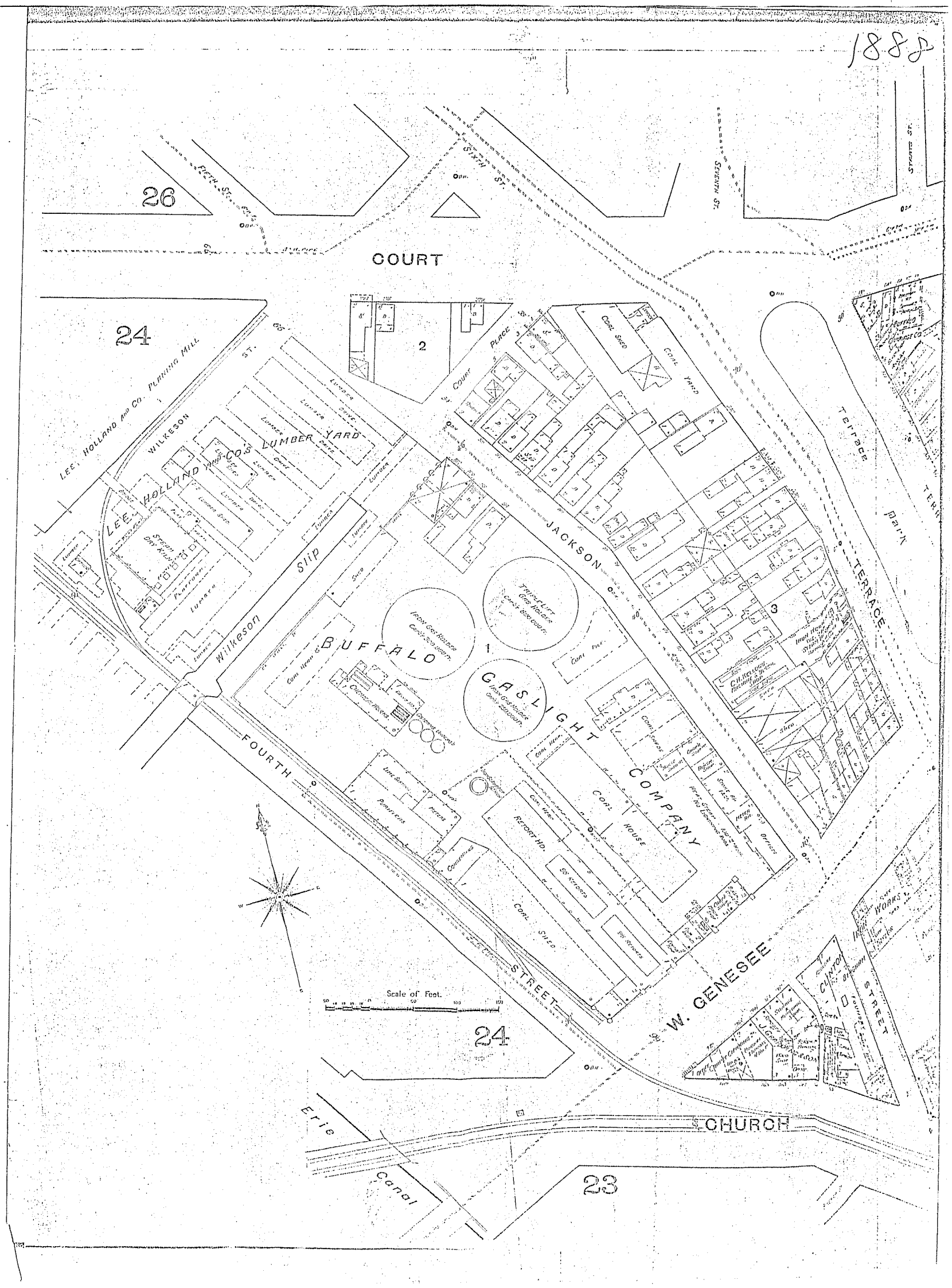
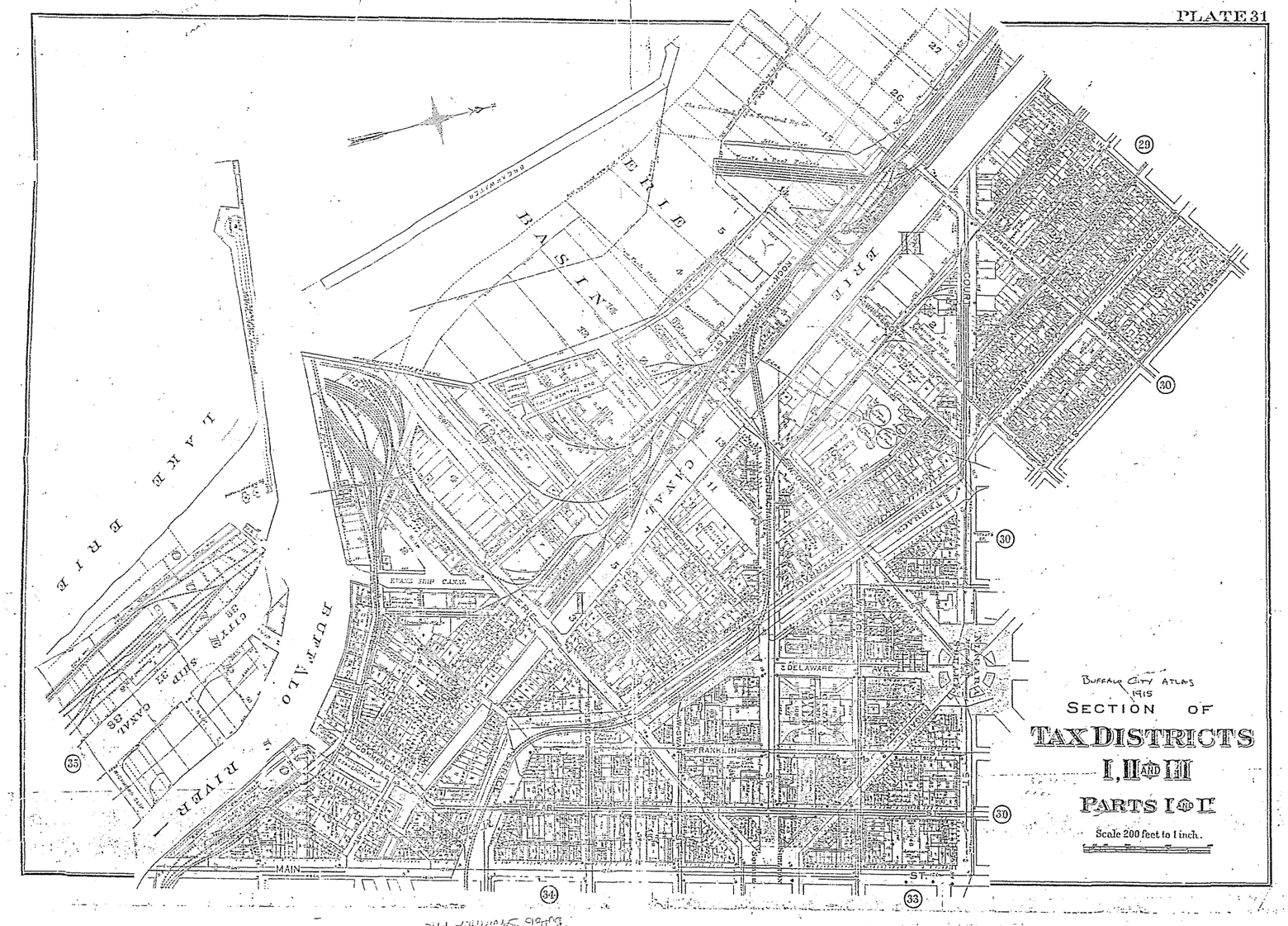
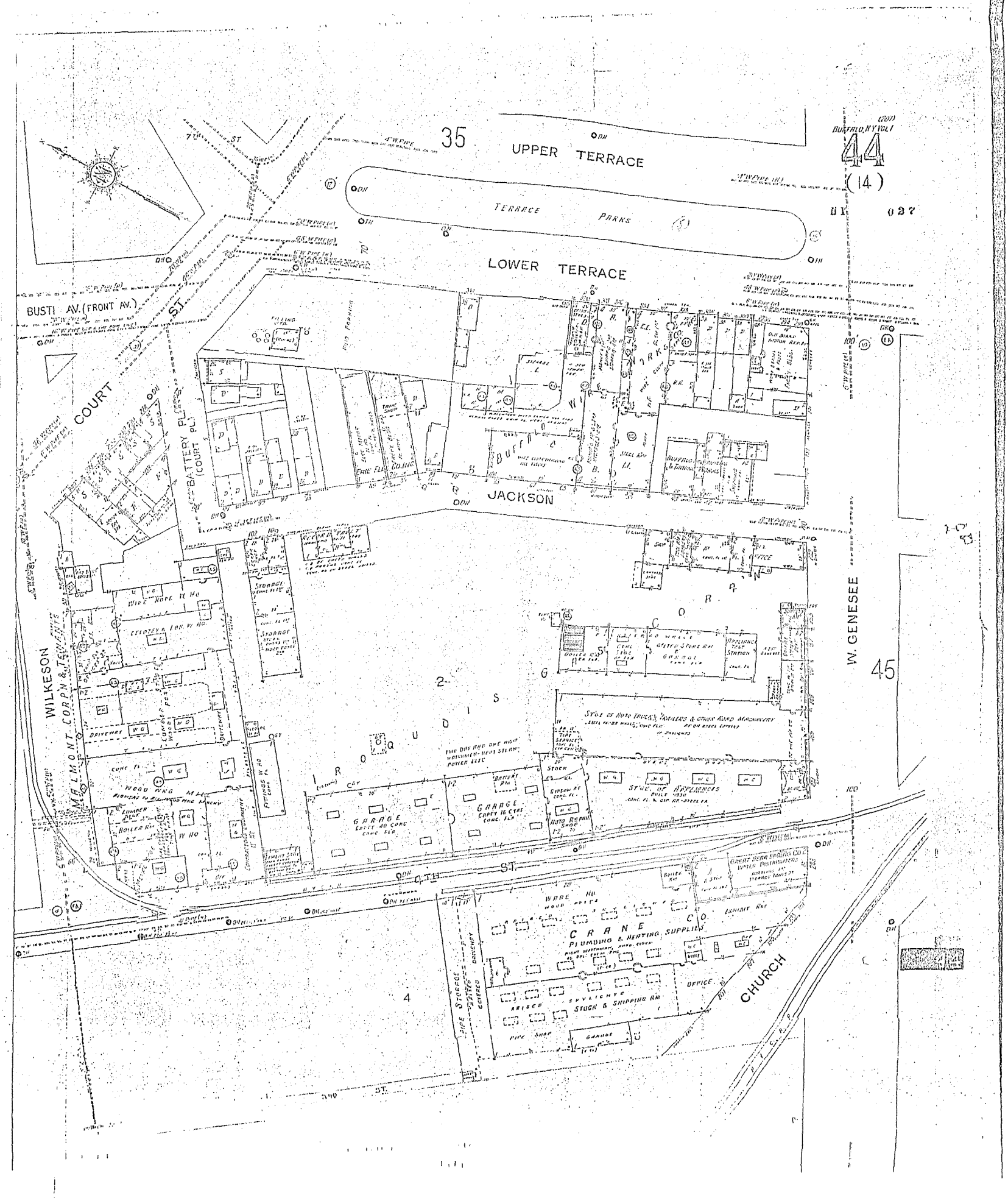

26
FIFTH ST.
SIXTH ST.
SEVENTH ST.
STRATA ST.
COURT
24
LEE, HOLLAND AND CO. PLANING MILL
WILKESON
ST.
2
PLACE
COAL SHED
COAL YARD
LUMBER YARD
LEE, HOLLAND AND CO'S
LUMBER
Slip
Wilkeson
JACKSON
TERRACE
Terrace
Park
3
1
BUFFALO
GASLIGHT
COMPANY
COAL HOUSE
REPORT HO.
COAL SHED
FOURTH
STREET
W. GENESEE
CLINTON
STREET
CHURCH
Erie
Canal
23
24
Scale of Feet.

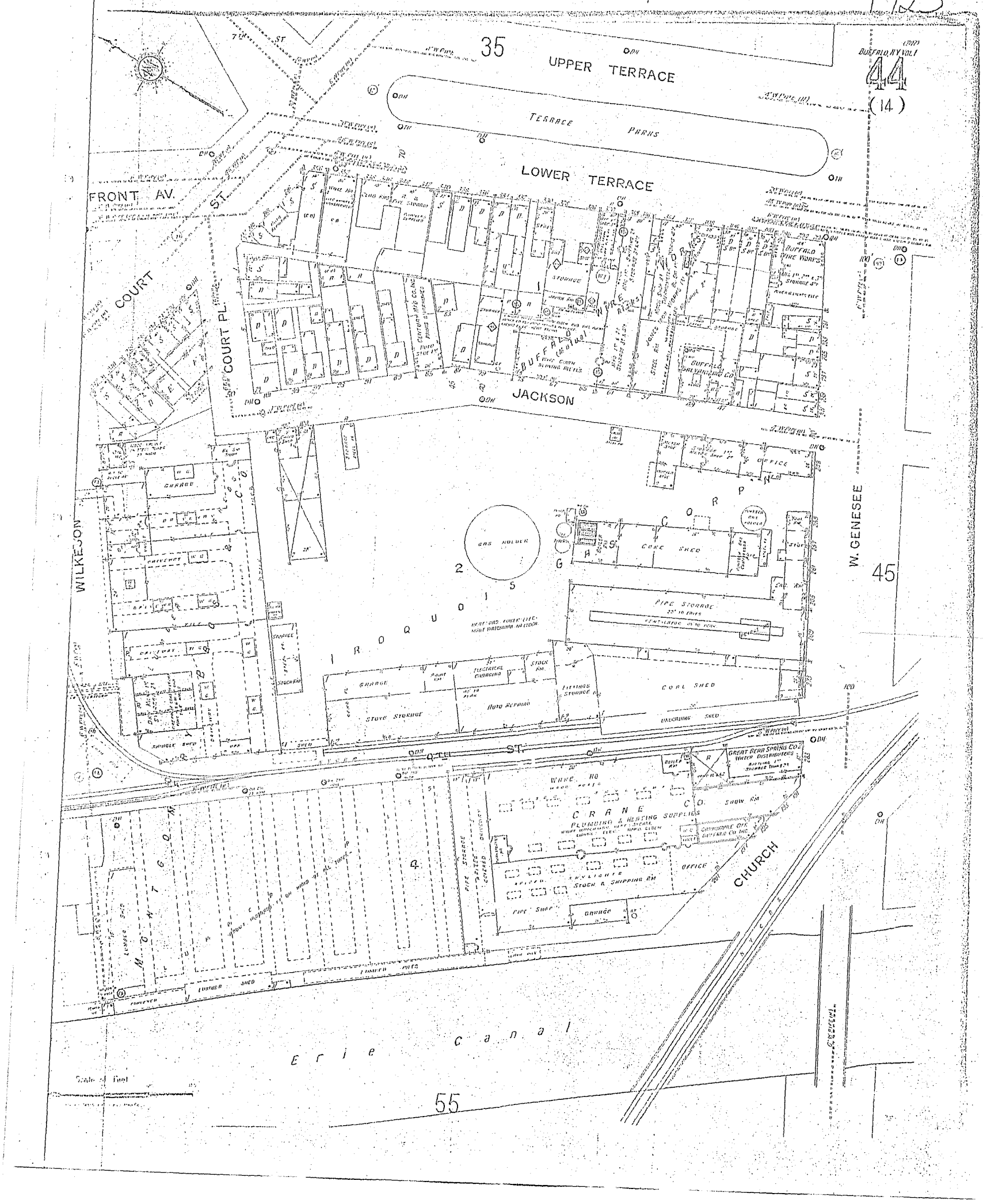
PLATE 31


BASIN
ERIE
BASIN
BASIN
ERIE
BASIN
BUFFALO
RIVER
CANAL
CITY'S SHIP
CANAL
ERIE
CANAL
ERIE
CANAL
ERIE

1951


35
UPPER TERRACE
Terrace Parks
LOWER TERRACE
BUSTI AV. (FRONT AV.)
ST
COURT
BATTERY PL (COURT PL)
JACKSON
WILKESON
MELMONT CORN & TOBACCO
ROQUOIS
6TH ST
CRANE
PLUMBING & HEATING SUPPLIES
CHURCH
W. GENESEE
45
44
(14)
037
4
2

1925


35
UPPER TERRACE
TERRACE PARKS
LOWER TERRACE
FRONT AV.
ST.
COURT
COURT PL.
JACKSON
WILKESON
IROQUOIS
ST.
CHURCH
W. GENESEE
GAS HOLDER
CONC SHED
PIPE STORAGE
COAL SHED
STOVE STORAGE
Auto Repairs
GARAGE
CRANE
PLUMBING & HEATING SUPPLIES
Stock & Shipping Rm
Pipe Shop
Garage
OFFICE
Show Rm
LUMBER SHED
LUMBER PILES
Erie Canal
Scale of Feet
55
45
44
(14)
BUFFALO, N.Y. VOL. I

ILKESON

LUMBER YARD

LAND AND LUMBER CO'S

LUMBER SHED

LUMBER DRIVE

LUMBER

PLATFORM

STEAM KILNS

VENTILATORS

Wilkeson Slip

SHED

BUFFALO

COAL HEAP

BR. WALL

CHEMICAL WORKS

No. 6 GAS VALVE HO.

CISTERNS UNDER

4 IRON GAS HOLDER CAPCY 600,000 FT.

1

3 TRIPLE LIFT GAS HOLDER CAPCY 600,000 FT.

GASLIGHT COMPANY

IRON GAS HOLDER CAPCY 250,000 FT.

6

5

7

8

9

10

11

12

2

TENEMENT

D.

3 STY BRICK

JACKSON

O.H.

45'

40'

31'

WALL

SHED

COAL PILE

COAL SHEDS

CAPR'S SHOP

BLKSM. SHOP

STORE RM

METER RM

HEAT, STEAM & NO. LIGHTNING RODS

HOUSE

STORE RM

CAPR'S SHOP

BRASS FOUNDR.

MACH. SHOP

FOUNDRY

FITTING SHOP

FOUNDRY PUMP

G.H. KEN MACHINE

LIME SIFTING

PURIFIERS

METERS

CONDENSERS

HYDT

UNDERGROUND RESERVOIR 50 HIGH

COAL HEAP

RETORT HO.

COAL HOUSE

WINDOWS

90' RETORTS

COAL SHED

STREET

FOURTH

Scale of Feet.

50 40 30 20 10 0 50 100 150

24

23

W. G

CHU

Erie Canal

PROPOSED LOCATIONS

APPENDIX
B

91B-2-99

Proj: NFG / Buff
File Code: 9B

GROUNDWATER TECHNOLOGY ®

Groundwater Technology, Inc.
60 Earhart Drive, #14, Buffalo, NY 14221 USA
Tel: (716) 634-1291 Fax: (716) 634-6881

SENSITIVE RECEPTOR SURVEY REPORT
NATIONAL FUEL GAS DISTRIBUTION CORPORATION
BUFFALO SERVICE CENTER
BUFFALO, NEW YORK

GTI Project #01111-0171

April 5, 1996

Prepared for:
Ms. Tanya B. Alexander, CHMM
Engineer
National Fuel Gas Corporation
10 Lafayette Square
Buffalo, New York 14203

Groundwater Technology, Inc.
Submitted by:

Thomas Antonoff
Buffalo Office Manager
Project Manager

(FOR)
Robert Smith
Environmental Scientist

RECEIVED
JAN 16 2002
NYSDEC - REG. 9
FOIL
REL UNREL

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FIGURE 1 AREA LOCATION MAP

FIGURE 2 SITE SKETCH

FIGURE 3 BUFFALO SEWER AUTHORITY SCHEMATIC

APPENDIX 1 EDR Geo-Check Report

1.0 INTRODUCTION

The objective of the sensitive receptor survey (SRS) is to evaluate the potential for human or environmental receptors of (and use of) shallow groundwater downgradient of the Buffalo Service Center (BfSC). This activity is being performed in support of National Fuel's site source control strategy and to address any concerns that the NYSDEC may have regarding potential downgradient receptors via the groundwater migration pathways.

2.0 HISTORICAL INFORMATION

The property is currently owned by National Fuel and was most recently operated as a service facility for fleet vehicles, becoming inactive in 1991. A remediation effort occurred to remove cyanide-impacted soil at the site in 1990. The source of the cyanide was determined to be related to past manufactured gas plant (MGP) operations at the site.

An investigation was completed in 1990 on the Waterfront School property to the north of the Buffalo Service Center.

3.0 WORK SCOPE

This assessment was performed to identify down-gradient use of shallow groundwater by confirming municipal water supply in the area, assessing the potential for local private wells, and evaluating the presence or absence of sensitive ecological receptors.

Activities associated with this task include communication with local, state and federal agencies regarding water supply, land use, sensitive ecological classifications of land, and location of private and municipal water supply wells. Utilities in the area were also contacted regarding the physical setting of utility trenches, lines and conduits.

Specifically, the following agencies were contacted in pursuing the above objectives:

Water Supply and Use

United States Geological Survey

City of Buffalo, Public Works Department, Water Division

Erie County Water Authority, Environmental Compliance, Environmental Health Services

New York State Department of Environmental Conservation, Department of Water

Wetlands and Ecological Receptors

New York State Department of Environmental Conservation, Department of Water

Underground Utilities

Underground Facilities Protective Organization

NYNEX, Niagara Mohawk, National Fuel Gas, US Sprint, TCI of NY Cable TV, MCI, AT&T, MFS Telecom Fiber, and Buffalo Sewer Authority

A Groundwater Technology scientist conducted a tour of the neighborhood downgradient of the site to determine the presence of basements, gardens, playgrounds and other sources of exposure in the area. The tour encompassed an area approximately 500 feet radially downgradient from the site, including the Waterfront School property, to inspect basement sumps, courtyards, and other potential receptors on site.

4.0 RESULTS

4.1 General Physiographic Setting

The Buffalo Service Center is located in the drainage basin of Lake Erie and the Niagara River. The area in the vicinity of the Buffalo Service Center is dominated by urbanization. Commercial properties bound the BfSC on the southeast and northeast. Interstate Highway 190, and the Buffalo Auto Civic Ramps, Inc. parking lot are adjacent to the southwest and the Waterfront School is adjacent to the northwest. Residential communities (apartments and townhomes) exist outside the area of investigation to the west, southwest and north. The land surface slopes southwestward towards Lake Erie, at an average slope of 1.1%.

4.2 Local Water Supply

According to the City of Buffalo, Division of Water, Mr. Leonard Milioto, Chemist, no private drinking water supply wells exist in the City of Buffalo. The Division of Water supplies municipal water sourced from Lake Erie to all residents and businesses in the City of Buffalo. Water is withdrawn from the lake

at a point approximately one mile off-shore from Buffalo in the Emerald Channel at the mouth of the Niagara River (Attachment 1, EDR Geo-Check Report). Groundwater is not used as a potable source of drinking water within one-half mile of the site, and no primary aquifers are situated within one mile of the site.

4.3 Groundwater

Based on previous studies, groundwater in the vicinity of the site is estimated to occur from approximately three and a half to five feet below grade (February 1995). Groundwater flow is indicated as being to the northwest, with a gradient of approximately 1% based on a previous site investigation in January 1991. According to these studies, the groundwater occurs in soils described as compacted fill material overlying lacustrine clay. Recharge to the groundwater at the site is sourced by rain and snow-melt waters percolating through the ground surface in the area of the site.

Groundwater in the area of the site is not used as a supply of potable water (Attachment 1, EDR-Geocheck Report). One water supply well is located within one-half mile of the site. It is approximately one-third of a mile to the southeast and is apparently unused. The source of the water in this well is described as the Onondaga Limestone at an undetermined depth. This well, as well as three others identified between one and two miles from the site, are located in an apparent up-gradient direction from the site. Well #1 on the EDR map is identified as being a supply well for the City of Sardinia, approximately 35 miles to the southeast of the site. The well owner is listed as James T. Carmody, Pioneer Tri County Ent. Ltd., 123 Michigan Avenue, Buffalo. The location of this well on the attached report is apparently mis-located by about one mile. The correct location is reported as being about one mile southeast in the area of Michigan Avenue and Seneca Streets. The location is suspicious for three obvious reasons: there is no aquifer in the city limits of Buffalo; it is unlikely that a community would locate their water supply well 35 miles away; and the location of the well as corrected by EDR through verbal communication is in downtown Buffalo.

Sources checked included the EPA Office of Drinking Water, the New York Department of Health, and the United States Geological Survey.

4.4 Surface Water and Wetlands

To determine if groundwater from the site may communicate directly with surface water bodies or

wetlands, topographic maps, NYSDEC and Federal wetlands maps were consulted. Surface water bodies existing within one mile of the site include the Buffalo River 2,000 feet to the southeast and Lake Erie 1,000 feet to the west. No federal or state wetland areas are designated within one-half mile of the site.

4.5 Underground Utilities

Through personal correspondence with utilities and underground utility locating services, several underground utilities exist in the vicinity of the site. Several of their general locations are indicated on Figure 2, Site Sketch, and are discussed below.

Buffalo Sewer Authority

The Buffalo Sewer Authority (BSA) has an extensive system of storm, sanitary, and combination sewer lines in the area of the site (Figure 3, BSA Schematic). The sewer lines range in diameter from six inches to 42 inches, and range in depth below grade from approximately three to 15 feet below grade. Two trunk lines also exist in the vicinity of the site to the west. One line is eleven and one half feet in diameter and the other is six feet in diameter. These lines are approximately 20 feet below grade. The lines have been installed and modified at several times over the last 90 years and are composed of brick, vitrinite clay pipe and other materials. Manways associated with the sewer are presented on Figure 2, Site Sketch.

US Sprint

US Sprint has buried cables along the Conrail right-of-way to the west. No sub-grade manways or vaults are involved. Depth of burial varies.

National Fuel Gas

At least two lines exist in proximity to the site: a sixteen inch high pressure line parallels Niagara Street to the northeast, and a six inch high pressure line parallels 7th Street to the northeast.

MCI, Niagara Mohawk, NYNEX and TCI Cable Television

These utilities are identified by Underground Facilities Protection Organization as having service in the downtown Buffalo area and will be forwarding location maps at their earliest convenience.

4.6 Basements

A tour through the vicinity of the site was made to determine indications of basements in any of the buildings downgradient of the site. To the east and northeast, the United States Post Office building and the Buffalo Fire Station and Repair Shop were observed. To the north, the apartment complexes along 7th Street were observed. To the west, townhouses along the western side of the Conrail tracks were observed. No indications of basements were found in any of these structures. Immediately to the northwest, the Waterfront School was observed. Details regarding this structure are presented below.

4.7 Monitoring Wells

During the neighborhood tour, three monitoring wells were noticed on the vacant ground between 500 and 1000 feet north and downgradient from the site. These wells are assumed to be associated with a bus garage that historically operated in that area. According to Noel Wilhelm, Engineer with the Waterfront School, the City of Buffalo investigated this area to determine groundwater and soil quality prior to development of additional housing units. No other monitor wells were noticed during the site walk.

4.8 Waterfront School

A tour of Buffalo Public School #95, The Waterfront School, was made by representatives of National Fuel Gas and Groundwater Technology and was lead by the school engineer. The tour revealed that the school has potential receptors including six sumps located in the basement of the building and a 20,000 gallon fuel oil underground storage tank pit adjacent to the north end of the building.

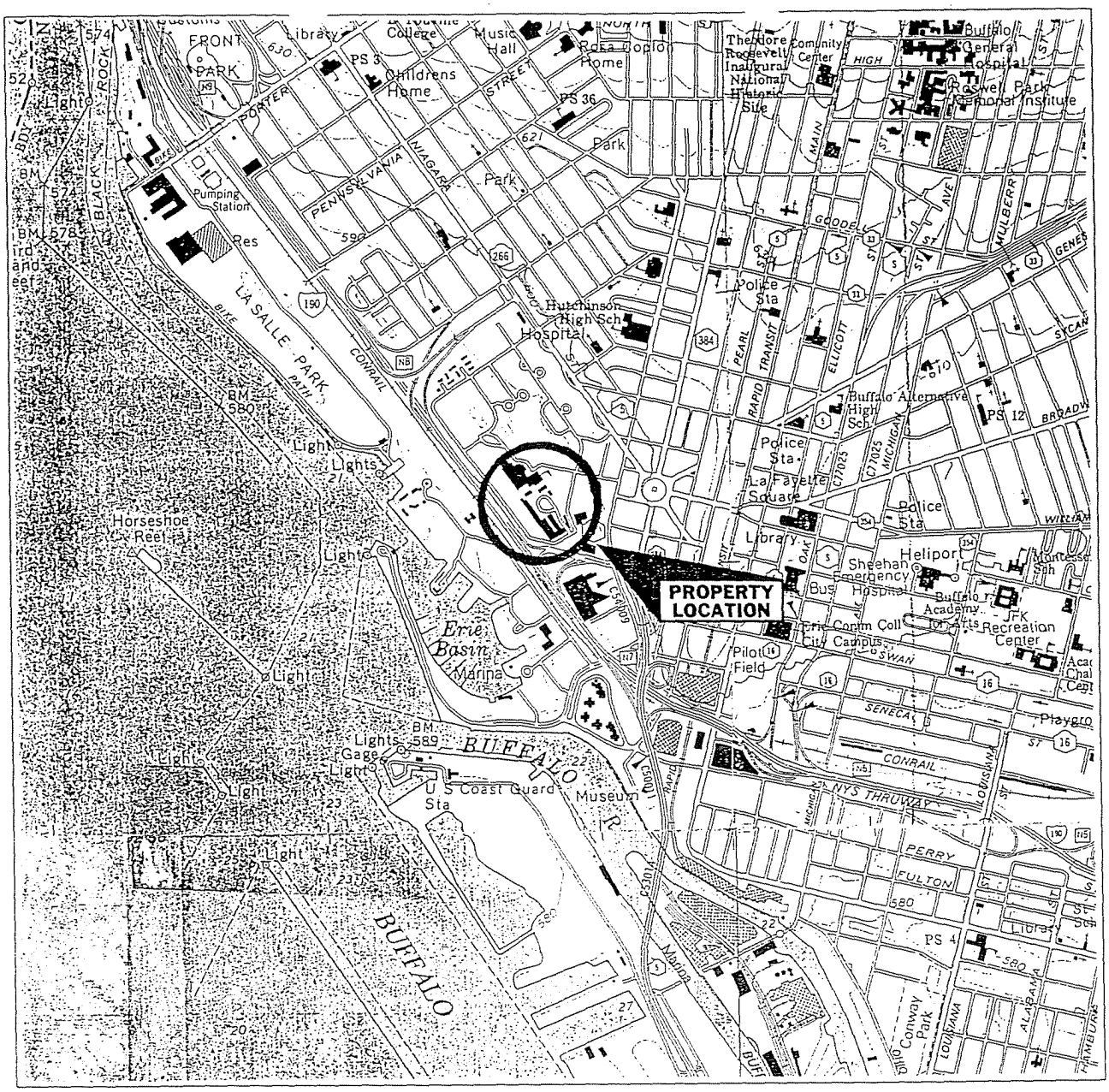
5.0 SUMMARY

The sensitive receptor survey indicates that:

- Groundwater is not used as a public or private water supply within two miles of site (discounting the Sardinia supply well owned by James T. Carmody, Pioneer Tri County Ent. Ltd., questionably identified as existing in downtown Buffalo).
- No federal or state wetlands exist within one-half mile of the site.
- The Waterfront School has potential receptors of groundwater in the basement in the form of six sumps.
- Underground utilities exist in the area in the form of buried gas pipelines, telecommunication

and television cables, electric power lines and storm and sanitary sewers which may act as preferential groundwater flow pathways.

- Lake Erie and the Buffalo River are the two closest surface bodies of water, occurring 1000 feet west and 2000 feet south, respectively. Lake Erie is downgradient or cross-gradient. The Buffalo River is upgradient from the site.



SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE
NE BUFFALO QUADRANGLE
NW BUFFALO QUADRANGLE
SE BUFFALO QUADRANGLE
7.5 MINUTE SERIES

SCALE 1:24,000

0 2,000 4,000

SCALE FEET

N

GROUNDWATER TECHNOLOGY

60 EARHART DRIVE, #14
BUFFALO, NEW YORK 14221
(716) 634-1291

DESIGNED: MLH

DETAILED:

CHECKED: KCC

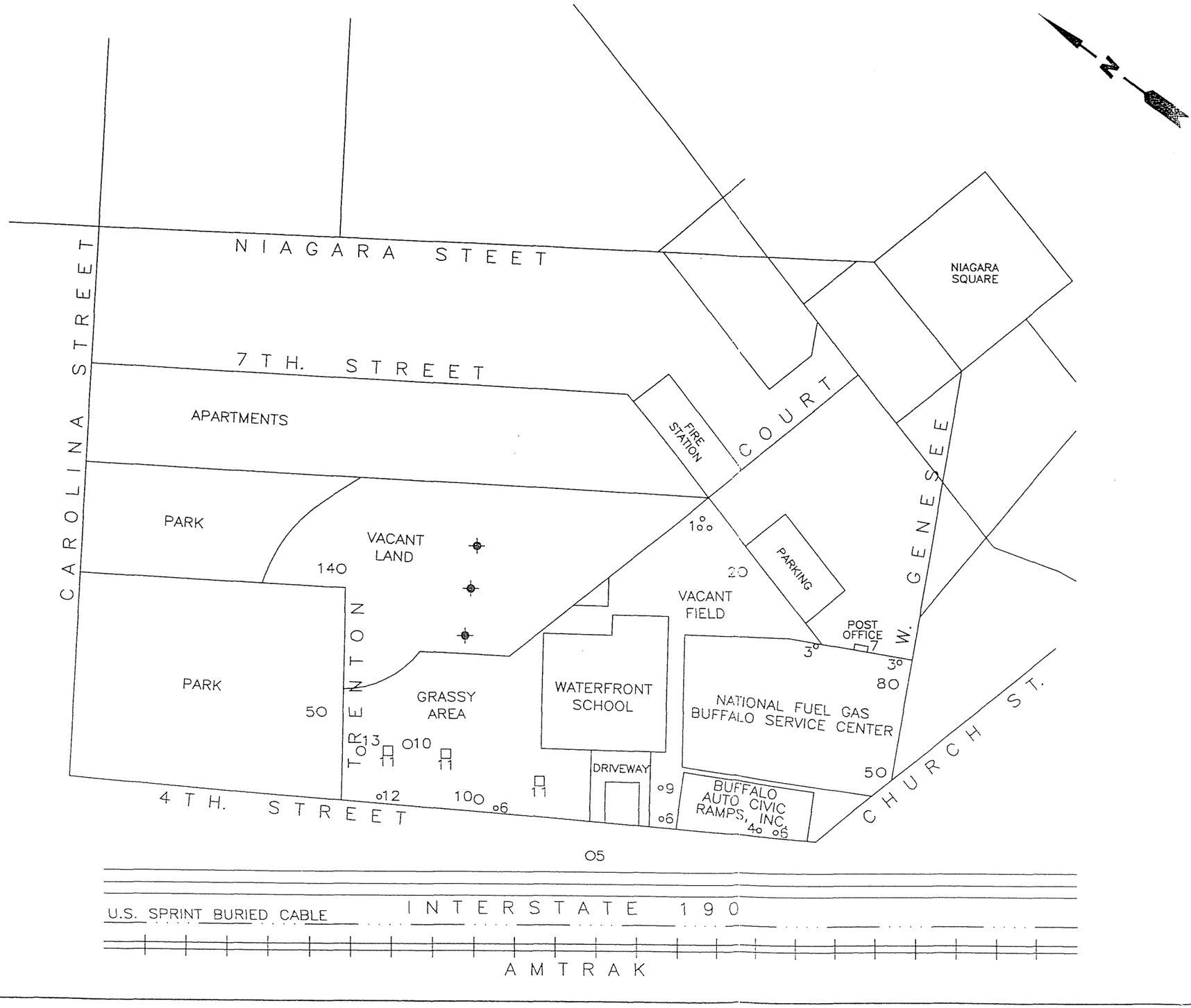
SITE LOCATION

CLIENT: National Fuel Gas Corporation
10 Lafayette Square
National Fuel Gas Corporation

LOCATION: 249 W. Genesee St.
Buffalo, New York

DRAWING DATE: 04/01/96

FIGURE: 1



LEGEND

⊕	MONITORING WELL
1	WATER VALVES
2	BELL SYSTEM 24" MANWAY
3	MCI MARKER
4	FIRE HYDRANT
5	24" SEWER MANWAY
6	STREET LIGHTS, UNDERGROUND LINES
7	STORM SEWER INVERT
8	36" UNIDENTIFIED MANWAY
9	ELECTRIC PANEL, ABOVE GRADE
10	36" "NM" MANWAY
11	STORM SEWER INVERT
12	ELECTRIC AT-GRADE UTILITY BOX
13	24" SANITARY SEWER MANWAY
14	BUFFALO SEWER AUTHORITY MANWAY

NOT TO SCALE

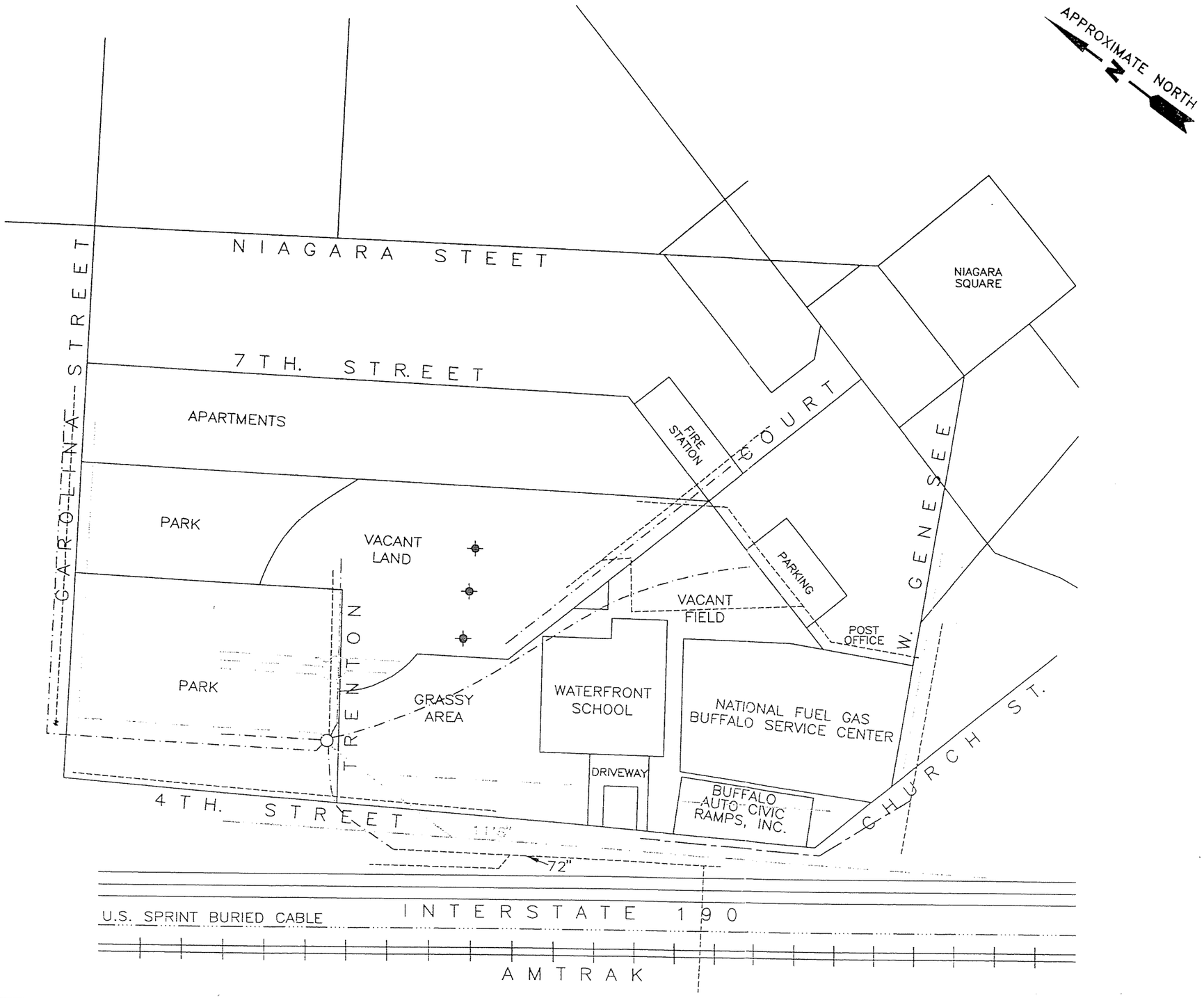
GROUNDWATER TECHNOLOGY
1245 KINGS ROAD
SCHENECTADY, NY 12303
(518) 370-5631

REV. NO.:	DRAWING DATE:	ACAD FILE:
	3/26/96	0171-STE

SITE SKETCH

CLIENT:	PM:
NATIONAL FUEL GAS	TDA
LOCATION: WEST GENESEE BUFFALO, NEW YORK	SM: ---

DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
---	GMC	01111-0171	2



LEGEND

- MONITORING WELL
- COMBINED STORM & SANITARY
- STORM DRAIN
- SANITARY
- STORM RELIEF & STORM OVERFLOW

SEWER LINES RANGE FROM 8" TO 42" UNLESS SPECIFIED

NOT TO SCALE

GROUNDWATER TECHNOLOGY
1245 KINGS ROAD
SCHENECTADY, NY 12303
(518) 370-5631

REV. NO.:	DRAWING DATE: 3/26/96	ACAD FILE: 0171-SEW

BUFFALO SEWER AUTHORITY SEWER LINE SCHEMATIC

CLIENT: NATIONAL FUEL GAS			PM: TDA
LOCATION: WEST GENESEE BUFFALO, NEW YORK			SM: ---
DESIGNED: ---	DETAILED: DEO	PROJECT NO.: 01111-0171	FIGURE: 3

APPENDIX
C

91B-2-99

NATIONAL GAS / BUFFALO
9B

FLUOR DANIEL GTI

November 7, 1996

Ms. Tanya Alexander
National Fuel Gas Distribution Corporation
10 Lafayette Square
Buffalo, New York 14203

Dear Ms. Alexander:

Fluor Daniel GTI, Inc. is pleased to present this risk assessment for National Fuel Gas Distribution Corporation's Buffalo Service Center. The attached report evaluates whether chemicals in groundwater beneath the Buffalo Service Center may affect the health of the students and/or employees at the adjacent Waterfront School.

The students and employees of the Waterfront School can potentially come into contact with the constituents detected in groundwater at the Buffalo Service Center via one potential route. This route is through breathing vapors that enter the building through cracks in the foundation and into the building's basement air.

The risk assessment indicates that this potential route of exposure would not be expected to pose any imminent danger to the students and/or employees of the Waterfront School. Calculations were performed using assumptions that provide an extreme worst-case estimate of human health risks. These conservative worst-case assumptions still resulted in no appreciable estimates of human health risks. It should be noted that air vapor monitoring performed during a site visit to collect sump water samples in the school building basement support this finding by showing no measurable concentrations in the indoor air.

Since this potential route of exposure has shown not to pose a significant human health threat, it can be safely assumed that the students and employees at the school are not in imminent danger from exposures to chemicals in groundwater found at the adjacent National Fuel Gas Buffalo Service Center facility.

It should also be noted that although the sump water samples collected by the New York State Department of Health (NYSDOH) showed detectable concentrations of site-related constituents, the NYSDOH has stated in a memo of September 25, 1996 that no health threat existed to students or employees from the sump water because the students and employees were not exposed to the sump water. This discussion is reiterated along with a statement that any issues related to the sump water have been addressed by the NYSDOH and will not be further evaluated in this report.

Again, Fluor Daniel GTI, Inc. is pleased to provide you with this report and thank you for utilizing us for your consulting needs. Please call if you have any questions regarding this report.

Sincerely,
Fluor Daniel GTI, Inc.

Thomas Antonoff
Buffalo Operations Manager

c: R. Hixon
R. Kotun
R. Smith
K. Stang

Attachment

60 Earhart Drive, #14 / Buffalo, NY 14221 USA (716) 634-1291 FAX (716) 634-6881

FLUOR DANIEL GTI

RISK ASSESSMENT FOR THE WATERFRONT SCHOOL BUFFALO, NEW YORK

Fluor Daniel GTI Project 011110171-60

November 7, 1996

Prepared for:
National Fuel Gas Distribution Corporation
10 Lafayette Square
Buffalo, New York 14203

Fluor Daniel GTI, Inc.
Prepared by:

Thomas D Antonoff (FOR)

Keith Stang
Staff Risk Analyst

Fluor Daniel GTI, Inc.
Reviewed by:

Thomas D Antonoff (FOR)

Ronald J. Kotun, Ph.D.
Senior Toxicologist

Fluor Daniel GTI, Inc.
Approved by:

Thomas Antonoff
Buffalo Operations Manager

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2.0 INHALATION EXPOSURE 2
2.1 Constituents of Interest 2
2.2 Inputs, Risk Formulae, and Assumptions 4
2.3 Toxicity 4
2.4 Risk Calculations 5

3.0 CONCLUSIONS 6

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1.0 INTRODUCTION

This report constitutes a focused risk assessment for evaluation of potential human health risk at the Waterfront School, potentially related to the adjacent National Fuel Gas Distribution Corporation's Buffalo Service Center, located at Fourth and West Genesee Streets in Buffalo, New York. The primary objective of this assessment is to determine whether the school students and employees at the Waterfront School are in imminent danger from potential exposures to constituents in groundwater, which may migrate from beneath the Buffalo Service Center property.

This assessment is a quantitative risk-based evaluation predicated on the use of groundwater data collected from the Buffalo Service Center. Any question regarding direct contact exposure routes of groundwater for this assessment can be qualitatively addressed. For a health threat to exist, a complete route of exposure must exist. This requires a source, a route (or pathway) of exposure where the receptor is either directly (active) or indirectly (passive) exposed to the source, a receptor, and an intake mechanism. Any direct contact potential exposure pathway can be qualitatively removed from further consideration since the sump water in the school are not expected to be used as any kind of water source in the school and it is extremely unlikely that students would ever contact the water. Additionally, under current practices (maintenance, etc.) employees are not required to contact the sump water either. The school is connected to a local public water supply and that is the only source of water used for all purposes at the school. Therefore, since no route of exposure to this water exists or will likely exist in the future, no human health risks exist from direct contact with groundwater that has seeped into the sumps in the school. As stated above, for a health threat to exist, a complete exposure pathway must exist.

This qualitative evaluation of the sump water is supported by the New York State Department of Health (NYS DOH) memo from Mr. Cameron O'Connor, Public Health Specialist, to Mr. Mel Alston, Associate Superintendent, Board of Education dated September 25, 1996 regarding the evaluation of the sump water analytical data. This memo concludes that no threat exists due to a lack of exposure to the sump water. Therefore, direct contact exposures need not be assessed and constituents found in the sump water will not be additionally addressed.

The students/employees could potentially be exposed to constituents detected in the groundwater via one potential route of exposure. Groundwater beneath the Buffalo Service Center could potentially migrate off-site. The predominant groundwater flow direction appears to be directly northwest (towards the school property). Volatile constituents found in the groundwater that potentially migrate off-site to a point beneath the school building could intrude into the school in a vapor phase. Vapors can enter a building through the foundation and/or cracks in the concrete floors. A student or employee can be exposed via inhalation of these vapor phase constituents if they are routinely in the vicinity of the intrusion area (i.e., basement) and if the vapors consistently enter the building.

The following sections describe the methods for assessing health risks for the school students and employees from the potential route of exposure. This includes a discussion of the assumptions made, inputs utilized, and conclusions drawn for this assessment.

2.0 INHALATION EXPOSURE

The inhalation of volatile organic vapors that could potentially intrude into the building basement need to be evaluated quantitatively to estimate human health risks. The remaining steps to the quantitative assessment are:

- To identify potential constituents of interest and their representative groundwater concentrations as the exposure source;

- To make assumptions regarding exposures and to select representative input values for the risk calculations; and
- To calculate estimated human health risks using standardized EPA formulae.

It should be noted that the quantitative assessment that follows for the potential exposure route of inhalation of volatile vapors is undertaken to assess the potential (worst-case) risk, not the actual risk. In the absence of actual data reflective of indoor air concentrations in the building, conservative estimates are calculated from worst-case groundwater concentrations. Additionally, exposure estimates and assumptions tend to be exaggerated or are uppermost (worst-case) values of the ranges of possible values. Finally, under normal and routine practices at the school, neither students or employees would be expected to be in the area of the building (basement) vapor intrusion could potentially occur. Thus, the intention and emphasis of this assessment is to greatly overestimate worst-case potential risks via this indirect exposure.

2.1 Constituents of Interest

Only organic compounds that readily volatilize would likely diffuse from groundwater and be released into the air. Therefore, any constituents with low or virtually no volatility are excluded. Additionally, only compounds that were detected in at least one of the most current groundwater samples from each monitoring well were included in the assessment, with one exception. The volatile organic compound methylene chloride was excluded from further assessment because this compound is a common laboratory contaminant that is often introduced into environmental samples from sample handling and preparations that typically include contact with methylene chloride. The laboratory results for methylene chloride showed this compound has only been detected in the latest sampling event and a laboratory flag indicated that compound was also detected in an associated laboratory blank, indicating the methylene chloride results reported in the groundwater samples may have been influenced by an outside source. Therefore, eleven volatile organic compounds and one semivolatile organic compound were selected as constituents of interest (COIs) for this assessment. A summary of the twelve COIs and their corresponding results from the latest available samples from each of the six monitoring wells on the Buffalo Service Center are presented in Table 1. Note that the most recent results for well MW-6 were from 1990 since the well has been destroyed since that time and more recent samples could not be collected.

Due to the uncertainty associated with evaluating the most representative concentrations of the COI, EPA typically recommends calculating a 95 percent upper confidence limit (95% UCL) of the mean concentration of each COI of all representative available groundwater analytical data. Thus, the 95% UCL represents a conservative result for each COI. For simplicity, the 95% UCL was calculated based on the arithmetic mean of the distribution of current results for each COI. Table 1 also presents the maximum detected, average, and 95% UCL concentrations for each COI. For COI that were nondetected, a concentration of one-half of the detection limit was used in calculating average and 95% UCL concentrations.

The use of the calculated 95% UCL concentrations of the on-site groundwater results as the representative concentration of groundwater that could potentially migrate to a point beneath the school is also conservative. Normally, as groundwater would migrate away from a source, the concentrations of constituents int he groundwater tend to decrease due to natural dilution and attenuation. Therefore, the use of the on-site groundwater 95% UCL concentration is also conservative.

Since the media of contact for this exposure route is via inhalation of vapor phase COI and only groundwater COI measurements are available, indoor air concentrations of the COI would have to be estimated. The estimated air

concentration resulting from diffusion from groundwater is dependent on the volatilization and intrusion of the COI. Volatilization factors for groundwater to enclosed space indoor air (VF_{wesp}) were calculated from formulae presented in the American Society for Testing and Materials (ASTM) guidance document E1739-95, "Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites". The inputs and formulae used to calculate the VF_{wesp} values are presented on Table 2. All default input values recommended in this guidance document were utilized in calculating VF_{wesp} values. Chemical-specific lookup values for parameters such as molecular weight, Henry's law constants, and air and water diffusivities were obtained or estimated form common reference sources. If not footnoted on Table 2, the source was the U.S. EPA's "Technical Background Document for Soil Screening Guidance" (1994).

The VF_{wesp} values calculated are in units of a ratio of air to groundwater concentrations in units of part per million (ppm). Therefore, the 95% UCL groundwater concentrations for each COI were multiplied times their respective calculated VF_{wesp} values to produce an estimated indoor air concentration in units of mg/m^3. These indoor air estimated concentrations are also presented in Table 2. Note that this method of estimating the indoor air concentrations also produces a conservative estimated value. This can be concluded since the model for estimating volatilization factors to indoor air assume perfect steady-state diffusion of a constant non-degrading source, even though this scenario is unlikely. It should also be noted that air vapor monitoring of volatiles was performed using an HNu photoionization detector (PID) unit during the site visit as part of the sump water sampling by the NYSDOH. PID monitoring revealed no measurable detections over background at any location within the school basement.

2.2 Inputs, Risk Formulae, and Assumptions

Although both children and employees of the school are potentially exposed via this indirect route of exposure, the quantitative assessment will focus on the child as a primary receptor group since they are a more sensitive receptor and are reflective of a more conservative estimate of risk. The risk estimate calculations, including input values and risk algorithms used in evaluating the inhalation of COI vapors volatilizing from impacted groundwater are presented in Table 3. The formulae for human health risk estimates for inhalation exposures are taken directly from the U.S. EPA's "Risk Assessment Guidance for Superfund (RAGS), Volume I, Human Health Evaluation Manual, Part A", (1989). The inputs for the risk calculations are primarily EPA default values from RAGS (1989) or the U.S. EPA's "Exposure Factors Handbook" (EFH) (1989). Those input variables and the assumptions for utilizing values other than default values are as follows:

- The exposure frequency (EF) (in days per year) is based on average duration of school days per year, which is approximately 180 days per year.
- The exposure duration (ED) (in years) for non-carcinogenic effects is based on a typical full-day child's maximum duration in this one school building of eight years.
- A child's body weight of 28.4 kilograms was based on the average male and female body weight for children ages five through thirteen as presented in Table 5A-3 of the EPA's EFH (1989).
- The exposure time (ET) (in fraction of a day that a child would be expected to be inside the building) is approximately six hours per day (or 0.25 day per day).

These input values are also conservative values since most of these inputs represent the maximum values of a range of possible expected values. In terms of exposure durations (time, frequency, and duration), the inputs are particularly conservative since under routine day to day school activities, children would not normally be expected to spend any of their time at school in the vicinity of the building basement.

2.3 Toxicity

Typically, COI in an environmental assessment have toxicity constants assigned under the U.S. EPA's *Integrated Risk Information System* (IRIS) on-line database that are based on documented human and animal studies. Additionally, secondary sources such as the Health Effects Assessment Summary Tables (1993) or other EPA-approved sources are often used if IRIS values are not available. If a toxicity constant is not available through one of the EPA-approved sources, a quantitative evaluation of that constituent and exposure route is not normally assessed. However, for added conservatism, some exceptions to that statement were made for the non-carcinogenic effects of several COI including cis-1,2-dichloroethene, total xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and naphthalene. These COI either do not have a reference dose (RfD) for inhalation exposures or their RfD has been withdrawn pending review. For conservatism, either the withdrawn toxicity constant for inhalation exposures or the oral exposure RfD (if available) were included in the quantitative assessment. A current summary of the most up-to-date toxicity constants for a variety of chemicals from these sources is presented in the current U.S. EPA Region III's Risk-Based Concentration Table (RBC Table) (May 1996). To keep this risk assessment focused, the discussions and findings of these studies will not be discussed herein. However, it should be noted that in EPA's development of these toxicity constants, the toxicity values are conservatively modified by one, two, or three orders of magnitude for every uncertainty factor involved in determining the value. Uncertainties include extrapolations from subchronic doses to chronic doses and the differences between interspecies affects. This ultimately results in the toxicity values used conservatively overestimate the dose-response relationships and provide a more conservative estimate of risk. The latest and most appropriate toxicity constants listed for each COI

in the U.S. EPA Region III's RBC Table were used in determining human health risks in this assessment.

2.4 Risk Calculations

Once the exposure pathways, input parameters, and toxicity values are identified, the human health risks can be calculated. There are two general equations used in calculating potential human health effects for carcinogens and non-carcinogens. Both equations are based on the estimated chronic daily intakes (CDI) calculated for each receptor and pathway retained for quantitative risk assessment. The equations for the CDIs are presented on the risk calculation summary table (Table 3). The formulae for the CDIs are taken directly from the RAGS guidance document (EPA, 1989).

For carcinogenic effects, the excess cancer risk due to a lifetime exposure to the estimated chronic daily intake of each carcinogen is calculated using the following equation:

Incremental Cancer Risk = CSF x CDI

where CSF is the cancer slope factor and CDI is the lifetime estimated daily intake (CDI) or dose. Because the units of CSF are $(mg/kg\text{-}day)^{-1}$ and the units of dose or intake are (mg/kg/day), the risk is unitless.

For compounds classified as carcinogens, the estimated risks normally appear in scientific notation. A risk of 1×10^{-6} means that one additional person in an exposed population of one million (1,000,000) individuals may develop cancer during a lifetime of exposure to the compound. EPA guidance states carcinogenic risk estimates should not exceed the 1×10^{-4} to 1×10^{-6} incremental cancer target risk range.

Noncarcinogenic effects were quantified using the hazard index approach as specified in RAGS (EPA, 1989). A hazard index (HI) is the ratio of the estimated chronic daily intake and a reference dose

considered to be the level where adverse health effects would not be observed (these doses have also been called "safe" or "acceptable").

Hazard Index = CDI/RfD

CDI is the estimated chronic daily intake and the RfD is the reference dose. Since the units of CDI and reference dose (RfD) are both mg/kg-day, the HI is unitless. According to EPA guidance, a HI less than 1.0 suggests that no adverse health effects would result from exposure to site-related COI. These equations were then used to calculate estimated health-based carcinogenic and non-carcinogenic risks for each COI for indoor air potential exposures using EPA's defined cancer target risk range and hazard indices for the child school student receptor group.

Carcinogenic and non-carcinogenic human health risks estimated for the child student indoor air exposures are summarized in Table 3. The conservatively evaluated cumulative carcinogenic risk was 9.83×10^{-7}, which is less than the EPA's carcinogenic target risk range. The non-carcinogenic risk estimate was 2.73×10^{-1}, which is below the 1.0 acceptable limit. Therefore, the child student receptor indirectly exposed to impacted groundwater via inhalation of volatilized vapors is clearly not a significant human health threat.

3.0 CONCLUSIONS

Following quantitative analysis and assessment, the potential route of exposure would not be expected to pose an imminent danger to the student body and/or employees of the Waterfront School. Risk-based calculations were performed in Section 2.0 using conservative inputs and assumptions to provide a worst-case estimate of human health risks from exposure to potentially entruding vapor phase constituents. These calculations were performed in accordance with standard and EPA-approved methods and formulations. Even using extremely conservative assumptions and inputs, the estimated potential human health risks for carcinogenic and non-carcinogenic effects are below typical EPA acceptance limits and thus, show that the potential vapor phase exposures to students and employees at the school would not be expected to pose an appreciable health risk.

Since the route of exposure has shown not to pose a significant human health threat, it can be safely assumed that the students and employees at the school are not in imminent danger from exposures to the impacted groundwater found at the adjacent National Fuel Gas Buffalo Service Center facility.

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TABLE 1
Summary of Current Groundwater Volatile Organic Results

National Fuel Gas Distribution Corporation
Buffalo Service Center Monitor Well Sampling

(all results in ug/L)

Well / Constituent	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6 *		Maximum Detected Concentration	Average Concentration (w/half DLs)	95% UCL Concentration (arithmetic mean)
cis-1,2-Dichloroethene	6.25	U	24		6.25	U	2.5	U	6.25	U	5	U	24	8.4	14.8
Chloroform	6.25	U	24		6.25	U	2.5	U	6.25	U	5	U	24	8.4	14.8
Benzene	48		14		120		180		370		160		370	149	252
Toluene	30		6.25	U	72		6		87		5	U	87	34.4	64.4
Ethylbenzene	15		6.25	U	2000		160		1300		34		2000	586	1289
Total Xylenes	84		12.5	U	7100		18		430		37		7100	1280	3629
Isopropylbenzene	6.25	U	6.25	U	51		76		160		5	U	160	50.8	101
n-Propylbenzene	6.25	U	6.25	U	48		14		49		5	U	49	21.4	38.9
1,3,5-Trimethylbenzene	30		6.25	U	930		2.5	U	6.25	U	5	U	930	163	472
1,2,4-Trimethylbenzene	64		6.25	U	2700		47		1800		5	U	2700	770	1742
n-Butylbenzene	15		6.25	U	6.25	U	2.5	U	6.25	U	5	U	15	6.9	10.4
Naphthalene	3700		75		9100		73		2600		5	U	9100	2592	5511

NOTES

Only non-blank related compounds positively detected in at least one sample in the most recent available groundwater data for each monitoring well are presented.

* Monitor well MW-6 was destroyed. The most recent sample collected from this well was from 1990. Those results are reported for MW-6. Detection limits for nondetected constituents were estimated since raw sample data were unavailable for this sample.

ug/L = micrograms per liter = parts per billion (ppb)

U signifies not detected at twice the detection limit specified. Half detection limit values are shown for statistical evaluation purposes.

TABLE 2
Calculation of Volatilization Factors to Indoor Air For On-Site Students From Groundwater Migrated Beneath the School

National Fuel Gas Distribution Corporation
Buffalo Service Center

CHEMICAL	MW	H (2)		Dair (2)		Deff,s	Deff,crack	Dwat (1)		Deff,ws	Deff,cap	VFwesp	95% UCL	Air Conc
		unitless		cm2/s		cm2/s	cm2/s	cm2/s		cm2/s	cm2/s	mg/m3/mg/l	mg/L	mg/m3
c-1,2-dichloroethene	9.70E+01	1.85E-01		7.36E-02		5.74E-03	5.74E-03	9.87E-06		9.91E-04	1.99E-05	1.17E-02	1.48E-02	1.73E-04
chloroform	1.19E+02	1.64E-01		1.04E-01		8.11E-03	8.11E-03	8.91E-06		1.23E-03	2.40E-05	1.36E-02	1.48E-02	2.02E-04
benzene	7.80E+01	2.24E-01	(3)	8.70E-02		6.79E-03	6.79E-03	1.10E-05	(3)	1.06E-03	2.08E-05	1.58E-02	2.52E-01	3.99E-03
toluene	9.20E+01	2.60E-01	(3)	8.7E-02		6.79E-03	6.79E-03	9.40E-06	(3)	9.46E-04	1.83E-05	1.73E-02	6.44E-02	1.11E-03
ethylbenzene	1.06E+02	3.20E-01	(3)	7.5E-02		5.85E-03	5.85E-03	8.50E-06	(3)	7.75E-04	1.49E-05	1.78E-02	1.29E+00	2.29E-02
xylenes	1.06E+02	2.90E-01	(3)	7.2E-02		5.62E-03	5.62E-03	8.50E-06	(3)	7.78E-04	1.50E-05	1.59E-02	3.63E+00	5.76E-02
isopropylbenzene	1.20E+02	6.20E-01	(5)	7.02E-02	(6)	5.47E-03	5.47E-03	8.87E-06		6.30E-04	1.18E-05	2.95E-02	1.01E-01	2.98E-03
n-propylbenzene	1.20E+02	3.28E-01	(4)	7.02E-02	(6)	5.47E-03	5.47E-03	8.86E-06		7.44E-04	1.43E-05	1.73E-02	3.89E-02	6.73E-04
1,3,5-trimethylbenzene	1.20E+02	9.00E-02	(7)	7.02E-02	(6)	5.47E-03	5.47E-03	8.86E-06		1.30E-03	2.82E-05	6.36E-03	4.72E-01	3.00E-03
1,2,4-trimethylbenzene	1.20E+02	2.87E-01	(4)	7.02E-02	(6)	5.47E-03	5.47E-03	8.86E-06		7.78E-04	1.51E-05	1.55E-02	1.74E+00	2.71E-02
n-butylbenzene	1.34E+02	4.30E-01	(4)	6.57E-02	(6)	5.12E-03	5.12E-03	8.39E-06		6.45E-04	1.23E-05	2.03E-02	1.04E-02	2.11E-04
naphthalene	1.26E+02	1.98E-02		5.90E-02		4.60E-03	4.60E-03	9.47E-06		2.64E-03	1.01E-04	1.61E-03	5.51E+00	8.87E-03

NOTES:

(1) *Value estimated using Equation 2-5 of U.S. Environmental Protection Agency.* 1988. Superfund Exposure Assessment Manual OSWER Directive 9285.5-1.

(2) Input value obtained from: U.S. Environmental Protection Agency. 1994. Technical Background Document for Soil Screening Guidance. EPA/540/R-94/106, unless otherwise noted.

(3) Input value obtained from: ASTM E1739-95. 1995. Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites.

(4) Henry's law constant value was estimated from Figure 15-2, Lyman et al, Handbook of Chemical Property Estimation Methods, 1993.

(5) Henry's law constant from Table 15-4, Lyman et al. 1993.

(6) The diffusivity to air value for estimated based on structural similarity utilizing the FSG method from Lyman et al, 1990.

(7) Henry's law constant from: U.S Environmental Protection agency. 1991. Soil Vapor Extraction Reference Handbook EPA/540/2-91/003.

FORMULAE:

$$VFwesp \quad (mg/m^3\text{-air}) / (mg/L\text{-water}) = \frac{([H] * ([Deff\text{-}ws / Lgw] / [ER * Lb])) * 10E+3\ L/m^3}{1+([Deff\text{-}ws / Lgw] / [ER * Lb]) + ([Deff\text{-}ws / Lgw] / [(Deff\text{-}crack / Lcrack) * n])}$$

Where:

Deff-s = Effective Diffusion coefficient in soil — Deff-s (cm^2/s) = Dair (thetaas^3.33/thetat^2) + (Dwat / H) (thetaws^3.33/ thetat^2)

Deffcrack = Effective Diffusion coefficient through cracks — Deffcrack (cm^2/s) = Dair (thetaacrack^3.33/thetat^2) + (Dwat / H) (thetawcrack^3.33/ thetat^2)

Deff-ws = Effective Diffusion coefficient between groundwater & surface — Deff-ws (cm^2/s) = (hcap +hv)*[hcap/Deff-cap + hv/Deff-s]^-1

Deff-cap = Effective Diffusion coefficient through capillary fringe — Deff-cap (cm^2/s) = Dair (thetaacap^3.33/thetat^2) + (Dwat / H) (thetawcap^3.33/ thetat^2)

H = Henry's Law Constant (cm^3-gw / cm^3-air)	Chemical-specific		thetawcrack = 0.12 cm^3-gw / cm^3-total volume	Default		
ER = Enclosed-Space Air Exchange Rate (L/s)	1.40E-04	Default	thetaacap = 0.038 cm^3-air/cm^3-soil	Default		
Lb = Enclosed-Space Volume / Infiltration Area Ratio (cm)	2.00E+02	Default	thetawcap = 0.342 cm^3 - water/cm^3-soil	Default		
Lcrack = Enclosed-Space Wall Thickness (cm)	1.50E+01	Default	n = Areal Fraction of Cracks (cm^2-cracks/cm^2-total a	1.00E-02	Default	
Lgw = Depth to Groundwater (cm)	3.00E+02	Default	hcap = Thickness of Capillary Fringe (cm)	6.00E+00	Default	
thetaas = 0.26 cm^3-air/ cm^3-soil	Default		hv = Thickness of Vadose Zone (cm)	2.95E+02	Default	
thetat = 0.38 cm^3 / cm^3-soil	Default		Dair = Diffusion Coefficient in Air (cm^2/s)	Chemical-specific		
thetaws = 0.12 cm^3-gw / cm^3-soil	Default		Dwat = Diffusion Coefficient in Water (cm^2/s)	Chemical-specific		
thetaacrack = 0.26 cm^3-air / cm^3-total volume	Default					

Table 3
Summary of Carcinogenic and Non-Carcinogenic Human Health Risks
Via Indoor Inhalation of Vapor Phase Volatiles Intrusion Through the School Building Floors
Based on 95% UCL Concentrations in On-Site Subsurface Soils
For Off-Site School Students Exposures

National Fuel Gas Distribution Corporation
Buffalo Service Center

CDI inh = [(CW)(IRair)(ET)(EF)(ED)]/[(BW)(AT)]

Where:
CW = The Chemical Concentration (mg/m^3)
EF = The Exposure Frequency (d/yr)
ED = The Exposure Duration (years)
ET = The Expsoure Time (hrs/day)
BW = The Average Receptor Body Weight (Kg)
AT = The Averaging Time (ED (yrs) x 365d/yr)
IRair = The Indoor Air Ingestion Rate (m^3/d)

ICR = SUM(CDIi * CSFi) HI = SUM(CDIi / RfDi)

CDIi = Chronic Daily Intake (per constituent)
inh = Via Inhalation Exposure
HI = Hazard Index (non-carcinogenic risks)
ICR = Incremental Cancer Risk (carcinogenic risks)
CSFi = Cancer Slope Factor (per constituent)
RfDi = Reference Dose (per constituent)

Constituents	CW (mg/m^3)	EPA WEIGHT OF EVIDENCE
c-1,2-Dichloroethene	1.73E-04	D
Chloroform	2.02E-04	B2
Benzene	3.99E-03	A
Toluene	1.11E-03	D
Ethylbenzene	2.29E-02	D
Xylenes	5.76E-02	D
Isopropylbenzene	2.98E-03	-
n-Propylbenzene	6.73E-04	-
1,3,5-Trimethylbenzene	3.00E-03	-
1,2,4-Trimethylbenzene	2.71E-02	-
n-Butylbenzene	2.11E-04	-
Naphthalene	8.87E-03	D

Constituents	IRair (m^3/d)	EF (d/yr)	ED (yrs)	BW (Kg)	ET (frac. of day)	AT Carc. (day)	AT Ncarc. (day)
c-1,2-Dichloroethene	15	180	8	28.4	0.25	25550	3285
Chloroform	15	180	8	28.4	0.25	25550	3285
Benzene	15	180	8	28.4	0.25	25550	3285
Toluene	15	180	8	28.4	0.25	25550	3285
Ethylbenzene	15	180	8	28.4	0.25	25550	3285
Xylenes	15	180	8	28.4	0.25	25550	3285
Isopropylbenzene	15	180	8	28.4	0.25	25550	3285
n-Propylbenzene	15	180	8	28.4	0.25	25550	3285
1,3,5-Trimethylbenzene	15	180	8	28.4	0.25	25550	3285
1,2,4-Trimethylbenzene	15	180	8	28.4	0.25	25550	3285
n-Butylbenzene	15	180	8	28.4	0.25	25550	3285
Naphthalene	15	180	8	28.4	0.25	25550	3285

Constituents	INH Carc. CDI	INH Ncarc. CDI	CSF (Kg-d/ mg)	RfD (mg/ Kg-d)	INH ICR	INH HI	% Carc. Risk	% Ncarc. Risk
c-1,2-Dichloroethene *	1.29E-06	1.00E-05		1E-02	0.00E+00	1.00E-03	0.0	0.4
Chloroform	1.50E-06	1.17E-05	8.05E-02		1.21E-07	0.00E+00	12.3	0.0
Benzene	2.97E-05	2.31E-04	2.9E-02	1.71E-03	8.62E-07	1.35E-01	87.7	49.5
Toluene	8.27E-06	6.43E-05		1.14E-01	0.00E+00	5.64E-04	0.0	0.2
Ethylbenzene	1.70E-04	1.33E-03		2.86E-01	0.00E+00	4.63E-03	0.0	1.7
Xylenes *	4.28E-04	3.33E-03		2E-01	0.00E+00	1.67E-02	0.0	6.1
Isopropylbenzene	2.22E-05	1.73E-04		2.57E-03	0.00E+00	6.71E-02	0.0	24.6
n-Propylbenzene	5.01E-06	3.89E-05			0.00E+00	0.00E+00	0.0	0.0
1,3,5-Trimethylbenzene *	2.24E-05	1.74E-04		5E-02	0.00E+00	3.48E-03	0.0	1.3
1,2,4-Trimethylbenzene *	2.01E-04	1.57E-03		5E-02	0.00E+00	3.13E-02	0.0	11.5
n-Butylbenzene	1.57E-06	1.22E-05			0.00E+00	0.00E+00	0.0	0.0
Naphthalene *	6.60E-05	5.13E-04		4E-02	0.00E+00	1.28E-02	0.0	4.7
INHALATION TOTAL ==>					9.83E-07	2.73E-01	100	100

* Oral reference dose values were used for these compounds for conservatism since inhalation reference dose values are not available.

APPENDIX
D

91B-2-99

FLUOR DANIEL GTI

National Fuel
7.1

October 7, 1998

Ms. Tanya B. Alexander, CHMM
Engineer
National Fuel Gas Distribution Corporation
10 Lafayette Square
Buffalo. New York 14203

Subject: **Environmental Site Assessment**
National Fuel Gas Buffalo Service Center (BfSC)
249 West Genesee Street
Buffalo, New York
Fluor Daniel GTI Project: 011110171

Dear Ms. Alexander,

Fluor Daniel GTI, Inc. (Fluor Daniel GTI) is pleased to present this report to National Fuel Gas (NFG) on field activities performed at the above-mentioned site as outlined in the Cost Estimate dated May 1, 1998 and its addendum dated May 29, 1998. Field work, consisting of the advancement of Geoprobe® borings, installation of two groundwater monitoring wells, purging, sampling, and surveying of seven groundwater monitoring wells was performed between June 11, and 30, 1998.

1.0 INTRODUCTION

The objective of the environmental site assessment (ESA) is to investigate the BfSC for the potential presence of industrial residues resulting from the former use of the site as a Manufactured Gas Plant (MGP) and general service center. This activity is being considered in support of National Fuel's objectives of divesting the property to potential purchasers.

1.1 Project Objectives

The proposed ESA scope is designed to support future divestment objectives by supplying a sound data set for NFG's internal evaluation of potential liabilities and remediation costs associated with the transfer of the property.

1.2 Site Location and Description

The BfSC is located in the southwest section of downtown Buffalo, Erie County, New York (figure 1). To the southwest, the property is bounded by a commercial parking lot, a local two lane road and the NYS Route 190. To the south, the property is bounded by West Genesee Street. To the northeast, the property is bounded by Jackson Street and other commercial properties. To the

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northwest, the property is bounded by the Waterfront School. Approximately one quarter mile to the north, opposite the Waterfront School, a former MGP site (unrelated to the NFG BfSC) is currently being investigated by the NYSDEC.

The area is generally described as being within the Great Lakes drainage basin, as the site is within one half mile of Lake Erie. The site consists of vacant, gravel-covered and paved parking areas, old abandoned buildings, and currently used older buildings.

1.3 Site History

The property is currently owned by National Fuel and was most recently operated as a service facility for fleet vehicles, becoming inactive in 1991. A remediation effort occurred to remove cyanide-impacted soil at the site in 1990. The source of the cyanide was determined to be related to past manufactured gas plant (MGP) operations at the site. The site was utilized from approximately 1848 until the early 1900s as a horizontal retort gas light facility, producing manufactured gas for lighting. Gas production capacity reached approximately 2,400,000 cubic feet of gas per day in 1912.

An investigation was completed in 1990 on the Waterfront School property to the north of the Buffalo Service Center. This investigation apparently found "coal tar and coke wastes" in certain soil borings on the school property.

The site has been administered by New York State through their Department of Environmental Conservation, Division of Hazardous Waste Remediation and the Department of Health.

1.4 Report Organization

This report is presented in a format which details the methods employed to gather data, our understanding of the local and regional physical setting, the observations made of impacts to groundwater and soil, and our conclusions in the following sections:

1.0 Introduction
2.0 Field Methods
3.0 Physical Site Characteristics
4.0 Presence and Nature of MGP Residuals
5.0 Conclusions

1.5 Summary of Areas of Investigation

In the process of performing the assessment, the following general areas were investigated through the collection of soil and groundwater samples:

Gasometers (GP-1 through GP-4)
Underground Storage Tank Systems (GP-5 and GP-6)
Gas Scrubber (GP-7)
Gas Purifiers and Retort House (GP-8 to GP-10; GP-13 through GP-18)
Machine Shop/Coke Shop (GP-11, GP-12 and GP-19)
Apparent Upgradient Groundwater Conditions (MW98-07 and MW98-08)

These areas were determined utilizing Sanborn Fire Insurance maps to identify historical structures.

2.0 FIELD METHODS

This section describes the field methods used to investigate the various areas across the site which may potentially have impacts to the subsurface soils and groundwater due to prior and current use activities, as identified by the site history review and previous investigations.

2.1 Field Mobilization

Field activities commenced on June 11, 1998, with a Fluor Daniel GTI geologist and drilling contractor, Zebra Environmental, beginning the intrusive phase of the project. Prior to start up of each day's activities a tail gate meeting was conducted by Fluor Daniel GTI to outline the daily work scope, review health and safety matters and discuss any other pertinent issues in keeping with Fluor Daniel GTI's safety policy. All subcontractor's employees signed the Health and Safety Plan and Tailgate Meeting Form.

2.2 Soil Boring, Soil Sampling and Analysis

Fluor Daniel GTI completed the following scope of work for the BfSC facility;

- Installation of, and collection of soil samples from 19 GeoProbe® borings
- Installation of two groundwater monitoring wells
- Collection of groundwater samples from seven groundwater monitoring wells (2 new, 5 existing)
- Analyses of soil and groundwater samples
- Report preparation

A detailed description of the activities completed is described below.

Fluor Daniel GTI contracted Zebra Environmental Corporation (Zebra) to install 12 Geoprobe® borings for soil collection. The Geoprobe® locations were chosen in accordance with past site usage and included Gas Relief Holders (GP-01 - GP-04), Chemical Works Building area (GP-05), Underground Cisterns (GP-06), Iron Scrubber (GP-07), Purifiers (GP-08), Generator (Retort) Houses (GP-09, GP-10), and the Machine Shop/Engine Room (GP-11, GP-12). Seven additional Geoprobe® borings were added to the workscope due to the presence of industrial wastes encountered (GP-13, GP-14) and the existence of three hydraulic vehicle lifts installed in the former vehicle service building (GP-15 - GP-17). Two Geoprobe® borings (GP-18 and GP-19B) were installed beside the Retort House because of difficulty in drilling through that structure's flooring. The locations of the soil borings are shown on **Figure 2.**

Fluor Daniel GTI contracted Maxim Technologies Inc. (Maxim) to install two ground water monitoring wells through hollow stem augers for groundwater collection. The locations were chosen to provide upgradient groundwater quality at the facility. Existing groundwater wells were used to indicate downgradient water quality.

Geoprobe® borings were completed between June 11 and 22, 1998 using a 2-inch-diameter Macro Core sampler that was 48 inches in length. In some borings a smaller diameter, 2-foot long, LB sampler was used when discreet soil samples were collected beneath the water table. Soil borings were completed to a depths ranging from approximately 5.5 feet (refusal at GP-10) to 23.5 feet (GP-12) feet below ground surface (bgs), presumably on top of bedrock. Each 48-inch sampling core was fitted with a removable cutting head and lined with a disposable clear acetate liner. Between samples, the sampling core was washed using a non-phosphate soap, followed by a tap water rinse, and then double rinsed with distilled water. When hydrocarbons were encountered in the subsurface, a steam cleaner was used to wash the sampler and other downhole equipment. Wash and rinse waters were containerized in a 55-gallon drum and left onsite for disposal by NFG.

Once the sampling core was fitted with the clear acetate liner, soil samples were collected in 3- or 4-foot intervals from 1-foot bgs to the bottom of the boring. Each interval was classified using United Soil Classification System (USCS) standards by a Fluor Daniel GTI geologist. The samples were then split into laboratory- prepared glass jars and resealable plastic bags. The jarred sample was immediately placed on ice, while the bagged sample was allowed to accumulate volatile organic compounds (VOCs) within the headspace. Each sample was then screened for volatile organic compounds using a Photoionization Detector (PID). PID readings are presented in **Table 1** and Soil Boring Logs are presented in **Attachment 1**.

The soil sample which exhibited the highest PID reading was submitted for analysis. If elevated PID readings were not encountered the sample collected from the near the water table was

submitted for analysis. Soil samples were analyzed for VOCs using USEPA Method 8260, semivolatile organic compounds (SVOCs) by EPA Method 8270, polychlorinated biphenyls (PCBs) by EPA Method 8080, target analyte list (TAL) inorganic compounds including metals, and free cyanide. A total of 19 soil samples were submitted for laboratory analysis.

2.3 Monitoring Well Installation and Development

On June 18, 1998, Maxim drilled and installed two groundwater monitoring wells through hollow-stem augers for groundwater collection. The locations (MW98-07 and MW98-08) were chosen to provide upgradient groundwater quality at the facility (**Figure 2**). The borings were advanced down to split-spoon refusal depth, presumably on top of bedrock, with continuous soil samples collected from 4 to 10 feet bgs then at 5-foot intervals thereafter. Each interval was classified using USCS standards by a Fluor Daniel GTI geologist. The samples were placed into glass jars and was allowed to accumulate VOCs within the headspace. Each sample was then screened for volatile organic compounds using the PID (**Table 1**). One soil sample from 19.0 feet to 19.9 feet at MW98-07 was submitted for laboratory analysis.

Each well was constructed with a 15-foot, 2-inch-diameter, PVC screened section (0.010-inch slot size) threaded to solid wall PVC riser pipe. Appropriately sized sand pack was placed to approximately 1-foot above the top of the screened section. A 1- to 2-foot bentonite pellet seal was installed over the sand pack and the installation was completed with a traffic-rated, flush-mounted road box grouted in place.

The following day each well was developed to remove fines from the sand pack and establish greater groundwater flow into the screened section. This was accomplished by surging and bailing the well using either a stainless steel bailer and/or a foot valve threaded onto polyethylene tubing. No odor or sheen was noted at MW98-08 while groundwater from MW98-07 exhibited a slight hydrocarbon odor during development.

2.4 Groundwater Level Measurements

Two rounds of groundwater level measurements were taken on June 22, 1998, in conjunction with groundwater sampling, and on June 30, 1998 during surveying of the two new groundwater monitoring wells (**Table 2**). Groundwater elevations measured during a previous round of sampling conducted August 26, 1996 is also presented. Groundwater flow direction appears to be to the west in the vicinity of MW-1 through MW-5 located along the facility's northwest property boundary (**Figure 2**). Total depths of those wells range from approximately 10 to 11 feet bgs and are assumed to be screened in fill material while the two new wells are installed to approximately 18 feet bgs and are screened in mostly native materials. Groundwater appears to

flow to the east as measured in the two new wells, MW98-07 and MW98-08, located near the east and southeast property boundaries respectively (**Figure 3**). Taken together these directions may suggest a radial flow away from the center of the site; however, additional wells would be needed to confirm the flow pattern across the site.

2.5 Groundwater Sampling and Analysis

On June 22, 1998, all seven wells were purged and sampled for VOCs, SVOCs, metals and free cyanide. Each well was purged a minimum of three well volumes prior to sampling. Purge water removed from the wells was collected in a 55-gallon drum and left on-site for disposal by NFG.

Groundwater samples were collected from each well using disposable polyethylene bailers, placed in laboratory prepared glassware and shipped under chain-of-custody documentation to Columbia Analytical Services, Inc. of Rochester, New York. Analytical results are presented in **Attachment 2**.

3.0 PHYSICAL SITE CHARACTERISTICS

3.1 Regional Geologic Setting

Unconsolidated soil overburden at the facility is identified as Urban Land according to the Soil Survey of Erie County, New York. This designation is given to areas in which 80 percent or more of the soil surface is covered by asphalt, concrete, buildings, or other impervious structures. These areas are generally nearly level. In the immediate facility area it is assumed that several feet of varied fill material has been placed over native soils due to the nature of materials encountered during installation of the Geoprobe® borings and the site's proximity to the old Erie Canal.

Bedrock underlying the site is mapped as Devonian age Onondaga Limestone, a massive limestone with cherty interbeds, which is frequently fossiliferous. No attempt was made to confirm the depth or type of bedrock underlying the site. The two new groundwater monitoring wells installed during this investigation were completed in the overburden.

3.2 Site-specific Geology

Fill material mantles the facility and ranges in thickness from approximately 4 feet near the property boundaries (as seen in MW98-07 and MW98-08) to approximately 14 feet. This material consists of a mixture of sand, gravel, silt, brick fragments, slag, coal, ash, wood and shale. In some soil samples this odor was noted in native soils below the fill layer. For example, at MW98-07 hydrocarbon odors were noted in native soils beginning at approximately 14 feet bgs to refusal at 19.9 feet bgs. Fill material and native soils in this boring above 14 feet bgs did not appear to be impacted suggesting that dissolved constituents may have migrated to this location from the center of the site, where thicknesses of impacted fill are greater.

Native soils encountered below the fill consist of heterogeneous mixtures of silty-clay to clayey silt, fine to coarse sand, silty sand and plastic clay with little to some fine to coarse gravel throughout. Thin peat layers were noted in several Geoprobe® borings (GP-11, GP-12 and GP-19) suggesting deposition in a near shore shallow water environment (i.e.; a swamp or marsh). A discontinuous glacial till layer composed of stiff, clayey-silt with some fine to coarse gravel and little sand was encountered in several Geoprobe® borings while glacio-fluvial or glaciolacustrine deposits were observed near the bottom of other borings. Refusal depths in native soil materials ranged from 18 feet to 23.5 feet bgs, possibly at the top of bedrock. It was not an objective of the investigation to map out the depth or type of bedrock underlying the site.

3.3 Regional Hydrogeological Setting

The BfSC property is located approximately 1,000 feet northeast of Lake Erie near the mouth of the Upper Niagara River, which is the nearest discharge zone for local groundwater found in the unconsolidated overburden deposits. Regionally, groundwater would be anticipated to flow toward Lake Erie in a southwesterly direction, although the extent of building and infrastructure in the area is likely to divert groundwater flow locally. Shallow groundwater in the area of the site is typically found in coarser grained glacially derived sediments or as perched water over deposits of fine grained sediments of lower permeability. Contributions of groundwater from bedrock units underlying the site were not considered as no bedrock wells were installed during the assessment.

3.4 Site Specific Hydrogeology

On June 30, 1998, depth to groundwater averaged approximately 4 feet bgs in MW-01 through MW-05, which are located at the northwest corner of the property, and was found in the unconsolidated fill materials. Recharge of the water table is provided by meteoric precipitation infiltrating the unpaved areas of the property. At MW98-07 and MW 98-08 depth to groundwater was approximately 7 feet bgs in native overburden soils (Table 2). Groundwater flow directions

varied from westerly on the northwest side of the site to easterly on the east and southeast side of the site.

4.0 PRESENCE AND NATURE OF MGP RESIDUALS

During the ESA completed at the Buffalo Service Center property, MGP residual material was detected in association with former gas processing and storage areas at the site. These residuals included coal tar, chemical constituents of coal tar in soil and groundwater, purifier waste material (complexed cyanides), and total and amenable cyanide within soil and groundwater. Samples were collected from these areas to quantify the concentrations of MGP chemical constituents in soil and groundwater. Analytical results for soil and groundwater samples are presented in Tables 3 through 8.

4.1 Soils

4.1.1 Field Observations and Data

Soil containing coal tar residues (staining) were observed in soil borings GP-03, GP-07, and GP-17. Soils saturated with coal tar were observed in soil borings GP-05, GP-06, GP-08, GP-13, GP-14, GP-15, GP-16, and GP-19B. These boring locations are within the central and western portions of the property.

Visible evidence of complexed cyanides, in the form of bluish-green sand, was observed in fill material in GP-5 through 8 and GP-15 located underneath and north of the former vehicle maintenance garage. Fill material heavily stained with presumed residual coal tar was observed in GP-5 through GP-8, GP-13 through GP-17, and GP-19. The coal tar was accompanied by a petroleum odor and sheen on the groundwater. No hydrocarbon odor and/or sheen were seen in fill or native soil materials in GP-12 or GP-18. In addition, no odor or sheen were observed in GP-9 or GP-10 drilled inside the Retort House; however both of these borings had shallow refusal depths and may not have reached potentially impacted underlying fill materials.

4.1.2 Chemical Analytical Data

Nineteen soil samples were collected for analysis of volatile and semivolatile compounds, metals and PCBs by methods listed in **Section 2.2**. VOCs were found to be non-detect in soils collected from GP-01 through GP-04, GP-09A, GP-15, GP-18 and GP-19. In the remaining soil samples total VOC concentrations ranged from 0.032 to 546 mg/kg (or parts per million; ppm). These VOC compounds were composed primarily of benzene, toluene, ethylbenzene and xylenes (BTEX). Soil chemical analytical results for VOCs are summarized in **Table 3**.

Total SVOC concentrations ranged from non-detect (MW 98-07; 19 - 19.9 ft bgs) to 36,930 ppm at GP-08. The SVOCs detected were primarily polynuclear aromatic hydrocarbons, or PAHs. Soil chemical analytical results for SVOCs are summarized in **Table 4**. The VOCs and SVOCs detected in the subsurface are commonly associated with MGP residues.

Metals detected above background concentrations in some of the soil samples included cyanide, lead, magnesium, mercury and zinc. Total cyanide was detected in ten subsurface soil samples at a maximum concentration of 969 ppm; however, amenable cyanide was only detected in one soil sample at 13.2 ppm. Soil chemical analytical results are summarized in **Table 5.** No PCBs were detected in any of the soil samples analyzed.

4.2 Groundwater

4.2.1 Field Observations

No liquid-phase hydrocarbons were detected at the site although slight sheens were observed on groundwater from MW-03 and MW-05. Hydrocarbon odors and/or sheens were noted on groundwater collected from MW-2, MW-3, MW-4, MW-5 and MW 98-07. Frequently, below the water table, the fill exhibited a hydrocarbon odor and/or was coated with black product (assumed to be coal tar) which contributed a sheen to the groundwater in the sample. Groundwater removed from MW-01 exhibited a bluish-green color.

4.2.2 Chemical Analytical Data

Seven groundwater samples were collected for analysis of VOCs, SVOCs, and metals. Groundwater analytical results for VOCs indicated detectable concentrations of benzene in water samples collected from MW-01 through MW-05 and MW 98-07. Ethylbenzene and xylenes were detected in MW-01, MW-03, MW-05 and MW98-07. Toluene was detected in MW-01 and MW-05. Total concentrations of VOCs ranged from 29.8 ppm (MW-02) to 11,130 ppm at MW-03. No VOCs were detected in groundwater from MW 98-08. Groundwater chemical analytical results for VOCs are summarized in **Table 6**.

SVOCs (primarily PAHs) were detected in groundwater from MW-01 through MW-05. Naphthalene, a SVOC commonly detected at MGP sites, was found in the highest concentrations ranging from 92 ppm to 7,200 ppm. No SVOCs were detected in groundwater from MW 98-07 or MW 98-08. Groundwater chemical analytical results for SVOCs are summarized in **Table 7**.

Arsenic, copper, cyanide, iron, lead, magnesium, manganese, mercury, thallium and zinc were found in one or more groundwater samples. Cyanide was detected in all of the samples ranging

in concentration from 0.05 ppm to 19.9 ppm. Groundwater chemical analytical results for metals are summarized in **Table 8**.

5.0 CONCLUSIONS

5.1 Comparison to Applicable Guidance and Standards

The chemical analytical data collected during the ESA at the Buffalo Service Center were compared to applicable New York State standards, criteria, and guidance values, as a method of screening the detected chemical constituents for substances which may be present at a level of concern. The standards, criteria, and guidance values used for this purpose include New York State Department of Environmental Conservation (NYSDEC) Groundwater Standards and Guidance (1993), and NYSDEC Hazardous Waste Site Soil Cleanup Guidance (1995).

The soil cleanup levels referenced above are intended as guidance for remediation of hazardous waste sites for unrestricted use, including occupancy and direct contact exposures by children and adults. While these conservative exposure scenarios are not realistic for the subject property, these guidance were used for screening purposes because currently NYSDEC has not issued guidance policy for industrial or commercial property use scenarios.

5.2 MGP Constituents In Soil

Certain MGP constituents were detected in soil at concentration above the NYSDEC (1995) guidance values. These constituents include VOCs (primarily BTEX), which were detected in excess of individual compound guidance values at borings GP-05, GP-06, GP-07, GP-08, GP-13, GP-14, GP-16, GP-17, and MW-98-07. The total VOC concentrations detected in soil borings GP-06, GP-08, GP-13, GP-14, and GP-16 were also above the NYSDEC (1995) guidance value of 100 ppm for total VOCs.

Concentrations of individual PAH compounds, such as acenaphthylene, benzo(a)pyrene, dibenzo(a,h) anthracene, naphthalene, phenanthrene, and others, were also detected in excess of NYSDEC (1995) soil guidance values at borings GP-02, GP-05, GP-06, GP-07, GP-08, GP-12, GP-13, GP-14, GP-15, GP-16, GP-17, and GP-18. The total PAHs detected at borings GP-06, GP-08, GP-13, GP-14, GP-15, and GP-16 were also above the NYSDEC (1995) guidance value of 500 ppm for total SVOCs.

Metals were detected at soil borings GP-01, GP-02, GP-03, GP-04, GP-05, GP-07, GP-11, GP-12, GP-13, GP-15, GP-16, and GP-19B in excess of NYSDEC (1995) guidance values. Zinc was

the metal most commonly detected in excess of the guidance value. For most of the boring locations, the concentrations of zinc were relatively similar (52 to 82 ppm), with the exception of GP-15, at 180 ppm. As the concentrations of zinc are ubiquitous and reasonably close to the range of values typical of non-industrialized eastern USA soils (9-50 ppm, NYSDEC, 1995), these concentrations are probably typical of the project area and are not expected to contribute significantly to any risk-based evaluation of the site.

Total cyanide was detected at borings GP-02, GP-03, GP-06, GP-07, GP-08, GP-13, GP-15, GP-16, GP-17, and GP-18; however amenable cyanide was only detected at boring GP-16. Total cyanide includes complexed cyanides, such as ferrocyanide (noted for its "prussian blue" color), which are relatively stable. This is supported by the project data, which shows that amenable cyanide was only detected in one of 10 borings that had positive detections of total cyanide.

5.3 Constituents in Groundwater

Individual VOC compounds exceeded NYSDEC standards (1993) in wells MW-01, MW-02, MW-03, MW-04, MW-05, and MW-98-07. Total VOC concentrations exceed the NYSDEC total VOC standard of 100 ppb in all wells except wells MW-02 and MW-98-08, which contained no detectable levels of VOCs.

Individual PAH compounds exceeded NYS standards (1993) in wells MW-01, MW-02, MW-03, MW-04, and MW-05. No PAH compounds were detected in wells MW-98-07 and MW-98-08.

One or more metals exceeded NYS standards (1993) in wells MW-01, MW-02, MW-03, MW-04, MW-05, MW-98-07, and MW-98-08. Total cyanide was also detected in all wells, but amenable cyanide was only detected in MW-03.

5.4 Summary and Recommendation

The presence of MGP chemical constituents (VOCs, PAHs, metals, and cyanide) at concentrations in excess of applicable NYSDEC standards and guidance values was detected during this ESA. Exposure assessments completed by Groundwater Technology, Inc. have been reviewed by NYSDOH, and have identified no significant health risks to off-site receptors.

The presence of these constituents at the concentrations detected during this ESA may potentially pose risks to commercial site workers or construction workers performing work at the site. The concentrations of MGP constituents detected during this ESA should be further evaluated in the context of potential exposures through these pathways, for both current operating scenarios and intended future uses of the property.

FLUOR DANIEL GTI

If you should have any questions or comments regarding this ESA, please do not hesitate to contact us at (518) 370-5631.

Sincerely,
Fluor Daniel GTI, Inc.

Thomas D. Antonoff
Project Manager

TDA

Attachments:
Figures
Tables
1. Soil Borings
2. Laboratory Analytical Reports

TABLES

TABLE 1
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
PID Soil Screening Results

Soil Sample Interval feet below grade	Soil Boring Identification										
	GP-01	GP-02	GP-03	GP-04	GP-05A	GP-06	GP-07	GP-08	GP-09A	GP-10	GP-11
0-1											
1-2											
2-3											
3-4	1.2	0.2	ND	ND	0.2	0.3	0.6	4.0	0.2	0.4	0.4
4-5											
5-6							76.0			0.4	
6-7							R @ 6'		0.8	R @ 5.5'	
7-8	1.2	1.1	ND	0.2	0.8	124.0		140.0	R @ 6.8'		0.4
8-9						150.0					
9-10						R @ 9'					
10-11											
11-12	2.0	1.0	0.4	1.2	9.8			176.0			1.5
12-13											
13-14								162.0			
14-15											
15-16	4.8	0.3	1.3	0.4	72.0			128.0			52.0
16-17											
17-18								176.0			
18-19					89.0						
19-20	14.0	74.0	30.0	28.0	29.0			88.0			72.0
20-21	R @ 20'		R @ 19.9'	28.0				R @ 19.5'			
21-22		NT		R @ 21'	0.4						
22-23		R @ 21.7'			R @ 21.8'						1.2
23-24											R @ 22.3'

results in ppmv

NT = Not Tested
ND = No Detectable Volatile Organic Compounds
NR = No Recovery
R = Refusal

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TABLE 1 (continued)
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
PID Soil Screening Results

Soil Sample Interval feet below grade	Soil Boring Identification									
	GP-12	GP-13	GP-14	GP-15	GP-16	GP-17	GP-18	GP-19B	MW 98-07	MW 98-08
0-1										
1-2										
2-3										
3-4	0.2	0.3	0.2	0.7	0.6	0.6	ND	0.2	NT	NT
4-5										
5-6									ND	ND
6-7								34.0		
7-8	0.2	3.0	235.0	2.6	1.0	1.0	0.3	1.0	0.1	ND
8-9										
9-10		70.0		162.0					ND	NR
10-11		R @ 10'		R @ 10'	144.0					
11-12	0.2		240.0		23.0	30.0	0.5	14.6		
12-13										
13-14					NT			30.0	NT	NT
14-15			240.0					58.0		
15-16	0.4		R @ 14.8'		80.0	29.0	0.5	R @ 15'	4.4	0.1
16-17										
17-18					54.0	52.0				
18-19	0.4				R @ 18'	110.0			NT	NT
19-20						R @ 19'	0.4			
20-21	ND						0.8		14.8	ND
21-22							R @ 20.5'		R @ 19.9'	0.1
22-23	0.2									R @ 21.9'
23-24	0.2									
	R @ 23.5'									

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TABLE 2
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Observation Well Gauging Results

Well ID	TOC Elevation (feet)	Date Gauged	DTW (feet)	DTP (feet)	Product Thickness (feet)	Product Specific Gravity	Corrected DTW (feet)	Corrected Water Elevation (feet)
MW-01	100.64	08/26/96	3.23	----	----	----	3.23	97.41
	100.64	06/22/98	3.36	----	----	----	3.36	97.28
	100.64	06/30/98	3.32	----	----	----	3.32	97.32
MW-02	100.39	08/26/96	3.90	----	----	----	3.90	96.49
	100.39	06/22/98	4.06	----	----	----	4.06	96.33
	100.39	06/30/98	4.09	----	----	----	4.09	96.30
MW-03	99.29	08/26/96	3.68	----	----	----	3.68	95.61
	99.29	06/22/98	3.70	----	----	----	3.70	95.59
	99.29	06/30/98	3.55	----	----	----	3.55	95.74
MW-04	99.78	08/26/96	4.39	----	----	----	4.39	95.39
	99.78	06/22/98	4.38	----	----	----	4.38	95.40
	99.78	06/30/98	4.45	----	----	----	4.45	95.33
MW-05	99.95	08/26/96	4.87	----	----	----	4.87	95.08
	99.95	06/22/98	4.70	----	----	----	4.70	95.25
	99.95	06/30/98	4.20	----	----	----	4.20	95.75
MW 98-07	99.57	06/22/98	6.07	----	----	----	6.07	93.50
	99.57	06/30/98	6.01	----	----	----	6.01	93.56
MW 98-08	101.21	06/22/98	8.35	----	----	----	8.35	92.86
	101.21	06/30/98	8.00	----	----	----	8.00	93.21

Notes:
TOC Elevation = Elevation at the top of the PVC well casing.
DTW = Depth to water.
DTP = Depth to Non-Aqueous Phase Liquid (NAPL).
Product Thickness = NAPL thickness.
Product Specific Gravity = Estimated specific gravity of NAPL.
Corrected DTW = Depth to water corrected for NAPL/water density difference.
Corrected Water Elevation = Elevation of the water table using the corrected depth to water.

TABLE 3
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Soil Sampling Results
EPA Method 8260 for Volatiles

Detected Volatile Analyte	GP-01 (16' - 20')	GP-02 (16' - 21.7')	GP-03 (16' - 19.9')	GP-04 (16' - 21')	GP-05 (16' - 19')	GP-06 (7' - 9')	GP-07 (4' - 6')	GP-08 (8' -12')	GP-09A (4' - 6.8')	GP-11 (16' - 20')	TAGM 4046* Soil Cleanup Objectives to Protect Grd. Wtr.	TAGM 4046* Recommended Soil Cleanup Objectives
Acetone											0.11	0.2
Benzene					1.5	10	10	28		4	0.06	0.06
Toluene					6.9	24		68			1.5	1.5
Ethylbenzene					2.6			60			5.5	5.5
Styrene					3.5							
O-Xylene					7.6	22		100			1.2	1.2
M+P-Xylene					20	53		290		0.97	1.2	1.2
TOTAL VOLATILES	Nondetect	Nondetect	Nondetect	Nondetect	42.1	109	10	546	Nondetect	4.97		<10

Detected Volatile Analyte	GP-12 (8' -12')	GP-13 (8' - 10')	GP-14 (12' - 14.8')	GP-15 (6' - 10')	GP-16 (8' - 11')	GP-17 (16' - 19')	GP-18 (8' - 12')	GP-19B (14' - 15')	MW 98-07 (19' - 19.9')	Soil Cleanup Objectives to Protect Grd. Wtr.	Recommended Soil Cleanup Objectives
Acetone	0.032									0.11	0.2
Benzene			37						0.15	0.06	0.06
Toluene			85							1.5	1.5
Ethylbenzene						4.7				5.5	5.5
Styrene											
O-Xylene		84	40		37	1.7				1.2	1.2
M+P-Xylene		240	120		92	2.9				1.2	1.2
TOTAL VOLATILES	0.032	324	282	Nondetect	129	9.3	Nondetect	Nondetect	0.15		<10

Only analytes with concentrations above laboratory detection limits presented.
Results in mg/kg (ppm).
* New York State Dept. of Environmental Conservation, Div. of Hazardous Waste, Technical & Admininstrative Guidance Memo 4046, revised April 1995
Per TAGM 4046, Total VOCs <10 ppm, Total Semi-VOCs <500 ppm, and Individual Semi-VOCs <50 ppm.

FLUOR DANIEL GTI

TABLE 4
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Soil Sampling Results
EPA Method 8270 for Semi-Volatiles

Detected Semivolatile Analyte	Soil Sample Identification										TAGM 4046*	
	GP-01 (16' - 20')	GP-02 (16' - 21.7')	GP-03 (16' - 19.9')	GP-04 (16' - 21')	GP-05 (16' - 19')	GP-06 (7' - 9')	GP-07 (4' - 6')	GP-08 (8' -12')	GP-09A (4' - 6.8')	GP-11 (16' - 20')	Soil Cleanup Objectives to Protect Grd. Wtr.	Recommended Soil Cleanup Objectives
cenaphthene					2.1			350.0			90	50
cenaphthylene					1.5	37.0		900.0			41	41
nthracene					1.8	39.0		890.0			700	50
enzo(a)anthracene					0.55	27.0		550.0			3	0.224 or MDL
enzo(a)pyrene					0.53	31.0		550.0			11	0.061 or MDL
enzo(b)fluoranthrene						24.0		480.0			1.1	0.224 or MDL
enzo(g,h,i)perylene								230.0			800	50
enzo(k)fluoranthrene					0.41			480.0			1.1	0.224 or MDL
arbozole					0.5			350.0				
ideno(1,2,3-cd)pyrene								270.0			3.2	3.2
hrysene					0.49	26.0		480.0			0.4	0.4
benzo(a,h)anthracene								1,000.0			165000	0.014 or MDL
benzofuran					2.4	37.0					6.2	6.2
luoranthene					2.0	85.0	66.0	1,600.0			1900	50
luorene					3.0	45.0		1,200.0			350	50
-Methylnaphthalene					6.1	100.0		3,200.0			36.4	36.4
laphthalene	3.0	330.0	0.65	4.0	15.0	530.0	230.0	21,000.0	3.2	1.4	13	13
henanthrene					4.4	120.0	66.0	2,400.0	0.6		220	50
yrene					1.3	47.0		1,000.0			665	50
OTAL SEMI-VOAs	3.0	330.0	0.65	4.0	42.1	1148.0	362.0	36930.0	3.8	1.4	**	**

Results in mg/kg (ppm)
Blank cell(s) indicate compound at or below method detection limit.
* New York State Dept. of Environmental Conservation, Div. of Hazardous Waste, Technical & Admininstrative Guidance Memo 4046, revised April 1995
** - Per TAGM 4046, Total VOCs <10 ppm, Total Semi-VOCs <500 ppm, and Individual Semi-VOCs <50 ppm.

FLUOR DANIEL GTI

TABLE 4 (Continued)
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Soil Sampling Results
EPA Method 8270 for Semi-Volatiles

Detected Analyte	Soil Sample Identification									TAGM 4046*	
	GP-12 (8' -12')	GP-13 (8' - 10')	GP-14 (12' - 14.8')	GP-15 (6' - 10')	GP-16 (8' - 11')	GP-17 (16' - 19')	GP-18 (8' - 12')	GP-19B (14' - 15')	MW 98-07 (19' - 19.9')	Soil Cleanup Objectives to Protect Grd. Wtr.	Recommended Soil Cleanup Objectives
Acenaphthene		160.0	15.0		86.0	5.8	4.9			90	50
Acenaphthylene		200.0	61.0		68.0		8.2			41	41
Anthracene	7.3	250.0	44.0	13.0	110.0		20.0			700	50
Benzo(a)anthracene	16.0	140.0	25.0	25.0	65.0		29.0			3	0.224 or MDL
Benzo(a)pyrene	10.0	160.0	27.0	14.0	69.0		24.0			11	0.061 or MDL
Benzo(b)fluoranthrene	5.7	120.0	20.0	27.0	46.0		16.0			1.1	0.224 or MDL
Benzo(g,h,i)perylene		63.0	11.0	14.0	27.0		8.9			800	50
Benzo(k)fluoranthrene	10.0	130.0	23.0	30.0	70.0		19.0			1.1	0.224 or MDL
Carbozole		89.0	19.0		33.0		8.1				
Indeno(1,2,3-cd)pyrene		75.0	14.0	18.0	33.0		10.0			3.2	3.2
Chrysene	16.0	130.0	23.0	28.0	60.0		31.0			0.4	0.4
Dibenzo(a,h)anthracene							5.0			165000	0.014 or MDL
Dibenzofuran		260.0	43.0	45.0	92.0		10.0			6.2	6.2
Fluoranthene	24.0	430.0	80.0	92.0	190.0	8.3	41.0			1900	50
Fluorene		290.0	51.0		110.0	4.6	12.0			350	50
2-Methylnaphthalene		730.0	130.0	100.0	260.0		13.0			36.4	36.4
Naphthalene		4,600.0	1,400.0	310.0	4,000.0	16.0	10.0	3.0		13	13
Phenanthrene		620.0	120.0	130.0	260.0	12.0	45.0			220	50
Pyrene	22.0	240.0	43.0	46.0	110.0	4.5	39.0			665	50
TOTAL SEMI-VOAs	111.0	8,687.0	2,149.0	892.0	5,689.0	51.2	354.1	3.0	Nondetect	**	**

Results in mg/kg (ppm)
Blank cell(s) indicate compound at or below method detection limit.
* New York State Dept. of Environmental Conservation, Div. of Hazardous Waste, Technical & Admininstrative Guidance Memo 4046, revised April 1995
** - Per TAGM 4046, Total VOCs <10 ppm, Total Semi-VOCs <500 ppm, and Individual Semi-VOCs <50 ppm.

FLUOR DANIEL GTI

TABLE 5
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Soil Sampling Results
EPA Method 6000 series for Metals

Detected Metals Analyte	Soil Sample Identification										Eastern USA Background	TAGM 4046* Recommended Soil Cleanup Objectives
	GP-01 (16' - 20')	GP-02 (16' - 21.7')	GP-03 (16' - 19.9')	GP-04 (16' - 21')	GP-05 (16' - 19')	GP-06 (7' - 9')	GP-07 (4' - 6')	GP-08 (8' -12')	GP-09A (4' - 6.8')	GP-11 (16' - 20')		
Lead											200-500	
Magnesium	13,200	35,300	20,900	25,600	25,800	5,120	18,200		6,750	21,200	100-5,000	SB
Mercury											0.001-0.2	0.1
Zinc	68.4	54.5	76.8	59.5	60.4		69.2			52.6	9-50	20 or SB
Amenable Cyanide												
Total Cyanide		27.5	2.3			76.9	236	969				

Detected Analyte	Soil Sample Identification									Eastern USA Background	TAGM 4046* Recommended Soil Cleanup Objectives
	GP-12 (8' -12')	GP-13 (8' - 10')	GP-14 (12' - 14.8')	GP-15 (6' - 10')	GP-16 (8' - 11')	GP-17 (16' - 19')	GP-18 (8' - 12')	GP-19B (14' - 15'	MW 98-07 (19' - 19.9')		
Lead		572								200-500	
Magnesium	5,490	5,470	5,230			17,100		21,200	27,800	100-5,000	SB
Mercury					1.74					0.001-0.2	0.10
Zinc	59.8	63.9		180.0	55.7			81.9		9-50	20 or SB
Amenable Cyanide					13.2						
Total Cyanide		386		591	61.1	1.92	1.38				

FLUOR DANIEL GTI

TABLE 6
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Water Sampling Results
EPA Method 8260 for Volatiles

Detected Volatile Analyte	Groundwater Sample Identification							TOGS 1.1.1.* State Standards
	MW-01	MW-02	MW-03	MW-04	MW-05	MW 98-07	MW 98-08	
Benzene	42	18	130	140	430	210		0.7
Carbon Disulfide	220							50
Cis-1,2-dichloroethene		6.4						5
Ethylbenzene	13		2,300	88	1,300	26		5
Toluene	33				78			5
Trichloroethene		5.4						5
O-Xylene	29		2,700		160	19		5
M+P-Xylene	71		6,000		690	30		5
TOTAL VOLATILES	408	29.8	11,130	228	2,658	285	Nondetect	

Only analytes with concentrations above laboratory detection limits presented.
Results in ug/L
Blank cell(s) indicate compound at or below method detection limit.
* TOGS - NYS DEC Technical and Operational Guidance Series (1.1.1.), Ambient Water Quality Standards and Guidance Values, Oct 1993.

TABLE 7
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Water Sampling Results
EPA Method 8270 for Semi-Volatiles

Detected Semivolatile Analyte	Soil Sample Identification							TOGS 1.1.1.* State Standards
	MW-01	MW-02	MW-03	MW-04	MW-05	MW 98-07	MW 98-08	
Acenaphthene				31				20
Carbozole			39	9.7				
Dibenzofuran	33		48	8.4				5
Fluoranthene			60					50
Fluorene			44	13				50
2-Methylnaphthalene	220		240	10				50
Naphthalene	2500	92	7200		1500			10
Phenanthrene	43		93					50
Pyrene			34					50
TOTAL SEMI-VOAs	2796	92	7758	72.1	1500	Nondetect	Nondetect	

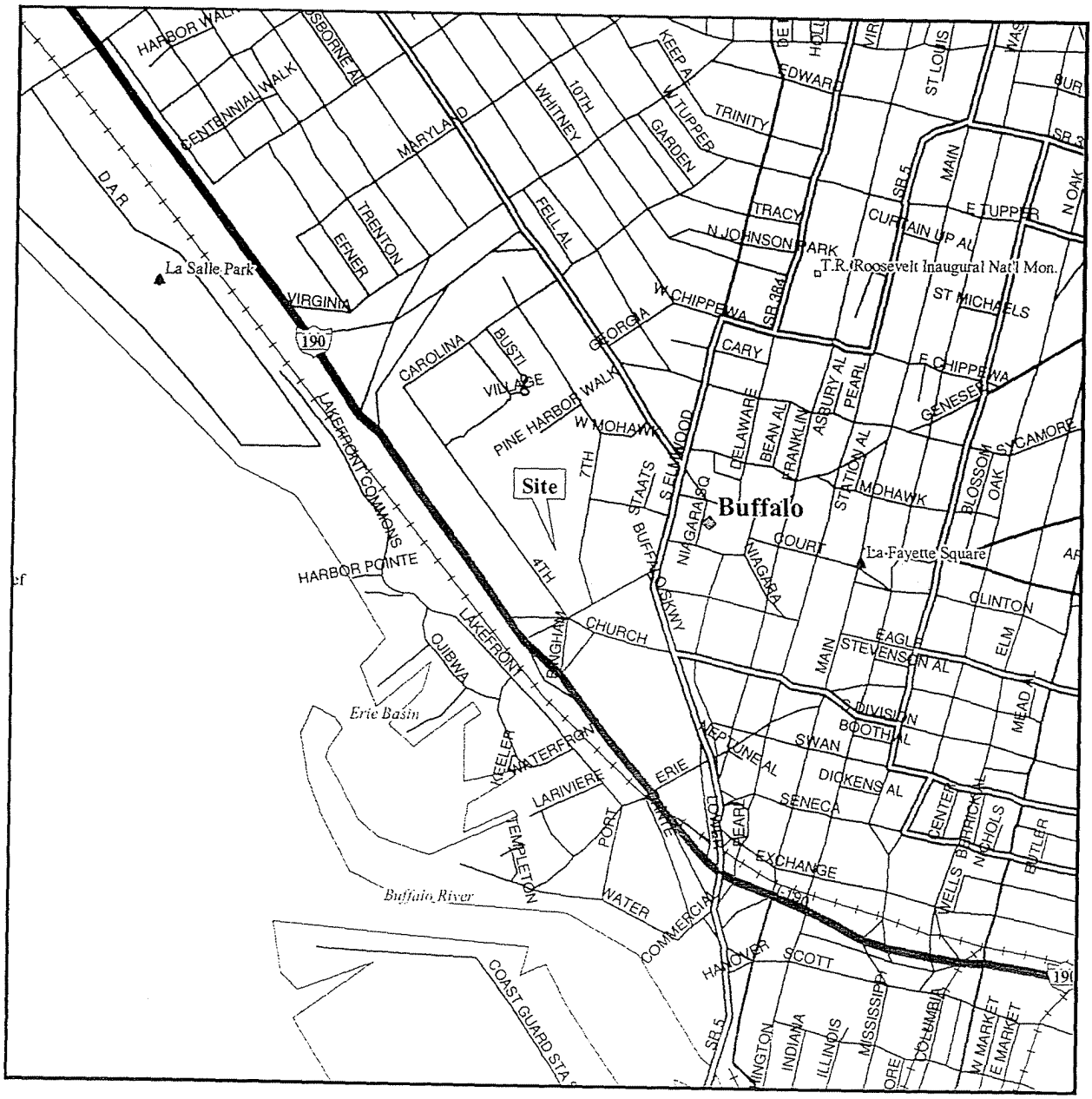
Only analytes with concentrations above laboratory detection limits presented.
Results in ug/L
Blank cell(s) indicate compound at or below method detection limit.
* TOGS - NYS DEC Technical and Operational Guidance Series (1.1.1.), Ambient Water Quality Standards and Guidance Values, Oct 1993.

TABLE 8
National Fuel Gas Buffalo Service Center
247 West Genesee Street, Buffalo, New York
Water Sampling Results
EPA Method 6000 series for Total Metals

Detected Metals Analyte	Groundwater Sample Identification							TOGS 1.1.1.* State Standards
	MW-01	MW-02	MW-03	MW-04	MW-05	MW 98-07	MW 98-08	
Arsenic	0.0691		0.043	0.0664	0.0466	0.0278		0.025
Copper					0.265			0.2
Iron	108	132	22.1	41	28.4	23.1	16.4	0.3
Lead				0.451	0.44	0.0307		0.025
Magnesium				57.9		52.5	135	35
Manganese	3.36	3.89	0.385	1.23	0.682	1.4	1.52	0.3
Mercury					0.00357			0.002
Thallium				0.0116		0.0129		0.004
Zinc				0.311	1.0			0.3
Amenable Cyanide			4.7					
Total Cyanide	7.77	1.36	19.9	1.55	4.12	0.0822	0.0535	0.1

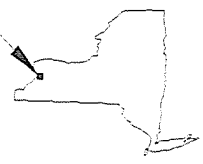
Results in mg/L (ppm)
Only Detected Analytes presented. Blank cell(s) indicate compound at or below method detection limit.
* TOGS - NYS DEC Technical and Operational Guidance Series (1.1.1.), Ambient Water Quality Standards and Guidance Values, Oct 1993.

FIGURES



MAP FROM DELORME'S MAPEXPERT, FREEPORT, MAINE

MAP LOCATION



SCALE 1:15,625

N

FLUOR DANIEL GTI	DESIGNED: TDA	**SITE LOCATION MAP**
1245 KINGS ROAD SCHENECTADY, NY 12303 (518) 370-5651	DETAILED: DEC	CLIENT: NATIONAL FUEL GAS CORP. — DRAWING DATE: 10/7/98
	CHECKED:	LOCATION: 249 WEST GENESEE STREET BUFFALO, NEW YORK — FIGURE: 1

FLUOR DANIEL GTI

ATTACHMENT 1

Soil Boring Logs

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-01

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *20 ft.* Diameter _____
Top of Casing _____ Water Level Initial *9.5 ft.* Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Marc Falzone* Log By *Kevin Cronin* Date *6/12/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

77.2' from SW corner of new brick bldg, 72' from SE corner, and ~64' perpendicular from bldgs steel door. Sampled 16'-20'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Gravel
0					
2	1.2	2.8'			0-4': Moist, loose gray, brown, black sand, fine to coarse gravel, silt fill with brick fragments, ash (?), no stain or odor.
4				SM	4-8': Same as above.
6	1.2	1.0'			
8					8-12': Moist, soft dark gray silty clay with little fine sand, grades to moist black soft silt, ash (?), over moist, plastic dark gray clay, over wet gray fine sand, little silt over moist firm reddish brown silty clay with gray mottles over wet fine to coarse sand with little fine gravel fill, no stain or odor.
10	2.0	3.5'			
12					12-16': Wet, reddish brown, stiff silty clay-clayey silt with gray mottles, trace fine gravel, sand, faint hyd odor over wet gray fine to coarse sand with some fine gravel, trace silt with faint hyd odor, no staining.
14	4.8	3.3'		SC	
16					16-20': Saturated, very soft grayish brown sandy silt with little fine gravel, coarse over moist firm silty clay over gray wet, fine to coarse sand with little fine to coarse gravel, trace silt with hyd odor, no staining.
18	14.0	4.0'			
20					Refusal at ~20'BGL.
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-02

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *21.7 ft.* Diameter ____
Top of Casing ____ Water Level Initial *6 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Marc Falzone* Log By *Kevin Cronin* Date *6/12/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

~63' from new brick bldg SE corner, ~82' from NE corner of bldg, and ~61.5' perpendicular to chain link fence. Sampled 16'-21.7'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Gravel
0					
2	0.2	3.0'			0-4': Damp, loose brown to tan fine to medium sand with little fine gravel, no stain or odor.
4					4-8': Same as above, becoming wet below 6', brick fragments, trace red silty clay (fill) and no stain or odor.
6	1.1	2.5'			▽
8					8-12': Saturated brown to brownish gray, loose fine to coarse sand with trace fine gravel, no stain or odor, at 11.5' have firm, wet grayish brown fine to coarse gravelly silty sand-sandy silt, no stain or odor.
10	1.0	4.0'		GM	
12					12-16': Saturated, brown loose fine to coarse sand with trace fine gravel, trace brick fragments (fill), no stain or odor.
14	0.3	4.0'			
16					16-20': Saturated, grayish brown fine to coarse sand with little fine to coarse gravel, trace ceramic pieces, brick (fill), slight hyd odor, no staining.
18	74.0	2.5'			
20	NT	1.4'		GC	20-21.7': Saturated, brown sandy silty clay-clayey silt with little fine gravel, red brick (fill), hyd odor, no staining.
22					Refusal at ~21.7'BGL.
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-03

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *19.9 ft.* Diameter _____
Top of Casing _____ Water Level Initial *4 ft.* Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/11/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

~84' NNE of GP-06. Sampled 16'-19.9'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Gravel
0					
2	ND	2.1'			0-4': Moist to wet loose gravel, sand, silt (fill) with brick fragments, over wet stiff silty clay, brown to black, hyd odor.
4					4-8': Saturated, black, sand, gravel, silt (fill) with some brown silty clay, faint hyd odor.
6	ND	0.4'			
8					8-12': Saturated, soft black clayey silt, with very slight hyd odor, grades to firm reddish brown clayey silt-silty clay, trace fine gravel, sand, no stain or odor.
10	0.4	3.3'		GC	
12					12-16': Saturated, soft black clayey silt with trace fine gravel, sand, slight hyd odor, over reddish brown soft clayey silt-silty clay with trace fine gravel, sand, occational black staining, faint hyd odor.
14	1.3	2.4'			
16					16-19.9': Soft, saturated reddish brown clayey silt-silt clay, over gray fine sand, loose grades to firm below 19', hyd odor and sheen on groundwater, occational black streaks throughout.
18	30.0	4.0'			
20					Refusal at ~19.9'BGL.
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-04

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *21 ft.* Diameter ____
Top of Casing ____ Water Level Initial *4.5 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/11/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

107.8' from GP-05, 144.5' from N corner of lime sifting bldg. Sampled 16'-21'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Gravel
0					
2	ND	2.4'		GM	0-4': Damp to moist loose gray to black sand, gravel, silt (fill) with brick, slag, shale and wood, no stain or odor.
4					4-8': Saturated, soft brown to gray, silty sand-sandy silt, with some gravel, clay, occational black stain, no odor.
6	0.2	2.0'			
8					8-12': Saturated soft brownish gray clayey silt with some sand, fine gravel, black and wood fill with occational black staining and odor, sheen noted on water.
10	1.2	2.5'			
12					12-16': Saturated soft brown to black clayey silt, with silty sand, fine gravel, trace wood (fill), no odor, over soft reddish brown wet silty clay, no stain or odor.
14	0.4	3.2'		SC	
16					16-20': Wet, reddish brown to brown silty clay, occational sandy zones, no staining, slight creosote odor throughout.
18	28.0	3.8'			
20	28.0	3.2'			20-21': Silty clay, with odor, wet firm silty sand with creosote odor.
22					Refusal at ~21'BGL.
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-05

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *21.8 ft.* Diameter ____
Top of Casing ____ Water Level Initial *4.5 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/11/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

45' N of lime sifting bldg, 178' NW of Retort house, 175' NW of Retort house. Sampled 16'-19'.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Asphalt
0						
	0.4		2.1'			0-2.2': Asphalt over dry loose gravel subbase over dry loose sand, fine to coarse gravel, silt, brick, slag (fill), no stain or odor. Refusal at 2.2', move rig 3' west.
2	0.2		1.5'			0-4': Same as above, trace blueish green sand, moist below 3.8'.
4					GM	4-8': Moist loose brown to tan sand, fine gravel, silt (fill), wet to saturated, stained black, odor.
6	0.8		1.9'			
8						8-12': Saturated loose fill, same as above, over wet black stained stiff plastic silty clay, over gray with black streaks, fine sand, black staining, creosote odor.
10	9.8		1.2'			
12						12-16': Saturated firm gray fine sand, with brown product and creosote odor, sheen on water, over thin silty clay, wet, plastic dark gray with stain and odor.
14	72.0		3.2'			
16					SC	16-20.1': Sand, with silty clay with brown product and creosote odor, rainbow sheen on water.
18	89.0		3.7'			
20	29.0		4.0'			20.1-21.8': Moist, stiff grayish brown silty clay, slightly plastic, no stain or odor.
	0.4		1.8'			
22						Refusal at 21.8'BGL.
24						

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-06

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *9 ft.* Diameter _____
Top of Casing _____ Water Level Initial *5.5 ft.* Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Marc Falzone* Log By *Kevin Cronin* Date *6/11/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

73' from GP-07. Sampled 7'-9'.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Asphalt
0						
2	0.3		2.7'			0-4': 1" asphalt over 1" dry loose gravel and sand subbase over brown to black sand, silt, fine gravel, slag, greenish blue sand, yellowish orange sand, no staining or odor (ash?).
4					SM	4-8': Moist, firm grayish brown, sand, silt with little coarse fine gravel, black stained fill with product (coal tar), creosote odor.
6	124.0		3.0'			
8	150.0		2.5'			8-9': Black stained fill, saturated with product.
10						Refusal at ~9'BGL.
12						
14						
16						
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-07

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *6 ft.* Diameter _____
Top of Casing _____ Water Level Initial *4 ft.* Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/11/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

22ppmv from GP-07 at 6' openhole. Sampled 4'-6'.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Asphalt
0						
2	0.8		2.4'		SM	0-4': 2" asphalt over 1" dry loose coarse to fine gravel over black loose dry to damp sand, with some fine gravel, silt, ash, brick fragments, shale, rust colored slag (fill), no odor.
4						▽ 4-6': Wet black (stained) fine to coarse gravel, sand, fill with coal tar odor, dark grayish blue sand.
	78.0		1.8'			
6						Refusal at ~6'BGL - Move rig ~8.5', have refusal at ~0.3'.
8						
10						
12						
14						
16						
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-08

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *19.5 ft.* Diameter ____
Top of Casing ____ Water Level Initial *4 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *Kawalasaki Mule*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/15/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

64' SE of NW overhead door, 38' SW of northern wall, and 28' NE of southern wall. Sampled 8'-12'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0					0-4': Dry brownish gray concrete dust and gravel (5") over damp to moist, loose bluish-green to brown silt, sand, gravel (fill) over moist, loose, bluish-green sand, silt, fine gravel, no odor.
2	4.0	1.9'			
4					4-8': Wet bluish-green fill, brown wet sand over brown wet sand and broken orange brick over black saturated, thick coal tar coated sand, gravel, silt (fill), hyd odor, sheen on water.
6	140.0	2.4'		SM	
8					8-12': Saturated bluish-green sand, gravel, silt fill over black, saturated, thich coal tar coated sand, gravel, silt fill with hyd odor and sheen, over broken brick and gravel with "oily" coating, odor and sheen over dark gray clayey silt, with little to some sand with stain and odor.
10	176.0	2.8'			
12					12-16': Saturated, black, coal tar coated sand, gravel, silt fill, over wet dark gray to brown silty clay-clayey silt with gray mottling and occ. blackish brown coal tar/staining/hyd odor, grades to sandy silt-silty sand with some clay below 15.5'.
	162.0				
14					
	128.0	4.0'			
16				SC	16-17.5': Saturated, coal tar coated gravel, sand, silt fill, hyd odor and stain, sheen (uphole) over dark gray wet sandy silt with little clay, with coal tar stain and hyd odor.
	176.0	3.8'			
18					17.5-19.5': Saturated, soft brownish gray sandy silt-silty sand, with little clay with occ. lenses of silty clay-clayey silt, sand, no gravel (native), no staining, hyd odor.
	86.0	2.0'			
20					Refusal at ~19.5'BGL.
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-09

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *6.3 ft.* Diameter ____
Top of Casing ____ Water Level Initial ____ Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 Truck Mtd.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Fill is VERY hard to drill through. No samples collected.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Asphalt over concrete.
0						
2	0.8		2.5'		SM	0-4': Dry loose concrete dust, sand and gravel over dry, loose brown to black, sand, gravel, slag over dry, loose dark yellow sand, fine gravel, no stain or odor.
4						4-6.3': Dry, loose brown to rust, sand, gravel, slag (fill) over dry loose medium yellow sand, quartz gravel over moist white coarse sand, white fine to coarse gravel over gray moist sand, gravel, slag, no stain or odor.
6	0.3		2.0'			
8						Refusal at ~6.3'BGL.
10						
12						
14						
16						
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-09A

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *6.8 ft.* Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 Truck Mtd.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

7' NW from GP-09 in straight line. Sampled 4'-6.8'.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Asphalt over concrete.
0						
2	0.2		2.8'		SM	0-4': Dry loose tan to light brown concrete dust, sand, gravel over black, dark brown, rust sand, gravel, slag dry and loose over dry loose dark yellow to rust sand and gravel, no stain or odor.
4						4-6.8': Orangish sand and gravel, dry loose over moist coarse sand over moist gray sand, gravel, slag over moist black gravel, sand (slag?), no odor.
6	0.8		3.3'			
8						Refusal at 6.8'BGL.
10						
12						
14						
16						
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-10

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *5.5 ft.* Diameter ____
Top of Casing ____ Water Level Initial ____ Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *Kawalasaki Mule*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/15/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Fill is VERY hard to drive through. No samples collected.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0					
2	0.4	2.8'		SM	0-4': Dry, loose, grayish brown, silt, sand, gravel (fill) over black sand, gravel, slag, ash? fill over dry loose dark yellow fine to medium sand with fine to coarse dark yellow gravel with little white ceramic like chips, no odor.
4	0.4	1.5'			4-5.5': Dry loose dark yellow sand and gravel, no stain or odor. Refusal at 5.5', move 4' toward W. Genesee, refusal at 5' in dry dark yellow to creme fine to medium sand with some fine to coarse dark yellow gravel. Move 9' east of GP-10A; hit refusal, no recovery at 4', move 9.5' NW of original GP-10 for GP-10C.
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-10C

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *5 ft.* Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *Kawalasaki Mule*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/15/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

Fill is VERY hard to drive through. No samples collected.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Concrete
0						
2	0.2		2.0'		SM	0-4': Dry, loose, grayish brown, silt, sand, gravel (fill) over black sand, gravel, slag, ash? fill over dry loose dark yellow fine to medium sand with fine to coarse dark yellow gravel with little white ceramic like chips, no odor.
4	0.4		1.4'			4-5': Dry loose creme colored fine to coarse sand and fine to coarse gravel with white ceramic pieces, little brick fragments, rust colored slag over creme to light pink fine to medium sand with little white ceramic pieces (fill), no odor or staining.
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-10D

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *3.5 ft.* Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 Truck Mtd.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

4.6' NNW of GP-10, drilled 6/15/98, fill is VERY hard to drill through. No samples collected.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0	0.5	3.2'		SM	0-3.5': Dry loose, tan concrete dust and gravel over dry loose black to brown, sand, fine to coarse gravel, slag (ash?) fill over dark to medium yellow sand with trace white ceramic chips (bricks?), no stain or odor.
2					
4					Refusal at ~3.5'BGL.
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-10E

Project Buffalo Service Center Owner National Fuel Gas
Location 249 W. Genesee St. Proj. No. 01111-0171
Surface Elev. ____ Total Hole Depth 3.5 ft. Diameter ____
Top of Casing ____ Water Level Initial ____ Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core 4x4 Truck Mtd.
Drill Co. ZEBRA ENVIRONMENTAL Method GeoProbe
Driller Mike Paul Log By Kevin Cronin Date 6/16/98 Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

14.6' from GP-10D toward W Genesee St., fill is VERY hard to drill through. No samples collected.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0	1.1	2.5'		SM	0-3.5': Dry loose, tan concrete dust and gravel, dry loose black to brown, sand, fine to coarse gravel, slag (ash?) fill over dark to medium yellow sand with trace white ceramic chips (bricks?), no stain or odor, yellow brick pieces with white quartz pebbles up to 2" thick, reddish brown slag, no stain or odor.
2					
4					Refusal at 3.5'BGL.
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-11

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *22.3 ft.* Diameter ____
Top of Casing ____ Water Level Initial *6 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/11/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

14' from brick bldg machine shop, 19' from Coal house, 46.3' from bldg corner. Sampled 16'-20'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Asphalt
0					
2	0.4	1.8'			0-4': Asphalt over black, loose fine gravel, moist, grades to dark gray-brownish gray loose sand, fine gravel, silt with trace coarse gravel, orange fine sand, no stain or odor, gravel is limestone with chert.
4					4-8': Same as above, over moist to wet, firm, brown to olive gray fine sand with little silt, clay, trace fine gravel, wood, occational black (natural organics?), no staining or odor.
6	0.4	2.9'		SM	▽
8					8-12': 8" of uphole sand and gravel over wet gray firm fine sand with little silt, trace fine gravel, over dark brown to brownish black silt and organic matter/peat, soft with wood fibers and roots, no odor or staining.
10	1.5	2.7'			
12					12-16': Saturated, light brown firm clay and compact fine sand, clay over sand, trace silt, no staining, but creosote odor from water, no sheen observed.
14	52.0	4.0'			
16					16-20': Saturated, firm, tan, fine sand, trace silt with creosote odor noted throughout, no staining, sheen on groundwater.
18	72.0	4.0'		SC	
20					20-22.3': Very moist, stiff, tan, sandy clay-silt with some coarse to fine gravel (dark gray subround to subangle) till, no staining, creosote odor throughout.
22	1.2	3.0'			
24					Refusal at ~22.3'BGL.

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-12

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *23.5 ft.* Diameter _____
Top of Casing _____ Water Level Initial *8 ft.* Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Marc Falzone* Log By *Kevin Cronin* Date *6/11/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

37.4' from brick office bldg, 7' from LS corner column. Sampled 8'-12'.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Asphalt
0						0-4': 2" asphalt over dry loose gray gravel, sand, silt subbase over dry becoming moist, brown to black below 1', sand, silt, fine gravel, black soil (ash?), trace orange sand, white sand, no odor.
2	0.2		1.7'			4-8': 5" of black soil/ash over firm to stiff, moist brown to orangish brown silty clay with little fine sand over very moist brown to orangish brown fine sand with little silt, trace fine gravel, occ. black color in clay and sand, no odor, last 2" olive brown moist silty clay woth wood fibers, slight odor.
4						
6	0.2		3.4'			
8						8-12': 6" brown, orangish brown wet fine sand with little silt over 2" of wet black gravelly sand, no odor, over wet, stiff gray, olive gray silty clay, plastic with trace fine gravel, over dark brown to black peat with roots and plant fibers, grades to firm wet dark brown to gray fine sand, no staining or odor.
10	0.2		4.0'			
12					SC	12-16': Saturated, brownish gray fine sand, trace silt, no staining, odor or sheen noted.
14	0.4		4.0'			
16						16-19': Same as above.
18	0.4		4.0'			
20	ND		4.0'			19-21': Same as above, moist, firm, grayish brown clayey silt with some fine to coarse gravel, sand (till).
22	0.2		1.6'			21-23': Saturated brownish gray sandy clayey silt-silty clay with some fine to coarse subround gravel (till), no stain or odor.
24	0.2		0.5'			23-23.5': Same as above.
						Refusal at ~23.5'BGL.

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-13

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *10 ft.* Diameter ____
Top of Casing ____ Water Level Initial *4 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

12.5 from overhead door. Sampled 8'-10'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0					
2	0.3	0.1'			0-4': Dry coarse gravel (slag), gray caught in shoe, no other recovery, no stain, odor or cyanide.
4					▽ 4-8': Saturated, brown sand, silt, gravel, slag, brick, wood (fill), grades to saturated, black fill with slight hyd odor, slight sheen on water.
6	3.0	2.1'		SC	
8					8-10': Saturated brown fill over 1' of saturated black coal tar coated fill with strong hyd odor and sheen on water.
10	70.0	1.4'			Refusal at ~10'BGL.
12					
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-13A

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *4 ft.* Diameter _____
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

No samples collected.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Concrete
0						
2	0.1		1.8'		SC	0-4': Move rig 4' to resample to check for cyanide, dry loose light gray powdered cement and gravel over brown to black dry sand, gravel, slag fill over moist to wet, firm reddish brown silty sand, no staining or odor, no cyanide.
4						
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-14

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *14.8 ft.* Diameter ____
Top of Casing ____ Water Level Initial *5 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Sampled 12'-14.8'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0					
2	0.2	1.0'			0-4': Dry, loose brown to gray sand, gravel, slag (fill) over moist black sand, gravel, silt, slag, brick fill.
4					4-8': 9" moist, loose, black sand, gravel, silt, slag fill, same as above over wet black, coal tar stained sand, gravel, wood fill with strong hyd odor.
6	235.0	2.1'			
8				SC	8-12': Saturated black coal tar stained fill (sand, gravel, brick, slag) over moist stained, firm silty clay to silty sand with little gravel with hyd odor.
10	240.0	1.8'			
12					12-14.8': Saturated coal tar impacted fill from uphole over soft wet silty sand to clayey silt with black stain and strong hyd odor, last 0.7' is olive gray silty sand, no stain, with hyd odor.
14	240.0	4.0'			
16					Refusal at ~14.8'BGL.
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-15

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *10 ft.* Diameter ____
Top of Casing ____ Water Level Initial *7 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

18' NNE of GP-08, 2.9' from hydraulic lift. Sampled 6'-10'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0					
2	0.7	0.3'			0-4': Light gray dry loose concrete dust with trace fine to coarse gravel over loose moist grayish brown sand with trace bluish green sand, brick fragments, no staining or odor.
4					4-8': Moist, brown sand, silt, gravel (fill), becoming very moist to wet over bluish green sand, gravel, silt fill with brick fragments, slight odor.
6	2.8	1.8'		SC	
8					8-10': Saturated, loose sand, gravel, silt fill with bluish green tint, grades to grayish brown then black with coal tar coating fill, strong hyd odor, sheen on bluish green tinged water.
10	182.0	1.5'			Refusal at ~10'BGL.
12					
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-16

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *18 ft.* Diameter ____
Top of Casing ____ Water Level Initial *4 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Marc Falzone* Log By *Kevin Cronin* Date *6/16/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Sampled 8'-11'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0					
2	0.6	0.7'			0-4': Dry, loose light gray concrete dust and fine to coarse gravel over dry to moist brown to brownish gray sand, gravel, silt, brick fragments (fill), no stain or odor.
4					▽ 4-8': 4" saturated brown sand, fine gravel, bricks, wood (fill) over saturated black stained with coal tar fill with strong hyd odor and sheen on water (no strong PID response).
6	1.0	1.8'			
8					8-12': 2.1' saturated black stained with coal tar fill (sand, gravel, silt, brick, wood) over wet dark gray to gray silty sand with little clay to clayey silt with some sand, sheen on water, hyd odor.
10	144.0	3.0'		SC	
12	23.0	3.0'			12-16': 2.2' uphole collapsed (black stained coal tar coated fill with hyd odor and sheen) over saturated brownish gray sandy silt-silty sand with occ. clayey silt with hyd odor, vitreous piece of coal (?) in silty sand.
14					
16	80.0	4.0'			16-18': Impacted uphole fill over 2.3' of sandy silt-silty sand, same as above with hyd odor.
18	54.0	3.4'			
20					Refusal at ~18'BGL.
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-17

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *19 ft.* Diameter ____
Top of Casing ____ Water Level Initial *3.5 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Marc Falzone* Log By *Kevin Cronin* Date *6/15/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

44.5' SSE of GP-08. Sampled 16'-19'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Concrete
0					
2	0.8	1.2'			0-4': Dry loose grayish brown sand, silt, gravel fill over wet, black stained sandy silt to clayey silt with trace fine gravel, slag (fill).
4					4-8': Saturated sand, gravel, silt fill, black with brick fragments, hyd odor with sheen on water.
6	1.0	2.8'			
8					8-12': Saturated black to dark gray sand, gravel, silt fill with brick fragments, hyd odor (petroleum then becoming coal tar like), saturated becoming wet silty sand, dark gray to black stained with coal tar odor and sewer odor, sheen on water.
10	30.0	2.8'		SC	
12					12-16': Saturated, black sand, silt, gravel fill (?uphole) with hyd odor, sheen on water.
14	29.0	0.9'			
16					16-19': Same as above, over saturated black stained silty clay with hyd odor, grades to saturated olive brown silty sand with hyd odor, no staining.
18	52.0	3.0'			
20	10.0				Refusal at ~19'BGL.
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-18

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. ____ Total Hole Depth *20.5 ft.* Diameter ____
Top of Casing ____ Water Level Initial *8.5 ft.* Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core *4x4 TRUCK MTD.*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/16/98* Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Boring is 110' SSE of GP-14. Sampled 8'-12'.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Asphalt over 4" concrete.
0					
2	ND	1.9'			0-4': 2" of dry powdered concrete and coarse gravel over moist brown to black sand, gravel, silt fill with brick fragments, slag (ash?), no odor.
4					4-8': 4" moist loose black fill, same as above over moist reddish brown clayey silt over moist, loose black to brown fill (sand, gravel, silt, bricks, slag wood, ash), no odor.
6	0.3	2.0'			
8					8-12': 0.9' moist black fill, same as above, over moist soft dark brown becoming gray silty clay-clayey silt over wet gray sandy silt- silty sand, no staining or odor.
10	0.5	2.5'		SC	
12					12-16': 10" of uphole fill over wet soft gray becoming reddish brown to brown soft silty sand with trace to little fine gravel, no stain or odor.
14	0.5	3.6'			
16					16-20': Saturated brown (fluid) silty sand-sandy silt over saturated soft silty sand with little gravel over firm, moist silty sand with some fine to coarse gravel (till), no stain or odor.
18	0.4	4.0'			
20					20-20.5': Wet to moist till, same as above, no stain or odor.
	0.8	0.4'			Refusal at ~20.5'BGL.
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-19

Project *Buffalo Service Center* Owner *National Fuel Gas*
Location *249 W. Genesee St.* Proj. No. *01111-0171*
Surface Elev. _____ Total Hole Depth *5 ft.* Diameter _____
Top of Casing _____ Water Level Initial *4.5 ft.* Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *Kawalsaki 4x4 Mule*
Drill Co. *ZEBRA ENVIRONMENTAL* Method *GeoProbe*
Driller *Mike Paul* Log By *Kevin Cronin* Date *6/22/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

57' from N end of Coal house, 13.7' from W wall of Coal house, 14.7' from E wall of Retort house.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					Gravel
0					
2	0.2	3.3'		SC	0-4': Dry loose gray gravel and sand over red brick over moist, black, orange to brown gravel, sand, silt, brick, slag fill, no odor.
4	1.0				4-5': Moist hard dark brown to black sand, silt, gravel fill with brick, slag, ash becoming wet.
6					
8					
10					
12					
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Soil Boring GP-19B

Project Buffalo Service Center Owner National Fuel Gas
Location 249 W. Genesee St. Proj. No. 01111-0171
Surface Elev. ____ Total Hole Depth 15 ft. Diameter ____
Top of Casing ____ Water Level Initial 4.9 ft. Static ____
Screen: Dia ____ Length ____ Type/Size ____
Casing: Dia ____ Length ____ Type ____
Fill Material ____ Rig/Core Kawalsaki 4x4 Mule
Drill Co. ZEBRA ENVIRONMENTAL Method GeoProbe
Driller Mike Paul Log By Kevin Cronin Date 6/22/98 Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

57' from N end of Coal house, 13.7' from W wall of Coal house, 14.7' from E wall of Retort house. Sampled 14'-15'.

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Gravel
0						
2	0.2		3.3'			0-4': Dry loose gray gravel and sand over red brick over moist, black orange to brown gravel, sand, silt, brick, slag fill, no odor.
4						4-8': Fill, same as above, over saturated, black stained fill with coal tar (fuel oil?), hyd odor, sheen on water over moist to firm to stiff gray to brown clayey silt-silty clay with slight hyd odor.
6	34.0		4.0'			
8					SC	8-12': Saturated fill from above, over moist stiff gray to brown silty clay-clayey silt over moist loose dark brown peat with roots and stems over dark gray moist stiff silty clay-clayey silt, slight hyd odor, slight sheen on water.
10	14.8		3.0'			
12						12-15': 2' saturated fill, peat from above over saturated loose olive brown to gray fine sand, little silt, no staining in sand with hyd odor.
	30.0		4.0'			
14	58.0					
16						Refusal at ~15'BGL.
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Monitoring Well MW98-07

Project Buffalo Service Center Owner National Fuel Gas
Location 249 W. Genesee St. Proj. No. 01111-0171
Surface Elev. ____ Total Hole Depth 19.9 ft. Diameter ____
Top of Casing ____ Water Level Initial 5 ft. Static ____
Screen: Dia 2 in. Length 15 ft. Type/Size 0.010 SCH40 PVC in.
Casing: Dia 2 in. Length 3.5 ft. Type SCH40 PVC
Fill Material #1 Washed Sand Rig/Core CME 55
Drill Co. Maxim Tech. Method 4 1/4 HSA/2 SSP
Driller Dale Bockhahn Log By Kevin Cronin Date 6/18/98 Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

Sampled 19'-19.9':

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						Gravel
0						
2		NT	NS		SM	0-4': Dry gray gravel over black, sand, gravel, silt fill dry to moist, with slag, no odor.
4		ND				4-6': Moist becoming wet, grayish brown silty sand with little fine gravel, clay, no staining.
6		0.1	1.5'			6-8': Wet dark gray to black silty sand with little fine gravel over wet loose brownish gray sand with no stain or odor.
8		ND	1.5'			8-10': Sand, same as above, over wet, stiff, grayish brown to brown silty sand and clay, grades to clayey silt with some sand, trace fine gravel, no stain or odor.
10						10-14': Advance HSAs.
12		NT	NS		SC	
14		4.4	1.5'			14-16': Saturated, brown compact fine sand with little silt, liquidfies when disturbed, no stain, slight hyd odor.
16						16-19': Advance HSAs.
18		NT	NS			
20		14.8	1.1'			19-19.9': Fine sand, same as above, over moist, stiff grayish brown silty sand-sandy silt with little to some fine to coarse gravel (subround, till), no stain, slight hyd odor.
22						Refusal at ~19.9'BGL.
24						

Drilling Log

FLUOR DANIEL GTI

Monitoring Well MW98-08

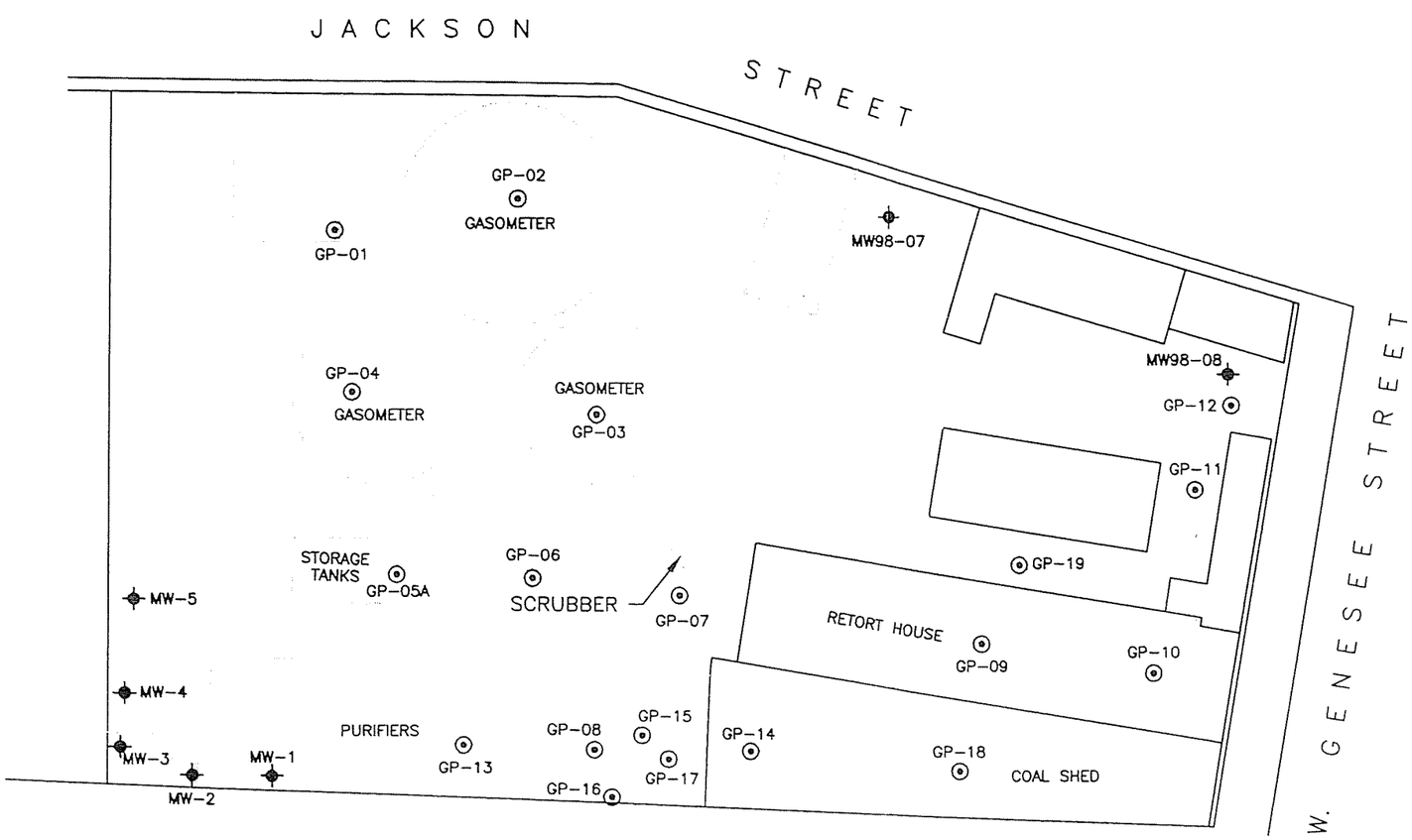
Project Buffalo Service Center Owner National Fuel Gas
Location 249 W. Genesee St. Proj. No. 01111-0171
Surface Elev. ____ Total Hole Depth 21.9 ft. Diameter 7 in.
Top of Casing ____ Water Level Initial 5.5 ft. Static ____
Screen: Dia 2 in. Length 15 ft. Type/Size 0.010 SCH40 PVC in.
Casing: Dia 2 in. Length 4.5 ft. Type SCH40 PVC
Fill Material #1 Washed Sand Rig/Core CME 55
Drill Co. Maxim Tech. Method 4 1/4 HSA/2 SSP
Driller Dale Bockhahn Log By Kevin Cronin Date 6/18/98 Permit # ____
Checked By ____ License No. ____

See Site Map For Boring Location

COMMENTS:

8' W of GP-12.

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2 to 0						Asphalt
0 to 4		NT	NS		SM	0-4': Dry loose gray gravel, sand, silt over moist brown to black sand, silt, fine gravel fill, no odor.
4 to 6		ND	0.8'		SC	4-6': Moist compact brown silty sand, little clay becoming wet, trace fine gravel, occ. black colored clay and sand, no odor.
6 to 8		ND	1.5'			6-8': Wet, grayish brown silty clay with wood fibers, little fine sand, no odor.
8 to 10		NT	0.0'			8-10': No recovery.
10 to 14						10-14': Advanced HSAs.
12 to 14		NT	NS			
14 to 16		0.1	1.3'		SM	14-16': Saturated grayish brown fine sand, trace to little silt, no staining, no odor.
16 to 19						16-19': Advanced HSAs.
18 to 20		NT	NS			
19 to 21						19-21': Saturated, very stiff brownish gray silty clay with little fine gravel, sand (till), no stain or odor.
20 to 22		ND	0.5'		SC	21-21.9': Wet to moist, hard brownish gray silty clay with some fine to coarse gravel, little sand, no stain or odor.
22 to 24		0.1	0.8'			Refusal at ~21.9'BGL.



LEGEND

- MONITORING WELL
- SOIL BORING
- FORMER STRUCTURES

0 80 160

SCALE FEET

N

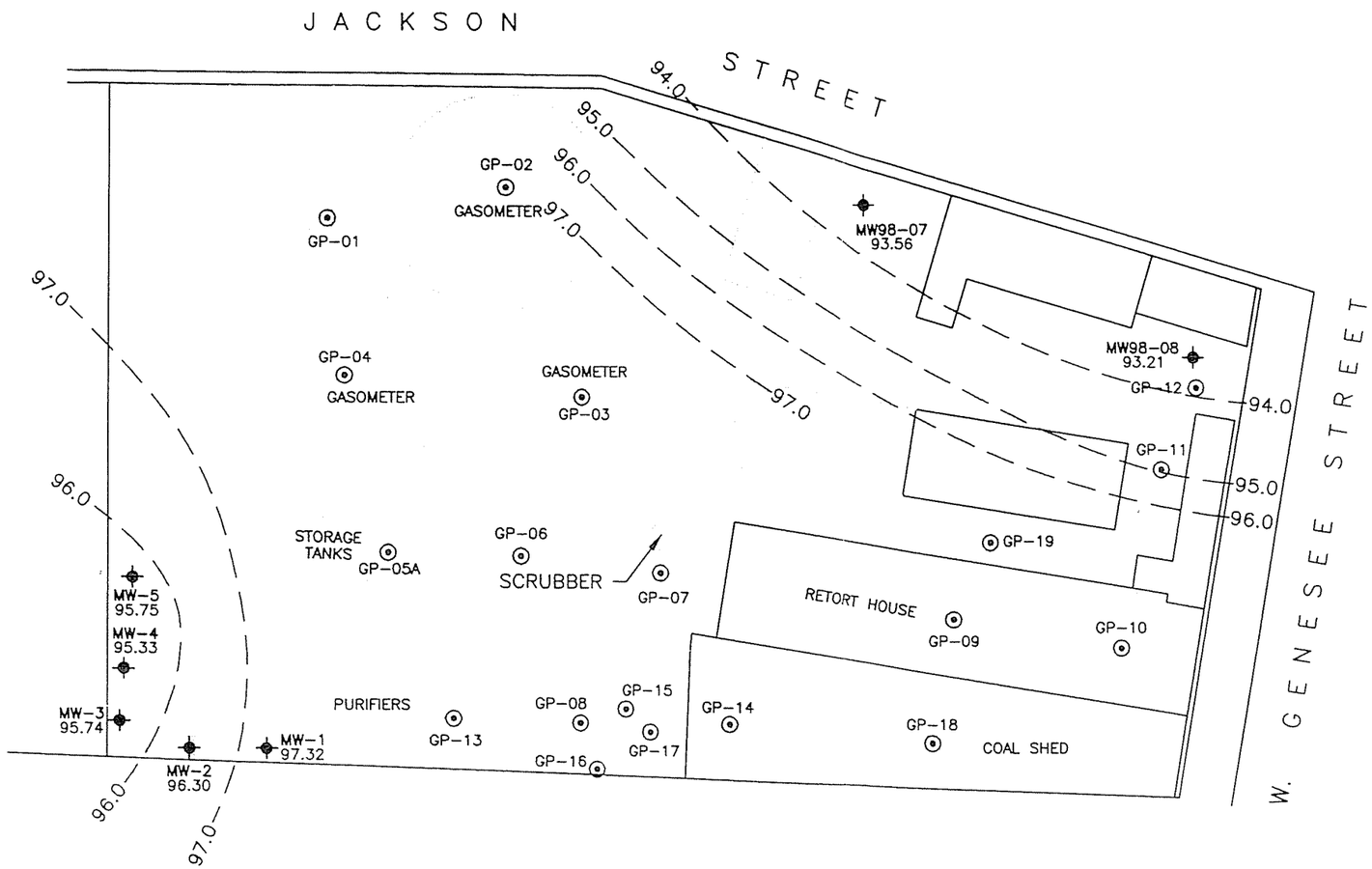
FLUOR DANIEL GTI
1245 KINGS ROAD
SCHENECTADY, NY 12303
(518) 370-5631

REV. NO.:	DRAWING DATE:	ACAD FILE:
	9/25/98	0171-STE

SITE MAP

CLIENT:	PM:
NATIONAL FUEL GAS	TDA
LOCATION: BUFFALO SERVICE CENTER WEST GENESEE STREET BUFFALO, NEW YORK	SM: ---

DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
---	SSH	01111-0171	2



LEGEND

- MONITORING WELL
- SOIL BORING
- FORMER STRUCTURES
- 95.75 GROUNDWATER ELEVATION (feet)
- 96.0 —— GROUNDWATER CONTOUR (feet)

0 80 160
SCALE FEET

N

FLUOR DANIEL GTI
1245 KINGS ROAD
SCHENECTADY, NY 12303
(518) 370-5631

REV. NO.:	DRAWING DATE:	ACAD FILE:
	10/7/98	0171-GWC

GROUNDWATER GRADIENT MAP

CLIENT:		PM:
	NATIONAL FUEL GAS	TDA
LOCATION:	BUFFALO SERVICE CENTER WEST GENESEE STREET BUFFALO, NEW YORK	SM: ----

DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
TDA	DEO	01111-0171	3

APPENDIX E

IT Corporation
13 British American Boulevard
Latham, NY 12110-1405
Tel. 518.783.1996
Fax. 518.783.8397
A Member of The IT Group

805808
File Code: 7B
National Fuel Gas

May 10, 2000

Ms. Tanya B. Alexander, CHMM
Manager, Environmental Services
National Fuel Gas Distribution Corporation
10 Lafayette Square
Buffalo, New York 14203

Subject: **Additional Monitoring Well Report**
National Fuel Gas Buffalo Service Center
Buffalo, New York

Dear Ms. Alexander,

IT Corporation (IT Corp.) has prepared this letter to summarize the installation and subsequent sampling of three additional monitoring wells that were installed along the northern property boundary of the National Fuel Gas Buffalo Service Center (BfSC). The location of these wells, designated MW00-9, MW00-10 and MW00-11, is shown on Figure 1.

These wells were installed to further define the groundwater flow direction and quality along the northern property boundary. This information was necessary to determine whether groundwater impacts previously observed at the Waterfront School property were originating from the BfSC property.

The scope of work completed by IT Corp. included:

- Installation of three two – inch diameter PVC monitoring wells
- Development of the monitoring wells to assure the connection with the shallow groundwater table,
- Surveying of the top of new and existing monitoring wells relative to mean sea level to facilitate preparation of a groundwater gradient map for the site
- Measurement of groundwater elevations in all wells, and

- Sampling of all wells at the site as well as monitoring wells MW-9, MW-11 and MW-12 on the Waterfront School property for laboratory analysis of Volatile Organic Compounds (VOCs) via U.S. EPA method 8260, Semivolatile Organic Compounds via U.S. EPA method 8270, and metals including total and amenable cyanide

The results of these investigative activities are discussed in the remaining portions of this report.

Results:

Subsurface conditions observed during the completion of these additional monitoring wells were similar to those previously encountered and included fine-grained sands, silts and clay underlying non-nature surface fill (including bricks, cinders, and slag). Bedrock was inferred to have been encountered at approximately 20 to 22 feet below ground surface. Drill logs and construction drawings for these wells are attached.

All monitoring wells at the site, as well as monitoring wells MW-9, MW-11 and MW-12 located on the Waterfront School property were sampled for quantification of volatile organic and semivolatile organic compounds via US EPA Methods 8260 and 8270 and metals including total and amenable cyanide. These results are summarized in Tables 1, 2 and 3, respectively.

As shown in Table 1, volatile organic compounds were detected primarily in monitoring wells MW-3, MW-4 and MW-5 and wells MW-9, MW00-9, MW00-10, MW00-11 and MW-12. The constituents observed included benzene, ethylbenzene, toluene and xylene isomers. The primary dissolved impacts appeared to be centered near and proximal to the former Wilkeson Slip (MWs 3, 4, 5 and 12). In comparison, semivolatile organic compounds were detected sporadically across the site with the primary occurrence in monitoring wells MW-1 and MW-12 (Table 2).

As shown in Table 3, the primary metal impacts were observed in MW-9 while the highest total cyanide concentrations were observed in MW-1 and MW-3.

Conclusions:

As shown in Table 1, benzene, toluene, ethylbenzene and xylene isomers were the primary volatile organic compounds detected during this sampling event. The impacts were observed primarily in wells located near the former Wilkeson Slip (wells MW-3, MW-4, MW-5 and MW-12) and on the Waterfront School property (MW-9). The impacts within each area are chemically distinct – the highest benzene impacts were observed in well MW-9 whereas benzene levels

were at least one order of magnitude or lower in the wells located in the area of the former Wilkeson Slip. Alternatively, concentrations of ethylbenzene and xylene isomers were much higher in the wells near the Wilkeson Slip and relatively low in MW-9. This difference may indicate separate source areas for the impacts.

Napthalene was the primary semivolatile organic compound across the site. As shown in Table 2, the highest napthalene concentrations were encountered in the wells located in or near the Wilkeson Slip (MW-12) and proximal to the former purifiers on the NFG property (MW-1.

As shown in Table 3, the primary inorganic impacts were aluminum, iron and sodium. These constituents were found in all wells across the site. All constituents were, however, detected at relatively low levels that are considered common in industrial areas.

Total cyanide was detected primarily in monitoring wells MW-1, MW-3 and MW-5 that are located near the former Wilkeson Slip and downgradient from the area where cyanide – impacted soils were previously removed.

Please do not hesitate to contact me at (518) 783-1996 should you have any questions regarding this letter.

Sincerely,
IT Corporation

Thomas D. Antonoff
Project Manager

Groundwater Elevation Data
National Fuel Gas
Buffalo Service Center
West Genessee Street
Buffalo, New York

Well Id	Date	Top of Casing Elevation	Depth to Water	Groundwater Elevation
MW-1	03/20/00	583.60	2.80	580.80
	04/03/00		3.11	580.49
	04/04/00		2.80	580.8
MW-2	03/20/00	583.36	2.92	580.44
	04/03/00		3.46	579.9
	04/04/00		3.10	580.26
MW-3	03/20/00	582.27	2.78	579.49
	04/03/00		3.28	578.99
	04/04/00		2.85	579.42
MW-4	03/20/00	582.70	3.62	579.08
	04/03/00		3.98	578.72
	04/04/00		3.45	579.25
MW-5	03/20/00	582.94	4.20	578.74
	04/03/00		4.61	578.33
	04/04/00		4.13	578.81
MW98-07	03/20/00	582.72	5.45	577.27
	04/03/00		5.63	577.09
	04/04/00		5.57	577.15
MW98-08	03/20/00	584.14	8.61	575.53
	04/03/00		9.15	574.99
	04/04/00		9.00	575.14
MW00-09	03/20/00	584.81	3.71	581.10
	04/03/00		4.27	580.54
	04/04/00		4.00	580.81
MW00-10	03/20/00	582.06	4.80	577.26
	04/03/00		5.37	576.69
	04/04/00		4.37	577.69
MW00-11	03/20/00	583.04	2.42	580.62
	04/03/00		2.91	580.13
	04/04/00		2.30	580.74

Sources: Seneca Design, P.C., Surveying and Engineering, Buffalo, New York, 2000
IT Corporation Field Notes, 2000

Notes: Elevations listed in feet above mean sea level as measured to vertical datum NGVD-29. Depths listed in feet below ground surface

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-09**

Project: MW00-09 | Owner: National Fuel Gas

Location: Buffalo, New York | Proj. No.: 784306

Surface Elev.: NA | Total Hole Depth: 21.0 ft. | North: | East:

Top of Casing: NA | Water Level Initial: NA | Static: ▼ 3.2 ft. | Diameter: 4.25 in.

Screen: Dia: 2 in. | Length: 18.5 ft. | Type/Size: PVC/0.010 in.

Casing: Dia: 2 in. | Length: 2 ft. | Type: PVC

Fill Material: Grout, bentonite, silica sand | Rig/Core:

Drill Co.: | Method: Hollow Stem Auger

Driller: | Log By: Jennifer League | Date: 3/10/00 | Permit #: NA

Checked By: D. Graham | License No.:

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0							
2		0	S-1 / 85%				Dark brown fine to coarse SAND and SILT, brick fragments, slag, trace of CLAY, moist
4							
6		0	S-2 / 95%			SC / CL	Brown fine to coarse SAND and CLAY, some SILT and GRAVEL
8							
10		0	S-3 / 5%			SM	Brown fine to coarse SAND, trace of SILT, saturated
12							
14							
16		0	S-4 / 5%			SM	Brown fine to coarse SAND, trace of SILT, saturated, oily sheen noted on spoon
18							
20		0	S-5 / 70%			SM / ML	Brown fine to coarse SAND, trace of SILT, wet Brown SILT, some fine to coarse SAND, CLAY, and, GRAVEL, moist Refusal encountered at 21 feet below grade
22							
24							

NATIONAL FUEL/BUFFALO
5A

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-10**

Project MW00-10 Owner National Fuel Gas

Location Buffalo, New York Proj. No. 784306

Surface Elev. NA Total Hole Depth 21.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static ▼ 5.3 ft. Diameter 4.25 in.

Screen: Dia 2 in. Length 19 ft. Type/Size PVC/0.010 in.

Casing: Dia 2 in. Length 2 ft. Type PVC

Fill Material Concrete, bentonite, silica sand Rig/Core ____

Drill Co. ____ Method Hollow Stem Auger

Driller ____ Log By Jennifer League Date 3/10/00 Permit # NA

Checked By D. Graham License No. ____

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
							Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0		0	S-1 100%				Black, brown, and grey GRAVEL, some cinders, fine to coarse SAND, trace of silt, fragments of bricks, trace of CLAY, moist
2							
4							
▼						SM	Brown fine SAND and SILT, trace of CLAY, moist to wet
6		0	S-2 50%			ML	Dark brown SILT and fine to coarse SAND, trace of CLAY and GRAVEL, moist
8							
10		0	S-3 75%			ML	Brown SILT and fine to coarse SAND, trace of CLAY, wet
12							
14						CL	Brown CLAY and SILT, some SAND, wet
16		0	S-4 85%			SM	Brown fine SAND and SILT, wet to moist
18							
20		0	S-5 100%			CL	Brown CLAY and fine SAND, some SILT, wet to saturated
22							Refusal encountered at 21 feet below grade
24							

IT_COMMERCIAL Rev. 12/6/99 NFMW0010.GPJ IT_CORP.GDT 3/20/00

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well MW00-11

Project MW00-11 Owner National Fuel Gas

Location Buffalo, New York Proj. No. 784306

Surface Elev. NA Total Hole Depth 22.5 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static ▼ 2.8 ft. Diameter 4.25 in.

Screen: Dia 2 in. Length 15 ft. Type/Size PVC/0.010 in.

Casing: Dia 2 in. Length 2 ft. Type PVC

Fill Material #1 Silica Sand, Bentonite, Grout/Cement Rig/Core ____

Drill Co. ____ Method Hollow Stem Auger

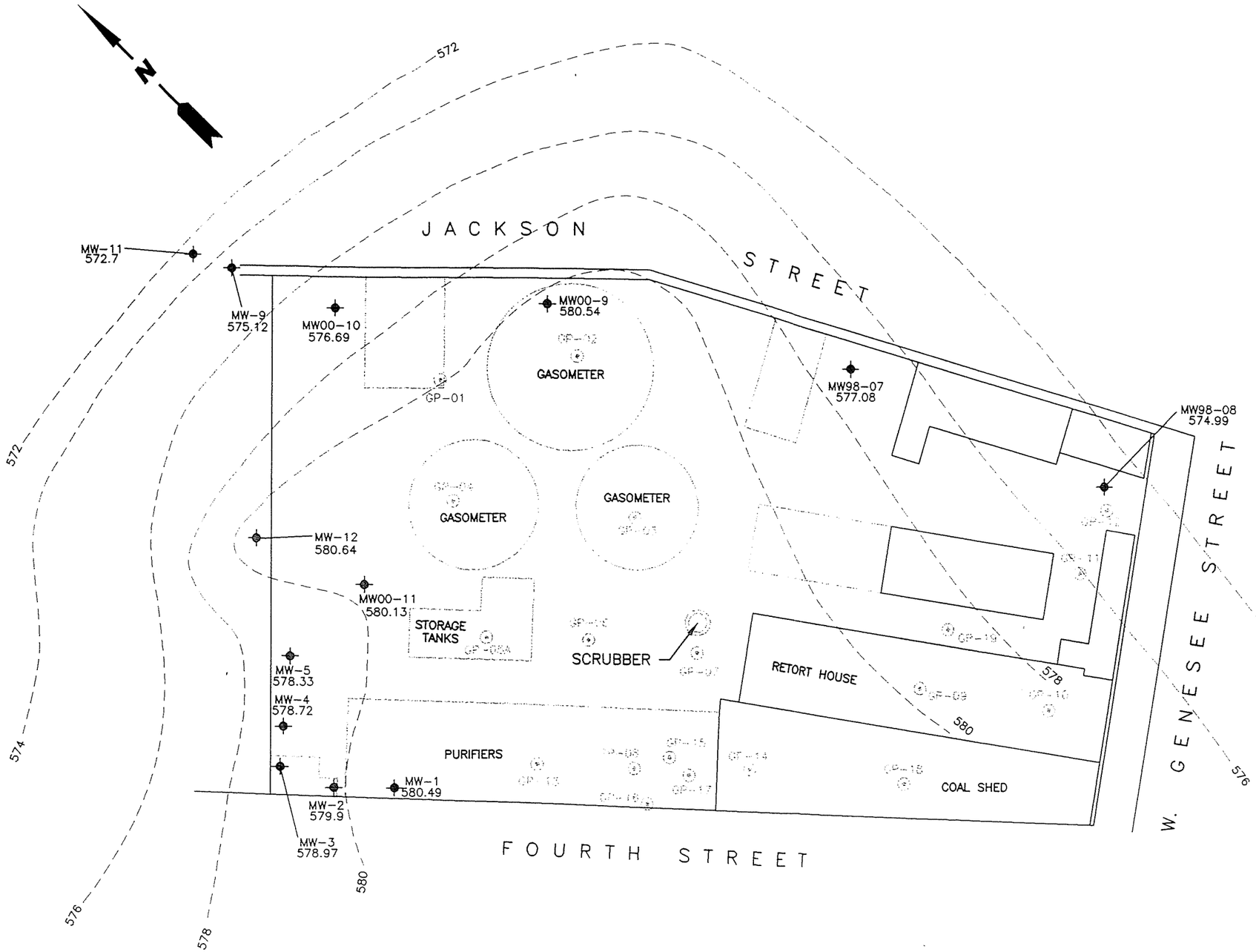
Driller ____ Log By Jennifer League Date 3/9/00 Permit # NA

Checked By D. Graham License No. ____

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
							Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0		0	S-1 100%			SM	Brown, fine to coarse SAND and GRAVEL with trace of SILT and slag, moist, slight unidentifiable odor (non-petroleum) Dark grey to black, fine to coarse SAND and SILT, trace of CLAY, moist, slight unidentifiable odor (non-petroleum)
2							
4							
6		0	S-2 30%			ML	Grey to brown SILT with fine to coarse SAND, saturated, slight unidentifiable odor (non-petroleum)
8							
10		0	S-3 20%			CL	Dark grey to brown CLAY and SILT, trace of fine to coarse sand, saturated, slight unidentifiable odor (non-petroleum)
12							
14						CL	Dark grey to black CLAY and SILT, trace of fine to coarse SAND, saturated, slight unidentifiable odor (non-petroleum)
16		2	S-4 75%			SM	Light brown fine to coarse SAND and SILT, trace of GRAVEL, wet
18							
20		0.2	S-5 100%			CL	Brown CLAY and SILT, wet, slight petroleum odor
22							
24							

IT_COMMERCIAL Rev. 12/6/99 NFMW0011.GPJ IT_CORP.GDT 3/20/00



DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
784306D2-B2			JV 05/12/00	ALBANY, NY	---	---

PLOT DATE: 04/17/00
FORMAT REVISION 9/24/99

IT CORPORATION

NATIONAL FUEL GAS

FIGURE 1
APRIL 3, 2000 GROUNDWATER GRADIENT MAP
BUFFALO SERVICE CENTER
WEST GENESEE ST., BUFFALO, N.Y.

Table 1.0 - Volatile Organic Compounds
Groundwater Analytical Data
National Fuel Gas
Buffalo Service Center
Buffalo, New York

Groundwater Analytical Results				National Fuel Gas Buffalo Service Center Monitor Wells													Waterfront School Wells				
Location			NYSDEC	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-5	MW98-07	MW98-08	MW00-9	MW00-10	MW00-11	MW00-11	MW-9	MW-9	MW-11	MW-12	MW-12
Date Collected			Guidance	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00
Analytical Dilution Factor			Values	5.0	1.0	1.0	5.0	1.0	5.0	100.0	1.0	1.0	1.0	1.0	2.0	5.0	2.0	20.0	1.0	5.0	20.0
Analyte	Units	PQL																			
Acetone	UG/L	20	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	96	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	UG/L	5	0.7	42	11	ND	ND	40	340	ND	ND	ND	95	170	440 E	440	2400 E	3600	ND	650	750
Bromodichloromethane	UG/L	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	UG/L	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	UG/L	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	UG/L	10	5	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	UG/L	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	UG/L	5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	UG/L	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethene	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	UG/L	5	5	ND	ND	210	210	12	1200	1400	ND	ND	14	ND	240	240	37	ND	ND	1500 E	1700
2-Hexanone	UG/L	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone (MIBK)	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	UG/L	5	930	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	UG/L	5	5	ND	63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	UG/L	5	5	ND	ND	ND	ND	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200 E	1400
1,1,1-Trichloroethane	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	UG/L	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O-Xylene	UG/L	5	5	ND	ND	73	77	ND	130	ND	ND	ND	11	ND	21	ND	31	ND	ND	2100 E	2400
M+P-Xylene	UG/L	5	5	51	ND	240	260	ND	200	ND	ND	ND	15	ND	14	ND	12	ND	ND	4600E	6000
TOTAL VOCs	UG/L			233	17.3	523	547	52.0	1,925	1,400	0.0	0.0	171	170	715	680	2,480	3,600	0.0	10,050	12,250

ND = Not Detected
Analyzed using EPA Method 8260 for VOCs.

PQL = Practical Quantification Limit
E = Identifies compounds whose concetrations exceed the calibration range.

Table 2.0 Semivolatile OrganicCompounds
Groundwater Analytical Data
National Fuel Gas
Buffalo Service Center

Groundwater Analytical Results				National Fuel Gas Buffalo Service Center Monitor Wells												Waterfront School Wells			
Location			NYSDEC	MW-1	MW-1	MW-2	MW-3	MW-4	MW-5	MW98-07	MW98-08	MW00-9	MW00-9	MW00-10	MW00-11	MW-9	MW-11	MW-12	MW-12
Date Collected			Guidance	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00
Analytical Dilution Factor			Values	1.0	20.0	1.0	1.0	1.0	10.0	1.0	1.0	1.0	10.0	1.0	5.0	1.0	1.0	10.0	200.0
Analyte	Units	PQL																	
Acenaphthene	UG/L	10	20	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND
Acenaphthylene	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110	ND
Anthracene	UG/L	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (A) Anthracene	UG/L	10	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (A) Pyrene	UG/L	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (B) Fluoranthene	UG/L	10	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (G, H, I,) Perylene	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (K) Fluoranthene	UG/L	10	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl Phthalate	UG/L	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-N-Butylphthalate	UG/L	10	770	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110	ND
Indeno (1,2,3-CD) Pyrene	UG/L	10	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (-2-Chloroethoxy) Methane	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (2-Chloroehtyl) Ether	UG/L	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	UG/L	10	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-Oxybis (1-Chloropropane)	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	UG/L	10	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo (A,H) Anthracene	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	UG/L	10		19	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	UG/L	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	UG/L	10	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	UG/L	10	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	UG/L	10	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	UG/L	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	UG/L	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

PQL = Practical Quantification Limit
UD = Undetected and spike diluted out.
E = Identifies compounds whose concentrations exceed the calibration range.
D = Spike Diluted Out.

ND = Not Detected
Analyzed using EPA Method 8270 for SVOCs.

Table 2.0 Semivolatile OrganicCompounds
Groundwater Analytical Data
National Fuel Gas
Buffalo Service Center

Groundwater Analytical Results				National Fuel Gas Buffalo Service Center Monitor Wells												Waterfront School Wells			
Location			NYSDEC	MW-1	MW-1	MW-2	MW-3	MW-4	MW-5	MW98-07	MW98-08	MW00-9	MW00-9	MW00-10	MW00-11	MW-9	MW-11	MW-12	MW-12
Date Collected			Guidance	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00
Analytical Dilution Factor			Values	1.0	20.0	1.0	1.0	1.0	10.0	1.0	1.0	1.0	10.0	1.0	5.0	1.0	1.0	10.0	200.0
Analyte	Units	PQL																	
2,4-Dinitrophenol	UG/L	50		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	UG/L	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (2-Ethylhexyl) Phthalate	UG/L	10	4200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	UG/L	10	50	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	UG/L	10	50	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	UG/L	10	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	UG/L	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	UG/L	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	UG/L	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	UG/L	10		150	200 UD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	710	2000 UD
4,6-Dinitro-2-Methylphenol	UG/L	50		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	UG/L	10	10	1300 E	2000 D	ND	140	ND	740	ND	ND	480 E	420 D	ND	10	ND	ND	12000E	15000 D
2-Nitroaniline	UG/L	50		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	UG/L	50		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	UG/L	50		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	UG/L	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	UG/L	50		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	UG/L	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-N-Octyl Phthalate	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	UG/L	50	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	UG/L	10	50	14	ND	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

PQL = Practical Quantification Limit
UD = Undetected and spike diluted out.
E = Identifies compounds whose concentrations exceed the calibration range.
D = Spike Diluted Out.

ND = Not Detected
Analyzed using EPA Method 8270 for SVOCs.

Table 2.0 Semivolatile OrganicCompounds
Groundwater Analytical Data
National Fuel Gas
Buffalo Service Center

Groundwater Analytical Results				National Fuel Gas Buffalo Service Center Monitor Wells												Waterfront School Wells			
Location			NYSDEC	MW-1	MW-1	MW-2	MW-3	MW-4	MW-5	MW98-07	MW98-08	MW00-9	MW00-9	MW00-10	MW00-11	MW-9	MW-11	MW-12	MW-12
Date Collected			Guidance	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00
Analytical Dilution Factor			Values	1.0	20.0	1.0	1.0	1.0	10.0	1.0	1.0	1.0	10.0	1.0	5.0	1.0	1.0	10.0	200.0
Analyte	Units	PQL																	
Phenol	UG/L	10	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND	ND	ND
4-Bromophenyl-Phenylether	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenylether	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	UG/L	10	50	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	UG/L	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,3,6-Trichlorophenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	UG/L	10		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL SVOCs				1,483	2,200	0	223	16	740	0	0	480	420	0	10	44	0	12,930	17,000

PQL = Practical Quantification Limit
UD = Undetected and spike diluted out.
E = Identifies compounds whose concentrations exceed the calibration range.
D = Spike Diluted Out.

ND = Not Detected
Analyzed using EPA Method 8270 for SVOCs.

Table 3.0
Groundwater Metal Analytical Data
National Fuel Gas
Buffalo Service Center
Buffalo, New York

Inorganic Analytical Results				National Fuel Gas Buffalo Service Center Monitor Wells											Waterfront School Wells		
Location			Groundwater	MW-1	MW-2	MW-3	MW-4	MW-5	MW98-07	MW98-08	MW00-9	MW00-10	MW00-11	MW-9	MW-11	MW-12
Date Collected			Effluent	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/04/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00	04/03/00
Analytical Dilution Factor			Standards	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Analyte	Unit	PQL														
Aluminum	mg/L	0.10	0.2	4.74	0.323	145	0.628	2.06	169	16.6	32.4	9.17	18.0	1.86	3.33	257
Antimony	mg/L	0.06	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	mg/L	0.01	0.05	0.026	ND	ND	ND	ND	ND	ND	0.0211	ND	ND	ND	ND	0.0136
Barium	mg/L	0.02	2	ND	ND	0.0482	0.0533	0.219	0.183	0.411	0.392	0.29	0.172	0.441	0.159	0.152
Beryllium	mg/L	0.005	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	mg/L	0.005	0.02	0.074	0.005	ND	ND	ND	ND	0.0085	0.0113	ND	0.00714	ND	ND	ND
Chromium	mg/L	0.01	0.1	0.01	ND	0.023	ND	ND	ND	0.0388	0.055	0.0172	0.273	ND	ND	ND
Cobalt	mg/L	0.05	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	mg/L	0.02	1	ND	ND	0.0228	ND	0.0712	ND	0.0244	0.182	ND	0.0354	ND	ND	ND
Iron	mg/L	0.1	0.6	104	32.8	10.5	4.77	7.91	10.1	35.9	55	16	26.8	17.9	6.13	2.66
Lead	mg/L	0.005	0.05	0.312	ND	0.0428	0.0113	0.111	0.00673	0.0318	0.588	0.0164	0.0416	ND	ND	ND
Magnesium	mg/L	0.5	35	15.4	27.6	20.5	26.8	30.9	23.9	90.6	146	31.5	75	51.9	65.3	42.8
Manganese	mg/L	0.01	0.6	3.96	4.5	1.05	1.11	0.379	1.07	1.65	1.9	0.582	0.539	1.15	0.497	0.0849
Mercury	mg/L	0.0003	0.004	ND	ND	ND	ND	0.00118	ND	ND	0.00199	ND	ND	ND	ND	ND
Nickel	mg/L	0.04	2	ND	ND	ND	ND	ND	ND	ND	0.0541	ND	ND	ND	ND	ND
Selenium	mg/L	0.005	0.04	ND	0.0054	ND	ND	ND	0.008	ND	ND	ND	ND	ND	0.0057	ND
Silver	mg/L	0.01	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	mg/L	0.5	20	46.1	105	317	417	60.9	537	949	305	49.2	121	120	52.8	153
Thallium	mg/L	0.01	0.004	ND	ND	ND	ND	ND	ND	0.0115	0.0104	ND	0.0139	ND	ND	ND
Vanadium	mg/L	0.05	-------	ND	ND	ND	ND	ND	ND	0.0523	0.0665	ND	ND	ND	ND	ND
Zinc	mg/L	0.02	5	1.35	0.274	0.374	0.0323	0.282	0.0427	0.268	0.668	0.0781	0.186	0.0336	0.0216	ND
Amendable Cyanide	mg/L	0.01	-------	ND	0.115	ND	0.348	0.0481	0.0397	0.0347	ND	ND	ND	ND	0.0166	0.15
Total Cyanide	mg/L	0.01	0.4	3.64	0.966	4.72	1.94	3.8	0.0397	0.0347	0.359	0.0683	1.07	0.165	0.0166	1.65

ND = Not Detected

&7M:\91bc\NFG\Metalgw

* - T.O.G.S. 1.1.2

PQL = Practical Quantification Limit

APPENDIX F

338 Harris Hill Road, Suite 201
Williamsville, New York 14221
(716) 565-0624 • FAX (716) 565-0625

GEOMATRIX

May 23, 2001
7262

David Stoll, P.G.
Senior Project Manager
The IT Group
13 British American Blvd.
Latham, New York 12110-1405

Subject: Geophysical Survey Results
Former Buffalo Service Center
Buffalo, New York

Dear Mr. Stoll:

This letter report presents the results of the geophysical investigation performed at the Former Buffalo Service Center located at 249 West Genessee St. in Buffalo, NY (Site). A manufactured gas plant (MGP) formerly operated at the site. The investigation was designed to geophysically characterize the subsurface and focus a follow-up intrusive investigation. The purpose of the geophysical investigation was to locate subsurface features with potential environmental significance and to identify the location of the Former Wilkenson Slip. The information provided herein is designed to assist The IT Group with their assessment of potential environmental concerns at the Site.

1.0 INTRODUCTION

A geophysical investigation was performed at the site utilizing both frequency domain and time domain electromagnetic techniques. Geomatrix Consultants, Inc. (Geomatrix) performed data acquisition between April 16 to April 22, 2001. The Site is approximately 8 acres in size and is located immediately south of the Waterfront School. Approximately 2 acres of the site is currently an asphalt paved parking lot. The remainder of the site consists of a fenced-in area with several relict foundations.

Two types of geophysical surveys were performed:

- an EM31 frequency domain electromagnetic (EM) survey; and
- an EM61 time domain EM survey.

Methodologies and results from these investigations are presented below.

The geophysical data presented herein are intended to serve as a guide to, and focus for, future intrusive investigations, if warranted. Additional collaborative data, such as test pits, is generally warranted to confirm the source of geophysical anomalies identified to be potentially significant.

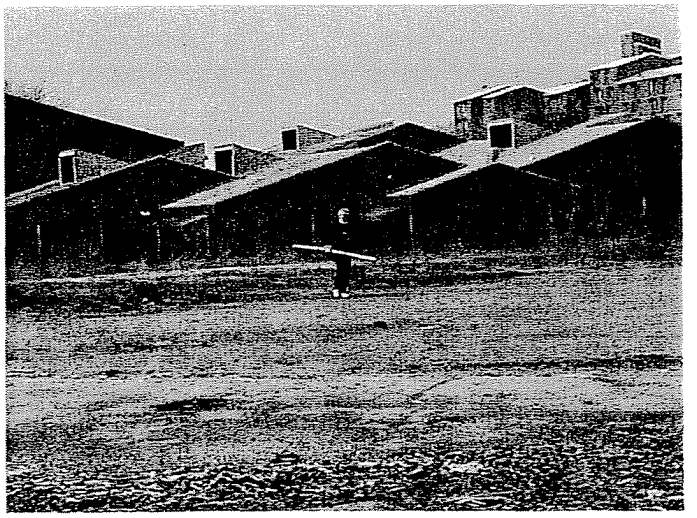
2.0 METHODOLOGY

The following sections present the geophysical methodology utilized for this investigation.

2.1 Reference Grid

Two reference grids were installed by Geomatrix personnel to facilitate data acquisition along lines spaced 12.5 feet (ft) apart. The grids consisted of alternating orange and yellow spray painted marks spaced at 25 ft by 100 ft intervals. Select grid coordinates were marked with spray paint to assure that grid coordinates could be reoccupied if necessary. Surface features were annotated on-site to assist with geophysical data interpretation. The second grid was installed at the parking lot located to the west of the site. This grid was installed to allow data to be acquired with the EM61 along lines spaced 3 feet apart. Both reference grids utilized the same coordinate system.

2.2 Electromagnetic EM31 Survey Methodology



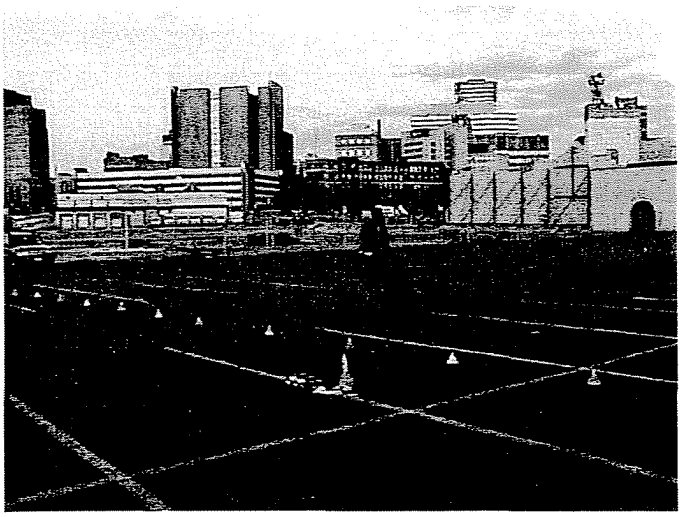
A Geonics EM31 Terrain Conductivity meter was used to measure and record the quadrature component (ground conductivity) and the inphase component of the EM field along the survey lines. The quadrature component of the EM field is a measurement of the apparent ground conductivity. The inphase component of the EM field is sensitive to metallic objects. Comparison of the quadrature component of the EM field data (expressed in units of milliSiemens per meter (mS/m)) and the inphase component data (expressed in units of parts per thousand (ppt)) results in increased anomaly definition. The character of the EM response, low or high, is partially dependent on the orientation of the buried target relative to the orientation of the EM31 device during data acquisition, and the survey direction. A buried metal pipe, for example, will exhibit a high

valued response when the trend of the pipe is parallel to the survey direction. Alternatively, when a survey line crosses a buried metal pipe whose trend is perpendicular to the survey direction, it is characterized by a low response. Similarly, other complex buried metal anomalies are indicated by a coupling of a high and low response.

All readings were taken with the instrument oriented parallel to the direction of travel, in the vertical dipole mode and with the instrument at waist height. The depth of penetration with the instrument in this configuration is approximately 12 to 15 feet below ground surface. Data were collected and stored in a solid state memory data logger during the survey. The data logger was interfaced to a portable computer and the data were transferred to a floppy disk for subsequent processing and interpretation. A survey base station was established on-site and was revisited throughout the survey to check for instrument drift and malfunction. No significant drift or malfunction was observed.

The terrain conductivity and inphase data were initially edited and then plotted as profile lines for interpretation. Contour maps of the data were then constructed and utilized for final interpretation. The geophysical data are presented in final form as a series of color contour maps. The color maps allow for an illustration of detected anomalies that are associated with conductive materials such as buried metals, wastes, fill, utilities, and changes in soil texture and/or moisture content.

2.3 Electromagnetic EM61 Survey Methodology



A paved portion of the site was geophysically surveyed using the Geonics EM61. The EM61 unit is a high sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the operator and is interfaced to a digital data logger. The transmitter and two receiver coils are located on a two-wheeled cart that is pulled by the operator.

The device's transmitter coil generates a pulsed primary EM field at a rate of 150 pulses per second, inducing eddy currents into the subsurface. The decay rates of these eddy currents are measured by two, 3.28 foot by 1.64 foot (1 meter by ½ meter) rectangular receiver coils. By taking the measurements at a relatively long time frame after termination of the primary pulse, the response is practically independent of the survey area's terrain conductivity. Specifically, the decay rates of the eddy currents are much longer for metals than for normal soils, allowing the discrimination of the two.

Data are collected from the EM61's two receiver coils. One of the receiver coils is located coincident to the transmitter coil. The other receiver coil is located 1.31 feet (0.4 meters) above the transmitter coil. Data from the top receiver coil are stored on Channel 1 of a digital data logger. Data from the bottom receiver coil are stored on Channel 2 of the data logger. Channel 1 and Channel 2 data are simultaneously recorded at each station location. The instrument responses are recorded in units of milliVolts (mV). Data were recorded at a rate of approximately 2 measurements per foot along the survey lines which were spaced 3 feet apart.

3.0 RESULTS

The following sections present the results from the geophysical investigation.

The geophysical conductivity and inphase data from the EM31 survey are presented as color contour maps in Figure 1 and 2, respectively. Actual data measurement points are superimposed on the maps and are shown as closely spaced tick marks.

Conductivity values at the site were observed to range from below 0 mS/m to over 300 mS/m. This variation in conductivity may be related to any one or combination of the following conditions:

- A change in soil/fill type. For example, an increase in relative clay content may increase the measured conductivity;
- A change in soil moisture. Moisture content would be expected to increase in areas of low topographic elevation as more saturated sediments lie within the depth of investigation of the EM instrument;
- A change in pore fluid specific conductance. For example, the presence of salt-impacted water within the pore space of the shallow soil will increase the measured conductivity primarily due to the presence of chloride ions; or
- Interference from surface metallic anthropogenic features such as powerlines, fences, pipes, and metallic structures.

The EM-31 inphase data are presented in Figure 2. The inphase component of the electromagnetic field, measured by the EM-31, is sensitive to buried metals. The inphase response is proportional to the conductivity response in areas of high conductivity. Where the conductivity is highly variable over a relatively short lateral distance, data interpretation and anomaly identification are difficult.

The EM61 data are presented in Figure 3. The color bar to the right of the map indicates the colors associated with the respective measured values. Areas suspected to be free of buried metals are shown as color shades of blue. All areas exhibiting a response greater than background (0 to 15 mVolts) likely contain buried metals. These areas are depicted in shades of light green through purple on the figure.

The following labeled anomalies are interpreted to be potentially significant:

Anomaly A: Anomaly A is characterized as a conductivity high and is best observed on Figure 1. Anomaly A is an east-west trending linear anomaly. The eastern extent of Anomaly A corresponds with an area that was excavated during previous remediation activities. A subsidence feature in the paved parking area is associated with this anomaly. Anomaly A may represent the former Wilkenson Slip. Surface metal features consisting of a portable toilet and guard rail are present at the western extent of this anomaly.

Anomaly B: Anomaly B is a north-south trending anomaly observed on both the conductivity and inphase data sets. This anomaly has a response similar in character to that observed at Anomaly A. Anomaly B may represent conductive fill material such as rail bed clinker or similar fill material as is observed at Anomaly A. The linear response of Anomaly B is amplified in part due to the proximity of the steel fence bounding the east side of the anomaly.

Anomaly C: Anomaly C is best observed as an inphase low in Figure 2. This is the approximate location of the former "Storage Tanks" associated with the MGP operation. Anomaly C may represent a remnant foundation or subsurface tank.

Anomalies D, E, and F: Anomalies D, E, and F are circular anomalies that are best observed in the inphase data set shown in Figure 2. These anomalies have the shape and appearance of the former gasholders associated with former MGP operation. Several linear anomalies (shown as dashed white lines) appear to be associated with Anomalies D, E, and F, possibly representing buried piping.

Anomaly G: Anomaly G is an aerially expansive anomaly that is most likely due to due to a reinforced concrete pad.

Anomaly H: Anomaly H is a zone of buried metal anomalies located in the parking area. This anomaly is best observed in the EM61 data set of Figure 3. Anomaly H is also characterized by a high conductivity response. Anomaly H likely represents a zone of miscellaneous buried metals.

Numerous additional anomalies were observed in the data set, however they are interpreted to be comparatively minor, related to adjacent anomalies, or related to metals at the surface.

4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for non-destructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features (electrical wires, scrap metal, etc.) preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

5.0 CONCLUSIONS

The geophysical investigation conducted at the Former Buffalo Service Center was successful in locating subsurface features with potential environmental significance and should be used to focus intrusive investigations. A total of 8 anomalies or anomalous zones were identified. These anomalies are labeled A through H on Figures 1 through 3. Anomaly A may be related to the Former Wilkenson Slip. Other anomalies determined to be significant are likely associated with historic MGP operations.

Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

John Luttinger
Project Geophysicist

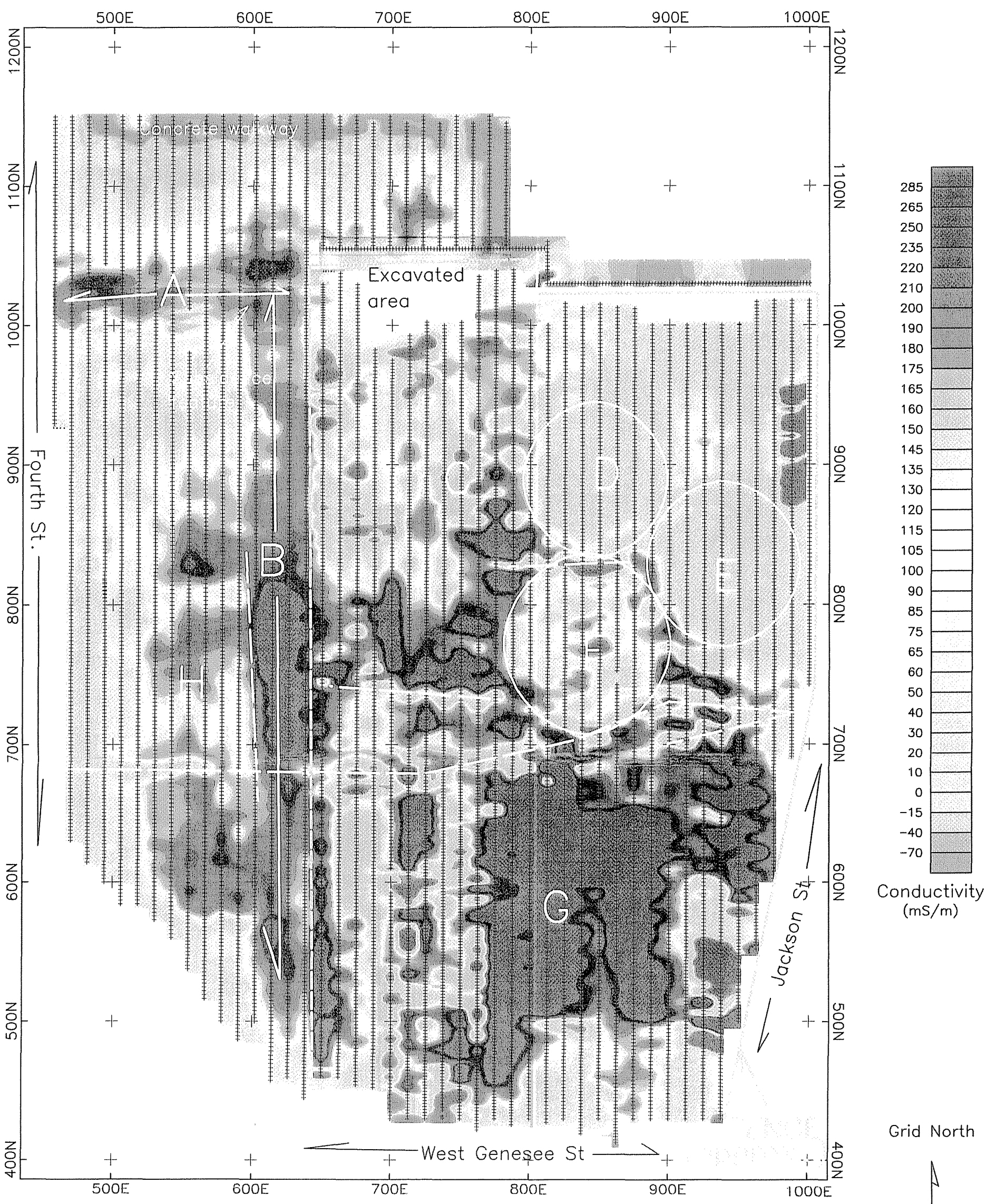


Figure 1

Geophysical Survey Results
Color Contours of EM31 Data
Conductivity (mS/m)

Former Buffalo Service Center
West Genesee St.
Buffalo, NY
IT Corporation

Geomatrix (716) 565-0624

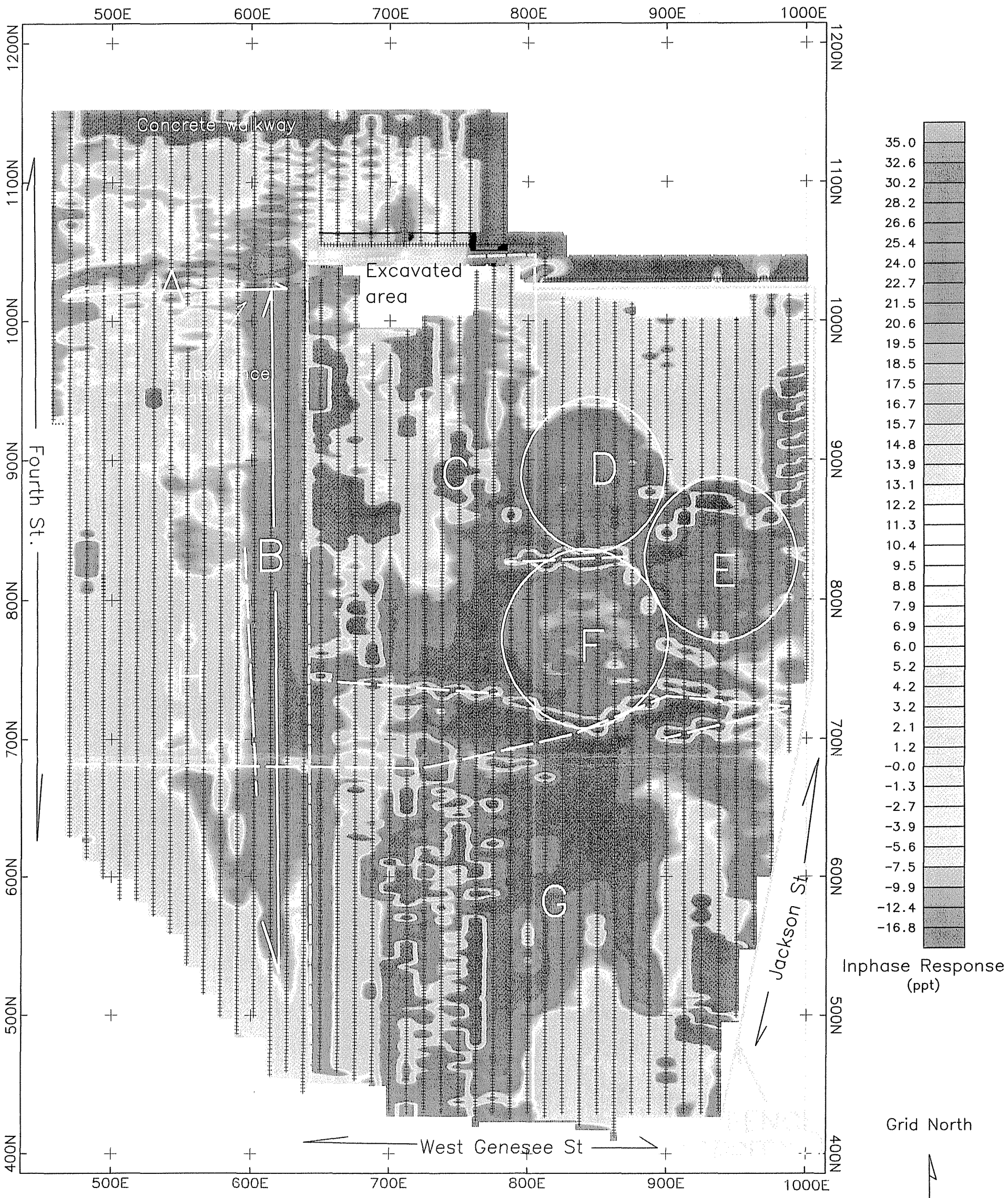
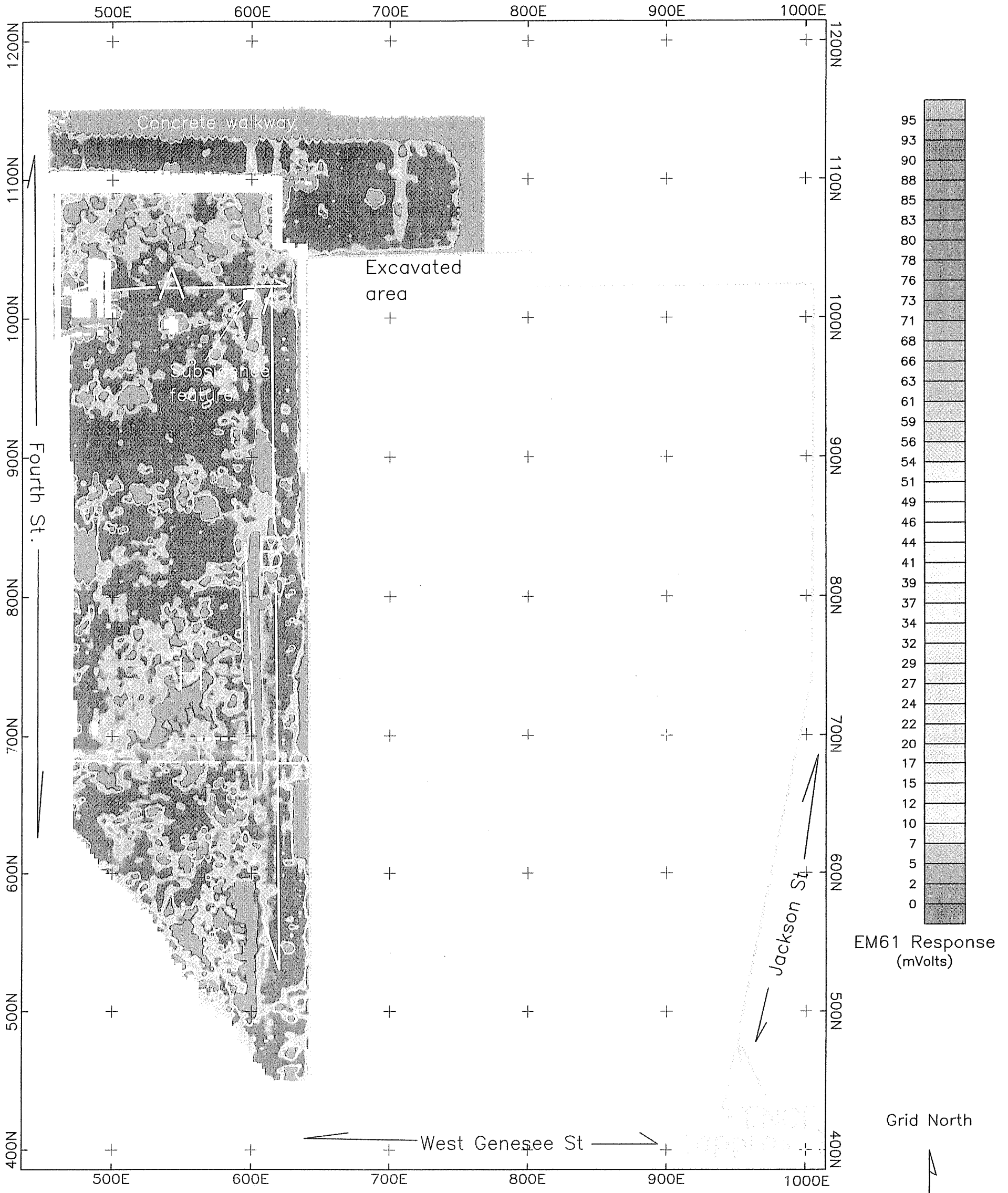


Figure 2

Geophysical Survey Results
Color Contours of EM31 Data
Inphase Response (ppt)

Former Buffalo Service Center
West Genesee St.
Buffalo, NY
IT Corporation

Geomatrix (716) 565-0624



Geophysical anomaly discussed in report

Interpreted linear anomaly

Geophysical measurement point and line location

For clarity, EM61 data pts are not shown. Data were collected at a 3 ft line spacing and 0.6 ft measurement spacing

Figure 3

Geophysical Survey Results
Color Contours of EM61 Data
(mVolts)

Former Buffalo Service Center
West Genesee St.
Buffalo, NY
IT Corporation

Geomatrix (716) 565-0624

APPENDIX
G

APPENDIX
H

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW01-1**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 14.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 4.25 in.

Screen: Dia 2 in. | Length 10 ft. | Type/Size 10 Slot PVC

Casing: Dia 2 in. | Length 3.5 ft. | Type PVC

Fill Material Sand, Bentonite | Rig/Core

Drill Co. Parrot Wolf | Method 4.24 HSA

Driller | Log By M. Flanagan | Date 9/20/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID	% Recovery	Blow Count	Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					2			GP	Gravel
					3				Concrete
		1	1		2				Void
					4				concrete
2					11				2'-6' Blue moist to wet, lose fine to corse sand, little silt, trace fine gravel
		0	2		2				
					2				
4					2			SP	
		<1	3		2				
					2				
6					9				
					7				6'-12' Blue wet, lose iron filings and fine- corse sand, little silt
		<1	4		9				
					11				
8					9				
		<4	5		3			SM	
					3				
					6				
10					5				
		5	6		3				
					3				
					5				
12					6				
					3				12'-13.5' Gray wet medium stiff silt, with trace fine sand
		na	7		3			ML	
					6				
					5			CL	13.5'-14' Gray wet- moist clay, little silt
14									
16									
18									
20									
22									
24									

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW01-24**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 13.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 4.25 in.

Screen: Dia 2 in. | Length 10 ft. | Type/Size 10 Slot PVC

Casing: Dia 2 in. | Length 2.5 ft. | Type PVC

Fill Material Sand, Bentonite | Rig/Core

Drill Co. Parrot Wolf | Method 4.24 HSA

Driller | Log By M. Flanagan | Date 9/19/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID	% Recovery	Blow Count	Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					50/.4				0-4.5' Brown- black moist very dense to medium dense, fine-medium sand, little silt, trace corse gravel, trace corse sand
		<1	1		r				
					r				
2					r			SP	
		<1	2		5				
					6				
4					5				
					4				
		2	3		2				4.5'-9' Gray wet, loose fine- medium sand, some silt, trace clay, trace wood fragments
					3				
6					3				
					5				
		2	4		6			SP	
					5				
8					5				
					5				
					2				
		3	5		4				
					6			PT	9'-9.5' Brown moist peat layer
10					9				Gray, wet medium density
					6				
		3	6		7			SM	
					6				
12					7				
		na	7		na				
					na				
					na				
14					na				
16									
18									
20									
22									
24									

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/10/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW01-25**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 14.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 4.25 in.

Screen: Dia 2 in. Length 10 ft. Type/Size 10 Slot PVC

Casing: Dia 2 in. Length 3.5 ft. Type PVC

Fill Material Sand, Bentonite Rig/Core ____

Drill Co. Parrot Wolf Method 4.24 HSA

Driller ____ Log By M. Flanagan Date 9/19/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0				h			
2		<1	1	3 5 5			0-6' Brown, moist, medium, stiff silt, little- trace clay, fine- corse sand, little to trace fine gravel
4		<1	2	8 7 5		ML	
6		1	3	3 3 2			
8		1	4	3 3 5			6'-14' Brown wet medium density fine sand, little silt, trace wood fragments
10		1	5	7 3 14		SP	
12		1	6	6 7 6			
14		1	7	5 7 5			
16				8 7 20			
18				12 14 16			
20							
22							
24							

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/10/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW01-26**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 14.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 4.25 in.

Screen: Dia 2 in. Length 10 ft. Type/Size 10 Slot PVC

Casing: Dia 2 in. Length 3.5 ft. Type PVC

Fill Material Sand, Bentonite Rig/Core ____

Drill Co. Parrot Wolf Method 4.24 HSA

Driller ____ Log By M. Flanagan Date 9/20/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
							Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0		9	1	h 11 8 6		SP	Gray to black medium density fine to corse sand, little fine - medium gravel, trace silt
2		9	2	4 10 6 5			
4		na	3	2 3 3 50/.3			
6		na	4	na na na na			Ground through cobbles?
8		15	5	11 8 5 5		SM	Gray wet medium density fine sand and silt
10		17	6	10 7 6 8			
12		10	7	7 11 9 14			
14							
16							
18							
20							
22							
24							

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/10/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW01-27**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 14.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 4.25 in.

Screen: Dia 2 in. Length 10 ft. Type/Size 10 Slot PVC

Casing: Dia 2 in. Length 3.5 ft. Type PVC

Fill Material Sand, Bentonite Rig/Core ____

Drill Co. Parrot Wolf Method 4.24 HSA

Driller ____ Log By M. Flanagan Date 9/20/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID	% Recovery	Blow Count	Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0									concrete
		3	1					SP	0.5'-2' Black fine to corse moist sand
2					1				No recovery
		5	2		1				
					1				
4					1				4'-14' Black wet loose fine to corse sand, some silt. (poor recovery)
		60	3						
6									
		150	4						
8					1				
		150	5		1			SP	
					1				
10					1				
					5				
		200	6		7				
					9				
12					11				
		na	7		6				
					5				
14					5				
					5				
16									
18									
20									
22									
24									

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/10/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-12**

Project NFG-Buffalo | Owner National Fuel & Gas

Location Buffalo, New York | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 22.7 ft. | North | East

Top of Casing NA | Water Level Initial ▽ 7.0 ft. | Static NA | Diameter 4.25 in.

Screen: Dia 2 in. | Length 17.5 ft. | Type/Size PVC/20 in.

Casing: Dia 2 in. | Length 5 ft. | Type PVC

Fill Material #1 Morrie and Bentonite | Rig/Core

Drill Co. Parratt Wolff | Method HSA

Driller Ron | Log By MEF | Date 8/1/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0				5 7			Gravel, brown-gray fine sand, trace silt, trace sub-rounded gravel. Dry
		1	50%	6 5		SP	
2		2	50%	6 4			
				5 6			
4		8.7	35%	4 3			Gray-brown, fine grain sand, some silt, trace of clay content. Moist. Wet at 7 feet bgs.
				3 3			
6	▽	2.8	95%	1 2			
				2 1			
8		13.9	60%	2 1			Gray-brown, silt, some clay, moist, trace of sub-rounded cobble.
				1 2			
10		16.5	50%	2 1			
				2 3			
12		8.2	50%	2 1			Brown-gray clay, some silt, trace sub-rounded cobble, trace wood, moist.
				2 3			
14		3.8	80%	8 11			Brown-gray silt, trace fine grain sand, trace sub-angular gravel. Moist.
				14 14			
16		3.3	80%	18 28			Gray-brown silt, trace fine grain sand. Moist.
				43 25			
18		36		7 14			Brown silt, trace fine grain sand. Moist. 2-inches brown, clay lense at 18.5-feet bgs.
				29 28			
20		57.4		10 8			Brown-gray silt, some clay content. Last 6-inches encountered brown clay. High plasticity. Moist.
				6 50			
22							
24							

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/14/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-13**

Project NFG-Buffalo Owner National Fuel & Gas

Location Buffalo, New York Proj. No. 805808

Surface Elev. NA Total Hole Depth 21.5 ft. North ____ East ____

Top of Casing NA Water Level Initial ▽ 6.0 ft. Static NA Diameter 4.25 in.

Screen: Dia 2 in. Length 16.5 ft. Type/Size PVC/20 in.

Casing: Dia 2 in. Length 5 ft. Type PVC

Fill Material #1 Morrie and Bentonite Rig/Core ____

Drill Co. Parratt Wolff Method HSA

Driller Ron Log By MEF Date 8/1/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
							Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0							Black top and fill.
2		3.1	50%	4 4 4 4		SP	Light brown-gray, med grain sand, some brick, some sub-rounded cobbles. Dry.
4		0.2	20%	1 WOH 1 WOH		SP	Light brown, med grain sand, some sub-rounded gravel, hint of blue coloration on soils. Wet at bottom.
6 ▽		300	20%	1 WOH WOH WOH		SP	Light brown, med grain sand, some sub-rounded gravel. Wet. Last 2-inches black med grain sand, some sub-rounded gravel. Wet. Faint petro odor.
8		7.5	35%	15 1 1 1		SP	Black, fine grain sand, some sub-rounded gravel. Wet. Some sheen observed upon cuttings. Faint petro odor.
10		68.5	40%	1 1 11 14		SM	Black, fine grain sand, some silt. Wet. Last 2-inches black, finer grain sand, some sub-rounded cobbles.
12		185	75%	4 2 3 3		SM	Black, fine grain sand, some silt, trace sub-rounded gravel, clay lense at 13.5-feet bgs. Trace wood. Wet. Detectable petro odor.
14		21		10 15 7 5		ML	Brown silt, trace fine grain sand. Wet. Last 6-inches brown clay, trace silt.
16		60	50%			ML	Brown clay trace silt. Last 6-inches encountered brown, med density silt. Moist.
18		1.7		1 WOH WOH 10		SM	Gray-brown silt, trace fine grain sand. Moist. Med density.
20		1.3	45%	8 5 5 50		SM	Brown clay, some silt, trace sub-angular rock. Low plasticity. Wet.
22							
24							

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/14/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-14**

Project NFG-Buffalo Owner National Fuel & Gas

Location Buffalo, New York Proj. No. 805808

Surface Elev. NA Total Hole Depth 19.0 ft. North ____ East ____

Top of Casing NA Water Level Initial ▽ 6.0 ft. Static NA Diameter 4.25 in.

Screen: Dia 2 in. Length 13 ft. Type/Size PVC/20 in.

Casing: Dia 2 in. Length 6 ft. Type PVC

Fill Material #1 Morrie and Bentonite Rig/Core ____

Drill Co. Parratt Wolff Method HSA

Driller Ron Log By MEF Date 8/1/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0		0	60%	11 12 7 7		SP	Dark brown, med grain sand, some sub-rounded gravel, trace brick, trace concrete. Dry.
2		0	70%	8 6 5 8		SP	Dark brown, med grain sand, trace silt, trace brick. Dry.
4		2.8	50%	2 2 2 2		SP	Dark brown, med Dark brown, med grain sand, trace silt, trace sub-rounded gravel, trace brick. Last inch in tip of spoon was moist.
6 ▽		0.7	50%	2 2 2 3			Dark brown, fine sand, some sub-rounded gravel for top 4-inches then dark brown-gray, fine grain sand, some silt. Wet.
8		0.1	50%	2 1 2 3			Gray-brown silt, trace fine grain sand, trace brick. Wet. Last 6-inches of spoon encountered brown, fine grain sand, some silt, some wood. Dry (peat-like).
10		3.6	30%	1 1 1 4			Brown, fine grain sand, some silt, some wood. Last couple of inches encountered gray silt, trace clay, trace wood. Moist.
12		176	60%	8 6 5 5			Brown-gray silt, some clay content, trace wood. Moist. Faint petro odor.
14		340	95%	6 9 11 12			Brown-gray silt, trace fine grain sand, med density. Moist. Faint petro odor.
16		145	75%	8 12 24 25			
18		171	50%	20 36 44 71			Brown-gray silt, some fragmented rock. Very little moisture.
20							
22							

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-15**

Project *NFG-Buffalo* Owner *National Fuel & Gas*

Location *Buffalo, New York* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *20.3 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial ▽ *4.0 ft.* Static *NA* Diameter *4.25 in.*

Screen: Dia *2 in.* Length *16 ft.* Type/Size *PVC/20 in.*

Casing: Dia *2 in.* Length *4 ft.* Type *PVC*

Fill Material *#1 Morrie and Bentonite* Rig/Core _____

Drill Co. *Parratt Wolff* Method *HSA*

Driller *Ron* Log By *S. LEITTEN* Date *8/3/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS
Hole left on 8/2/01. Completed on 8/3/01.

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0				10 5			Brick
		0	50%	2 2			Black, slag gravel. Some whit slag. Dry.
2				2 1			
		0	50%	1 1			Grayish orange gravel. Wet.
4 ▽				1 1			
		0.2	50%	1 1			
6				1 1			Brownish-orange, sandy gravel. Wet. Trace clay.
		4.9	90%	1 4			Black, coarse, sandy gravel. Wet.
8				2 1			
		35.6	25%	2 2			
10				2 1			Black peat, some wood. Moist.
		138	60%	1 3			
12				4 5			Dark gray clay. Trace silt. Moist.
		525	50%	2 7			First inch dark gray clay. Trace silt. Moist. Rest was dark brown peat, trace wood. Moist.
14				8 8			Gray clay. Last 2-inches silty sand with black band at top.
		123	80%	7 12			Grayish-brown, fine grain sand. Trace silt. Trace clay. Moist. Wet the last 6-inches.
16				38 8			
		25.7	75%	34 48			
18				49 6			
		45.2	50%	7 11			
20				12 46			Brown clay, trace silt, some sub-rounded gravel.
		50.7	10%	50.3			
22							

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-16**

Project NFG-Buffalo | Owner National Fuel & Gas

Location Buffalo, New York | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 15.0 ft. | North | East

Top of Casing NA | Water Level Initial ▽ 7.0 ft. | Static NA | Diameter 4.25 in.

Screen: Dia 2 in. | Length 10 ft. | Type/Size PVC/20 in.

Casing: Dia 2 in. | Length 5 ft. | Type PVC

Fill Material #1 Morrie and Bentonite | Rig/Core

Drill Co. Parratt Wolff | Method HSA

Driller Ron | Log By MEF | Date 7/31/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0				5 8 7 4			Dark brown, fine grain sand, trace sub-rounded gravel, trace brick, trace concrete cobbles. Dry.
2		1.1	50%	4 4 4 6			Encounter black, fine grain sand, trace silt, trace brick, trace of white silt-sand matrix with cuttings, nothing substantial. Dry. No odors.
4		1.6	60%	1 2 1 1			Black, fine grain sand, some sub-rounded gravel, trace silt, moist. Last 2-inches trace clay in silty sand. Trace brick. Faint petro odor.
6		19.2	50%	3 2 3 4			Black, fine grin sand with some silt, some wood, trace brick. Wet. Detectable petro odor.
8	▽	263	50%	1 5 2 4			
10		442	15%	3 3 17 4			Limited recovery. Gray clay, some silt, trace wood, low plasticity. Wet. Some black smearing on outside of clay lense.
12		227	5%	3 5 7 7			Gray clay, some silt, black smearing. Grades with depth at 13 to 13.8 feet bgs to dark gray, fine grain sand, some silt. Wet. Last 2-inches encountered a brown clay lense. Sheen observed on water in spoon.
14		1125	50%	5 15 31 51			Brown-gray fine sand with silt, trace clay. Very dense. Dry.
16		120					
18							

Description: (Color, Texture, Structure)

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-17**

Project NFG-Buffalo | Owner National Fuel & Gas

Location Buffalo, New York | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 20.0 ft. | North | East

Top of Casing NA | Water Level Initial ▽ 8.0 ft. | Static ▼ 10.0 ft. | Diameter 4.25 in.

Screen: Dia 2 in. | Length 14 ft. | Type/Size PVC/20 in.

Casing: Dia 2 in. | Length 6 ft. | Type PVC

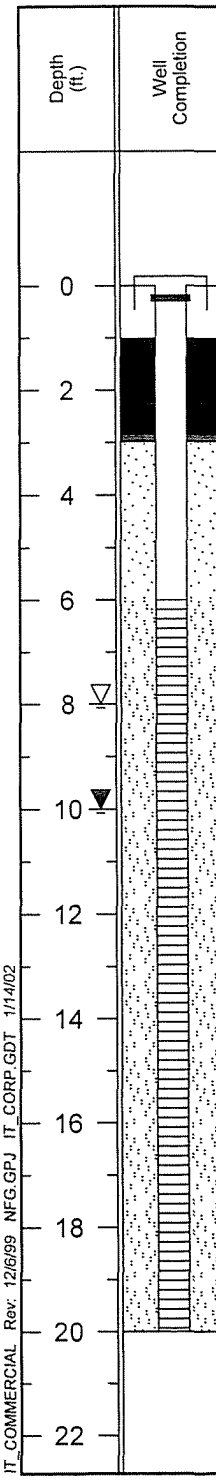
Fill Material #1 Morrie and Bentonite | Rig/Core

Drill Co. Parratt Wolff | Method HSA

Driller Ron | Log By MEF | Date 7/30/01 | Permit # NA

Checked By | License No.

COMMENTS



PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0	10%	3 2 0 0		SP	0-2' Gravel, blacktop, concrete first foot. Then dark brown medium sand, some subrounded gravel. Trace silt. Last 2" hint of blue tinted soil. Dry
0	35%	3 2 2 2		SP	2-4' Dark brown, medium sand, some subrounded gravel, trace silt, grades with depth to brown fine sand, trace silt. Dry
0.2	0%	2 1 2 2		SP	4-6' Trace of dark brown fine sand, some gravel in bottom of spoon.
0.9		2 2 3 4		SP	6-8' Brown fine sand, some silt, moist. Last inch black medium sand, trace subrounded grave. no detectable odors
0.2	75%	1 2 2 2		SP CL	8-10' Top four inches bellow fluff, is dark brown fine sand, some silt, some wood debris, moist. ~8.5' encounter gray clay with some silt, trace wood, moist.
0.5	25%	1 1 2 2		CL	10-12' Gray clay with some silt, moist. Last 2" gray fine sand, some silt, wet
0.2	60%	3 7 7 10		SP	12-14' Brown fine sand, some silt, trace subrounded gravel, wet.
0.5	65%	3 5 5 10		CL	14-16' Brown clay, high plasticity, some silt. Moist
1.1		20 22 24 32		SP	16-18' Brown- gray, fine sand, some silt, trace subrounded gravel, Wet..
8.7	80%	16 22 18 53		CL	18-20' Some silt, trace subrounded gravel, last 2" some rock.
					No recovery. Some rock in tip of spoon, will set well at 20'

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-18**

Project NFG-Buffalo Owner National Fuel & Gas

Location Buffalo, New York Proj. No. 805808

Surface Elev. NA Total Hole Depth 26.0 ft. North ____ East ____

Top of Casing NA Water Level Initial ▽ 5.0 ft. Static NA Diameter 4.25 in.

Screen: Dia 2 in. Length 21 ft. Type/Size PVC/20 in.

Casing: Dia 2 in. Length 5 ft. Type PVC

Fill Material #1 Morrie and Bentonite Rig/Core ____

Drill Co. Parratt Wolff Method HSA

Driller Ron Log By S. LEITTEN Date 8/2/01 Permit # NA

Checked By ____ License No. ____

COMMENTS
Parking Lot

Depth (ft.)	Well Completion	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0				1 3 7		GP	0-2' Asphalt. Brown sandy gravel, dry. Brown sandy gravel, trace brick
2		6.1	25%	9 4 4 4		GP	2-4' 3'-3.5' Green- gray slag, corse sand and gravel, dry. 3.5-4' Dark brown sandy gravel, trace brick, trace subrounded gravel. Moist
4		1.5	50%	2 1 2 3		GP	4-5' Dark brown sandy gravel, trace brick, trace silt, trace subrounded gravel. Moist
6		1.3	90%	3 2 3 3		SP	Medium brown fine sand, trace silt, little clay, trace subrounded gravel, moist
8		2	30%	1 2 2 2		GP	Dark gray gravel, some corse sand, trace brick. Wet
10		0	0%	1 1 1 2		GP	Dark gray gravel, some corse sand, trace brick. wet
12		0	90%	2 2 1 2		SP	Medium brown fine sand, little clay, trace silt. Wet
14		0	60%	4 2 5 9		SP	Medium brown fine sand, little clay, trace silt, wet
16		0	100%	7 8 7 8		SP	Dark brown peat, little wood. DSamp
18		0	50%	10 7 8 9		SP	Fine grain sand, trace silt, little clay, wet
20		0	75%	8 2 3 4		ML	medium brown fine grain sand, trace silt, little clay. Wet
22		0	25%	5 5 2 2		SP	same as above
24		0	5%	4		SP	Same but wet
26							Medium brown clay, trace silt, moist, last 4.5" little to some poorly rounded gravel
28							Brown fine sand, trace silt, some poorly sorted gravel.
							Brown fine sand, trace silt, some poorly sorted gravel, wet.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-19**

Project NFG-Buffalo | Owner National Fuel & Gas

Location Buffalo, New York | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 20.0 ft. | North | East

Top of Casing NA | Water Level Initial ▽ 11.0 ft. | Static NA | Diameter 4.25 in.

Screen: Dia 2 in. | Length 10 ft. | Type/Size PVC/20 in.

Casing: Dia 2 in. | Length 10 ft. | Type PVC

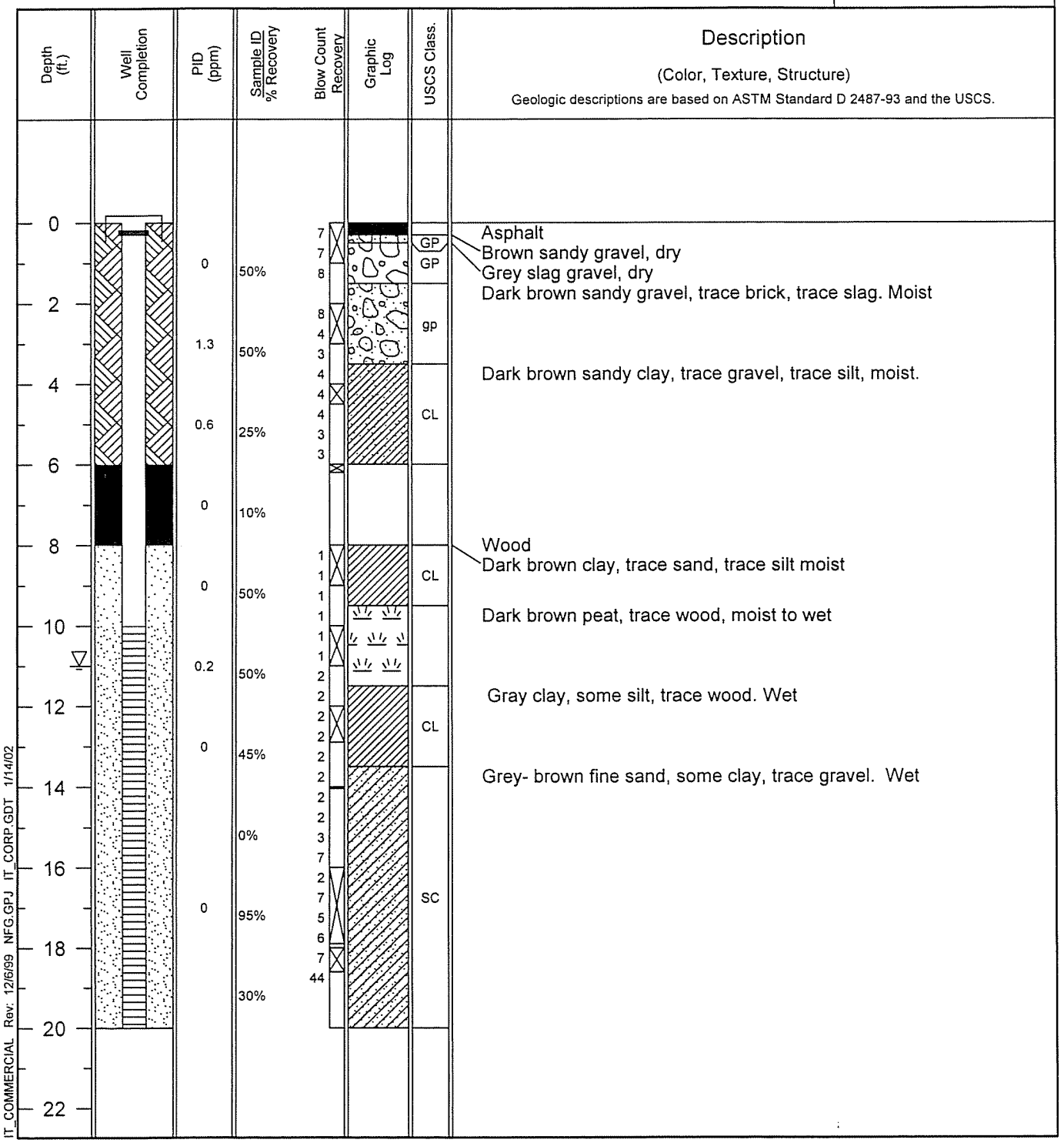
Fill Material #1 Morrie and Bentonite | Rig/Core

Drill Co. Parratt Wolff | Method HSA

Driller Ron | Log By S. LEITTEN | Date 8/3/01 | Permit # NA

Checked By | License No.

COMMENTS
Parking Lot



INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-20**

Project *NFG-Buffalo* Owner *National Fuel & Gas*

Location *Buffalo, New York* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *19.5 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial ▽ *14.0 ft.* Static *NA* Diameter *4.25 in.*

Screen: Dia *2 in.* Length *14.5 ft.* Type/Size *PVC/20 in.*

Casing: Dia *2 in.* Length *5 ft.* Type *PVC*

Fill Material *#1 Morrie and Bentonite* Rig/Core _____

Drill Co. *Parratt Wolff* Method *HSA*

Driller *Ron* Log By *S. LEITTEN* Date *8/2/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS
Parking Lot

Depth (ft.)	Well Completion	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0				8 5 11		GP	Asphalt Brown sandy gravel, trace slag, trace brick, trace subrounded gravel
2		0	50%	10 8 7		GP SP	no recovery Brown sandy gravel, trace slag, trace brick, trace subrounded gravel. moist White- gray corse sand and slag. Dry
4		1.3	75%	9 2 2		GP GP	Brown sandy gravel, trace slag, trace brick, dry. Medium gray fine gravel, trace slag, moist
6		11.7		1 4 10		SP	Medium brown fine sand, trace silt, moist. last 1" medium brown fine grain sand, trace silt, trace clay, moist
8		8.5		7 2 8		SP	Light brown fine grain sand, trace silt, trace clay. Moist
10		6.5	20%	2 2 2 2		CL	Light brown clay little sand, trace silt, trace subrounded gravel. Moist
12		1.2	50%	2 2 3 4		CL	Light brown clay, little sand, trace silt, trace subrounded gravel, moist
14 ▽		1.2	25%	6 5 5 5			Dark brown peat, trace wood, moist Dark brown peat, trace wood, 1" chunk of wood in shoe.
16		1.1	80%	2 3 8		CL	Greenish brown clay, trace silt, wet.
18		142	70%	10 7 11 13 15		SP	Light brown fine sand, trace silt, trace subrounded gravel
20			25%	14 45 50 1			

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **SB00-21**

Project NFG-Buffalo | Owner National Fuel & Gas

Location Buffalo, New York | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 17.5 ft. | North ____ | East ____

Top of Casing NA | Water Level Initial ▽ 8.0 ft. | Static NA | Diameter ____

Screen: Dia NA in. | Length NA ft. | Type/Size NA/NA in.

Casing: Dia NA in. | Length NA ft. | Type NA

Fill Material NA | Rig/Core ____

Drill Co. Parratt Wolff | Method HSA

Driller Ron | Log By MEF | Date 7/30/01 | Permit # NA

Checked By ____ | License No. ____

COMMENTS
Former Location ITGP-4

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Concrete
1	1	10%			SP	Dark brown medium sand, some subrounded gravel, trace brick. Dry
2	0.7	15%	2 3 5 1		SP	Dark brown medium sand, some subrounded gravel, trace brick. Last 4" encounter white- brown medium sand, some subrounded gravel, moist with hint of blue staining.
4	0	20%	2 1 1 2		SP	Dark brown medium sand, trace subrounded gravel, trace silt. Dry
6	0	70%	1 1 2 4		SP	Dark brown, medium sand, trace silt, trace wood. moist
8 ▽	4	70%	1 3 3 4		CL	Gray clay, some silt, trace wood. Moist. Last 2" gray silt, some fine sand, wet.
10	2.5	60%	2 1 2 3		ML	Gray silt, trace fine sand, trace wood, wet.
12	4.9	50%	2 2 3 5		ML	Gray silt, some fine sand, trace subrounded gravel, trace wood. Wet
14	0.6	80%	8 9 9 13		SM	Brown- gray fine sand, some silt, trace subrounded gravel. moist
16	0.2	65%	19		SM	Brown gray fine sand, some silt, trace subrounded gravel, last 4" encounter gray brown clay, trace silt, some fragment of rock encountered with clay.
18						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-22**

Project NFG-Buffalo | Owner National Fuel & Gas

Location Buffalo, New York | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 21.4 ft. | North | East

Top of Casing NA | Water Level Initial ▽ 6.0 ft. | Static ▼ 8.0 ft. | Diameter 4.25 in.

Screen: Dia 2 in. | Length 15.4 ft. | Type/Size PVC/20 in.

Casing: Dia 2 in. | Length 6 ft. | Type PVC

Fill Material #1 Morrie and Bentonite | Rig/Core

Drill Co. Parratt Wolff | Method HSA

Driller Ron | Log By MEF | Date 7/30/01 | Permit # NA

Checked By | License No.

COMMENTS
Former GP-5 Location

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0		0	40%	6 2 1 54		SP	Dark brown medium sand, trace brick, dry. Last two inches, light brown medium sand, trace brick, dry.
2		0					
4		0	50%	10 37 32 12		SP	light brown medium sand, trace brick, some red staining (faint) on the cuttings in last two inches.
6 ▽		257	30%	5 10 12 10		SP	Dark brown medium sand, trace brick, some subrounded cobbles, some concrete, wet
8 ▼		121	90%	3 2 4 3		SP	Dark brown medium sand, trace silt, some subangular cobbles, wet. Detectable weathered gas like odor. Sheen last two inches
10		90	95%	6 12 31 32		SM	Dark brown- gray fine sand, some silt , gray clay, trace silt in clay. Grades to gray silt, trace fine sand. Wet with detectable petroleum like odor.
12		53	95%	11 15 15 16		SM	Dark gray brown, some silt. At ~13' encounter .5' thick gray clay lens, last six inches are brown fine sand, some silt. Wet with detectable odor.
14		113	95%	27 23 33 36		SM	Dark gray- brown fine sand, some silt, wet. Detectable petroleum like odor.
16		35		16 17 26		SM	Dark gray- brown fine sand, some silt, wet. Detectable petroleum like odor
18		54				ml	Gray brown silt, some subrounded gravel, trace clay. Faint petroleum like odor.
20						SM	Gray- brown, fine grain sand, some silt, some subrounded gravel. Wet. Gravel is characterized by black, con- coidal fracturing slate.
22							
24							

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/14/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Monitoring Well **MW00-23**

Project *NFG-Buffalo* Owner *National Fuel & Gas*

Location *Buffalo, New York* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *19.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial ▽ *5.5 ft.* Static ▼ *6.0 ft.* Diameter *4.25 in.*

Screen: Dia *2 in.* Length *14 ft.* Type/Size *PVC/20 in.*

Casing: Dia *2 in.* Length *5 ft.* Type *PVC*

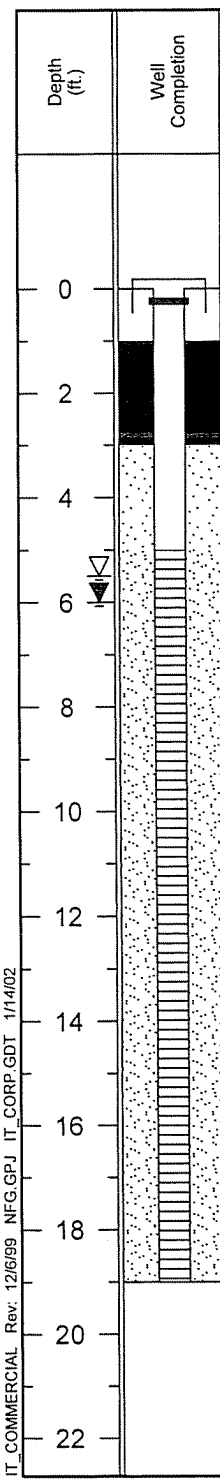
Fill Material *#1 Morrie and Bentonite* Rig/Core _____

Drill Co. *Parratt Wolff* Method *HSA*

Driller *Ron* Log By *MEF* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS
Scoped originally as a geoprobe.



Description

(Color, Texture, Structure)

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

Dark brown medium sand, some subrounded gravel, trace brick, dry.

Black medium sand, some subrounded gravel. moist. Faint petroleum like odor.

Black silt, some subrounded gravel, trace brick. Wet. Strong petroleum like odor.

2" of recovery same as above, some wood. Wet with sheen on tube.

Black medium sand, some subrounded gravel, trace wood. Wet. Strong petroleum like odor. Sheen observed in water in spoon.

Black medium sand, some subrounded gravel, trace silt. last 8" encounter fine sand, some silt, trace wood. Dry

Gray silt, trace fine sand, trace clay. Moist. Faint petroleum like odor.

Gray- brown silt, trace fine sand, moist, dense. Faint petroleum like odor.

Gray brown silt, trace fine sand, trace sub rounded gravel, moist. Faint petroleum like odor.

Gray brown silt, trace fine sand, refusal, some fracturing rock, conchoidal. Moist

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-1**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 16.0 ft. North _____ East _____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material _____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/24/01 Permit # NA

Checked By _____ License No. _____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
2	0	1			SP	0-4' First foot concrete and blacktop. At about 2' brick present. 3' Black medium grain sand, some subrounded gravel. Gravel poorly sorted.
4						
6	0	2			SP	4'-8'brown medium grain sand, some sub rounded gravel, trace subrounded cobble, grades with depth to fine grain sand, some silt wet at bottom. Water table at 8' BGS.
8						
10	0	3			SM	8'-12' Gray brown fine sand , some silt, wet. At about 12', gray silt tightly compacted.
12						
14	0	4			ML	12'-16' Gray- brown silt, trace subrounded gravel. Clay in tip of macro core.
16						
18						
20						
22						
24						

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Drilling Log

Soil Boring **ITGP-2**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 16.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/24/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						
2	0	1			SP	0-4' Concrete and gravel mixture, some subrounded cobbles, grads with depth to dark brown medium sand, some subrounded gravel. Brick in the tip. Dry
4						4'-8' Dark brown medium grain sand, some subrounded gravel, trace brick and wood debris.
6	0	2			SP	
8						8'-12' Brown- gray fine sand, some silt. Wet at top.
10	0	3			SM	
12						12'-16' Gray- brown silt, trace clay, wet. Gray clay lens present at 15' BGS
14	0	4			ML	
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-3**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 12.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/24/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						0-4' Gravel and concrete at top. Brown- gray medium sand, some subrounded gravel. Black staining on inside of shelby tube. Detectable petrolium like odors.
2	117	1 / 30%			SP	
4						4'-8' Black medium grained sand some subrounded gravel, trace clay, moist. Detectable odor? Wet at the tip
6	2000	2			SP	
8						8'-12' Gray- brown fine sand, some silt, moist throughout. Detectable petrolium like odor. Some trave wood debris.
10	464	3			SP	
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-4**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 6.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/24/01 Permit # NA

Checked By ____ License No. ____

COMMENTS
Under former coal shed area.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						First four inches concrete. Dark brown- black medium grained sand, some subrounded gravel, trace brick, trace coal, dry.
2		1			SP	
4		2			SP	4'-6' Refusal at 6'. At 5' came across some sandy mixture with blue, mainly white tint, wet.. Will collect for analysis. Last 4" grades to brown fine grain sand, trace gravel, moist.
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-5**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 6.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/24/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						0-4' Brown medium sand with sub angular blocks of concrete. Trace brick. fill
2	0	1 / 15%			SP	
4	0	2			SP	4'-5' Light brown, medium sand, trace brick, dry. Some iron staining.
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

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Drilling Log

Soil Boring **ITGP-6**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 12.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/25/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						0-4' First two feet, gravel and concrete cobbles, blacktop. Grades to a gray brown medium sand with some subrounded gravel.
2	0	1			SP	
4						4'-8' Gray- brown, medium grain sand, some subrounded gravel, trace brick, moist
6	0	2			SP	
8						8'-12' Gray medium grain sand, some subrounded gravel (lenses). Wet at 10'. Last 8" gray clay with a trace of silt. Water table @ 10' BGS.
10	0	3			CL	
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-7**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 16.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/25/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
2	0	1 / 75%			SP	0-4' First two feet gray- brown medium grain sand, some subrounded gravel, some subrounded cobble, trace brick. Clay lens with some silt and trace brick present in last 6" of spoon. dry
4						
6	21	2 / 50%			SP	4'-8' Brown medium grain sand, some subrounded gravel, some subrounded cobble, trace brick. Last shelby tube was wet.
8						
10	183	3 / 90%			SM	8'-12' Gray medium sand, some silt. Trace of subrounded gravel. Trace of wood debris in the last six inches of spoon. Wet detectable sewer like odor.
12						Pushed a rock. No recovery
14	-	4 / 0%				
16						
18						
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-8**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 12.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/25/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
2	0	1 / 95%			SP	0-4' First 6" gravel, concrete and blacktop. Then brown to dark brown medium grain sand, some sub rounded gravel, some brick. Dry
4						
6	156	2 / 30%			SP	4'-8' Gray dark brown medium grain sand, some sub rounded gravel, trace brick, lower 4" some silt, detectable sewer like odor. Moist last 6"
8						
10	25	3			SC	Wet at top. Gray fine sand, some sub- rounded gravel. Grade with depth to a gray silt with some clay lenses, high plasticity. Black clay in bottom tip of macro core.
12						
14						
16						
18						
20						
22						
24						

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Drilling Log

Soil Boring **ITGP-9**

Project *NFG- Buffalo* Owner *NFG*

Location *Buffalo, NY* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *8.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material _____ Rig/Core *Geoprobe*

Drill Co. *SLC* Method *Geoprobe*

Driller *Rich* Log By *M. Flanagan* Date *7/25/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
2	0	1 / 80%			SP	First 2" is gravel and blacktop associated with lot. brown- gray medium sand, some subrounded gravel, trace brick. Dry
4						
6	74	2 / 60%			CL	Gray clay from 6'-8', some silt , trace of wood fragments. Moist. clay has high plasticity (silt)
8						
10						
12						
14						
16						
18						
20						
22						
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-10**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 12.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 2 in.

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material | Rig/Core Geoprobe

Drill Co. SLC | Method Geoprobe

Driller Rich | Log By M. Flanagan | Date 7/25/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						0-4' Grass, grass roots. Light brown, medium grain sand, some subrounded gravel, trace of concrete. trace of wood debris last two inches.
2	23	1 / 50%			SP	
4						4'-8' Dark brown gray medium grain sand, trace sub rounded gravel, trace wood debris. Moist at bottom.
6	65	2 / 50%			SP	
8						8-12' Dark brown- gray medium grain sand, trace subrounded gravel, for about 2", then gray clay, high plasticity, trace silt in clay. Water table @ 8' BGS
10	0	3 / 75%			CL	
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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Drilling Log

Soil Boring **ITGP-11**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 14.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/25/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						
2	56	1 75%			SM	0-4' Brown medium to fine sand, trace silt, trace brick, some subrounded gravel, dry
4						Dark brown medium grain sand, some sub rounded gravel, trace brick. Wet at about 6' BGS. Detectable petro like odor from cuttings.
6	32	2			SP	
8						10-14' Dark brown medium sand, some subrounded gravel, trace brick. Wet. Water as petro like odor.
10	84	3			SP	
12						
14	41	4				
16						
18						
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-12**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 12.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 2 in.

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material | Rig/Core Geoprobe

Drill Co. SLC | Method Geoprobe

Driller Rich | Log By M. Flanagan | Date 7/25/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0		1 / 160%			SP	0-4' Dark brown medium sand, some brick, trace wood debris, some subrounded gravel. Bottom foot contained some brown silt with trace of clay material. Faint petro odor, moist.
4		2 / 115%			SM	4'-8' Gray to dark brown fine sand, some silt, trace sub rounded gravel.
8		3			SM	Water table at 8' BGS. 8'-12' BGS Gray medium sand, some subrounded gravel. Wet. Grades with depth to gray clay with trace of silt and wood debris.
10					CL	
12						
14						
16						
18						
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-13**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 12.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/25/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
2		1			SP	0-4' First 2" gravel and blacktop. Dark gray medium sand, some subrounded gravel, trace brick, trace wood, dry.
4						
6		2			SM	4'-8' Dark gray fine grain sand, some silt, trace wood, detectable petro odor on cuttings, moist.
8						
10		3			SM	Water table at 8' BGS. Layer of gray fine sand, some silt and grades with depth to gray clay with trace silt. Faint petro odor detected.
12					CL	
14						
16						
18						
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-14**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 16.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/25/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						0-4' About 2' blacktop and gravel. Then black medium sand, some subrounded gravel, trace of brick, moist
2		1			SP	
4						Water at 6.5' BGS. Black to medium sand, some subrounded gravel, lens with some silt. Detectable petrolium like odor.
6		2			SP	
8						Wet black silt, some subrounded gravel, trace of brick. Distictive lithographic change from above.
10		3			ML	
12						Black medium grained sand, some sub rounded gravel, some brick, trace silt. Wet. bottom two inches tightly compacted fine sand with some silt, sheen observed on soils
14		4			SP	
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-15**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 12.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller Rich Log By M. Flanagan Date 7/25/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
2		100%			SP	0-4' first 2" gravel and blacktop. Black medium sand, some subrounded gravel, trace brick fragments, trace cobbles.
4					ML	4-8' about 5.5' lens of wood debris. Sample is black gray silt with some clay lenses, moist. Water at 7' BGS
8					SP	8-12' Black medium grain sand, some silt, trace brick, trace wood. at 10' gray clay, with trace silt, clean, no staining last foot.
10					cl	
12						
14						
16						
18						
20						
22						
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-16**

Project NFG- Buffalo — Owner NFG

Location Buffalo, NY — Proj. No. 805808

Surface Elev. NA — Total Hole Depth 12.0 ft. — North — East —

Top of Casing NA — Water Level Initial NA — Static NA — Diameter 2 in.

Screen: Dia NA — Length NA — Type/Size NA

Casing: Dia NA — Length NA — Type NA

Fill Material — Rig/Core Geoprobe

Drill Co. SLC — Method Geoprobe

Driller Rich — Log By M. Flanagan — Date 7/25/01 — Permit # NA

Checked By — License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						0-4' First 2" or so gravel and blacktop. Black medium sand, some sub rounded gravel, trace brick. Last 4" brown clay lens with trace silt. Dry
2		1 / 60%			SP	
4					cl	4-8' Brown clay, trace silt to 6', gray fine grain sand, trace sub rounded gravel, 7-8' dark brown medium grain sand, some silt, trace wood debris, dry
6		2 / 75%			SP	
8					SP	Some moisture at 9' . Gray fine sand, some silt, grades with depth to gray clay with trace silt.
10	10.3	3 / 75%			CL ML	
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-17**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 20.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 2 in.

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material | Rig/Core Geoprobe

Drill Co. SLC | Method Geoprobe

Driller Rich | Log By M. Flanagan | Date 7/26/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						0-4' Gravel and blacktop. Dark brown medium sand, some subrounded gravel, some silt, moist (storm night before)
2	2.3	1 / 95%			SP	
4						4-8' black fine sand, trace of subrounded gravel, some silt. Wet last few inches. No odor
6	7.2	2 / 50%			SP	
8						water table at 8' BGS. Push down. No recovery
10		3 / 0%				
12						12-16' Black silt, some fine sand, highly impacted at 14'4" to 15'10". Last 2" fine sand, some silt, not visibly impacted.
14	33	4 / 60%			ML	
16						No recovery
18		5 / 0%				
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-18**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 20.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 2 in.

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material | Rig/Core Geoprobe

Drill Co. SLC | Method Geoprobe

Driller Rich | Log By M. Flanagan | Date 7/26/01 | Permit # NA

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COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						0-4' Gravel and blacktop. Brown medium grain sand some subrounded gravel, trace brick. At 3' is a lens of brown fine sand, some silt. Dry
2	0	1 / 90%			SP	
4						Brown medium grained sand, some subrounded gravel, trace brick, 2" lens of brown fine sand, some silt. At 7' to 8' light gray medium sand, some subrounded gravel. No odor
6	1.7	2 / 80%			sp	
8						Light gray sand grades to light brown fine sand, trace silt. Wet at 11', encounter hydrocarbon impacted black silt, some clay, trace wood debris
10	27	3 / 80%			SP	
12					ml	Black medium grained sand, some subrounded gravel, trace wood, at 15' brown gray clay with trace silt, bottom tip may be slightly impacted. Sheen observed on gravel at 15'.
14	12	4 / 80%			SP	
16					CL	Brown gray clay, some silt, no visual impacts.
18	1.2	5 / 100%			CL	
20						
22						
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-19**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 24.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 2 in.

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material | Rig/Core Geoprobe

Drill Co. SLC | Method Geoprobe

Driller Rich | Log By M. Flanagan | Date 7/26/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						Concrete asphalt
2	.6	1 / 75%				0-4' Concrete/ asphalt, brown clayey silt, brick, white medium sand, brown silty sand with some gravel
4						4-8' Gravel, concrete and asphalt, gray corse sand with gravel
6	1	2 / 40%				
8						8-12' water at 8' BGS. Wet fill material, corse, some fine sand
10	2	3 / 40%				
12						12- 16'wet fill material, corse consistency, some fine sand, black fine sand with some gravel, staining present
14	5	4 / 40%				
16						16-20' Wet fine sand, fine fill material
18	1	5 / 40%				
20						20-24' Wet. Refusal at 23'. Fill material, sandy clay with staining,
22	9	6 / 100%			CL	Brown competent clay with trace sand and gravel
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-20**

Page: 1 of 1

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 16.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 2 in.

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material | Rig/Core Geoprobe

Drill Co. SLC | Method Geoprobe

Driller Rich | Log By M. Flanagan | Date 7/26/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0			na			0-4', 6" asphalt/concrete, 18" brown sand with some gravel, 18" Brownish black silt, wet
2	.6	1 / 75%			SP	
					ML	
4			na			4-8', 3" Fine black wet sand, 33" Black clayey silt, wet, 12" Black Clay some silt, dry, some staining. Water table at ~7' BGS.
6	0	2 / 100%			CL ML	
					CL	
8			na			8-12', no recovery. Trace of wood with petroleum like odor.
10	20	3 / 0%				
12			na			12-16' Brown clay, some fine sand. High plasticity. No visual impacts.
14	1.2	4			CL	
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-21**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 16.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller ____ Log By M. Flanagan Date 7/26/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0			na			0-4', 12" asphalt/concrete, 28" Fill, brick, gravel, 6" brown sort silty clay with lens of soft sandy, light blue material.
2		1 / 75%			CL ML	
4			na			4-8', 12" Fill material, brick, some clay, sand and gravel, 8" black silty clay with some sand, 10" black medium sand, some silt.
6		2 / 65%			CL ML	
					SP	
8			na			8-12', 24" Black medium sand, 24" wet black stained medium sand
10		3 / 100%			SP	
12			na			No recovery
14		4 / 0%				
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/11/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-22**

Project *NFG- Buffalo* Owner *NFG*

Location *Buffalo, NY* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *8.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter *2 in.*

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material _____ Rig/Core *Geoprobe*

Drill Co. *SLC* Method *Geoprobe*

Driller _____ Log By *M. Flanagan* Date *7/26/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0			na			0-4' Gravel and blacktop, then brown medium sand, some subrounded gravel, trace brick, grades with depth to brown, fine sand, some silt, dry.
2	.1	1 80%				
4			na			4-8', Brown medium sand, trace silt
6	0	2 80%			SP	
8						
10						
12						
14						
16						
18						
20						
22						
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-23**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 20.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller ____ Log By M. Flanagan Date 7/26/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0			na			0-4' Gravel and blacktop, brown- dark brown, medium grain sand, trace silt, some subrounded gravel, trace brick, moist
2	0	1 50%			SP	
4			na			4-8' No recovery, some water at bottom, no odor associated with it, no sheen.
6		2 0%				
8			na			8-12' No recovery, no water
10		3 0%				
12			na			12-16' Dark gray fine sand, some silt, trace subrounded gravel, Wet, bottom 2" is brown silt with some fine grain sand, trace clay
14	5.2	4 95%			SM	
16			na			16-20' Some brown gray silt to ~17.5', then encounter brown clay, trace silt
18	0	5 60%			CL ML	
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-24**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 8.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller ____ Log By M. Flanagan Date 7/26/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0			na			0-4' Concrete and blacktop, then dark brown medium sand, some subrounded gravel, trace brick, trace wood debris, dry.
2	.1	1 80%				
4			na		SP	4-8' Dark brown medium sand, some subrounded gravel, trace brick, at 6.5' encounter gray brown clay, some silt. Moist
6	6	2 80%			CL	
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/11/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-25**

Project NFG- Buffalo | Owner NFG

Location Buffalo, NY | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 16.0 ft. | North | East

Top of Casing NA | Water Level Initial NA | Static NA | Diameter 2 in.

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material | Rig/Core Geoprobe

Drill Co. SLC | Method Geoprobe

Driller | Log By M. Flanagan | Date 7/26/01 | Permit # NA

Checked By | License No.

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0			na			0-4' Gravel and blacktop, Dark brown medium sand, some subrounded, gravel, trace brick, bottom two inches brown fine sand, some silt, dry
2	.6	1 / 75%				
4			na			4-8' Brown fine sand, some silt, trace brick. At about 7' soil becomes mix of brown silty sand and black fine sand, some silt, trace brick. Faint petroleum like odor.
6	1	2 / 60%			SP	
8			na			8-12' Brown fine sand, trace wood. Moist. Brown clay lens at about 10' some black smearing over clay. bottom two inches gray brown silt. Faint petroleum like odor
10	8.2	3 / 60%			SP	
12			na			no recovery
14		4 / 0%				
16						
18						
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-26**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 13.0 ft. North ____ East ____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material ____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller ____ Log By M. Flanagan Date 7/26/01 Permit # NA

Checked By ____ License No. ____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0			na			Concrete, then brown to dark brown, medium sand with some gravel. Grades with depth to black fine grain sand. some subrounded gravel, some silt. Faint petrolium like odor.
2	110	1			SP	
4			na			4-8' Brown fine sand, some silt, wet near 7.5'. 7' encounter brown silt with some clay for 6", Bottom 6" black medium sand, some subrounded gravel. wet
6	400	2			SP	
8			na		CL ML	12-16' No recovery. Refusal at 13'
10		3				
12		4	na			
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Soil Boring **ITGP-27**

Project NFG- Buffalo Owner NFG

Location Buffalo, NY Proj. No. 805808

Surface Elev. NA Total Hole Depth 16.0 ft. North _____ East _____

Top of Casing NA Water Level Initial NA Static NA Diameter 2 in.

Screen: Dia NA Length NA Type/Size NA

Casing: Dia NA Length NA Type NA

Fill Material _____ Rig/Core Geoprobe

Drill Co. SLC Method Geoprobe

Driller _____ Log By M. Flanagan Date 7/26/01 Permit # NA

Checked By _____ License No. _____

COMMENTS

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0			na			0-4' Gravel and concrete. Then brown medium sand, some subrounded gravel, trace brick, trace silt. Dry
2	1	1 / 50%				
4			na			4-8' Brown medium sand, some surrounded gravel, grades with depth to brown gray fine sand, some silt, trace clay. Moist
6	15	2 / 50%			SP	
8			na			8-12' wet at top 6". Brown gray, fine grain sand, some silt, moist, some clay content
10	4	3 / 100%			SM	
12	0	4 / 200%	na		SM	12-16' Brown gray fine sand, some silt. At 14' encounter brown clay with trace of silt
14					CL	
16						
18						
20						
22						
24						

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-01**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Composite sample taken from 4-7' @ 0840.

Note: slight odor of petroleum products from pit at ~4' and below.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-1' Light grey gravel with slag fill, dry. Cloth tarp at 1'
2					GP	1-2.5' Coarse slag with sandy gravel matrix. Trace brick and wood.
4						2.5-4' Dark black coal, dry
6					SP SM	4-6' Medium brown silty sand,damp, trace subrounded gravel
8					CL	6-7' Medium brown silty clay, damp, some dark grey bands .25-.5"
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-02**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *6.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Oily sheen on surface of water at 6'

Sample taken @ 6' 0925

No odor detected.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0						Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0					GP	0-1' Light grey, sandy gravel, dry, trace subrounded coarse gravel
2					SP	1-6' Medium brown sand, dry, some gravel-cobble slag, trace brick, trace slab concrete, trace subrounded gravel.
4						
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-03**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *8.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS
Sample taken at 7-8' @1005

Note: gasometer wall goes 5' down with ~3' footer

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-0.5' Light grey sandy gravel, dry
2					GP	0.5-2' Sandy gravel, Medium brown, trace gravel-slag
4					SP SC	2-5' Medium brown clayey sand, damp, trace brick, some subrounded gravel, trace gravel slag.
6					CL	5-8' Medium brown silty clay, wet, some dark black bands with odor, trace wood, some subrounded gravel.
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-04**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *8.5 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Sample taken from 6-8.5' @ 1050

Note @~ 5.5-6' slight odor

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-4" Grey, sandy gravel, dry
2					SP	4"-6' Medium brown sand, damp, slight discoloration @ 5', trace brick, trace subrounded gravel, trace slag
4						
6					CL	6-8.5' Medium-dark brown silty clay, trace subrounded gravel, wet
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-05**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Note: Pipe was found ~2' below surface, concrete slab 2' below pipe

Sample taken from 6-7' @ 1135

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-0.5' Light grey sandy gravel, dry
					GP	0.5-1.5' Yellowish brown sandy gravel, dry, trace subrounded gravel, trace brick, trace cobbles
2						1.5-6' Medium brown silty sand, some subrounded gravel, damp
4					SP SM	
6					CL	6-7' Silty clay, brown, wet - note discoloration and odor
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-06**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Sample taken from 5-7' @ 1255

Note: water @ bottom of pit had oily sheen

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-8" Grey sandy gravel, dry, some brick
						8"-1.5' Black slag, brittle, no odor
2					GP	1.5-3' Yellowish brown sandy gravel, some subrounded gravel, dry
4					SM	3-5' Brown Silty sand, dry, little gravel, trace brick and slag
6					CL	5-7' Silty clay, dark brown-black, noticeable black sludge, wet, some wiid planks (vertical)
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-07**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *4.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Note: pipe was found ~6" below surface. Pit moved 5' East.

Sample taken from 3.5-4' @1320

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-0.5' Light grey sandy gravel, dry
0.5						0.5-4' Brown sandy gravel, trace brick and slag, trace wood. Refusal at 4'
2					GP	
4						
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-08**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *6.5 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Sample taken from5-6.5' @ 1340

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					SP	0-0.5' Sandy soil, medium brown dry
2					GP SP	0.5-4.5' Grayish brown sand and gravel, trace wood
4						
6					SM	4.5-6.5' Silty sand-wet, noticeable odor
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

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INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-09**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *6.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Note: Started pit, hit brick @ 2', moved 2' north-hit brick, moved 2' north-hit brick, moved 5' north-hit brick, moved 10' east.

Noted water at @ 6'

Sample taken from 5-6' @ 1430

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0						
					GP	0-3" Asphalt 3"-1' Dark brown sandy gravel, dry, little slag, some brick
2					SM	1-6' Brown silty sand, some slab slag, little gravel, slight odor
4						
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-10**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *6.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Noted water @ bottom of pit

Sample taken from 5.5-6' @ 1500

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-3" Asphalt 3-8" Light brown sandy gravel, dry 8"-1.5' Dark black slag, no odor, dry
2					SM	1.5-6' Silty sand- yellow brown, little brick, some subrounded gravel, trace wood
4						
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-11**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *7/31/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Sample taken from 6-7' @ 1525

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-1' Gray sandy gravel, dry
2					CL	1-5' Reddish brown clay, damp, trace brick, some odor, some subrounded gravel
4						
6					SM	5-7' Silty sand, wet, grayish brown, some subrounded gravel
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-12**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *8/1/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Note: Metal band encountered from pit. Could be band from tank.

Sample taken from 6-7' @ 0755

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-6" Gray sandy gravel, dry
2					GP	6"-5' Medium brown gravely sand, dry, trace subrounded gravel
4						
6					SP	5-7' Black coarse sand, wet, some subrounded gravel, strong petroleum odor
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-13**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *8/1/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Note: Water @ bottom of pit had sheen.

Sample taken from 5-7' @ 0845

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-6" Light gray sandy gravel, dry
2					GP	6"-5' Dark gray sandy gravel, dry, little brick (brick layer @ ~3'), some subrounded gravel
4						
					GP	5-5.5' Black gravel, wet, some coarse sand, petroleum odor
6					GP	5.5-7' Light gray sandy gravel, wet, mostly agregate (looks like wet cement)
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/11/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-14**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.5 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *8/1/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Note: Water @ bottom of pit had sheen. Piping was dug up @ ~3'.

Sample taken from 7-7.5" @ 0910

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.
0					GP	0-6" Light gray sandy gravel, dry
						6"-7' Dark gray sandy gravel, trace wood, trace brick, some subrounded gravel, some silty clay
2						
4					GP	
6						
					GP	7-7.5' Black coarse sandy gravel, wet, petroleum odor
8						
10						
12						
14						
16						
18						
20						
22						
24						

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/11/02

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-15**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *7.5 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *8/1/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Sample TP-15C taken from 6-7.5' @ 1010 (dupe)

Note: After last scoop, west wall was leaking liquid @ ~6' resulting in 10-20 gal. of liquid in bottom of pit.

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-8" Light gray sandy gravel,dry
					SP	8-12" Yellow orange sand, dry. TP-15B sample taken 8-12" @ 1010
					ML	12-16" Bluish black sandy clay, dry. TP-15A sample taken @ 1010
2						16"-6' Medium gray sandy gravel, dry, some subrounded gravel, trace wood, trace brick, trace slag
4					GP	
6					GP	6-7.5' Black sandy gravel, wet, petroleum odor
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-16**

Project *NFG Buffalo* Owner *National Fuel*

Location *West Genessee St.* Proj. No. *805808*

Surface Elev. *NA* Total Hole Depth *4.0 ft.* North _____ East _____

Top of Casing *NA* Water Level Initial *NA* Static *NA* Diameter _____

Screen: Dia *NA* Length *NA* Type/Size *NA*

Casing: Dia *NA* Length *NA* Type *NA*

Fill Material *Back Fill* Rig/Core *Back Hoe*

Drill Co. *SLC* Method _____

Driller *Dan / Ken* Log By *S. Leitten* Date *8/1/01* Permit # *NA*

Checked By _____ License No. _____

COMMENTS

Note @ 4' a pipe was broken into

Sample taken from1.5-4' @ 1100

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count / Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-1.5' Medium gray sandy gravel, dry, some brick
2						1.5-4' Light gray granular powder, possibly lime, damp
4						
6						
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

INTERNATIONAL TECHNOLOGY CORPORATION

Drilling Log

Test Pit **TP-17**

Project NFG Buffalo | Owner National Fuel

Location West Genessee St. | Proj. No. 805808

Surface Elev. NA | Total Hole Depth 7.0 ft. | North ____ | East ____

Top of Casing NA | Water Level Initial NA | Static NA | Diameter ____

Screen: Dia NA | Length NA | Type/Size NA

Casing: Dia NA | Length NA | Type NA

Fill Material Back Fill | Rig/Core Back Hoe

Drill Co. SLC | Method ____

Driller Dan / Ken | Log By S. Leitten | Date 8/1/01 | Permit # NA

Checked By ____ | License No. ____

COMMENTS

Note: Pipe found ~3' down running perpendicular to test pit. Water in bottom of pit has sheen.

Sample pulled 6.5-7' @ 1600

Depth (ft.)	PID (ppm)	Sample ID / % Recovery	Blow Count Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure)
0					GP	0-8" Gray sandy gravel, dry
					GP	8"-1.5' Brownish black sandy gravel, dry
2					SM	1.5-6.5' Brown silty sand, dry
4						
6					GP	6.5-7' Black coarse sandy gravel, petroleum odor
8						
10						
12						
14						
16						
18						
20						
22						
24						

Geologic descriptions are based on ASTM Standard D 2487-93 and the USCS.

IT_COMMERCIAL Rev: 12/6/99 NFG.GPJ IT_CORP.GDT 1/11/02

APPENDIX

[redacted]

9/4-9-91

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000096
Client No.

ITGP-3

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1700801

ample wt/vol: 5.01 (g/mL) G Lab File ID: P5154.RR

evel: (low/med) LOW Date Samp/Recv: 07/24/2001 07/24/2001

Moisture: not dec. 26.8 Heated Purge: Y Date Analyzed: 08/04/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	68	B
71-43-2	Benzene	36	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	13	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	28	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	16	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	28	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	69	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000007

Client No.

ITGP-3

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1700801

ample wt/vol: 30.41 (g/mL) G Lab File ID: Y48440.RR

evel: (low/med) LOW Date Samp/Recv: 07/24/2001 07/24/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 07/31/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

njection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	230	J
56-55-3	Benzo(a)anthracene	620	
205-99-2	Benzo(b)fluoranthene	470	
207-08-9	Benzo(k)fluoranthene	540	
191-24-2	Benzo(ghi)perylene	190	J
50-32-8	Benzo(a)pyrene	640	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	910	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	340	U
101-55-3	4-Bromophenyl phenyl ether	340	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	570	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	120	J
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	120	J
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: ITGP-3

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1700801

ample wt/vol: 30.41 (g/mL) G Lab File ID: Y48440.RR

evel: (low/med) LOW Date Samp/Recv: 07/24/2001 07/24/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 07/31/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	340	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	880	
86-73-7	Fluorene	340	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	340	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	190	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	250	J
95-48-7	2-Methylphenol	460	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	410	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	820	
108-95-2	Phenol	460	U
129-00-0	Pyrene	830	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000099

Client No.

ITGP-3

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1700801

mple wt/vol: 30.41 (g/mL) G Lab File ID: Y48440.RR

vel: (low/med) LOW Date Samp/Recv: 07/24/2001 07/24/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 07/31/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	680	U

ITT CORP

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-3

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7008

Matrix (soil/water): SOIL Lab Sample ID: AD114572

Level (low/med): LOW Date Received: 7/24/01

% Solids: 72

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9100			P
7440-36-0	Antimony	14.2	U		P
7440-38-2	Arsenic	2.7			P
7440-39-3	Barium	88.5			P
7440-41-7	Beryllium	0.71	U		P
7440-43-9	Cadmium	0.71	U		P
7440-70-2	Calcium	14900			P
7440-47-3	Chromium	12.5			P
7440-48-4	Cobalt	8.8			P
7440-50-8	Copper	20.4			P
7439-89-6	Iron	13300			P
7439-92-1	Lead	19.9			P
7439-95-4	Magnesium	6290			P
7439-96-5	Manganese	146			P
7440-02-0	Nickel	19.2			P
7440-09-7	Potassium	1120		N	P
7782-49-2	Selenium	4.3	U		P
7440-22-4	Silver	1.4	U		P
7439-97-6	Mercury	0.136	U		CV
7440-23-5	Sodium	352			P
7440-28-0	Thallium	8.5	U		P
7440-62-2	Vanadium	17.3			P
7440-66-6	Zinc	82.8			P

Color Before: BROWN Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000016

Client Sample No.

ITGP-3

La me: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A1700801

% Solids: 71.9 Date Samp/Recv: 07/24/2001 07/24/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	0.50	U			9010	08/03/2001
Cyanide - Total	UG/G	2.8				9010	07/31/2001

Comments:

IT CORP

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-4

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7008

Matrix (soil/water): SOIL Lab Sample ID: AD114573

Level (low/med): LOW Date Received: 7/24/01

% Solids: 56

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	921			P
7440-36-0	Antimony	17.8	U		P
7440-38-2	Arsenic	2.2			P
7440-39-3	Barium	3.8			P
7440-41-7	Beryllium	0.89	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	461000			P
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt	3.6	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	1290			P
7439-92-1	Lead	8.9	U		P
7439-95-4	Magnesium	2580			P
7439-96-5	Manganese	146			P
7440-02-0	Nickel	5.3			P
7440-09-7	Potassium	357	U	N	P
7782-49-2	Selenium	5.4	U		P
7440-22-4	Silver	1.8	U		P
7439-97-6	Mercury	0.167	U		CV
7440-23-5	Sodium	178	U		P
7440-28-0	Thallium	10.7	U		P
7440-62-2	Vanadium	2.8			P
7440-66-6	Zinc	4.2			P

Color Before: WHITE Clarity Before: Texture: SAND

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000917
Client Sample No.

ITGP-4

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A1700802

% Solids: 56.1 Date Samp/Recv: 07/24/2001 07/24/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	0.50	U			9010	07/31/2001
Cyanide - Total	UG/G	0.50	U			9010	07/31/2001

Comments:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: ITGP-5

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1700803

ample wt/vol: 30.15 (g/mL) G Lab File ID: Y48441.RR

evel: (low/med) LOW Date Samp/Recv: 07/24/2001 07/24/2001

Moisture: 6.7 decanted: (Y/N) N Date Extracted: 07/31/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	400	
208-96-8	Acenaphthylene	360	U
120-12-7	Anthracene	1300	
56-55-3	Benzo(a)anthracene	3200	
205-99-2	Benzo(b)fluoranthene	3500	
207-08-9	Benzo(k)fluoranthene	2500	
191-24-2	Benzo(ghi)perylene	1200	
50-32-8	Benzo(a)pyrene	2800	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1400	U
111-91-1	Bis(2-chloroethoxy) methane	360	U
111-44-4	Bis(2-chloroethyl) ether	360	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	360	U
117-81-7	Bis(2-ethylhexyl) phthalate	530	U
101-55-3	4-Bromophenyl phenyl ether	530	U
85-68-7	Butyl benzyl phthalate	360	U
106-47-8	4-Chloroaniline	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-58-7	2-Chloronaphthalene	360	U
95-57-8	2-Chlorophenol	360	U
7005-72-3	4-Chlorophenyl phenyl ether	360	U
218-01-9	Chrysene	3200	
53-70-3	Dibenzo(a,h)anthracene	490	
132-64-9	Dibenzofuran	300	J
84-74-2	Di-n-butyl phthalate	360	U
95-50-1	1,2-Dichlorobenzene	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	360	U
105-67-9	2,4-Dimethylphenol	530	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-5

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1700803

mple wt/vol: 30.15 (g/mL) G Lab File ID: Y48441.RR

evel: (low/med) LOW Date Samp/Recv: 07/24/2001 07/24/2001

Moisture: 6.7 decanted: (Y/N) N Date Extracted: 07/31/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	360	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	360	U
606-20-2	2,6-Dinitrotoluene	530	U
117-84-0	Di-n-octyl phthalate	360	U
206-44-0	Fluoranthene	7200	
86-73-7	Fluorene	480	J
118-74-1	Hexachlorobenzene	360	U
87-68-3	Hexachlorobutadiene	360	U
77-47-4	Hexachlorocyclopentadiene	530	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	1200	
78-59-1	Isophorone	360	U
91-57-6	2-Methylnaphthalene	360	U
95-48-7	2-Methylphenol	710	U
106-44-5	4-Methylphenol	360	U
91-20-3	Naphthalene	350	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	640	U
88-75-5	2-Nitrophenol	360	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	360	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	5800	
108-95-2	Phenol	710	U
129-00-0	Pyrene	5700	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012

Client No.

ITGP-5

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1700803

ample wt/vol: 30.15 (g/mL) G Lab File ID: Y48441.RR

evel: (low/med) LOW Date Samp/Recv: 07/24/2001 07/24/2001

Moisture: 6.7 decanted: (Y/N) N Date Extracted: 07/31/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1100	U

IT CORP

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-5

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7008

Matrix (soil/water): SOIL Lab Sample ID: AD114576

Level (low/med): LOW Date Received: 7/24/01

% Solids: 93

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5020			P
7440-36-0	Antimony	10.9	U		P
7440-38-2	Arsenic	78.6			P
7440-39-3	Barium	75.4			P
7440-41-7	Beryllium	0.55	U		P
7440-43-9	Cadmium	1.5			P
7440-70-2	Calcium	20100			P
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt	2.9			P
7440-50-8	Copper	50.4			P
7439-89-6	Iron	25100			P
7439-92-1	Lead	163			P
7439-95-4	Magnesium	2050			P
7439-96-5	Manganese	158			P
7440-02-0	Nickel	7.4			P
7440-09-7	Potassium	456		N	P
7782-49-2	Selenium	3.3	U		P
7440-22-4	Silver	1.1	U		P
7439-97-6	Mercury	0.651			CV
7440-23-5	Sodium	379			P
7440-28-0	Thallium	6.6	U		P
7440-62-2	Vanadium	15.9			P
7440-66-6	Zinc	480			P

Color Before: BROWN Clarity Before: Texture: SILT

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000918

Client Sample No.

ITGP-5

a ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

latrix (soil/water): SOIL Lab Sample ID: A1700803

Solids: 93.3 Date Samp/Recv: 07/24/2001 07/24/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	2.0				9010	08/03/2001
Cyanide - Total	UG/G	2.0				9010	07/31/2001

omments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

ITGP-6 (4-8)

ıb ..ıne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1707109

ımple wt/vol: 5.18 (g/mL) G Lab File ID: P5137.RR

:vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 45.7 Heated Purge: Y Date Analyzed: 08/03/2001

: Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

›il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	210	
71-43-2	Benzene	4	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	39	
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	4	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	6	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	7	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	9	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000029

Client No.

ITGP-6 (4-8)

ab ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707109

ample wt/vol: 30.58 (g/mL) G Lab File ID: X48525.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1300	
208-96-8	Acenaphthylene	340	U
120-12-7	Anthracene	3800	
56-55-3	Benzo(a)anthracene	6400	
205-99-2	Benzo(b)fluoranthene	5500	
207-08-9	Benzo(k)fluoranthene	2200	
191-24-2	Benzo(ghi)perylene	1600	
50-32-8	Benzo(a)pyrene	4900	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	340	U
111-91-1	Bis(2-chloroethoxy) methane	340	U
111-44-4	Bis(2-chloroethyl) ether	340	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	340	U
117-81-7	Bis(2-ethylhexyl) phthalate	340	U
101-55-3	4-Bromophenyl phenyl ether	340	U
85-68-7	Butyl benzyl phthalate	340	U
106-47-8	4-Chloroaniline	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-58-7	2-Chloronaphthalene	340	U
95-57-8	2-Chlorophenol	340	U
7005-72-3	4-Chlorophenyl phenyl ether	340	U
218-01-9	Chrysene	5700	
53-70-3	Dibenzo(a,h)anthracene	550	
132-64-9	Dibenzofuran	940	
84-74-2	Di-n-butyl phthalate	340	U
95-50-1	1,2-Dichlorobenzene	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	340	U
84-66-2	Diethyl phthalate	340	U
105-67-9	2,4-Dimethylphenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-6 (4-8)

ab ..ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707109

ample wt/vol: 30.58 (g/mL) G Lab File ID: X48525.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	340	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
117-84-0	Di-n-octyl phthalate	340	U
206-44-0	Fluoranthene	13000	
86-73-7	Fluorene	1700	
118-74-1	Hexachlorobenzene	340	U
87-68-3	Hexachlorobutadiene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
67-72-1	Hexachloroethane	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	2100	
78-59-1	Isophorone	340	U
91-57-6	2-Methylnaphthalene	340	U
95-48-7	2-Methylphenol	340	U
106-44-5	4-Methylphenol	340	U
91-20-3	Naphthalene	810	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	340	U
88-75-5	2-Nitrophenol	340	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	13000	
108-95-2	Phenol	340	U
129-00-0	Pyrene	11000	
120-82-1	1,2,4-Trichlorobenzene	340	U
95-95-4	2,4,5-Trichlorophenol	800	U

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NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-6 (4-8)

ıb ıvame: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1707109

ımple wt/vol: 30.58 (g/mL) G Lab File ID: X48525.RR

ıvel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 08/03/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 10.00

ıC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-6 (4-8) RE

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707109RE

ample wt/vol: 30.35 (g/mL) G Lab File ID: X48719.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 08/17/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1300	
208-96-8	Acenaphthylene	340	U
120-12-7	Anthracene	3800	
56-55-3	Benzo(a)anthracene	7400	
205-99-2	Benzo(b)fluoranthene	6600	
207-08-9	Benzo(k)fluoranthene	2800	
191-24-2	Benzo(ghi)perylene	3300	
50-32-8	Benzo(a)pyrene	6200	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	340	U
111-91-1	Bis(2-chloroethoxy) methane	340	U
111-44-4	Bis(2-chloroethyl) ether	340	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	340	U
117-81-7	Bis(2-ethylhexyl) phthalate	340	U
101-55-3	4-Bromophenyl phenyl ether	340	U
85-68-7	Butyl benzyl phthalate	340	U
106-47-8	4-Chloroaniline	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-58-7	2-Chloronaphthalene	340	U
95-57-8	2-Chlorophenol	340	U
7005-72-3	4-Chlorophenyl phenyl ether	340	U
218-01-9	Chrysene	6500	
53-70-3	Dibenzo(a,h)anthracene	890	
132-64-9	Dibenzofuran	760	
84-74-2	Di-n-butyl phthalate	340	U
95-50-1	1,2-Dichlorobenzene	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	340	U
84-66-2	Diethyl phthalate	340	U
105-67-9	2,4-Dimethylphenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

ITGP-6 (4-8) RE

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707109RE

ample wt/vol: 30.35 (g/mL) G Lab File ID: X48719.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 08/17/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	340	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
117-84-0	Di-n-octyl phthalate	340	U
206-44-0	Fluoranthene	15000	
86-73-7	Fluorene	1500	
118-74-1	Hexachlorobenzene	340	U
87-68-3	Hexachlorobutadiene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
67-72-1	Hexachloroethane	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	3800	
78-59-1	Isophorone	340	U
91-57-6	2-Methylnaphthalene	340	U
95-48-7	2-Methylphenol	340	U
106-44-5	4-Methylphenol	340	U
91-20-3	Naphthalene	430	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	340	U
88-75-5	2-Nitrophenol	340	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	13000	
108-95-2	Phenol	340	U
129-00-0	Pyrene	11000	
120-82-1	1,2,4-Trichlorobenzene	340	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034

Client No.

ITGP-6 (4-8) RE

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707109RE

mple wt/vol: 30.35 (g/mL) G Lab File ID: X48719.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.1 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	340	U

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IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

000087

SAMPLE NO.

ITGP-6 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114446

evel (low/med): LOW Date Received: 7/25/01

Solids: 72

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5720		E	P
7440-36-0	Antimony	13.6	U		P
7440-38-2	Arsenic	3.8			P
7440-39-3	Barium	64.2			P
7440-41-7	Beryllium	0.68	U		P
7440-43-9	Cadmium	0.68	U		P
7440-70-2	Calcium	57200		E	P
7440-47-3	Chromium	9.9			P
7440-48-4	Cobalt	3.5			P
7440-50-8	Copper	18.4			P
7439-89-6	Iron	10200		E	P
7439-92-1	Lead	60.6			P
7439-95-4	Magnesium	9830		E	P
7439-96-5	Manganese	256			P
7440-02-0	Nickel	9.7			P
7440-09-7	Potassium	842			P
7782-49-2	Selenium	4.1	U		P
7439-97-6	Mercury	0.134	U		CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	588			P
7440-28-0	Thallium	8.2	U		P
7440-62-2	Vanadium	10.9			P
7440-66-6	Zinc	64.7			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000091

Client Sample No.

ITGP-6 (4-8)

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1707109

Solids: 71.9 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/03/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

ITGP-7 (8-12)

b .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707110

mple wt/vol: 5.10 (g/mL) G Lab File ID: P5138.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 45.5 Heated Purge: Y Date Analyzed: 08/03/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	45	
71-43-2	Benzene	3	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	3	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5	U
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	6	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	4	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000035

Client No.

ITGP-7 (8-12)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707110

mple wt/vol: 30.06 (g/mL) G Lab File ID: X48526.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 45.1 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	74	J
205-99-2	Benzo(b)fluoranthene	75	J
207-08-9	Benzo(k)fluoranthene	27	J
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	52	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	40	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	63	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000036

Client No.

ITGP-7 (8-12)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707110

ample wt/vol: 30.06 (g/mL) G Lab File ID: X48526.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 45.1 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	180	J
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	110	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	120	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

000037

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-7 (8-12)

ab ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707110

ample wt/vol: 30.06 (g/mL) G Lab File ID: X48526.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 45.1 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

ajection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

000088

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-7 (8-12)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114447

evel (low/med): LOW Date Received: 7/25/01

Solids: 55

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4430		E	P
7440-36-0	Antimony	17.5	U		P
7440-38-2	Arsenic	2.2			P
7440-39-3	Barium	799			P
7440-41-7	Beryllium	0.87	U		P
7440-43-9	Cadmium	0.87	U		P
7440-70-2	Calcium	231000		E	P
7440-47-3	Chromium	4.8			P
7440-48-4	Cobalt	3.5	U		P
7440-50-8	Copper	76.9			P
7439-89-6	Iron	5060		E	P
7439-92-1	Lead	367			P
7439-95-4	Magnesium	12400		E	P
7439-96-5	Manganese	2110			P
7440-02-0	Nickel	12.8			P
7440-09-7	Potassium	2660			P
7782-49-2	Selenium	5.2	U		P
7439-97-6	Mercury	0.165	U		CV
7440-22-4	Silver	1.7	U		P
7440-23-5	Sodium	1210			P
7440-28-0	Thallium	10.5	U		P
7440-62-2	Vanadium	7.3			P
7440-66-6	Zinc	169			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Co ents: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000092

Client Sample No.

ITGP-7 (8-12)

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1707110

Solids: 55.0 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	07/31/2001
yanide - Total	UG/G	0.51				9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

ITGP-8 (4-8)

ıb .ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1707108

ımple wt/vol: 5.09 (g/mL) G Lab File ID: P5136.RR

:vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 24.2 Heated Purge: Y Date Analyzed: 08/03/2001

! Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

ɔil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	61	
71-43-2	Benzene	4	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	9	J
75-15-0	Carbon Disulfide	4	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	4	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	6	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	12	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-8 (4-8)

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707108

ample wt/vol: 30.03 (g/mL) G Lab File ID: X48524.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1200	
208-96-8	Acenaphthylene	340	U
120-12-7	Anthracene	3300	
56-55-3	Benzo(a)anthracene	8400	
205-99-2	Benzo(b)fluoranthene	9600	
207-08-9	Benzo(k)fluoranthene	3500	
191-24-2	Benzo(ghi)perylene	3300	
50-32-8	Benzo(a)pyrene	8200	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	340	U
111-91-1	Bis(2-chloroethoxy) methane	340	U
111-44-4	Bis(2-chloroethyl) ether	340	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	340	U
117-81-7	Bis(2-ethylhexyl) phthalate	340	U
101-55-3	4-Bromophenyl phenyl ether	340	U
85-68-7	Butyl benzyl phthalate	340	U
106-47-8	4-Chloroaniline	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-58-7	2-Chloronaphthalene	340	U
95-57-8	2-Chlorophenol	340	U
7005-72-3	4-Chlorophenyl phenyl ether	340	U
218-01-9	Chrysene	7200	
53-70-3	Dibenzo(a,h)anthracene	1100	
132-64-9	Dibenzofuran	740	
84-74-2	Di-n-butyl phthalate	340	U
95-50-1	1,2-Dichlorobenzene	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	340	U
84-66-2	Diethyl phthalate	340	U
105-67-9	2,4-Dimethylphenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-8 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707108

mple wt/vol: 30.03 (g/mL) G Lab File ID: X48524.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	340	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
117-84-0	Di-n-octyl phthalate	340	U
206-44-0	Fluoranthene	15000	
86-73-7	Fluorene	1400	
118-74-1	Hexachlorobenzene	340	U
87-68-3	Hexachlorobutadiene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
67-72-1	Hexachloroethane	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	4300	
78-59-1	Isophorone	340	U
91-57-6	2-Methylnaphthalene	340	U
95-48-7	2-Methylphenol	340	U
106-44-5	4-Methylphenol	340	U
91-20-3	Naphthalene	1300	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	340	U
88-75-5	2-Nitrophenol	340	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	9900	
108-95-2	Phenol	340	U
129-00-0	Pyrene	10000	
120-82-1	1,2,4-Trichlorobenzene	340	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040

Client No.

ITGP-8 (4-8)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707108

mple wt/vol: 30.03 (g/mL) G Lab File ID: X48524.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000041

Client No.

ITGP-8 (4-8) RE

ıb Name: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1707108RE

ımple wt/vol: 30.03 (g/mL) G Lab File ID: X48750.RR

:vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/17/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 10.00

ℂ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1700	
208-96-8	Acenaphthylene	340	U
120-12-7	Anthracene	4700	
56-55-3	Benzo(a)anthracene	16000	
205-99-2	Benzo(b)fluoranthene	18000	
207-08-9	Benzo(k)fluoranthene	5800	
191-24-2	Benzo(ghi)perylene	8100	
50-32-8	Benzo(a)pyrene	16000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	340	U
111-91-1	Bis(2-chloroethoxy) methane	340	U
111-44-4	Bis(2-chloroethyl) ether	340	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	340	U
117-81-7	Bis(2-ethylhexyl) phthalate	340	U
101-55-3	4-Bromophenyl phenyl ether	340	U
85-68-7	Butyl benzyl phthalate	340	U
106-47-8	4-Chloroaniline	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-58-7	2-Chloronaphthalene	340	U
95-57-8	2-Chlorophenol	340	U
7005-72-3	4-Chlorophenyl phenyl ether	340	U
218-01-9	Chrysene	13000	
53-70-3	Dibenzo(a,h)anthracene	2500	
132-64-9	Dibenzofuran	1100	
84-74-2	Di-n-butyl phthalate	340	U
95-50-1	1,2-Dichlorobenzene	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	340	U
84-66-2	Diethyl phthalate	340	U
105-67-9	2,4-Dimethylphenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000042

Client No.

ITGP-8 (4-8) RE

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707108RE

mple wt/vol: 30.03 (g/mL) G Lab File ID: X48750.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	340	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
117-84-0	Di-n-octyl phthalate	340	U
206-44-0	Fluoranthene	29000	
86-73-7	Fluorene	2200	
118-74-1	Hexachlorobenzene	340	U
87-68-3	Hexachlorobutadiene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
67-72-1	Hexachloroethane	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	2200	
78-59-1	Isophorone	340	U
91-57-6	2-Methylnaphthalene	310	J
95-48-7	2-Methylphenol	340	U
106-44-5	4-Methylphenol	340	U
91-20-3	Naphthalene	1700	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	340	U
88-75-5	2-Nitrophenol	340	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	15000	
108-95-2	Phenol	340	U
129-00-0	Pyrene	17000	
120-82-1	1,2,4-Trichlorobenzene	340	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-8 (4-8) RE

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707108RE

mple wt/vol: 30.03 (g/mL) G Lab File ID: X48750.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	340	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-8 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114445

evel (low/med): LOW Date Received: 7/25/01

Solids: 73

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5840		E	P
7440-36-0	Antimony	13.3	U		P
7440-38-2	Arsenic	13.4			P
7440-39-3	Barium	57.8			P
7440-41-7	Beryllium	0.67	U		P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	110000		E	P
7440-47-3	Chromium	7.0			P
7440-48-4	Cobalt	4.3			P
7440-50-8	Copper	36.9			P
7439-89-6	Iron	17500		E	P
7439-92-1	Lead	158			P
7439-95-4	Magnesium	2630		E	P
7439-96-5	Manganese	183			P
7440-02-0	Nickel	8.9			P
7440-09-7	Potassium	737			P
7782-49-2	Selenium	4.1			P
7439-97-6	Mercury	0.521			CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	628			P
7440-28-0	Thallium	8.0	U		P
7440-62-2	Vanadium	12.8			P
7440-66-6	Zinc	57.7			P

Color Before: BROWN Clarity Before: Texture:

Color After: YELLOW Clarity After: Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000093

Client Sample No.

ITGP-8 (4-8)

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1707108

Solids: 73.5 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	132				9010	08/03/2001
yanide - Total	UG/G	46.2				9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

ITGP-9 (4-8)

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1707111

Sample wt/vol: 5.06 (g/mL) G Lab File ID: P5151.RR

Level: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 26.7 Heated Purge: Y Date Analyzed: 08/04/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	340	B
71-43-2	Benzene	16	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	53	
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	15	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	7	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000044

Client No.

ITGP-9 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707111

ample wt/vol: 30.64 (g/mL) G Lab File ID: X48554.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.4 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	46	J
56-55-3	Benzo(a)anthracene	140	J
205-99-2	Benzo(b)fluoranthene	140	J
207-08-9	Benzo(k)fluoranthene	44	J
191-24-2	Benzo(ghi)perylene	34	J
50-32-8	Benzo(a)pyrene	120	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	25	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	120	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-9 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707111

ample wt/vol: 30.64 (g/mL) G Lab File ID: X48554.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.4 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	280	J
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	44	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	170	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	210	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000046

Client No.

ITGP-9 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707111

ample wt/vol: 30.64 (g/mL) G Lab File ID: X48554.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 28.4 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-9 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114448

evel (low/med): LOW Date Received: 7/25/01

Solids: 72

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11100		E	P
7440-36-0	Antimony	14.6	U		P
7440-38-2	Arsenic	1.5	U		P
7440-39-3	Barium	180			P
7440-41-7	Beryllium	0.73	U		P
7440-43-9	Cadmium	0.73	U		P
7440-70-2	Calcium	6510		E	P
7440-47-3	Chromium	20.6			P
7440-48-4	Cobalt	6.9			P
7440-50-8	Copper	12.8			P
7439-89-6	Iron	15200		E	P
7439-92-1	Lead	17.7			P
7439-95-4	Magnesium	2970		E	P
7439-96-5	Manganese	253			P
7440-02-0	Nickel	39.9			P
7440-09-7	Potassium	951			P
7782-49-2	Selenium	4.4	U		P
7439-97-6	Mercury	0.145	U		CV
7440-22-4	Silver	1.5	U		P
7440-23-5	Sodium	146	U		P
7440-28-0	Thallium	8.7	U		P
7440-62-2	Vanadium	21.0			P
7440-66-6	Zinc	87.8			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000094

Client Sample No.

ITGP-9 (4-8)

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1707111

Solids: 71.6 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	07/31/2001
anide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

ITGP-10 (4-8)

ab ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707106

ample wt/vol: 5.13 (g/mL) G Lab File ID: P5134.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 26.6 Heated Purge: Y Date Analyzed: 08/03/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	210	
71-43-2	Benzene	12	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	8	J
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	11	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000047

Client No.

ITGP-10 (4-8)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707106

mple wt/vol: 30.05 (g/mL) G Lab File ID: X48522.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	310	J
205-99-2	Benzo(b)fluoranthene	230	J
207-08-9	Benzo(k)fluoranthene	70	J
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	210	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	260	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000048

Client No.

ITGP-10 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707106

ample wt/vol: 30.05 (g/mL) G Lab File ID: X48522.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	490	
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	440	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

000049

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-10 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707106

mple wt/vol: 30.05 (g/mL) G Lab File ID: X48522.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000050

Client No.

ITGP-10 (4-8) RE

ıb ..me: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1707106RE

ımple wt/vol: 30.24 (g/mL) G Lab File ID: X48748.RR

:vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	300	J
205-99-2	Benzo(b)fluoranthene	270	J
207-08-9	Benzo(k)fluoranthene	300	J
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	270	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	300	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000051

Client No.

ITGP-10 (4-8) RE

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707106RE

mple wt/vol: 30.24 (g/mL) G Lab File ID: X48748.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	440	
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	380	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000052

Client No.

ITGP-10 (4-8) RE

ab ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707106RE

ample wt/vol: 30.24 (g/mL) G Lab File ID: X48748.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/17/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ijection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

TL BUFFALO

000980

I T CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-10 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114443

evel (low/med): LOW Date Received: 7/25/01

Solids: 75

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6210		E	P
7440-36-0	Antimony	13.3	U		P
7440-38-2	Arsenic	3.8			P
7440-39-3	Barium	106			P
7440-41-7	Beryllium	0.68			P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	25400		E	P
7440-47-3	Chromium	7.3			P
7440-48-4	Cobalt	5.2			P
7440-50-8	Copper	16.2			P
7439-89-6	Iron	10900		E	P
7439-92-1	Lead	50.3			P
7439-95-4	Magnesium	6240		E	P
7439-96-5	Manganese	308			P
7440-02-0	Nickel	10.3			P
7440-09-7	Potassium	789			P
7782-49-2	Selenium	4.0	U		P
7439-97-6	Mercury	0.151			CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	278			P
7440-28-0	Thallium	8.0	U		P
7440-62-2	Vanadium	14.3			P
7440-66-6	Zinc	77.0			P

Color Before: BROWN Clarity Before: Texture:

Color After: YELLOW Clarity After: Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000095

Client Sample No.

ITGP-10 (4-8)

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1707106

)olids: 75.0 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
ienable Cyanide	MG/KG	0.50	U			9010	08/03/2001
/anide - Total	UG/G	0.50	U			9010	08/07/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

ITGP-11 (4-8)

a. me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707104

ample wt/vol: 5.18 (g/mL) G Lab File ID: P5122.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 31.8 Heated Purge: Y Date Analyzed: 08/03/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	140	B
71-43-2	Benzene	2	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	27	
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	3	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	BJ
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	7	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000053

Client No.

ITGP-11 (4-8)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707104

mple wt/vol: 30.93 (g/mL) G Lab File ID: X48520.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.9 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	800	
208-96-8	Acenaphthylene	340	U
120-12-7	Anthracene	2300	
56-55-3	Benzo(a)anthracene	6200	
205-99-2	Benzo(b)fluoranthene	5900	
207-08-9	Benzo(k)fluoranthene	2100	
191-24-2	Benzo(ghi)perylene	2700	
50-32-8	Benzo(a)pyrene	5400	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	340	U
111-91-1	Bis(2-chloroethoxy) methane	340	U
111-44-4	Bis(2-chloroethyl) ether	340	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	340	U
117-81-7	Bis(2-ethylhexyl) phthalate	340	U
101-55-3	4-Bromophenyl phenyl ether	340	U
85-68-7	Butyl benzyl phthalate	340	U
106-47-8	4-Chloroaniline	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-58-7	2-Chloronaphthalene	340	U
95-57-8	2-Chlorophenol	340	U
7005-72-3	4-Chlorophenyl phenyl ether	340	U
218-01-9	Chrysene	5800	
53-70-3	Dibenzo(a,h)anthracene	740	
132-64-9	Dibenzofuran	460	
84-74-2	Di-n-butyl phthalate	340	U
95-50-1	1,2-Dichlorobenzene	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	340	U
84-66-2	Diethyl phthalate	340	U
105-67-9	2,4-Dimethylphenol	340	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000054

Client No.

ITGP-11 (4-8)

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707104

mple wt/vol: 30.93 (g/mL) G Lab File ID: X48520.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.9 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	340	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
117-84-0	Di-n-octyl phthalate	340	U
206-44-0	Fluoranthene	13000	
86-73-7	Fluorene	820	
118-74-1	Hexachlorobenzene	340	U
87-68-3	Hexachlorobutadiene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
67-72-1	Hexachloroethane	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	3200	
78-59-1	Isophorone	340	U
91-57-6	2-Methylnaphthalene	340	U
95-48-7	2-Methylphenol	340	U
106-44-5	4-Methylphenol	340	U
91-20-3	Naphthalene	1200	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	340	U
88-75-5	2-Nitrophenol	340	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	340	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	11000	
108-95-2	Phenol	340	U
129-00-0	Pyrene	11000	
120-82-1	1,2,4-Trichlorobenzene	340	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000055

Client No.

ITGP-11 (4-8)

o Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707104

mple wt/vol: 30.93 (g/mL) G Lab File ID: X48520.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.9 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	340	U

TL BUFFALO

IT CORPORATION

000081

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-11 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114441

evel (low/med): LOW Date Received: 7/25/01

Solids: 70

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5460		E	P
7440-36-0	Antimony	13.7	U		P
7440-38-2	Arsenic	8.8			P
7440-39-3	Barium	139			P
7440-41-7	Beryllium	0.69	U		P
7440-43-9	Cadmium	0.69	U		P
7440-70-2	Calcium	18600		E	P
7440-47-3	Chromium	11.9			P
7440-48-4	Cobalt	3.5			P
7440-50-8	Copper	97.0			P
7439-89-6	Iron	15500		E	P
7439-92-1	Lead	273			P
7439-95-4	Magnesium	3480		E	P
7439-96-5	Manganese	163			P
7440-02-0	Nickel	10.1			P
7440-09-7	Potassium	452			P
7782-49-2	Selenium	4.1	U		P
7439-97-6	Mercury	0.252			CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	423			P
7440-28-0	Thallium	8.2	U		P
7440-62-2	Vanadium	14.0			P
7440-66-6	Zinc	202			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000096

Client Sample No.

ITGP-11 (4-8)

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1707104

Solids: 70.1 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	07/31/2001
yanide - Total	UG/G	1.1				9010	08/07/2001

mments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

ITGP-12 (4-8)

ab .me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707105

ample wt/vol: 5.02 (g/mL) G Lab File ID: P5133.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 26.5 Heated Purge: Y Date Analyzed: 08/03/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	150	
71-43-2	Benzene	19	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	33	
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	7	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	11	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	13	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	25	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-12 (4-8)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707105

mple wt/vol: 30.54 (g/mL) G Lab File ID: X48553.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 35.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	4700	
208-96-8	Acenaphthylene	1200	
120-12-7	Anthracene	4000	
56-55-3	Benzo(a)anthracene	6900	
205-99-2	Benzo(b)fluoranthene	9000	
207-08-9	Benzo(k)fluoranthene	2600	
191-24-2	Benzo(ghi)perylene	1900	
50-32-8	Benzo(a)pyrene	6700	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	380	U
111-91-1	Bis(2-chloroethoxy) methane	380	U
111-44-4	Bis(2-chloroethyl) ether	380	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	380	U
117-81-7	Bis(2-ethylhexyl) phthalate	380	U
101-55-3	4-Bromophenyl phenyl ether	380	U
85-68-7	Butyl benzyl phthalate	380	U
106-47-8	4-Chloroaniline	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-58-7	2-Chloronaphthalene	380	U
95-57-8	2-Chlorophenol	380	U
7005-72-3	4-Chlorophenyl phenyl ether	380	U
218-01-9	Chrysene	5800	
53-70-3	Dibenzo(a,h)anthracene	940	
132-64-9	Dibenzofuran	3400	
84-74-2	Di-n-butyl phthalate	380	U
95-50-1	1,2-Dichlorobenzene	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	380	U
84-66-2	Diethyl phthalate	380	U
105-67-9	2,4-Dimethylphenol	380	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000057

Client No.

ITGP-12 (4-8)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707105

mple wt/vol: 30.54 (g/mL) G Lab File ID: X48553.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 35.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	380	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	380	U
606-20-2	2,6-Dinitrotoluene	380	U
117-84-0	Di-n-octyl phthalate	380	U
206-44-0	Fluoranthene	8500	
86-73-7	Fluorene	5300	
118-74-1	Hexachlorobenzene	380	U
87-68-3	Hexachlorobutadiene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
67-72-1	Hexachloroethane	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	2400	
78-59-1	Isophorone	380	U
91-57-6	2-Methylnaphthalene	8800	
95-48-7	2-Methylphenol	380	U
106-44-5	4-Methylphenol	380	U
91-20-3	Naphthalene	11000	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	380	U
88-75-5	2-Nitrophenol	380	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	380	U
621-64-7	N-Nitroso-Di-n-propylamine	380	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	9000	
108-95-2	Phenol	380	U
129-00-0	Pyrene	7800	
120-82-1	1,2,4-Trichlorobenzene	380	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000058

Client No.

ITGP-12 (4-8)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707105

mple wt/vol: 30.54 (g/mL) G Lab File ID: X48553.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 35.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	380	U

TL BUFFALO

IT CORPORATION

000082

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-12 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114442

evel (low/med): LOW Date Received: 7/25/01

Solids: 65

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7270		E	P
7440-36-0	Antimony	15.7	U		P
7440-38-2	Arsenic	5.0			P
7440-39-3	Barium	133			P
7440-41-7	Beryllium	0.79	U		P
7440-43-9	Cadmium	0.79	U		P
7440-70-2	Calcium	24700		E	P
7440-47-3	Chromium	12.5			P
7440-48-4	Cobalt	6.0			P
7440-50-8	Copper	67.1			P
7439-89-6	Iron	14100		E	P
7439-92-1	Lead	212			P
7439-95-4	Magnesium	8580		E	P
7439-96-5	Manganese	219			P
7440-02-0	Nickel	14.4			P
7440-09-7	Potassium	1130			P
7782-49-2	Selenium	4.7	U		P
7439-97-6	Mercury	1.1			CV
7440-22-4	Silver	1.6	U		P
7440-23-5	Sodium	205			P
7440-28-0	Thallium	9.4	U		P
7440-62-2	Vanadium	15.6			P
7440-66-6	Zinc	110			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000097

Client Sample No.

ITGP-12 (4-8)

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1707105

Solids: 64.8 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/03/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021

Client No.

ITGP-13 (4-8)

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1707103

Sample wt/vol: 5.11 (g/mL) G Lab File ID: P5121.RR

Level: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

% Moisture: not dec. 38.0 Heated Purge: Y Date Analyzed: 08/03/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	450	B
71-43-2	Benzene	30	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	120	
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	510	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	95	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	1800	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

ITGP-13 (4-8) DL

b ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707103DL

mple wt/vol: 4.07 (g/mL) G Lab File ID: F3387.RR

vel: (low/med) MED Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 38.0 Heated Purge: N Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	625	U
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	625	U
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	4400	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	440	DJ
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	18000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-13 (4-8)

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1707103

nple wt/vol: 30.21 (g/mL) G Lab File ID: X48517.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	42000	
208-96-8	Acenaphthylene	2200	
120-12-7	Anthracene	30000	
56-55-3	Benzo(a)anthracene	8800	
205-99-2	Benzo(b)fluoranthene	5500	
207-08-9	Benzo(k)fluoranthene	2200	
191-24-2	Benzo(ghi)perylene	1500	
50-32-8	Benzo(a)pyrene	4700	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	350	U
111-91-1	Bis(2-chloroethoxy) methane	350	U
111-44-4	Bis(2-chloroethyl) ether	350	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	350	U
117-81-7	Bis(2-ethylhexyl) phthalate	350	U
101-55-3	4-Bromophenyl phenyl ether	350	U
85-68-7	Butyl benzyl phthalate	350	U
106-47-8	4-Chloroaniline	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-58-7	2-Chloronaphthalene	350	U
95-57-8	2-Chlorophenol	350	U
7005-72-3	4-Chlorophenyl phenyl ether	350	U
218-01-9	Chrysene	7300	
53-70-3	Dibenzo(a,h)anthracene	680	
132-64-9	Dibenzofuran	38000	
84-74-2	Di-n-butyl phthalate	350	U
95-50-1	1,2-Dichlorobenzene	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	350	U
84-66-2	Diethyl phthalate	350	U
105-67-9	2,4-Dimethylphenol	350	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000060

Client No.

ITGP-13 (4-8)

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix: (soil/water) SOIL Lab Sample ID: A1707103

mple wt/vol: 30.21 (g/mL) G Lab File ID: X48517.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ɲcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	350	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
117-84-0	Di-n-octyl phthalate	350	U
206-44-0	Fluoranthene	26000	
86-73-7	Fluorene	53000	
118-74-1	Hexachlorobenzene	350	U
87-68-3	Hexachlorobutadiene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
67-72-1	Hexachloroethane	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	1800	
78-59-1	Isophorone	350	U
91-57-6	2-Methylnaphthalene	220000	E
95-48-7	2-Methylphenol	350	U
106-44-5	4-Methylphenol	350	U
91-20-3	Naphthalene	190000	BE
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	350	U
88-75-5	2-Nitrophenol	350	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	350	U
621-64-7	N-Nitroso-Di-n-propylamine	350	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	71000	
108-95-2	Phenol	350	U
129-00-0	Pyrene	18000	
120-82-1	1,2,4-Trichlorobenzene	350	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000051

Client No.

ITGP-13 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707103

mple wt/vol: 30.21 (g/mL) G Lab File ID: X48517.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	350	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000062

Client No.

ITGP-13 (4-8) DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707103DL

ample wt/vol: 30.21 (g/mL) G Lab File ID: X48609.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.2 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

njection Volume: 1.00 (uL) Dilution Factor: 50.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	50000	
208-96-8	Acenaphthylene	1800	U
120-12-7	Anthracene	33000	
56-55-3	Benzo(a)anthracene	9300	
205-99-2	Benzo(b)fluoranthene	4900	
207-08-9	Benzo(k)fluoranthene	1700	J
191-24-2	Benzo(ghi)perylene	1800	U
50-32-8	Benzo(a)pyrene	4200	
65-85-0	Benzoic acid	1800	U
100-51-6	Benzyl alcohol	1800	U
111-91-1	Bis(2-chloroethoxy) methane	1800	U
111-44-4	Bis(2-chloroethyl) ether	1800	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1800	U
117-81-7	Bis(2-ethylhexyl) phthalate	1800	U
101-55-3	4-Bromophenyl phenyl ether	1800	U
85-68-7	Butyl benzyl phthalate	1800	U
106-47-8	4-Chloroaniline	1800	U
59-50-7	4-Chloro-3-methylphenol	1800	U
91-58-7	2-Chloronaphthalene	1800	U
95-57-8	2-Chlorophenol	1800	U
7005-72-3	4-Chlorophenyl phenyl ether	1800	U
218-01-9	Chrysene	7100	
53-70-3	Dibenzo(a,h)anthracene	1800	U
132-64-9	Dibenzofuran	46000	
84-74-2	Di-n-butyl phthalate	1800	U
95-50-1	1,2-Dichlorobenzene	1800	U
541-73-1	1,3-Dichlorobenzene	1800	U
106-46-7	1,4-Dichlorobenzene	1800	U
91-94-1	3,3'-Dichlorobenzidine	1800	U
120-83-2	2,4-Dichlorophenol	1800	U
84-66-2	Diethyl phthalate	1800	U
105-67-9	2,4-Dimethylphenol	1800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000063

Client No.

ITGP-13 (4-8) DL

ıb ..me: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1707103DL

ımple wt/vol: 30.21 (g/mL) G Lab File ID: X48609.RR

:vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 50.00

ℂ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
51-28-5	2,4-Dinitrophenol	1800	U
121-14-2	2,4-Dinitrotoluene	1800	U
606-20-2	2,6-Dinitrotoluene	1800	U
117-84-0	Di-n-octyl phthalate	1800	U
206-44-0	Fluoranthene	29000	
86-73-7	Fluorene	61000	
118-74-1	Hexachlorobenzene	1800	U
87-68-3	Hexachlorobutadiene	1800	U
77-47-4	Hexachlorocyclopentadiene	1800	U
67-72-1	Hexachloroethane	1800	U
193-39-5	Indeno(1,2,3-cd)pyrene	1800	U
78-59-1	Isophorone	1800	U
91-57-6	2-Methylnaphthalene	150000	
95-48-7	2-Methylphenol	1800	U
106-44-5	4-Methylphenol	1800	U
91-20-3	Naphthalene	250000	B
88-74-4	2-Nitroaniline	1800	U
99-09-2	3-Nitroaniline	1800	U
100-01-6	4-Nitroaniline	1800	U
98-95-3	Nitrobenzene	1800	U
88-75-5	2-Nitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
86-30-6	N-nitrosodiphenylamine	1800	U
621-64-7	N-Nitroso-Di-n-propylamine	1800	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	92000	
108-95-2	Phenol	1800	U
129-00-0	Pyrene	22000	
120-82-1	1,2,4-Trichlorobenzene	1800	U
95-95-4	2,4,5-Trichlorophenol	1800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000064

Client No.

ITGP-13 (4-8) DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707103DL

ample wt/vol: 30.21 (g/mL) G Lab File ID: X48609.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.2 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 50.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1800	U

TL BUFFALO

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IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-13 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114440

evel (low/med): LOW Date Received: 7/25/01

Solids: 71

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6790		E	P
7440-36-0	Antimony	14.7	U		P
7440-38-2	Arsenic	9.4			P
7440-39-3	Barium	210			P
7440-41-7	Beryllium	0.74	U		P
7440-43-9	Cadmium	0.74	U		P
7440-70-2	Calcium	29900		E	P
7440-47-3	Chromium	23.2			P
7440-48-4	Cobalt	5.0			P
7440-50-8	Copper	55.9			P
7439-89-6	Iron	12800		E	P
7439-92-1	Lead	483			P
7439-95-4	Magnesium	7750		E	P
7439-96-5	Manganese	225			P
7440-02-0	Nickel	12.0			P
7440-09-7	Potassium	1120			P
7782-49-2	Selenium	4.4	U		P
7439-97-6	Mercury	3.1			CV
7440-22-4	Silver	1.5	U		P
7440-23-5	Sodium	208			P
7440-28-0	Thallium	8.8	U		P
7440-62-2	Vanadium	13.7			P
7440-66-6	Zinc	882			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000098

Client Sample No.

ITGP-13 (4-8)

l .: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1707103

olids: 70.8 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	07/31/2001
anide - Total	UG/G	2.6				9010	08/07/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023

Client No.

ITGP-14 (4-8)

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707101

mple wt/vol: 5.10 (g/mL) G Lab File ID: P5119.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 22.4 Heated Purge: Y Date Analyzed: 08/02/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	32	B
71-43-2	Benzene	10	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	3	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	4	BJ
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000065

Client No.

ITGP-14 (4-8)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707101

mple wt/vol: 30.12 (g/mL) G Lab File ID: X48516.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 24.2 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	270	J
205-99-2	Benzo(b)fluoranthene	330	
207-08-9	Benzo(k)fluoranthene	110	J
191-24-2	Benzo(ghi)perylene	170	J
50-32-8	Benzo(a)pyrene	260	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	270	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000066

Client No.

ITGP-14 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707101

ample wt/vol: 30.12 (g/mL) G Lab File ID: X48516.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 24.2 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

njection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	470	
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	120	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	2100	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	450	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000067

Client No.

ITGP-14 (4-8)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707101

ample wt/vol: 30.12 (g/mL) G Lab File ID: X48516.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 24.2 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

njection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-14 (4-8)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114438

evel (low/med): LOW Date Received: 7/25/01

Solids: 76

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4810		E	P
7440-36-0	Antimony	12.9	U		P
7440-38-2	Arsenic	4.5			P
7440-39-3	Barium	39.8			P
7440-41-7	Beryllium	0.65	U		P
7440-43-9	Cadmium	0.65	U		P
7440-70-2	Calcium	4200		E	P
7440-47-3	Chromium	8.7			P
7440-48-4	Cobalt	3.8			P
7440-50-8	Copper	50.6			P
7439-89-6	Iron	12300		E	P
7439-92-1	Lead	94.6			P
7439-95-4	Magnesium	946		E	P
7439-96-5	Manganese	33.5			P
7440-02-0	Nickel	6.6			P
7440-09-7	Potassium	259	U		P
7782-49-2	Selenium	3.9	U		P
7439-97-6	Mercury	0.139	U		CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	237			P
7440-28-0	Thallium	7.8	U		P
7440-62-2	Vanadium	14.5			P
7440-66-6	Zinc	61.7			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000099

Client Sample No.

ITGP-14 (4-8)

l : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1707101

olids: 75.8 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	3.0				9010	08/03/2001
anide - Total	UG/G	4.6				9010	08/07/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

ITGP-15 (9-10)

ab .ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707102

ample wt/vol: 5.07 (g/mL) G Lab File ID: P5120.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 26.7 Heated Purge: Y Date Analyzed: 08/03/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	210	B
71-43-2	Benzene	45	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	53	
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	710	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	99	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2100	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025

Client No.

ITGP-15 (9-10) DL

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707102DL

ample wt/vol: 4.18 (g/mL) G Lab File ID: F3471.RR

evel: (low/med) MED Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 26.7 Heated Purge: N Date Analyzed: 08/08/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	625	U
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	625	U
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	3200	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	320	DJ
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	12000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-15 (9-10)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707102

ample wt/vol: 30.70 (g/mL) G Lab File ID: X48555.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.8 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	180000	E
208-96-8	Acenaphthylene	7300	
120-12-7	Anthracene	280000	E
56-55-3	Benzo(a)anthracene	52000	
205-99-2	Benzo(b)fluoranthene	44000	
207-08-9	Benzo(k)fluoranthene	17000	
191-24-2	Benzo(ghi)perylene	6400	
50-32-8	Benzo(a)pyrene	33000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	350	U
111-91-1	Bis(2-chloroethoxy) methane	350	U
111-44-4	Bis(2-chloroethyl) ether	350	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	350	U
117-81-7	Bis(2-ethylhexyl) phthalate	370	
101-55-3	4-Bromophenyl phenyl ether	350	U
85-68-7	Butyl benzyl phthalate	350	U
106-47-8	4-Chloroaniline	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-58-7	2-Chloronaphthalene	350	U
95-57-8	2-Chlorophenol	350	U
7005-72-3	4-Chlorophenyl phenyl ether	350	U
218-01-9	Chrysene	42000	
53-70-3	Dibenzo(a,h)anthracene	2900	
132-64-9	Dibenzofuran	170000	E
84-74-2	Di-n-butyl phthalate	350	U
95-50-1	1,2-Dichlorobenzene	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	350	U
84-66-2	Diethyl phthalate	350	U
105-67-9	2,4-Dimethylphenol	350	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000069

Client No.

ITGP-15 (9-10)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707102

mple wt/vol: 30.70 (g/mL) G Lab File ID: X48555.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.8 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	350	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
117-84-0	Di-n-octyl phthalate	350	U
206-44-0	Fluoranthene	130000	E
86-73-7	Fluorene	220000	E
118-74-1	Hexachlorobenzene	350	U
87-68-3	Hexachlorobutadiene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
67-72-1	Hexachloroethane	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	9000	
78-59-1	Isophorone	350	U
91-57-6	2-Methylnaphthalene	530000	E
95-48-7	2-Methylphenol	350	U
106-44-5	4-Methylphenol	350	U
91-20-3	Naphthalene	690000	BE
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	350	U
88-75-5	2-Nitrophenol	350	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	350	U
621-64-7	N-Nitroso-Di-n-propylamine	350	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	290000	E
108-95-2	Phenol	350	U
129-00-0	Pyrene	110000	E
120-82-1	1,2,4-Trichlorobenzene	350	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

009070

Client No.

ITGP-15 (9-10)

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707102

mple wt/vol: 30.70 (g/mL) G Lab File ID: X48555.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.8 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	350	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000071
Client No.

ITGP-15 (9-10) DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707102DL

mple wt/vol: 30.70 (g/mL) G Lab File ID: X48610.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.8 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 200.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	310000	
208-96-8	Acenaphthylene	7000	U
120-12-7	Anthracene	180000	
56-55-3	Benzo(a)anthracene	57000	
205-99-2	Benzo(b)fluoranthene	38000	
207-08-9	Benzo(k)fluoranthene	14000	
191-24-2	Benzo(ghi)perylene	5500	J
50-32-8	Benzo(a)pyrene	30000	
65-85-0	Benzoic acid	7000	U
100-51-6	Benzyl alcohol	7000	U
111-91-1	Bis(2-chloroethoxy) methane	7000	U
111-44-4	Bis(2-chloroethyl) ether	7000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	7000	U
117-81-7	Bis(2-ethylhexyl) phthalate	7000	U
101-55-3	4-Bromophenyl phenyl ether	7000	U
85-68-7	Butyl benzyl phthalate	7000	U
106-47-8	4-Chloroaniline	7000	U
59-50-7	4-Chloro-3-methylphenol	7000	U
91-58-7	2-Chloronaphthalene	7500	
95-57-8	2-Chlorophenol	7000	U
7005-72-3	4-Chlorophenyl phenyl ether	7000	U
218-01-9	Chrysene	48000	
53-70-3	Dibenzo(a,h)anthracene	7000	U
132-64-9	Dibenzofuran	260000	
84-74-2	Di-n-butyl phthalate	7000	U
95-50-1	1,2-Dichlorobenzene	7000	U
541-73-1	1,3-Dichlorobenzene	7000	U
106-46-7	1,4-Dichlorobenzene	7000	U
91-94-1	3,3'-Dichlorobenzidine	7000	U
120-83-2	2,4-Dichlorophenol	7000	U
84-66-2	Diethyl phthalate	7000	U
105-67-9	2,4-Dimethylphenol	7000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000072

Client No.

ITGP-15 (9-10) DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707102DL

ample wt/vol: 30.70 (g/mL) G Lab File ID: X48610.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.8 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

njection Volume: 1.00 (uL) Dilution Factor: 200.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	7000	U
534-52-1	4,6-Dinitro-2-methylphenol	7000	U
51-28-5	2,4-Dinitrophenol	7000	U
121-14-2	2,4-Dinitrotoluene	7000	U
606-20-2	2,6-Dinitrotoluene	7000	U
117-84-0	Di-n-octyl phthalate	7000	U
206-44-0	Fluoranthene	190000	
86-73-7	Fluorene	340000	
118-74-1	Hexachlorobenzene	7000	U
87-68-3	Hexachlorobutadiene	7000	U
77-47-4	Hexachlorocyclopentadiene	7000	U
67-72-1	Hexachloroethane	7000	U
193-39-5	Indeno(1,2,3-cd)pyrene	7700	
78-59-1	Isophorone	7000	U
91-57-6	2-Methylnaphthalene	720000	
95-48-7	2-Methylphenol	7000	U
106-44-5	4-Methylphenol	7000	U
91-20-3	Naphthalene	1000000	B
88-74-4	2-Nitroaniline	7000	U
99-09-2	3-Nitroaniline	7000	U
100-01-6	4-Nitroaniline	7000	U
98-95-3	Nitrobenzene	7000	U
88-75-5	2-Nitrophenol	7000	U
100-02-7	4-Nitrophenol	7000	U
86-30-6	N-nitrosodiphenylamine	7000	U
621-64-7	N-Nitroso-Di-n-propylamine	7000	U
87-86-5	Pentachlorophenol	7000	U
85-01-8	Phenanthrene	500000	
108-95-2	Phenol	7000	U
129-00-0	Pyrene	140000	
120-82-1	1,2,4-Trichlorobenzene	7000	U
95-95-4	2,4,5-Trichlorophenol	7000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000073

Client No.

ITGP-15 (9-10) DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707102DL

mple wt/vol: 30.70 (g/mL) G Lab File ID: X48610.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 29.8 decanted: (Y/N) N Date Extracted: 08/03/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 200.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	7000	U

TL BUFFALO

IT CORPORATION 000085

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-15 (9-10)

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114439

evel (low/med): LOW Date Received: 7/25/01

Solids: 70

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5980		E	P
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	20.4			P
7440-39-3	Barium	136			P
7440-41-7	Beryllium	0.86			P
7440-43-9	Cadmium	0.89			P
7440-70-2	Calcium	24700		E	P
7440-47-3	Chromium	24.0			P
7440-48-4	Cobalt	8.7			P
7440-50-8	Copper	92.1			P
7439-89-6	Iron	35500		E	P
7439-92-1	Lead	358			P
7439-95-4	Magnesium	4990		E	P
7439-96-5	Manganese	510			P
7440-02-0	Nickel	20.2			P
7440-09-7	Potassium	622			P
7782-49-2	Selenium	4.2	U		P
7439-97-6	Mercury	0.813			CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	578			P
7440-28-0	Thallium	8.4	U		P
7440-62-2	Vanadium	17.4			P
7440-66-6	Zinc	287			P

Color Before: BROWN Clarity Before: Texture:

Color After: YELLOW Clarity After: Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000100
Client Sample No.

ITGP-15 (9-10)

Lab: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A1707102

Solids: 70.2 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	0.50	U			9010	07/31/2001
Cyanide - Total	UG/G	2.4				9010	08/07/2001

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-16 (10-11)

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707107

mple wt/vol: 5.06 (g/mL) G Lab File ID: P5135.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 27.9 Heated Purge: Y Date Analyzed: 08/03/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	270	
71-43-2	Benzene	28	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	67	
75-15-0	Carbon Disulfide	4	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	700	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	42	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	3500	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000027

Client No.

ITGP-16 (10-11) DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707107DL

mple wt/vol: 0.51 (g/mL) G Lab File ID: P5153.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: not dec. 27.9 Heated Purge: Y Date Analyzed: 08/04/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	600	BD
71-43-2	Benzene	42	D
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	140	D
75-15-0	Carbon Disulfide	11	U
56-23-5	Carbon Tetrachloride	11	U
108-90-7	Chlorobenzene	11	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	11	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	11	U
107-06-2	1,2-Dichloroethane	11	U
75-35-4	1,1-Dichloroethene	11	U
540-59-0	1,2-Dichloroethene (Total)	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	1800	D
591-78-6	2-Hexanone	34	U
75-09-2	Methylene chloride	84	BD
108-10-1	4-Methyl-2-pentanone	27	U
100-42-5	Styrene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
127-18-4	Tetrachloroethene	11	U
108-88-3	Toluene	220	D
71-55-6	1,1,1-Trichloroethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
79-01-6	Trichloroethene	7	U
108-05-4	Vinyl acetate	11	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	7100	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000074

Client No.

ITGP-16 (10-11)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707107

ample wt/vol: 30.01 (g/mL) G Lab File ID: X48523.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 31.0 decanted: (Y/N) N Date Extracted: 08/03/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	2600	
208-96-8	Acenaphthylene	360	U
120-12-7	Anthracene	3300	
56-55-3	Benzo(a)anthracene	6600	
205-99-2	Benzo(b)fluoranthene	6600	
207-08-9	Benzo(k)fluoranthene	2600	
191-24-2	Benzo(ghi)perylene	2400	
50-32-8	Benzo(a)pyrene	6300	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	360	U
111-91-1	Bis(2-chloroethoxy) methane	360	U
111-44-4	Bis(2-chloroethyl) ether	360	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	360	U
117-81-7	Bis(2-ethylhexyl) phthalate	360	U
101-55-3	4-Bromophenyl phenyl ether	360	U
85-68-7	Butyl benzyl phthalate	360	U
106-47-8	4-Chloroaniline	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-58-7	2-Chloronaphthalene	360	U
95-57-8	2-Chlorophenol	360	U
7005-72-3	4-Chlorophenyl phenyl ether	360	U
218-01-9	Chrysene	5800	
53-70-3	Dibenzo(a,h)anthracene	810	
132-64-9	Dibenzofuran	2700	
84-74-2	Di-n-butyl phthalate	360	U
95-50-1	1,2-Dichlorobenzene	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	360	U
84-66-2	Diethyl phthalate	360	U
105-67-9	2,4-Dimethylphenol	360	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000075

Client No.

ITGP-16 (10-11)

b Name: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1707107

ımple wt/vol: 30.01 (g/mL) G Lab File ID: X48523.RR

:vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 31.0 decanted: (Y/N) N Date Extracted: 08/03/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 10.00

ℂ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	360	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
117-84-0	Di-n-octyl phthalate	360	U
206-44-0	Fluoranthene	12000	
86-73-7	Fluorene	3500	
118-74-1	Hexachlorobenzene	360	U
87-68-3	Hexachlorobutadiene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
67-72-1	Hexachloroethane	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	3000	
78-59-1	Isophorone	360	U
91-57-6	2-Methylnaphthalene	14000	
95-48-7	2-Methylphenol	360	U
106-44-5	4-Methylphenol	360	U
91-20-3	Naphthalene	36000	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	360	U
88-75-5	2-Nitrophenol	360	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	360	U
621-64-7	N-Nitroso-Di-n-propylamine	360	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	11000	
108-95-2	Phenol	360	U
129-00-0	Pyrene	9000	
120-82-1	1,2,4-Trichlorobenzene	360	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000076

Client No.

ITGP-16 (10-11)

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) SOIL Lab Sample ID: A1707107

mple wt/vol: 30.01 (g/mL) G Lab File ID: X48523.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 31.0 decanted: (Y/N) N Date Extracted: 08/03/2001

ɪncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/09/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	360	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000077

Client No.

ITGP-16 (10-11) RE

o Name: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1707107RE

mple wt/vol: 30.01 (g/mL) G Lab File ID: X48749.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 31.0 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	3400	
208-96-8	Acenaphthylene	980	
120-12-7	Anthracene	5200	
56-55-3	Benzo(a)anthracene	14000	
205-99-2	Benzo(b)fluoranthene	14000	
207-08-9	Benzo(k)fluoranthene	6000	
191-24-2	Benzo(ghi)perylene	480	
50-32-8	Benzo(a)pyrene	14000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	360	U
111-91-1	Bis(2-chloroethoxy) methane	360	U
111-44-4	Bis(2-chloroethyl) ether	360	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	360	U
117-81-7	Bis(2-ethylhexyl) phthalate	360	U
101-55-3	4-Bromophenyl phenyl ether	360	U
85-68-7	Butyl benzyl phthalate	360	U
106-47-8	4-Chloroaniline	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-58-7	2-Chloronaphthalene	360	U
95-57-8	2-Chlorophenol	360	U
7005-72-3	4-Chlorophenyl phenyl ether	360	U
218-01-9	Chrysene	12000	
53-70-3	Dibenzo(a,h)anthracene	2200	
132-64-9	Dibenzofuran	4200	
84-74-2	Di-n-butyl phthalate	360	U
95-50-1	1,2-Dichlorobenzene	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	360	U
84-66-2	Diethyl phthalate	360	U
105-67-9	2,4-Dimethylphenol	360	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000078

Client No.

ITGP-16 (10-11) RE

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1707107RE

mple wt/vol: 30.01 (g/mL) G Lab File ID: X48749.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 31.0 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	360	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
117-84-0	Di-n-octyl phthalate	360	U
206-44-0	Fluoranthene	23000	
86-73-7	Fluorene	5600	
118-74-1	Hexachlorobenzene	360	U
87-68-3	Hexachlorobutadiene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
67-72-1	Hexachloroethane	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	8200	
78-59-1	Isophorone	360	U
91-57-6	2-Methylnaphthalene	20000	
95-48-7	2-Methylphenol	360	U
106-44-5	4-Methylphenol	360	U
91-20-3	Naphthalene	28000	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	360	U
88-75-5	2-Nitrophenol	360	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	360	U
621-64-7	N-Nitroso-Di-n-propylamine	360	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	17000	
108-95-2	Phenol	360	U
129-00-0	Pyrene	15000	
120-82-1	1,2,4-Trichlorobenzene	360	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000079

Client No.

ITGP-16 (10-11) RE

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1707107RE

mple wt/vol: 30.01 (g/mL) G Lab File ID: X48749.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/25/2001

Moisture: 31.0 decanted: (Y/N) N Date Extracted: 08/17/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	360	U

TL BUFFALO

TT CORPORATION

000086

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-16 (10-11)

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7071

atrix (soil/water): SOIL Lab Sample ID: AD114444

evel (low/med): LOW Date Received: 7/25/01

Solids: 69

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6540		E	P
7440-36-0	Antimony	14.2	U		P
7440-38-2	Arsenic	4.2			P
7440-39-3	Barium	87.3			P
7440-41-7	Beryllium	0.71	U		P
7440-43-9	Cadmium	0.71	U		P
7440-70-2	Calcium	31500		E	P
7440-47-3	Chromium	11.1			P
7440-48-4	Cobalt	4.2			P
7440-50-8	Copper	18.3			P
7439-89-6	Iron	11000		E	P
7439-92-1	Lead	45.9			P
7439-95-4	Magnesium	8290		E	P
7439-96-5	Manganese	258			P
7440-02-0	Nickel	10.5			P
7440-09-7	Potassium	899			P
7782-49-2	Selenium	4.3	U		P
7439-97-6	Mercury	0.153	U		CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	536			P
7440-28-0	Thallium	8.5	U		P
7440-62-2	Vanadium	13.2			P
7440-66-6	Zinc	59.2			P

Color Before: BROWN Clarity Before: _____ Texture: _____

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000101
Client Sample No.

ITGP-16 (10-11)

N. : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1707107

olids: 69.0 Date Samp/Recv: 07/25/2001 07/25/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/03/2001
anide - Total	UG/G	0.51				9010	08/07/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

IT-GP-17 14-16

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713607

ple wt/vol: 5.04 (g/mL) G Lab File ID: P5188.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 46.5 Heated Purge: Y Date Analyzed: 08/04/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	530	B
71-43-2	Benzene	670	E
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	120	
75-15-0	Carbon Disulfide	25	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	2100	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	9	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	260	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	4100	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

IT-GP-17 14-16 DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713607DL

ple wt/vol: 4.19 (g/mL) G Lab File ID: F3394.RR

el: (low/med) MED Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 46.5 Heated Purge: N Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	2000	D
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	350	DJ
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	27000	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	1600	D
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	52000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000044

Client No.

IT-GP-17 14-16

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713607

ple wt/vol: 30.07 (g/mL) G Lab File ID: X48558.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: 47.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	310000	E
208-96-8	Acenaphthylene	11000	
120-12-7	Anthracene	160000	
56-55-3	Benzo(a)anthracene	34000	
205-99-2	Benzo(b)fluoranthene	22000	
207-08-9	Benzo(k)fluoranthene	9000	
191-24-2	Benzo(ghi)perylene	4600	
50-32-8	Benzo(a)pyrene	21000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	950	U
111-91-1	Bis(2-chloroethoxy) methane	950	U
111-44-4	Bis(2-chloroethyl) ether	950	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	950	U
117-81-7	Bis(2-ethylhexyl) phthalate	950	U
101-55-3	4-Bromophenyl phenyl ether	950	U
85-68-7	Butyl benzyl phthalate	950	U
106-47-8	4-Chloroaniline	950	U
59-50-7	4-Chloro-3-methylphenol	950	U
91-58-7	2-Chloronaphthalene	950	U
95-57-8	2-Chlorophenol	950	U
7005-72-3	4-Chlorophenyl phenyl ether	950	U
218-01-9	Chrysene	28000	
53-70-3	Dibenzo(a,h)anthracene	1400	
132-64-9	Dibenzofuran	280000	E
84-74-2	Di-n-butyl phthalate	950	U
95-50-1	1,2-Dichlorobenzene	950	U
541-73-1	1,3-Dichlorobenzene	950	U
106-46-7	1,4-Dichlorobenzene	950	U
91-94-1	3,3'-Dichlorobenzidine	950	U
120-83-2	2,4-Dichlorophenol	950	U
84-66-2	Diethyl phthalate	950	U
105-67-9	2,4-Dimethylphenol	950	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000045

Client No.

IT-GP-17 14-16

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713607

mple wt/vol: 30.07 (g/mL) G Lab File ID: X48558.RR

/el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 47.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	950	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	950	U
606-20-2	2,6-Dinitrotoluene	950	U
117-84-0	Di-n-octyl phthalate	950	U
206-44-0	Fluoranthene	150000	
86-73-7	Fluorene	290000	E
118-74-1	Hexachlorobenzene	950	U
87-68-3	Hexachlorobutadiene	950	U
77-47-4	Hexachlorocyclopentadiene	950	U
67-72-1	Hexachloroethane	950	U
193-39-5	Indeno(1,2,3-cd)pyrene	6000	
78-59-1	Isophorone	950	U
91-57-6	2-Methylnaphthalene	580000	E
95-48-7	2-Methylphenol	950	U
106-44-5	4-Methylphenol	950	U
91-20-3	Naphthalene	1500000	BE
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	950	U
88-75-5	2-Nitrophenol	950	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	950	U
621-64-7	N-Nitroso-Di-n-propylamine	950	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	440000	E
108-95-2	Phenol	950	U
129-00-0	Pyrene	98000	
120-82-1	1,2,4-Trichlorobenzene	950	U
95-95-4	2,4,5-Trichlorophenol	950	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000046

Client No.

IT-GP-17 14-16

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713607

mple wt/vol: 30.07 (g/mL) G Lab File ID: X48558.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 47.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	950	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000047

Client No.

IT-GP-17 14-16 DL

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) SOIL Lab Sample ID: A1713607DL

mple wt/vol: 30.07 (g/mL) G Lab File ID: X48611.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 47.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 400.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	460000	D
208-96-8	Acenaphthylene	19000	U
120-12-7	Anthracene	200000	D
56-55-3	Benzo(a)anthracene	32000	D
205-99-2	Benzo(b)fluoranthene	19000	U
207-08-9	Benzo(k)fluoranthene	19000	U
191-24-2	Benzo(ghi)perylene	19000	U
50-32-8	Benzo(a)pyrene	19000	U
65-85-0	Benzoic acid	19000	U
100-51-6	Benzyl alcohol	19000	U
111-91-1	Bis(2-chloroethoxy) methane	19000	U
111-44-4	Bis(2-chloroethyl) ether	19000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	19000	U
117-81-7	Bis(2-ethylhexyl) phthalate	19000	U
101-55-3	4-Bromophenyl phenyl ether	19000	U
85-68-7	Butyl benzyl phthalate	19000	U
106-47-8	4-Chloroaniline	19000	U
59-50-7	4-Chloro-3-methylphenol	19000	U
91-58-7	2-Chloronaphthalene	19000	U
95-57-8	2-Chlorophenol	19000	U
7005-72-3	4-Chlorophenyl phenyl ether	19000	U
218-01-9	Chrysene	22000	D
53-70-3	Dibenzo(a,h)anthracene	19000	U
132-64-9	Dibenzofuran	370000	D
84-74-2	Di-n-butyl phthalate	19000	U
95-50-1	1,2-Dichlorobenzene	19000	U
541-73-1	1,3-Dichlorobenzene	19000	U
106-46-7	1,4-Dichlorobenzene	19000	U
91-94-1	3,3'-Dichlorobenzidine	19000	U
120-83-2	2,4-Dichlorophenol	19000	U
84-66-2	Diethyl phthalate	19000	U
105-67-9	2,4-Dimethylphenol	19000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000048

Client No.

IT-GP-17 14-16 DL

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713607DL

mple wt/vol: 30.07 (g/mL) G Lab File ID: X48611.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 47.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 400.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	19000	U
534-52-1	4,6-Dinitro-2-methylphenol	19000	U
51-28-5	2,4-Dinitrophenol	19000	U
121-14-2	2,4-Dinitrotoluene	19000	U
606-20-2	2,6-Dinitrotoluene	19000	U
117-84-0	Di-n-octyl phthalate	19000	U
206-44-0	Fluoranthene	160000	D
86-73-7	Fluorene	400000	D
118-74-1	Hexachlorobenzene	19000	U
87-68-3	Hexachlorobutadiene	19000	U
77-47-4	Hexachlorocyclopentadiene	19000	U
67-72-1	Hexachloroethane	19000	U
193-39-5	Indeno(1,2,3-cd)pyrene	19000	U
78-59-1	Isophorone	19000	U
91-57-6	2-Methylnaphthalene	740000	D
95-48-7	2-Methylphenol	19000	U
106-44-5	4-Methylphenol	19000	U
91-20-3	Naphthalene	2100000	BD
88-74-4	2-Nitroaniline	19000	U
99-09-2	3-Nitroaniline	19000	U
100-01-6	4-Nitroaniline	19000	U
98-95-3	Nitrobenzene	19000	U
88-75-5	2-Nitrophenol	19000	U
100-02-7	4-Nitrophenol	19000	U
86-30-6	N-nitrosodiphenylamine	19000	U
621-64-7	N-Nitroso-Di-n-propylamine	19000	U
87-86-5	Pentachlorophenol	19000	U
85-01-8	Phenanthrene	680000	D
108-95-2	Phenol	19000	U
129-00-0	Pyrene	120000	D
120-82-1	1,2,4-Trichlorobenzene	19000	U
95-95-4	2,4,5-Trichlorophenol	19000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000049

Client No.

IT-GP-17 14-16 DL

o Name: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713607DL

mple wt/vol: 30.07 (g/mL) G Lab File ID: X48611.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 47.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 400.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	19000	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-17 14-16

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

atrix (soil/water): SOIL Lab Sample ID: AD114832

evel (low/med): LOW Date Received: 7/26/01

Solids: 53

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7640		E	P
7440-36-0	Antimony	18.3	U		P
7440-38-2	Arsenic	11.5			P
7440-39-3	Barium	112		E	P
7440-41-7	Beryllium	0.91	U		P
7440-43-9	Cadmium	0.91	U		P
7440-70-2	Calcium	161000		E	P
7440-47-3	Chromium	13.8			P
7440-48-4	Cobalt	6.0			P
7440-50-8	Copper	44.7			P
7439-89-6	Iron	21000		E	P
7439-92-1	Lead	130			P
7439-95-4	Magnesium	6430		E	P
7439-96-5	Manganese	444		E	P
7440-02-0	Nickel	16.2			P
7440-09-7	Potassium	1210			P
7782-49-2	Selenium	5.5	U		P
7439-97-6	Mercury	2.4			CV
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	259			P
7440-28-0	Thallium	11.0	U		P
7440-62-2	Vanadium	16.8			P
7440-66-6	Zinc	151			P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: BROWN Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000113

Client Sample No.

IT-GP-17 14-16

o e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1713607

Solids: 52.6 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

_____
_____
_____
_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

IT-GP-18 14-15

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713608

mple wt/vol: 5.13 (g/mL) G Lab File ID: P5189.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: not dec. 36.6 Heated Purge: Y Date Analyzed: 08/04/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	350	B
71-43-2	Benzene	1900	E
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	94	
75-15-0	Carbon Disulfide	7	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	1600	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	12	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	610	E
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	4500	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

IT-GP-18 14-15 DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1713608DL

Sample wt/vol: 4.02 (g/mL) G Lab File ID: F3395.RR

Level: (low/med) MED Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: not dec. 36.6 Heated Purge: N Date Analyzed: 08/07/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	3800	D
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	260	DJ
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	33000	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	3900	D
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	110000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000050

Client No.

IT-GP-18 14-15

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713608

mple wt/vol: 30.41 (g/mL) G Lab File ID: X48559.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 27.5 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	45000	
208-96-8	Acenaphthylene	2600	
120-12-7	Anthracene	30000	
56-55-3	Benzo(a)anthracene	26000	
205-99-2	Benzo(b)fluoranthene	25000	
207-08-9	Benzo(k)fluoranthene	9600	
191-24-2	Benzo(ghi)perylene	4800	
50-32-8	Benzo(a)pyrene	21000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	680	U
111-91-1	Bis(2-chloroethoxy) methane	680	U
111-44-4	Bis(2-chloroethyl) ether	680	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	680	U
117-81-7	Bis(2-ethylhexyl) phthalate	680	U
101-55-3	4-Bromophenyl phenyl ether	680	U
85-68-7	Butyl benzyl phthalate	680	U
106-47-8	4-Chloroaniline	680	U
59-50-7	4-Chloro-3-methylphenol	680	U
91-58-7	2-Chloronaphthalene	680	U
95-57-8	2-Chlorophenol	680	U
7005-72-3	4-Chlorophenyl phenyl ether	680	U
218-01-9	Chrysene	22000	
53-70-3	Dibenzo(a,h)anthracene	1800	
132-64-9	Dibenzofuran	38000	
84-74-2	Di-n-butyl phthalate	680	U
95-50-1	1,2-Dichlorobenzene	680	U
541-73-1	1,3-Dichlorobenzene	680	U
106-46-7	1,4-Dichlorobenzene	680	U
91-94-1	3,3'-Dichlorobenzidine	680	U
120-83-2	2,4-Dichlorophenol	680	U
84-66-2	Diethyl phthalate	680	U
105-67-9	2,4-Dimethylphenol	680	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000051

Client No.

IT-GP-18 14-15

o Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713608

mple wt/vol: 30.41 (g/mL) G Lab File ID: X48559.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 27.5 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	680	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	680	U
606-20-2	2,6-Dinitrotoluene	680	U
117-84-0	Di-n-octyl phthalate	680	U
206-44-0	Fluoranthene	57000	
86-73-7	Fluorene	44000	
118-74-1	Hexachlorobenzene	680	U
87-68-3	Hexachlorobutadiene	680	U
77-47-4	Hexachlorocyclopentadiene	680	U
67-72-1	Hexachloroethane	680	U
193-39-5	Indeno(1,2,3-cd)pyrene	6000	
78-59-1	Isophorone	680	U
91-57-6	2-Methylnaphthalene	76000	
95-48-7	2-Methylphenol	680	U
106-44-5	4-Methylphenol	680	U
91-20-3	Naphthalene	180000	BE
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	680	U
88-75-5	2-Nitrophenol	680	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	680	U
621-64-7	N-Nitroso-Di-n-propylamine	680	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	92000	
108-95-2	Phenol	680	U
129-00-0	Pyrene	44000	
120-82-1	1,2,4-Trichlorobenzene	680	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

IT-GP-18 14-15

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713608

mple wt/vol: 30.41 (g/mL) G Lab File ID: X48559.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 27.5 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	680	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000053

Client No.

IT-GP-18 14-15 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713608DL

ample wt/vol: 30.41 (g/mL) G Lab File ID: X48612.RR

evel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 27.5 decanted: (Y/N) N Date Extracted: 08/04/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

njection Volume: 1.00 (uL) Dilution Factor: 40.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	57000	D
208-96-8	Acenaphthylene	2400	D
120-12-7	Anthracene	38000	D
56-55-3	Benzo(a)anthracene	30000	D
205-99-2	Benzo(b)fluoranthene	29000	D
207-08-9	Benzo(k)fluoranthene	9900	D
191-24-2	Benzo(ghi)perylene	4100	D
50-32-8	Benzo(a)pyrene	23000	D
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1400	U
111-91-1	Bis(2-chloroethoxy) methane	1400	U
111-44-4	Bis(2-chloroethyl) ether	1400	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1400	U
117-81-7	Bis(2-ethylhexyl) phthalate	1400	U
101-55-3	4-Bromophenyl phenyl ether	1400	U
85-68-7	Butyl benzyl phthalate	1400	U
106-47-8	4-Chloroaniline	1400	U
59-50-7	4-Chloro-3-methylphenol	1400	U
91-58-7	2-Chloronaphthalene	1400	U
95-57-8	2-Chlorophenol	1400	U
7005-72-3	4-Chlorophenyl phenyl ether	1400	U
218-01-9	Chrysene	27000	D
53-70-3	Dibenzo(a,h)anthracene	1400	U
132-64-9	Dibenzofuran	47000	D
84-74-2	Di-n-butyl phthalate	1400	U
95-50-1	1,2-Dichlorobenzene	1400	U
541-73-1	1,3-Dichlorobenzene	1400	U
106-46-7	1,4-Dichlorobenzene	1400	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
120-83-2	2,4-Dichlorophenol	1400	U
84-66-2	Diethyl phthalate	1400	U
105-67-9	2,4-Dimethylphenol	1400	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000054

Client No.

IT-GP-18 14-15 DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713608DL

mple wt/vol: 30.41 (g/mL) G Lab File ID: X48612.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 27.5 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	1400	U
606-20-2	2,6-Dinitrotoluene	1400	U
117-84-0	Di-n-octyl phthalate	1400	U
206-44-0	Fluoranthene	70000	D
86-73-7	Fluorene	55000	D
118-74-1	Hexachlorobenzene	1400	U
87-68-3	Hexachlorobutadiene	1400	U
77-47-4	Hexachlorocyclopentadiene	1400	U
67-72-1	Hexachloroethane	1400	U
193-39-5	Indeno(1,2,3-cd)pyrene	5900	D
78-59-1	Isophorone	1400	U
91-57-6	2-Methylnaphthalene	98000	D
95-48-7	2-Methylphenol	1400	U
106-44-5	4-Methylphenol	1400	U
91-20-3	Naphthalene	210000	BD
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	1400	U
88-75-5	2-Nitrophenol	1400	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	1400	U
621-64-7	N-Nitroso-Di-n-propylamine	1400	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	120000	D
108-95-2	Phenol	1400	U
129-00-0	Pyrene	60000	D
120-82-1	1,2,4-Trichlorobenzene	1400	U
95-95-4	2,4,5-Trichlorophenol	1400	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000055

Client No.

IT-GP-18 14-15 DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713608DL

ple wt/vol: 30.41 (g/mL) G Lab File ID: X48612.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: 27.5 decanted: (Y/N) N Date Extracted: 08/04/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1400	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-18 14-15

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

atrix (soil/water): SOIL Lab Sample ID: AD114833

evel (low/med): LOW Date Received: 7/26/01

Solids: 72

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6400		E	P
7440-36-0	Antimony	14.1	U		P
7440-38-2	Arsenic	7.5			P
7440-39-3	Barium	80.3		E	P
7440-41-7	Beryllium	0.70	U		P
7440-43-9	Cadmium	0.70	U		P
7440-70-2	Calcium	30400		E	P
7440-47-3	Chromium	10.2			P
7440-48-4	Cobalt	4.2			P
7440-50-8	Copper	17.4			P
7439-89-6	Iron	11400		E	P
7439-92-1	Lead	71.4			P
7439-95-4	Magnesium	9160		E	P
7439-96-5	Manganese	204		E	P
7440-02-0	Nickel	10.9			P
7440-09-7	Potassium	891			P
7782-49-2	Selenium	4.2	U		P
7439-97-6	Mercury	0.512			CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	297			P
7440-28-0	Thallium	8.4	U		P
7440-62-2	Vanadium	16.9			P
7440-66-6	Zinc	66.9			P

Color Before: BROWN Clarity Before: Texture: SILT

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000114

Client Sample No.

IT-GP-18 14-15

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1713608

Solids: 72.5 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

IT-GP-19 12-16

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713609

nple wt/vol: 5.16 (g/mL) G Lab File ID: P5232.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: not dec. 35.0 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	120	B
71-43-2	Benzene	120	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	21	J
75-15-0	Carbon Disulfide	9	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	480	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	17	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	34	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	590	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021

Client No.

IT-GP-19 12-16 DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713609DL

ple wt/vol: 4.11 (g/mL) G Lab File ID: F3510.RR

el: (low/med) MED Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 35.0 Heated Purge: N Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	520	DJ
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	570	DJ
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	4000	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	230	DJ
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	5000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

IT-GP-19 20-23

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713613

ple wt/vol: 5.16 (g/mL) G Lab File ID: P5200.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 23.1 Heated Purge: Y Date Analyzed: 08/05/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	140	
71-43-2	Benzene	1300	E
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	41	
75-15-0	Carbon Disulfide	3	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	1	J
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	1400	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	84	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	30000	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023

Client No.

IT-GP-19 20-23 DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713613DL

ple wt/vol: 4.14 (g/mL) G Lab File ID: F3396.RR

el: (low/med) MED Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 23.1 Heated Purge: N Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	470	DJ
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	625	U
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	9700	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	320	DJ
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	19000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000056

Client No.

IT-GP-19 12-16

› Name: STL Buffalo Contract: _____

› Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713609

mple wt/vol: 30.85 (g/mL) G Lab File ID: X48562.RR

/el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 39.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	24000	
208-96-8	Acenaphthylene	800	U
120-12-7	Anthracene	26000	
56-55-3	Benzo(a)anthracene	16000	
205-99-2	Benzo(b)fluoranthene	16000	
207-08-9	Benzo(k)fluoranthene	7000	
191-24-2	Benzo(ghi)perylene	4200	
50-32-8	Benzo(a)pyrene	15000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	800	U
111-91-1	Bis(2-chloroethoxy) methane	800	U
111-44-4	Bis(2-chloroethyl) ether	800	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	800	U
117-81-7	Bis(2-ethylhexyl) phthalate	800	U
101-55-3	4-Bromophenyl phenyl ether	800	U
85-68-7	Butyl benzyl phthalate	800	U
106-47-8	4-Chloroaniline	800	U
59-50-7	4-Chloro-3-methylphenol	800	U
91-58-7	2-Chloronaphthalene	800	U
95-57-8	2-Chlorophenol	800	U
7005-72-3	4-Chlorophenyl phenyl ether	800	U
218-01-9	Chrysene	14000	
53-70-3	Dibenzo(a,h)anthracene	800	U
132-64-9	Dibenzofuran	17000	
84-74-2	Di-n-butyl phthalate	800	U
95-50-1	1,2-Dichlorobenzene	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
91-94-1	3,3'-Dichlorobenzidine	800	U
120-83-2	2,4-Dichlorophenol	800	U
84-66-2	Diethyl phthalate	800	U
105-67-9	2,4-Dimethylphenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000057

Client No.

IT-GP-19 12-16

o Name: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713609

mple wt/vol: 30.85 (g/mL) G Lab File ID: X48562.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 39.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	800	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	800	U
606-20-2	2,6-Dinitrotoluene	800	U
117-84-0	Di-n-octyl phthalate	800	U
206-44-0	Fluoranthene	35000	
86-73-7	Fluorene	19000	
118-74-1	Hexachlorobenzene	800	U
87-68-3	Hexachlorobutadiene	800	U
77-47-4	Hexachlorocyclopentadiene	800	U
67-72-1	Hexachloroethane	800	U
193-39-5	Indeno(1,2,3-cd)pyrene	5600	
78-59-1	Isophorone	800	U
91-57-6	2-Methylnaphthalene	14000	
95-48-7	2-Methylphenol	800	U
106-44-5	4-Methylphenol	800	U
91-20-3	Naphthalene	220000	BE
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	800	U
88-75-5	2-Nitrophenol	800	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	800	U
621-64-7	N-Nitroso-Di-n-propylamine	800	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	47000	
108-95-2	Phenol	800	U
129-00-0	Pyrene	24000	
120-82-1	1,2,4-Trichlorobenzene	800	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000058

Client No.

IT-GP-19 12-16

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713609

ple wt/vol: 30.85 (g/mL) G Lab File ID: X48562.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: 39.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000059

Client No.

IT-GP-19 12-16 DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713609DL

ple wt/vol: 30.85 (g/mL) G Lab File ID: X48613.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: 39.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	30000	D
208-96-8	Acenaphthylene	1600	U
120-12-7	Anthracene	30000	D
56-55-3	Benzo(a)anthracene	18000	D
205-99-2	Benzo(b)fluoranthene	17000	D
207-08-9	Benzo(k)fluoranthene	7400	D
191-24-2	Benzo(ghi)perylene	3300	D
50-32-8	Benzo(a)pyrene	15000	D
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1600	U
111-91-1	Bis(2-chloroethoxy) methane	1600	U
111-44-4	Bis(2-chloroethyl) ether	1600	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1600	U
117-81-7	Bis(2-ethylhexyl) phthalate	1600	U
101-55-3	4-Bromophenyl phenyl ether	1600	U
85-68-7	Butyl benzyl phthalate	1600	U
106-47-8	4-Chloroaniline	1600	U
59-50-7	4-Chloro-3-methylphenol	1600	U
91-58-7	2-Chloronaphthalene	1600	U
95-57-8	2-Chlorophenol	1600	U
7005-72-3	4-Chlorophenyl phenyl ether	1600	U
218-01-9	Chrysene	14000	D
53-70-3	Dibenzo(a,h)anthracene	1600	U
132-64-9	Dibenzofuran	20000	D
84-74-2	Di-n-butyl phthalate	1600	U
95-50-1	1,2-Dichlorobenzene	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
84-66-2	Diethyl phthalate	1600	U
105-67-9	2,4-Dimethylphenol	1600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000060

Client No.

IT-GP-19 12-16 DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713609DL

mple wt/vol: 30.85 (g/mL) G Lab File ID: X48613.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 39.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
117-84-0	Di-n-octyl phthalate	1600	U
206-44-0	Fluoranthene	38000	D
86-73-7	Fluorene	22000	D
118-74-1	Hexachlorobenzene	1600	U
87-68-3	Hexachlorobutadiene	1600	U
77-47-4	Hexachlorocyclopentadiene	1600	U
67-72-1	Hexachloroethane	1600	U
193-39-5	Indeno(1,2,3-cd)pyrene	4900	D
78-59-1	Isophorone	1600	U
91-57-6	2-Methylnaphthalene	13000	D
95-48-7	2-Methylphenol	1600	U
106-44-5	4-Methylphenol	1600	U
91-20-3	Naphthalene	240000	BD
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	1600	U
88-75-5	2-Nitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	1600	U
621-64-7	N-Nitroso-Di-n-propylamine	1600	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	55000	D
108-95-2	Phenol	1600	U
129-00-0	Pyrene	30000	D
120-82-1	1,2,4-Trichlorobenzene	1600	U
95-95-4	2,4,5-Trichlorophenol	1600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000061

Client No.

IT-GP-19 12-16 DL

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713609DL

mple wt/vol: 30.85 (g/mL) G Lab File ID: X48613.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 39.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000062

Client No.

IT-GP-19 20-23

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713613

ample wt/vol: 30.90 (g/mL) G Lab File ID: X48655.RR

evel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 24.1 decanted: (Y/N) N Date Extracted: 08/04/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 80.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	39000	
208-96-8	Acenaphthylene	2600	U
120-12-7	Anthracene	12000	
56-55-3	Benzo(a)anthracene	4700	
205-99-2	Benzo(b)fluoranthene	2600	U
207-08-9	Benzo(k)fluoranthene	2600	U
191-24-2	Benzo(ghi)perylene	2600	U
50-32-8	Benzo(a)pyrene	2600	U
65-85-0	Benzoic acid	2600	U
100-51-6	Benzyl alcohol	2600	U
111-91-1	Bis(2-chloroethoxy) methane	2600	U
111-44-4	Bis(2-chloroethyl) ether	2600	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	2600	U
117-81-7	Bis(2-ethylhexyl) phthalate	2600	U
101-55-3	4-Bromophenyl phenyl ether	2600	U
85-68-7	Butyl benzyl phthalate	2600	U
106-47-8	4-Chloroaniline	2600	U
59-50-7	4-Chloro-3-methylphenol	2600	U
91-58-7	2-Chloronaphthalene	2600	U
95-57-8	2-Chlorophenol	2600	U
7005-72-3	4-Chlorophenyl phenyl ether	2600	U
218-01-9	Chrysene	4700	
53-70-3	Dibenzo(a,h)anthracene	2600	U
132-64-9	Dibenzofuran	33000	
84-74-2	Di-n-butyl phthalate	2600	U
95-50-1	1,2-Dichlorobenzene	2600	U
541-73-1	1,3-Dichlorobenzene	2600	U
106-46-7	1,4-Dichlorobenzene	2600	U
91-94-1	3,3'-Dichlorobenzidine	2600	U
120-83-2	2,4-Dichlorophenol	2600	U
84-66-2	Diethyl phthalate	2600	U
105-67-9	2,4-Dimethylphenol	2600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000063

Client No.

IT-GP-19 20-23

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713613

mple wt/vol: 30.90 (g/mL) G Lab File ID: X48655.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 24.1 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 80.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	2600	U
534-52-1	4,6-Dinitro-2-methylphenol	2600	U
51-28-5	2,4-Dinitrophenol	2600	U
121-14-2	2,4-Dinitrotoluene	2600	U
606-20-2	2,6-Dinitrotoluene	2600	U
117-84-0	Di-n-octyl phthalate	2600	U
206-44-0	Fluoranthene	15000	
86-73-7	Fluorene	33000	
118-74-1	Hexachlorobenzene	2600	U
87-68-3	Hexachlorobutadiene	2600	U
77-47-4	Hexachlorocyclopentadiene	2600	U
67-72-1	Hexachloroethane	2600	U
193-39-5	Indeno(1,2,3-cd)pyrene	2600	U
78-59-1	Isophorone	2600	U
91-57-6	2-Methylnaphthalene	79000	
95-48-7	2-Methylphenol	2600	U
106-44-5	4-Methylphenol	2600	U
91-20-3	Naphthalene	280000	B
88-74-4	2-Nitroaniline	2600	U
99-09-2	3-Nitroaniline	2600	U
100-01-6	4-Nitroaniline	2600	U
98-95-3	Nitrobenzene	2600	U
88-75-5	2-Nitrophenol	2600	U
100-02-7	4-Nitrophenol	2600	U
86-30-6	N-nitrosodiphenylamine	2600	U
621-64-7	N-Nitroso-Di-n-propylamine	2600	U
87-86-5	Pentachlorophenol	2600	U
85-01-8	Phenanthrene	53000	
108-95-2	Phenol	2600	U
129-00-0	Pyrene	11000	
120-82-1	1,2,4-Trichlorobenzene	2600	U
95-95-4	2,4,5-Trichlorophenol	2600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000064

Client No.

IT-GP-19 20-23

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713613

mple wt/vol: 30.90 (g/mL) G Lab File ID: X48655.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 24.1 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 80.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	2600	U

I T CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-19 12-16

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

Matrix (soil/water): SOIL Lab Sample ID: AD114834

Level (low/med): LOW Date Received: 7/26/01

% Solids: 61

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18000		E	P
7440-36-0	Antimony	16.4	U		P
7440-38-2	Arsenic	13.0			P
7440-39-3	Barium	70.9		E	P
7440-41-7	Beryllium	1.0			P
7440-43-9	Cadmium	13.3			P
7440-70-2	Calcium	7820		E	P
7440-47-3	Chromium	33.4			P
7440-48-4	Cobalt	12.6			P
7440-50-8	Copper	77.5			P
7439-89-6	Iron	29900		E	P
7439-92-1	Lead	260			P
7439-95-4	Magnesium	1590		E	P
7439-96-5	Manganese	118		E	P
7440-02-0	Nickel	24.9			P
7440-09-7	Potassium	505			P
7782-49-2	Selenium	9.3			P
7439-97-6	Mercury	0.651			CV
7440-22-4	Silver	1.6	U		P
7440-23-5	Sodium	519			P
7440-28-0	Thallium	9.9	U		P
7440-62-2	Vanadium	59.8			P
7440-66-6	Zinc	6440			P

Color Before: BLACK Clarity Before: Texture: SAND

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

I T CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-19 20-23

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

atrix (soil/water): SOIL Lab Sample ID: AD114839

evel (low/med): LOW Date Received: 7/26/01

Solids: 76

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6870		E	P
7440-36-0	Antimony	13.4	U		P
7440-38-2	Arsenic	4.3			P
7440-39-3	Barium	135		E	P
7440-41-7	Beryllium	0.67	U		P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	36000		E	P
7440-47-3	Chromium	11.3			P
7440-48-4	Cobalt	5.1			P
7440-50-8	Copper	21.8			P
7439-89-6	Iron	12800		E	P
7439-92-1	Lead	108			P
7439-95-4	Magnesium	11200		E	P
7439-96-5	Manganese	235		E	P
7440-02-0	Nickel	11.4			P
7440-09-7	Potassium	1230			P
7782-49-2	Selenium	4.0	U		P
7439-97-6	Mercury	0.967			CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	185			P
7440-28-0	Thallium	8.1	U		P
7440-62-2	Vanadium	14.7			P
7440-66-6	Zinc	133			P

Color Before: BROWN Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000115

Client Sample No.

IT-GP-19 12-16

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1713609

Solids: 60.8 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000116

Client Sample No.

IT-GP-19 20-23

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1713613

Solids: 75.9 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

IT-GP-20 8-12

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713610

ple wt/vol: 5.18 (g/mL) G Lab File ID: P5233.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 21.4 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	300	B
71-43-2	Benzene	31	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	68	
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	57	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	14	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	29	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	120	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000065

Client No.

IT-GP-20 8-12

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713610

mple wt/vol: 30.31 (g/mL) G Lab File ID: X48616.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 21.1 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	16000	
208-96-8	Acenaphthylene	240	J
120-12-7	Anthracene	6100	
56-55-3	Benzo(a)anthracene	830	
205-99-2	Benzo(b)fluoranthene	310	J
207-08-9	Benzo(k)fluoranthene	120	J
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	240	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	610	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	14000	
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000066

Client No.

IT-GP-20 8-12

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713610

mple wt/vol: 30.31 (g/mL) G Lab File ID: X48616.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 21.1 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	4200	
86-73-7	Fluorene	13000	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	1600	
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	7600	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	19000	
108-95-2	Phenol	330	U
129-00-0	Pyrene	3600	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000067

Client No.

IT-GP-20 8-12

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713610

mple wt/vol: 30.31 (g/mL) G Lab File ID: X48616.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 21.1 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-20 8-12

ontract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

Matrix (soil/water): SOIL Lab Sample ID: AD114835

Level (low/med): LOW Date Received: 7/26/01

% Solids: 79

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1740		E	P
7440-36-0	Antimony	12.2	U		P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	16.5		E	P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	31000		E	P
7440-47-3	Chromium	2.7			P
7440-48-4	Cobalt	2.4	U		P
7440-50-8	Copper	2.7			P
7439-89-6	Iron	4210		E	P
7439-92-1	Lead	8.3			P
7439-95-4	Magnesium	2220		E	P
7439-96-5	Manganese	137		E	P
7440-02-0	Nickel	3.3			P
7440-09-7	Potassium	314			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.112	U		CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	285			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	6.7			P
7440-66-6	Zinc	14.8			P

Color Before: BLACK Clarity Before: _____ Texture: SAND

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

SDG116A

Client Sample No.

IT-GP-20 8-12

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1713610

olids: 79.0 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/07/2001
anide - Total	UG/G	0.50	U			9010	08/07/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025

Client No.

IT-GP-21 8-12

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713611

ple wt/vol: 5.11 (g/mL) G Lab File ID: P5234.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: not dec. 26.0 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	440	B
71-43-2	Benzene	49	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	110	
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	170	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	16	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	32	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	430	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000026

Client No.

IT-GP-21 DUP

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713611FD

mple wt/vol: 5.07 (g/mL) G Lab File ID: P5198.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: not dec. 26.0 Heated Purge: Y Date Analyzed: 08/05/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	460	
71-43-2	Benzene	17	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	110	
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	160	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	22	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	410	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000068

Client No.

IT-GP-21 8-12

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713611

mple wt/vol: 30.16 (g/mL) G Lab File ID: X48617.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 23.9 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	64000	
208-96-8	Acenaphthylene	2000	
120-12-7	Anthracene	47000	
56-55-3	Benzo(a)anthracene	29000	
205-99-2	Benzo(b)fluoranthene	23000	
207-08-9	Benzo(k)fluoranthene	10000	
191-24-2	Benzo(ghi)perylene	1800	
50-32-8	Benzo(a)pyrene	19000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	650	U
111-91-1	Bis(2-chloroethoxy) methane	650	U
111-44-4	Bis(2-chloroethyl) ether	650	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	650	U
117-81-7	Bis(2-ethylhexyl) phthalate	650	U
101-55-3	4-Bromophenyl phenyl ether	650	U
85-68-7	Butyl benzyl phthalate	650	U
106-47-8	4-Chloroaniline	650	U
59-50-7	4-Chloro-3-methylphenol	650	U
91-58-7	2-Chloronaphthalene	650	U
95-57-8	2-Chlorophenol	650	U
7005-72-3	4-Chlorophenyl phenyl ether	650	U
218-01-9	Chrysene	24000	
53-70-3	Dibenzo(a,h)anthracene	960	
132-64-9	Dibenzofuran	63000	
84-74-2	Di-n-butyl phthalate	650	U
95-50-1	1,2-Dichlorobenzene	650	U
541-73-1	1,3-Dichlorobenzene	650	U
106-46-7	1,4-Dichlorobenzene	650	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	650	U
84-66-2	Diethyl phthalate	650	U
105-67-9	2,4-Dimethylphenol	650	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000069

Client No.

IT-GP-21 8-12

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713611

mple wt/vol: 30.16 (g/mL) G Lab File ID: X48617.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 23.9 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	650	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	650	U
606-20-2	2,6-Dinitrotoluene	650	U
117-84-0	Di-n-octyl phthalate	650	U
206-44-0	Fluoranthene	58000	
86-73-7	Fluorene	84000	
118-74-1	Hexachlorobenzene	650	U
87-68-3	Hexachlorobutadiene	650	U
77-47-4	Hexachlorocyclopentadiene	650	U
67-72-1	Hexachloroethane	650	U
193-39-5	Indeno(1,2,3-cd)pyrene	2900	
78-59-1	Isophorone	650	U
91-57-6	2-Methylnaphthalene	120000	
95-48-7	2-Methylphenol	650	U
106-44-5	4-Methylphenol	650	U
91-20-3	Naphthalene	92000	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	650	U
88-75-5	2-Nitrophenol	650	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	650	U
621-64-7	N-Nitroso-Di-n-propylamine	650	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	130000	
108-95-2	Phenol	650	U
129-00-0	Pyrene	54000	
120-82-1	1,2,4-Trichlorobenzene	650	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000070

Client No.

IT-GP-21 8-12

› Name: STL Buffalo Contract: _____

› Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713611

mple wt/vol: 30.16 (g/mL) G Lab File ID: X48617.RR

/el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 23.9 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	650	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

C00071

Client No.

IT-GP-21 DUP

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713611FD

mple wt/vol: 30.46 (g/mL) G Lab File ID: X48618.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 23.9 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	39000	
208-96-8	Acenaphthylene	1300	
120-12-7	Anthracene	36000	
56-55-3	Benzo(a)anthracene	24000	
205-99-2	Benzo(b)fluoranthene	21000	
207-08-9	Benzo(k)fluoranthene	8300	
191-24-2	Benzo(ghi)perylene	1600	
50-32-8	Benzo(a)pyrene	16000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	650	U
111-91-1	Bis(2-chloroethoxy) methane	650	U
111-44-4	Bis(2-chloroethyl) ether	650	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	650	U
117-81-7	Bis(2-ethylhexyl) phthalate	650	U
101-55-3	4-Bromophenyl phenyl ether	650	U
85-68-7	Butyl benzyl phthalate	650	U
106-47-8	4-Chloroaniline	650	U
59-50-7	4-Chloro-3-methylphenol	650	U
91-58-7	2-Chloronaphthalene	650	U
95-57-8	2-Chlorophenol	650	U
7005-72-3	4-Chlorophenyl phenyl ether	650	U
218-01-9	Chrysene	20000	
53-70-3	Dibenzo(a,h)anthracene	650	U
132-64-9	Dibenzofuran	38000	
84-74-2	Di-n-butyl phthalate	650	U
95-50-1	1,2-Dichlorobenzene	650	U
541-73-1	1,3-Dichlorobenzene	650	U
106-46-7	1,4-Dichlorobenzene	650	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	650	U
84-66-2	Diethyl phthalate	650	U
105-67-9	2,4-Dimethylphenol	650	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000072

Client No.

IT-GP-21 DUP

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713611FD

ple wt/vol: 30.46 (g/mL) G Lab File ID: X48618.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 23.9 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	650	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	650	U
606-20-2	2,6-Dinitrotoluene	650	U
117-84-0	Di-n-octyl phthalate	650	U
206-44-0	Fluoranthene	45000	
86-73-7	Fluorene	56000	
118-74-1	Hexachlorobenzene	650	U
87-68-3	Hexachlorobutadiene	650	U
77-47-4	Hexachlorocyclopentadiene	650	U
67-72-1	Hexachloroethane	650	U
193-39-5	Indeno(1,2,3-cd)pyrene	2500	
78-59-1	Isophorone	650	U
91-57-6	2-Methylnaphthalene	68000	
95-48-7	2-Methylphenol	650	U
106-44-5	4-Methylphenol	650	U
91-20-3	Naphthalene	62000	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	650	U
88-75-5	2-Nitrophenol	650	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	650	U
621-64-7	N-Nitroso-Di-n-propylamine	650	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	86000	
108-95-2	Phenol	650	U
129-00-0	Pyrene	46000	
120-82-1	1,2,4-Trichlorobenzene	650	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000073

Client No.

IT-GP-21 DUP

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713611FD

ıple wt/vol: 30.46 (g/mL) G Lab File ID: X48618.RR

/el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 23.9 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	650	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: IT-GP-21 8-12

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

atrix (soil/water): SOIL Lab Sample ID: AD114836

evel (low/med): LOW Date Received: 7/26/01

Solids: 76

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7420		E	P
7440-36-0	Antimony	12.9	U		P
7440-38-2	Arsenic	3.3			P
7440-39-3	Barium	94.5		E	P
7440-41-7	Beryllium	0.64	U		P
7440-43-9	Cadmium	0.64	U		P
7440-70-2	Calcium	30600		E	P
7440-47-3	Chromium	10.7			P
7440-48-4	Cobalt	5.3			P
7440-50-8	Copper	20.5			P
7439-89-6	Iron	10500		E	P
7439-92-1	Lead	123			P
7439-95-4	Magnesium	11300		E	P
7439-96-5	Manganese	267		E	P
7440-02-0	Nickel	11.0			P
7440-09-7	Potassium	1250			P
7782-49-2	Selenium	3.9	U		P
7439-97-6	Mercury	2.6			CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	177			P
7440-28-0	Thallium	7.7	U		P
7440-62-2	Vanadium	15.9			P
7440-66-6	Zinc	75.2			P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-21 DUP

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

atrix (soil/water): SOIL Lab Sample ID: AD114837

evel (low/med): LOW Date Received: 7/26/01

Solids: 76

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5470		E	P
7440-36-0	Antimony	13.4	U		P
7440-38-2	Arsenic	5.2			P
7440-39-3	Barium	105		E	P
7440-41-7	Beryllium	0.67	U		P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	29800		E	P
7440-47-3	Chromium	10.1			P
7440-48-4	Cobalt	4.3			P
7440-50-8	Copper	21.2			P
7439-89-6	Iron	10200		E	P
7439-92-1	Lead	133			P
7439-95-4	Magnesium	11500		E	P
7439-96-5	Manganese	227		E	P
7440-02-0	Nickel	8.9			P
7440-09-7	Potassium	1110			P
7782-49-2	Selenium	4.0	U		P
7439-97-6	Mercury	8.2			CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	162			P
7440-28-0	Thallium	8.0	U		P
7440-62-2	Vanadium	11.6			P
7440-66-6	Zinc	75.0			P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000117

Client Sample No.

IT-GP-21 8-12

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1713611

Solids: 76.1 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.: 000118

IT-GP-21 DUP

) . e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1713611FD

Solids: 76.1 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.56				9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000027

Client No.

IT-GP-22 5-7

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713612

ple wt/vol: 5.16 (g/mL) G Lab File ID: P5199.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 71.5 Heated Purge: Y Date Analyzed: 08/05/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	2700	
71-43-2	Benzene	75	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	680	
75-15-0	Carbon Disulfide	17	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	12	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	35	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	45	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	23	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

C00074

Client No.

IT-GP-22 5-7

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713612

mple wt/vol: 30.55 (g/mL) G Lab File ID: X48619.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 70.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	260	J
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	250	J
205-99-2	Benzo(b)fluoranthene	310	J
207-08-9	Benzo(k)fluoranthene	110	J
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	200	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	220	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	76	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000075

Client No.

IT-GP-22 5-7

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713612

mple wt/vol: 30.55 (g/mL) G Lab File ID: X48619.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 70.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	380	
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	190	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	730	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	260	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	620	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000076

Client No.

IT-GP-22 5-7

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713612

mple wt/vol: 30.55 (g/mL) G Lab File ID: X48619.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 70.2 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-22 5-7

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

atrix (soil/water): SOIL Lab Sample ID: AD114838

evel (low/med): LOW Date Received: 7/26/01

Solids: 30

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6970		E	P
7440-36-0	Antimony	34.2	U		P
7440-38-2	Arsenic	11.3			P
7440-39-3	Barium	119		E	P
7440-41-7	Beryllium	1.7	U		P
7440-43-9	Cadmium	1.7	U		P
7440-70-2	Calcium	25300		E	P
7440-47-3	Chromium	10.9			P
7440-48-4	Cobalt	7.1			P
7440-50-8	Copper	21.9			P
7439-89-6	Iron	21200		E	P
7439-92-1	Lead	17.1	U		P
7439-95-4	Magnesium	2420		E	P
7439-96-5	Manganese	198		E	P
7440-02-0	Nickel	16.1			P
7440-09-7	Potassium	705			P
7782-49-2	Selenium	10.3	U		P
7439-97-6	Mercury	0.341	U		CV
7440-22-4	Silver	3.4	U		P
7440-23-5	Sodium	1150			P
7440-28-0	Thallium	20.5	U		P
7440-62-2	Vanadium	21.3			P
7440-66-6	Zinc	173			P

olor Before: BLACK Clarity Before: Texture: SILT

olor After: BROWN Clarity After: CLOUDY Artifacts:

ot ts:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000119

Client Sample No.

IT-GP-22 5-7

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A1713612

Solids: 29.8 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	8.9				9010	08/07/2001
Cyanide - Total	UG/G	0.50	U			9010	08/07/2001

Comments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028

Client No.

IT-GP-23 6-7

)] : STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713616

ple wt/vol: 5.15 (g/mL) G Lab File ID: P5202.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

)isture: not dec. 22.5 Heated Purge: Y Date Analyzed: 08/06/2001

)olumn: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	100	
71-43-2	Benzene	140	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	200	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	12	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	30	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
5-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	310	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000077

Client No.

IT-GP-23 6-7

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713616

ample wt/vol: 30.54 (g/mL) G Lab File ID: X48603.RR

evel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 21.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	470	
205-99-2	Benzo(b)fluoranthene	610	
207-08-9	Benzo(k)fluoranthene	250	J
191-24-2	Benzo(ghi)perylene	460	
50-32-8	Benzo(a)pyrene	660	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	310	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000078

Client No.

IT-GP-23 6-7

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713616

mple wt/vol: 30.54 (g/mL) G Lab File ID: X48603.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 21.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	260	J
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	490	
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	160	BJ
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	340	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

C00079

Client No.

IT-GP-23 6-7

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713616

mple wt/vol: 30.54 (g/mL) G Lab File ID: X48603.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 21.4 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-23 6-7

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

atrix (soil/water): SOIL Lab Sample ID: AD114841

evel (low/med): LOW Date Received: 7/26/01

Solids: 79

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6240		E	P
7440-36-0	Antimony	12.7	U		P
7440-38-2	Arsenic	12.5			P
7440-39-3	Barium	94.2		E	P
7440-41-7	Beryllium	0.64	U		P
7440-43-9	Cadmium	0.66			P
7440-70-2	Calcium	18200		E	P
7440-47-3	Chromium	17.2			P
7440-48-4	Cobalt	42.3			P
7440-50-8	Copper	82.2			P
7439-89-6	Iron	28700		E	P
7439-92-1	Lead	27.1			P
7439-95-4	Magnesium	6620		E	P
7439-96-5	Manganese	134		E	P
7440-02-0	Nickel	73.0			P
7440-09-7	Potassium	769			P
7782-49-2	Selenium	10.2			P
7439-97-6	Mercury	0.129	U		CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	196			P
7440-28-0	Thallium	7.6	U		P
7440-62-2	Vanadium	18.4			P
7440-66-6	Zinc	62.5			P

olor Before: BROWN Clarity Before: _____ Texture: CLAY

olor After: YELLOW Clarity After: CLOUDY Artifacts: _____

mments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000120

Client Sample No.

IT-GP-23 6-7

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1713616

Solids: 78.6 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	32.9				9010	08/07/2001
anide - Total	UG/G	0.50	U			9010	08/07/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000029

Client No.

IT-GP-24 5-7

1 : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713615

ple wt/vol: 5.05 (g/mL) G Lab File ID: P5264.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 27.0 Heated Purge: Y Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	120	
71-43-2	Benzene	28	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	16	J
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	4	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	17	
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	26	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	6	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000080

Client No.

IT-GP-24 5-7

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix: (soil/water) SOIL Lab Sample ID: A1713615

mple wt/vol: 30.12 (g/mL) G Lab File ID: X48602.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 33.3 decanted: (Y/N) N Date Extracted: 08/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	290	J
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	440	
56-55-3	Benzo(a)anthracene	560	
205-99-2	Benzo(b)fluoranthene	140	J
207-08-9	Benzo(k)fluoranthene	400	
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	370	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	380	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	140	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
4-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

CC0081

Client No.

IT-GP-24 5-7

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713615

mple wt/vol: 30.12 (g/mL) G Lab File ID: X48602.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 33.3 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	1200	
86-73-7	Fluorene	430	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	130	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	350	
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	260	BJ
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	960	
108-95-2	Phenol	330	U
129-00-0	Pyrene	1000	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

IT-GP-24 5-7

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1713615

mple wt/vol: 30.12 (g/mL) G Lab File ID: X48602.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 33.3 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-24 5-7

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

Matrix (soil/water): SOIL Lab Sample ID: AD114840

Level (low/med): LOW Date Received: 7/26/01

% Solids: 67

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6900		E	P
7440-36-0	Antimony	15.3	U		P
7440-38-2	Arsenic	5.7			P
7440-39-3	Barium	87.5		E	P
7440-41-7	Beryllium	0.77	U		P
7440-43-9	Cadmium	0.77	U		P
7440-70-2	Calcium	17200		E	P
7440-47-3	Chromium	10.3			P
7440-48-4	Cobalt	5.8			P
7440-50-8	Copper	18.6			P
7439-89-6	Iron	13100		E	P
7439-92-1	Lead	32.5			P
7439-95-4	Magnesium	9100		E	P
7439-96-5	Manganese	149		E	P
7440-02-0	Nickel	14.3			P
7440-09-7	Potassium	992			P
7782-49-2	Selenium	4.6	U		P
7439-97-6	Mercury	0.141	U		CV
7440-22-4	Silver	1.5	U		P
7440-23-5	Sodium	204			P
7440-28-0	Thallium	9.2	U		P
7440-62-2	Vanadium	17.5			P
7440-66-6	Zinc	71.5			P

Color Before: BROWN Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000121

Client Sample No.

IT-GP-24 5-7

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1713615

olids: 66.7 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/07/2001
anide - Total	UG/G	0.50	U			9010	08/07/2001

ments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000030

Client No.

IT-GP-25 5-7

): STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1713617

ple wt/vol: 5.17 (g/mL) G Lab File ID: P5203.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 16.9 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	100	
71-43-2	Benzene	77	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	22	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	220	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	15	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	28	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	15	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000031

Client No.

IT-GP-25 DUP

) ' e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1713617FD

ple wt/vol: 1.11 (g/mL) G Lab File ID: P5236.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

oisture: not dec. 16.9 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	130	B
71-43-2	Benzene	38	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	28	
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	120	
591-78-6	2-Hexanone	14	U
75-09-2	Methylene chloride	39	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	41	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	22	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000083

Client No.

IT-GP-25 5-7

ıb e: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1713617

mple wt/vol: 30.10 (g/mL) G Lab File ID: X48604.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 16.7 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	9600	
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	5200	
56-55-3	Benzo(a)anthracene	2300	
205-99-2	Benzo(b)fluoranthene	1700	
207-08-9	Benzo(k)fluoranthene	630	
191-24-2	Benzo(ghi)perylene	610	
50-32-8	Benzo(a)pyrene	1600	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	1800	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	7600	
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000084
Client No.

IT-GP-25 5-7

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713617

ample wt/vol: 30.10 (g/mL) G Lab File ID: X48604.RR

evel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 16.7 decanted: (Y/N) N Date Extracted: 08/04/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	6300	
86-73-7	Fluorene	10000	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	740	
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	12000	
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	19000	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	16000	
108-95-2	Phenol	330	U
129-00-0	Pyrene	4600	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000085

Client No.

IT-GP-25 5-7

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1713617

ımple wt/vol: 30.10 (g/mL) G Lab File ID: X48604.RR

ıvel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 16.7 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000086

Client No.

IT-GP-25 DUP

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1713617FD

mple wt/vol: 30.30 (g/mL) G Lab File ID: X48605.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 16.7 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	410	
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	970	
56-55-3	Benzo(a)anthracene	2100	
205-99-2	Benzo(b)fluoranthene	1500	
207-08-9	Benzo(k)fluoranthene	600	
191-24-2	Benzo(ghi)perylene	500	
50-32-8	Benzo(a)pyrene	1400	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	1600	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	240	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000087
Client No.

IT-GP-25 DUP

ab ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1713617FD

ample wt/vol: 30.30 (g/mL) G Lab File ID: X48605.RR

evel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 16.7 decanted: (Y/N) N Date Extracted: 08/04/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	3000	
86-73-7	Fluorene	660	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	630	
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	310	BJ
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	1900	
108-95-2	Phenol	330	U
129-00-0	Pyrene	2600	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000088

Client No.

IT-GP-25 DUP

ıb e: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1713617FD

mple wt/vol: 30.30 (g/mL) G Lab File ID: X48605.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/26/2001

Moisture: 16.7 decanted: (Y/N) N Date Extracted: 08/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-25 5-7

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

Matrix (soil/water): SOIL Lab Sample ID: AD114842

Level (low/med): LOW Date Received: 7/26/01

% Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4630		E	P
7440-36-0	Antimony	12.2	U		P
7440-38-2	Arsenic	2.8			P
7440-39-3	Barium	47.3		E	P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	46700		E	P
7440-47-3	Chromium	6.9			P
7440-48-4	Cobalt	3.7			P
7440-50-8	Copper	8.7			P
7439-89-6	Iron	8390		E	P
7439-92-1	Lead	23.8			P
7439-95-4	Magnesium	18700		E	P
7439-96-5	Manganese	255		E	P
7440-02-0	Nickel	7.6			P
7440-09-7	Potassium	989			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.332			CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	131			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	11.9			P
7440-66-6	Zinc	51.4			P

Color Before: BROWN Clarity Before: _____ Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

IT CORPORATION

000106

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-25 DUP

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

Matrix (soil/water): SOIL Lab Sample ID: AD114843

Level (low/med): LOW Date Received: 7/26/01

% Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6780		E	P
7440-36-0	Antimony	11.8	U		P
7440-38-2	Arsenic	2.9			P
7440-39-3	Barium	78.2		E	P
7440-41-7	Beryllium	0.59	U		P
7440-43-9	Cadmium	0.59	U		P
7440-70-2	Calcium	45800		E	P
7440-47-3	Chromium	10.0			P
7440-48-4	Cobalt	5.2			P
7440-50-8	Copper	12.0			P
7439-89-6	Iron	11100		E	P
7439-92-1	Lead	25.2			P
7439-95-4	Magnesium	20400		E	P
7439-96-5	Manganese	329		E	P
7440-02-0	Nickel	10.6			P
7440-09-7	Potassium	1540			P
7782-49-2	Selenium	3.5	U		P
7439-97-6	Mercury	0.105	U		CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	160			P
7440-28-0	Thallium	7.1	U		P
7440-62-2	Vanadium	16.0			P
7440-66-6	Zinc	53.0			P

Color Before: BROWN Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000122

Client Sample No.

IT-GP-25 5-7

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1713617

Solids: 83.3 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000123

Client Sample No.

IT-GP-25 DUP

b ' ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1713617FD

Solids: 83.3 Date Samp/Recv: 07/26/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	0.50	U			9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

ITGP-26 (7-8')

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1717701

ple wt/vol: 5.02 (g/mL) G Lab File ID: P5212.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: not dec. 27.2 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	510	E
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	6	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	1900	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	18	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	300	E
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	7300	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

ITGP-26 (7-8') DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1717701DL

Sample wt/vol: 4.14 (g/mL) G Lab File ID: F3388.RR

Level: (low/med) MED Date Samp/Recv: 07/26/2001 07/27/2001

% Moisture: not dec. 27.2 Heated Purge: N Date Analyzed: 08/06/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	350	DJ
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	625	U
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	9500	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	420	DJ
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	39000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040

Client No.

ITGP-26 (7-8')

: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1717701

ple wt/vol: 30.95 (g/mL) G Lab File ID: X48752.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: 30.7 decanted: (Y/N) N Date Extracted: 08/06/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ection Volume: 1.00 (uL) Dilution Factor: 200.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	20000	
208-96-8	Acenaphthylene	11000	
120-12-7	Anthracene	12000	
56-55-3	Benzo(a)anthracene	24000	
205-99-2	Benzo(b)fluoranthene	22000	
207-08-9	Benzo(k)fluoranthene	9800	
191-24-2	Benzo(ghi)perylene	7000	U
50-32-8	Benzo(a)pyrene	24000	
65-85-0	Benzoic acid	7000	U
100-51-6	Benzyl alcohol	7000	U
111-91-1	Bis(2-chloroethoxy) methane	7000	U
111-44-4	Bis(2-chloroethyl) ether	7000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	7000	U
117-81-7	Bis(2-ethylhexyl) phthalate	7000	U
101-55-3	4-Bromophenyl phenyl ether	7000	U
85-68-7	Butyl benzyl phthalate	7000	U
106-47-8	4-Chloroaniline	7000	U
59-50-7	4-Chloro-3-methylphenol	7000	U
91-58-7	2-Chloronaphthalene	7000	U
95-57-8	2-Chlorophenol	7000	U
7005-72-3	4-Chlorophenyl phenyl ether	7000	U
218-01-9	Chrysene	17000	
53-70-3	Dibenzo(a,h)anthracene	7000	U
132-64-9	Dibenzofuran	12000	
84-74-2	Di-n-butyl phthalate	7000	U
95-50-1	1,2-Dichlorobenzene	7000	U
541-73-1	1,3-Dichlorobenzene	7000	U
106-46-7	1,4-Dichlorobenzene	7000	U
91-94-1	3,3'-Dichlorobenzidine	7000	U
120-83-2	2,4-Dichlorophenol	7000	U
4-66-2	Diethyl phthalate	7000	U
105-67-9	2,4-Dimethylphenol	7000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000041

Client No.

ITGP-26 (7-8')

ı : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1717701

ɔle wt/vol: 30.95 (g/mL) G Lab File ID: X48752.RR

ɜl: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

ɔisture: 30.7 decanted: (Y/N) N Date Extracted: 08/06/2001

ɔentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ɜction Volume: 1.00 (uL) Dilution Factor: 200.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	7000	U
534-52-1	4,6-Dinitro-2-methylphenol	7000	U
51-28-5	2,4-Dinitrophenol	7000	U
121-14-2	2,4-Dinitrotoluene	7000	U
606-20-2	2,6-Dinitrotoluene	7000	U
117-84-0	Di-n-octyl phthalate	7000	U
206-44-0	Fluoranthene	47000	
86-73-7	Fluorene	12000	
118-74-1	Hexachlorobenzene	7000	U
87-68-3	Hexachlorobutadiene	7000	U
77-47-4	Hexachlorocyclopentadiene	7000	U
67-72-1	Hexachloroethane	7000	U
193-39-5	Indeno(1,2,3-cd)pyrene	7000	U
78-59-1	Isophorone	7000	U
91-57-6	2-Methylnaphthalene	79000	
95-48-7	2-Methylphenol	7000	U
106-44-5	4-Methylphenol	7000	U
91-20-3	Naphthalene	930000	
88-74-4	2-Nitroaniline	7000	U
99-09-2	3-Nitroaniline	7000	U
100-01-6	4-Nitroaniline	7000	U
98-95-3	Nitrobenzene	7000	U
88-75-5	2-Nitrophenol	7000	U
100-02-7	4-Nitrophenol	7000	U
86-30-6	N-nitrosodiphenylamine	7000	U
621-64-7	N-Nitroso-Di-n-propylamine	7000	U
87-86-5	Pentachlorophenol	7000	U
85-01-8	Phenanthrene	56000	
108-95-2	Phenol	7000	U
129-00-0	Pyrene	28000	
20-82-1	1,2,4-Trichlorobenzene	7000	U
95-95-4	2,4,5-Trichlorophenol	7000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000042

Client No.

ITGP-26 (7-8')

ı : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1717701

ɔle wt/vol: 30.95 (g/mL) G Lab File ID: X48752.RR

ɛl: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

ɔisture: 30.7 decanted: (Y/N) N Date Extracted: 08/06/2001

ɔentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ɛction Volume: 1.00 (uL) Dilution Factor: 200.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	7000	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: ITGP-26 (7-8')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7177

Matrix (soil/water): SOIL Lab Sample ID: AD114584

Level (low/med): LOW Date Received: 7/27/01

% Solids: 69

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7820		E	P
7440-36-0	Antimony	14.1	U		P
7440-38-2	Arsenic	7.4			P
7440-39-3	Barium	66.3			P
7440-41-7	Beryllium	0.71	U		P
7440-43-9	Cadmium	0.71	U		P
7440-70-2	Calcium	54400		E	P
7440-47-3	Chromium	10.4			P
7440-48-4	Cobalt	6.4			P
7440-50-8	Copper	15.3			P
7439-89-6	Iron	14000		E	P
7439-92-1	Lead	24.5			P
7439-95-4	Magnesium	20900		E	P
7439-96-5	Manganese	386		E	P
7440-02-0	Nickel	13.8			P
7440-09-7	Potassium	1810			P
7782-49-2	Selenium	4.2	U		P
7439-97-6	Mercury	0.326			CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	266			P
7440-28-0	Thallium	8.5	U		P
7440-62-2	Vanadium	16.5			P
7440-66-6	Zinc	59.9			P

Color Before: BROWN Clarity Before: Texture: GRAVEL

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

000056

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.

ITGP-26 (7-8')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1717701

Solids: 69.3 Date Samp/Recv: 07/26/2001 07/27/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/07/2001
yanide - Total	UG/G	7.1				9010	08/07/2001

mments:

_____
_____
_____
_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

ITGP-27 (8.5-9.5')

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1717702

ple wt/vol: 5.12 (g/mL) G Lab File ID: P5211.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: not dec. 22.8 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	130	
71-43-2	Benzene	69	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	20	J
75-15-0	Carbon Disulfide	9	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	38	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	11	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	7	
108-88-3	Toluene	8	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	41	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITGP-27 (8.5-9.5')

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1717702

ple wt/vol: 30.34 (g/mL) G Lab File ID: X48656.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: 21.1 decanted: (Y/N) N Date Extracted: 08/06/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	500	
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	1000	
56-55-3	Benzo(a)anthracene	4300	
205-99-2	Benzo(b)fluoranthene	4800	
207-08-9	Benzo(k)fluoranthene	1900	
191-24-2	Benzo(ghi)perylene	1700	
50-32-8	Benzo(a)pyrene	5000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	3700	
53-70-3	Dibenzo(a,h)anthracene	750	
132-64-9	Dibenzofuran	220	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000044

Client No.

ITGP-27 (8.5-9.5')

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1717702

mple wt/vol: 30.34 (g/mL) G Lab File ID: X48656.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: 21.1 decanted: (Y/N) N Date Extracted: 08/06/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	4100	
86-73-7	Fluorene	400	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	2200	
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	1600	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	2600	
108-95-2	Phenol	330	U
129-00-0	Pyrene	3200	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000045

Client No.

ITGP-27 (8.5-9.5')

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1717702

nple wt/vol: 30.34 (g/mL) G Lab File ID: X48656.RR

/el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: 21.1 decanted: (Y/N) N Date Extracted: 08/06/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-27 (8.5-9.5')

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7177

Matrix (soil/water): SOIL Lab Sample ID: AD114585

Level (low/med): LOW Date Received: 7/27/01

Solids: 79

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4870		E	P
7440-36-0	Antimony	12.2	U		P
7440-38-2	Arsenic	3.2			P
7440-39-3	Barium	55.1			P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	21000		E	P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	3.9			P
7440-50-8	Copper	12.4			P
7439-89-6	Iron	7640		E	P
7439-92-1	Lead	37.8			P
7439-95-4	Magnesium	6410		E	P
7439-96-5	Manganese	148		E	P
7440-02-0	Nickel	8.5			P
7440-09-7	Potassium	716			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.181			CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	143			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	11.7			P
7440-66-6	Zinc	60.1			P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: GRAY Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000057

Client Sample No.

ITGP-27 (8.5-9.5')

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): SOIL Lab Sample ID: A1717702

Solids: 78.9 Date Samp/Recv: 07/26/2001 07/27/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	18.6				9010	08/07/2001
Cyanide - Total	UG/G	35.9				9010	08/07/2001

omments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

MW01-1-12

ıb .ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1907302

ımple wt/vol: 1.07 (g/mL) G Lab File ID: P6174.RR

:vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: not dec. 43.5 Heated Purge: Y Date Analyzed: 10/02/2001

! Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

ıil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	92	B
71-43-2	Benzene	820	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	4400	E
56-23-5	Carbon Tetrachloride	7	U
108-90-7	Chlorobenzene	7	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	7	U
107-06-2	1,2-Dichloroethane	7	U
75-35-4	1,1-Dichloroethene	7	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	500	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	160	
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
127-18-4	Tetrachloroethene	13	
108-88-3	Toluene	550	B
71-55-6	1,1,1-Trichloroethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	3500	B

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

MW01-1-12 DL

Lab Name: STL Buffalo Contract: _____

Job Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1907302DL

Sample wt/vol: 4.05 (g/mL) G Lab File ID: F4716.RR

Level: (low/med) MED Date Samp/Recv: 09/20/2001 09/20/2001

% Moisture: not dec. 43.5 Heated Purge: N Date Analyzed: 10/04/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	625	U
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	280	DJ
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	625	U
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	625	U
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	940	DJ

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023

Client No.

MW01-1-12

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1907302

mple wt/vol: 30.87 (g/mL) G Lab File ID: W45256.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.1 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 10/05/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	100000	
208-96-8	Acenaphthylene	370000	
120-12-7	Anthracene	350000	
56-55-3	Benzo(a)anthracene	270000	
205-99-2	Benzo(b)fluoranthene	170000	
207-08-9	Benzo(k)fluoranthene	260000	
191-24-2	Benzo(ghi)perylene	75000	
50-32-8	Benzo(a)pyrene	220000	
65-85-0	Benzoic acid	10000	U
100-51-6	Benzyl alcohol	10000	U
111-91-1	Bis(2-chloroethoxy) methane	10000	U
111-44-4	Bis(2-chloroethyl) ether	10000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10000	U
117-81-7	Bis(2-ethylhexyl) phthalate	10000	U
101-55-3	4-Bromophenyl phenyl ether	10000	U
85-68-7	Butyl benzyl phthalate	10000	U
106-47-8	4-Chloroaniline	5100	U
59-50-7	4-Chloro-3-methylphenol	10000	U
91-58-7	2-Chloronaphthalene	10000	U
95-57-8	2-Chlorophenol	10000	U
7005-72-3	4-Chlorophenyl phenyl ether	5100	U
218-01-9	Chrysene	240000	
53-70-3	Dibenzo(a,h)anthracene	38000	
132-64-9	Dibenzofuran	340000	
84-74-2	Di-n-butyl phthalate	10000	U
95-50-1	1,2-Dichlorobenzene	10000	U
541-73-1	1,3-Dichlorobenzene	10000	U
106-46-7	1,4-Dichlorobenzene	10000	U
91-94-1	3,3'-Dichlorobenzidine	10000	U
120-83-2	2,4-Dichlorophenol	8200	U
84-66-2	Diethyl phthalate	10000	U
105-67-9	2,4-Dimethylphenol	28000	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

MW01-1-12

ıb Name: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1907302

ımple wt/vol: 30.87 (g/mL) G Lab File ID: W45256.MSQ

ɛvel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.1 decanted: (Y/N) N Date Extracted: 10/04/2001

ɔncentrated Extract Volume: 10000 (uL) Date Analyzed: 10/05/2001

ɪjection Volume: 1.00 (uL) Dilution Factor: 20.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	10000	U
534-52-1	4,6-Dinitro-2-methylphenol	10000	U
51-28-5	2,4-Dinitrophenol	10000	U
121-14-2	2,4-Dinitrotoluene	10000	U
606-20-2	2,6-Dinitrotoluene	10000	U
117-84-0	Di-n-octyl phthalate	10000	U
206-44-0	Fluoranthene	600000	
86-73-7	Fluorene	390000	
118-74-1	Hexachlorobenzene	10000	U
87-68-3	Hexachlorobutadiene	10000	U
77-47-4	Hexachlorocyclopentadiene	10000	U
67-72-1	Hexachloroethane	8200	U
193-39-5	Indeno(1,2,3-cd)pyrene	89000	
78-59-1	Isophorone	10000	U
91-57-6	2-Methylnaphthalene	770000	
95-48-7	2-Methylphenol	27000	
106-44-5	4-Methylphenol	60000	
91-20-3	Naphthalene	3000000	BE
88-74-4	2-Nitroaniline	10000	U
99-09-2	3-Nitroaniline	10000	U
100-01-6	4-Nitroaniline	10000	U
98-95-3	Nitrobenzene	10000	U
88-75-5	2-Nitrophenol	10000	U
100-02-7	4-Nitrophenol	10000	U
86-30-6	N-nitrosodiphenylamine	10000	U
621-64-7	N-Nitroso-Di-n-propylamine	10000	U
87-86-5	Pentachlorophenol	10000	U
85-01-8	Phenanthrene	940000	
108-95-2	Phenol	51000	
129-00-0	Pyrene	470000	
120-82-1	1,2,4-Trichlorobenzene	7200	U
95-95-4	2,4,5-Trichlorophenol	10000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025

Client No.

MW01-1-12

ıb ıme: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1907302

ımple wt/vol: 30.87 (g/mL) G Lab File ID: W45256.MSQ

ıvel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.1 decanted: (Y/N) N Date Extracted: 10/04/2001

ıncentrated Extract Volume: 10000 (uL) Date Analyzed: 10/05/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 20.00

ıC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	10000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000026

Client No.

MW01-1-12 DL

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907302DL

mple wt/vol: 30.87 (g/mL) G Lab File ID: W45264.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.1 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 10/08/2001

jection Volume: 1.00 (uL) Dilution Factor: 80.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	86000	D
208-96-8	Acenaphthylene	350000	D
120-12-7	Anthracene	350000	D
56-55-3	Benzo(a)anthracene	260000	D
205-99-2	Benzo(b)fluoranthene	170000	D
207-08-9	Benzo(k)fluoranthene	210000	D
191-24-2	Benzo(ghi)perylene	82000	D
50-32-8	Benzo(a)pyrene	220000	D
65-85-0	Benzoic acid	41000	U
100-51-6	Benzyl alcohol	41000	U
111-91-1	Bis(2-chloroethoxy) methane	41000	U
111-44-4	Bis(2-chloroethyl) ether	41000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	41000	U
117-81-7	Bis(2-ethylhexyl) phthalate	41000	U
101-55-3	4-Bromophenyl phenyl ether	41000	U
85-68-7	Butyl benzyl phthalate	41000	U
106-47-8	4-Chloroaniline	20000	U
59-50-7	4-Chloro-3-methylphenol	41000	U
91-58-7	2-Chloronaphthalene	41000	U
95-57-8	2-Chlorophenol	41000	U
7005-72-3	4-Chlorophenyl phenyl ether	20000	U
218-01-9	Chrysene	240000	D
53-70-3	Dibenzo(a,h)anthracene	41000	U
132-64-9	Dibenzofuran	330000	D
84-74-2	Di-n-butyl phthalate	41000	U
95-50-1	1,2-Dichlorobenzene	41000	U
541-73-1	1,3-Dichlorobenzene	41000	U
106-46-7	1,4-Dichlorobenzene	41000	U
91-94-1	3,3'-Dichlorobenzidine	41000	U
120-83-2	2,4-Dichlorophenol	33000	U
84-66-2	Diethyl phthalate	41000	U
105-67-9	2,4-Dimethylphenol	41000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000027

Client No.

MW01-1-12 DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907302DL

mple wt/vol: 30.87 (g/mL) G Lab File ID: W45264.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.1 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 10/08/2001

jection Volume: 1.00 (uL) Dilution Factor: 80.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	41000	U
534-52-1	4,6-Dinitro-2-methylphenol	41000	U
51-28-5	2,4-Dinitrophenol	41000	U
121-14-2	2,4-Dinitrotoluene	41000	U
606-20-2	2,6-Dinitrotoluene	41000	U
117-84-0	Di-n-octyl phthalate	41000	U
206-44-0	Fluoranthene	700000	D
86-73-7	Fluorene	390000	D
118-74-1	Hexachlorobenzene	41000	U
87-68-3	Hexachlorobutadiene	41000	U
77-47-4	Hexachlorocyclopentadiene	41000	U
67-72-1	Hexachloroethane	33000	U
193-39-5	Indeno(1,2,3-cd)pyrene	87000	D
78-59-1	Isophorone	41000	U
91-57-6	2-Methylnaphthalene	840000	D
95-48-7	2-Methylphenol	41000	U
106-44-5	4-Methylphenol	41000	U
91-20-3	Naphthalene	4000000	BD
88-74-4	2-Nitroaniline	41000	U
99-09-2	3-Nitroaniline	41000	U
100-01-6	4-Nitroaniline	41000	U
98-95-3	Nitrobenzene	41000	U
88-75-5	2-Nitrophenol	41000	U
100-02-7	4-Nitrophenol	41000	U
86-30-6	N-nitrosodiphenylamine	41000	U
621-64-7	N-Nitroso-Di-n-propylamine	41000	U
87-86-5	Pentachlorophenol	41000	U
85-01-8	Phenanthrene	1200000	D
108-95-2	Phenol	41000	U
129-00-0	Pyrene	560000	D
120-82-1	1,2,4-Trichlorobenzene	29000	U
95-95-4	2,4,5-Trichlorophenol	41000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028
Client No.

MW01-1-12 DL

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907302DL

mple wt/vol: 30.87 (g/mL) G Lab File ID: W45264.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.1 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 10/08/2001

jection Volume: 1.00 (uL) Dilution Factor: 80.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	41000	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-1-12

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-9073

Matrix (soil/water): SOIL Lab Sample ID: AD118367

Level (low/med): LOW Date Received: 9/20/01

Solids: 63

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13400			P
7440-36-0	Antimony	16.6	U		P
7440-38-2	Arsenic	28.2			P
7440-39-3	Barium	224			P
7440-41-7	Beryllium	0.83	U		P
7440-43-9	Cadmium	0.83	U		P
7440-70-2	Calcium	11800			P
7440-47-3	Chromium	50.6			P
7440-48-4	Cobalt	13.9			P
7440-50-8	Copper	18.7			P
7439-89-6	Iron	45000			P
7439-92-1	Lead	298			P
7439-95-4	Magnesium	1630			P
7439-96-5	Manganese	565			P
7440-02-0	Nickel	17.8			P
7440-09-7	Potassium	455			P
7782-49-2	Selenium	5.0	U		P
7440-22-4	Silver	1.7	U		P
7439-97-6	Mercury	0.233			CV
7440-23-5	Sodium	767			P
7440-28-0	Thallium	9.9	U		P
7440-62-2	Vanadium	68.6			P
7440-66-6	Zinc	126			P

Color Before: BLACK Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.: 009032

MW01-1-12

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1907302

Solids: 62.9 Date Samp/Recv: 09/20/2001 09/20/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9012A	10/02/2001
yanide - Total	UG/G	439				9010	10/02/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000042
Client No.

MW00-12 (21-21.5')

Lab: STL Buffalo Contract: _____

Job Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743624

Sample wt/vol: 5.07 (g/mL) G Lab File ID: P5333.RR

Level: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

% Moisture: not dec. 15.7 Heated Purge: Y Date Analyzed: 08/09/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	19	BJ
71-43-2	Benzene	170	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	190	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	10	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	26	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	4	J
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	340	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000056
Client No.

MW00-12 (21-21.5')FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743624FD

ple wt/vol: 5.17 (g/mL) G Lab File ID: P5334.RR

el: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

bisture: not dec. 15.7 Heated Purge: Y Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	19	BJ
71-43-2	Benzene	180	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	3	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	200	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	22	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	5	J
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	360	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000118

Client No.

MW00-12 (21-21.5')

ab ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743624

ample wt/vol: 30.32 (g/mL) G Lab File ID: Y48580.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.0 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	49	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000119

Client No.

MW00-12 (21-21.5')

ıb . ıne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743624

ımple wt/vol: 30.32 (g/mL) G Lab File ID: Y48580.RR

:vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

'C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	400	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000120

Client No.

MW00-12 (21-21.5')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743624

mple wt/vol: 30.32 (g/mL) G Lab File ID: Y48580.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000180

Client No.

MW00-12 (21-21.5')FD

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743624FD

mple wt/vol: 30.74 (g/mL) G Lab File ID: Y48581.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	100	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000131

Client No.

MW00-12 (21-21.5')FD

o Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743624FD

mple wt/vol: 30.74 (g/mL) G Lab File ID: Y48581.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	23	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	680	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000162

Client No.

MW00-12 (21-21.5')FD

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743624FD

ample wt/vol: 30.74 (g/mL) G Lab File ID: Y48581.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.0 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-12 (21-21.5')

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114980

evel (low/med): LOW Date Received: 8/2/01

Solids: 84

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3050		N	P
7440-36-0	Antimony	12.1	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	28.6		N	P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	46900		E	P
7440-47-3	Chromium	5.1			P
7440-48-4	Cobalt	2.6			P
7440-50-8	Copper	6.7			P
7439-89-6	Iron	6440		E	P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	20900			P
7439-96-5	Manganese	241		E	P
7440-02-0	Nickel	5.1			P
7440-09-7	Potassium	884			P
7782-49-2	Selenium	3.6	U		P
7439-97-6	Mercury	0.126	U	N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	213			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	8.8			P
7440-66-6	Zinc	42.8		N	P

Color Before: GRAY Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

I T CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-12 (21-21.5')FD

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114981

evel (low/med): LOW Date Received: 8/2/01

Solids: 84

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2730		N	P
7440-36-0	Antimony	12.4	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	25.8		N	P
7440-41-7	Beryllium	0.62	U		P
7440-43-9	Cadmium	0.62	U		P
7440-70-2	Calcium	47600		E	P
7440-47-3	Chromium	5.2			P
7440-48-4	Cobalt	2.5			P
7440-50-8	Copper	7.1			P
7439-89-6	Iron	6260		E	P
7439-92-1	Lead	6.5			P
7439-95-4	Magnesium	21700			P
7439-96-5	Manganese	223		E	P
7440-02-0	Nickel	4.5			P
7440-09-7	Potassium	807			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.110	U	N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	169			P
7440-28-0	Thallium	7.4	U		P
7440-62-2	Vanadium	8.8			P
7440-66-6	Zinc	46.3		N	P

Color Before: GRAY Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000212

Client Sample No.

MW00-12 (21-21.5')

a me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

latrix (soil/water): SOIL Lab Sample ID: A1743624

; Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	21.2				9010	08/13/2001
Cyanide - Total	UG/G	21.2				9010	08/09/2001

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000223

Client Sample No.

MW00-12 (21-21.5')FD

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1743624FD

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	166				9010	08/13/2001
yanide - Total	UG/G	166				9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000043

Client No.

MW00-13 (18-20')

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743625

ple wt/vol: 5.12 (g/mL) G Lab File ID: P5335.RR

el: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 20.4 Heated Purge: Y Date Analyzed: 08/10/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	19	BJ
71-43-2	Benzene	38	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	19	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	13	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	9	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	7	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	5	J
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	24	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000121

Client No.

MW00-13 (18-20')

La. ame: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743625

Sample wt/vol: 30.33 (g/mL) G Lab File ID: Y48582.RR

Level: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

% Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/15/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	250	J
208-96-8	Acenaphthylene	34	J
120-12-7	Anthracene	320	J
56-55-3	Benzo(a)anthracene	80	J
205-99-2	Benzo(b)fluoranthene	66	J
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	46	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	170	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	67	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	110	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000122

Client No.

MW00-13 (18-20')

ab .me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743625

ample wt/vol: 30.33 (g/mL) G Lab File ID: Y48582.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	280	J
86-73-7	Fluorene	470	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	58	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	150	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	540	
108-95-2	Phenol	330	U
129-00-0	Pyrene	170	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000123

Client No.

MW00-13 (18-20')

ıb ıvame: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743625

ımple wt/vol: 30.33 (g/mL) G Lab File ID: Y48582.RR

:vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/15/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-13 (18-20')

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114982

Level (low/med): LOW Date Received: 8/2/01

Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2340		N	P
7440-36-0	Antimony	12.2	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	15.1		N	P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	48400		E	P
7440-47-3	Chromium	4.3			P
7440-48-4	Cobalt	2.4	U		P
7440-50-8	Copper	5.3			P
7439-89-6	Iron	6020		E	P
7439-92-1	Lead	9.7			P
7439-95-4	Magnesium	22400			P
7439-96-5	Manganese	225		E	P
7440-02-0	Nickel	3.9			P
7440-09-7	Potassium	615			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.112	U	N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	314			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	8.6			P
7440-66-6	Zinc	49.4		N	P

Color Before: GRAY Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000213

Client Sample No.

MW00-13 (18-20')

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1743625

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	117				9010	08/13/2001
yanide - Total	UG/G	126				9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000044
Client No.

MW00-14 (18-20')

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743626

ple wt/vol: 5.02 (g/mL) G Lab File ID: P5336.RR

el: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 7.9 Heated Purge: Y Date Analyzed: 08/10/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	17	BJ
71-43-2	Benzene	1100	E
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	3	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	390	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	6	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	150	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	4	J
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	1100	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000045

Client No.

MW00-14 (18-20') DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743626DL

Sample wt/vol: 4.02 (g/mL) G Lab File ID: F3611.RR

Level: (low/med) MED Date Samp/Recv: 08/01/2001 08/02/2001

% Moisture: not dec. 7.9 Heated Purge: N Date Analyzed: 08/14/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	440	DJ
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	625	U
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	820	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	625	U
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	3000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000124

Client No.

MW00-14 (18-20')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743626

mple wt/vol: 30.12 (g/mL) G Lab File ID: Y48583.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 6.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	51	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	75	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000125

Client No.

MW00-14 (18-20')

ıb Name: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743626

ımple wt/vol: 30.12 (g/mL) G Lab File ID: Y48583.RR

:vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 6.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ℂ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	680	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	64	J
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000126

Client No.

MW00-14 (18-20')

ıb ..me: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743626

ımple wt/vol: 30.12 (g/mL) G Lab File ID: Y48583.RR

:vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 6.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ℂ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-14 (18-20')

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114983

evel (low/med): LOW Date Received: 8/2/01

Solids: 94

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3460		N	P
7440-36-0	Antimony	11.1	U	N	P
7440-38-2	Arsenic	1.1			P
7440-39-3	Barium	30.0		N	P
7440-41-7	Beryllium	0.56	U		P
7440-43-9	Cadmium	0.56	U		P
7440-70-2	Calcium	105000		E	P
7440-47-3	Chromium	6.1			P
7440-48-4	Cobalt	3.1			P
7440-50-8	Copper	6.4			P
7439-89-6	Iron	7180		E	P
7439-92-1	Lead	5.6	U		P
7439-95-4	Magnesium	26300			P
7439-96-5	Manganese	400		E	P
7440-02-0	Nickel	7.2			P
7440-09-7	Potassium	879			P
7782-49-2	Selenium	3.3	U		P
7439-97-6	Mercury	0.104	U	N	CV
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	133			P
7440-28-0	Thallium	6.7	U		P
7440-62-2	Vanadium	8.6			P
7440-66-6	Zinc	31.3		N	P

Color Before: GRAY Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000214

Client Sample No.

MW00-14 (18-20')

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix (soil/water): SOIL Lab Sample ID: A1743626

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
ɪenable Cyanide	MG/KG	37.0				9010	08/13/2001
yanide - Total	UG/G	37.0				9010	08/09/2001

ɪments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

00011

Client No.

MW00-15

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ix: (soil/water) SOIL Lab Sample ID: A1746501

le wt/vol: 4.15 (g/mL) G Lab File ID: F3489.RR

l: (low/med) MED Date Samp/Recv: 08/02/2001 08/03/2001

isture: not dec. 17.5 Heated Purge: N Date Analyzed: 08/09/2001

olumn: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

. Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	1600	
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	320	J
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	1400	
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	1400	
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	3100	
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	10000	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

00012

Client No.

MW00-15 DUP

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ix: (soil/water) SOIL Lab Sample ID: A1746501FD

le wt/vol: 4.02 (g/mL) G Lab File ID: F3490.RR

l: (low/med) MED Date Samp/Recv: 08/02/2001 08/03/2001

isture: not dec. 17.5 Heated Purge: N Date Analyzed: 08/09/2001

olumn: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	1200	
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	260	J
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	1200	
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	1400	
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	2600	
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	9800	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No. 00015

MW00-15

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1746501

Sample wt/vol: 30.94 (g/mL) G Lab File ID: W44734.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 08/15/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	620	
208-96-8	Acenaphthylene	1400	
120-12-7	Anthracene	1300	
56-55-3	Benzo(a)anthracene	390	U
205-99-2	Benzo(b)fluoranthene	420	
207-08-9	Benzo(k)fluoranthene	660	
191-24-2	Benzo(ghi)perylene	390	U
50-32-8	Benzo(a)pyrene	670	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	390	U
111-91-1	Bis(2-chloroethoxy) methane	390	U
111-44-4	Bis(2-chloroethyl) ether	390	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	390	U
117-81-7	Bis(2-ethylhexyl) phthalate	390	U
101-55-3	4-Bromophenyl phenyl ether	390	U
85-68-7	Butyl benzyl phthalate	390	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-58-7	2-Chloronaphthalene	390	U
95-57-8	2-Chlorophenol	390	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
132-64-9	Dibenzofuran	1400	
84-74-2	Di-n-butyl phthalate	390	U
95-50-1	1,2-Dichlorobenzene	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	390	U
105-67-9	2,4-Dimethylphenol	1800	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: MW00-15

lame: STL Buffalo Contract: _____

ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

x: (soil/water) SOIL Lab Sample ID: A1746501

le wt/vol: 30.94 (g/mL) G Lab File ID: W44734.MSQ

l: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

isture: 17.8 decanted: (Y/N) N Date Extracted: 08/15/2001

entrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ction Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	390	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	390	U
606-20-2	2,6-Dinitrotoluene	390	U
117-84-0	Di-n-octyl phthalate	390	U
206-44-0	Fluoranthene	2300	
86-73-7	Fluorene	390	U
118-74-1	Hexachlorobenzene	390	U
87-68-3	Hexachlorobutadiene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
78-59-1	Isophorone	390	U
91-57-6	2-Methylnaphthalene	5300	
95-48-7	2-Methylphenol	2100	
106-44-5	4-Methylphenol	2800	
91-20-3	Naphthalene	23000	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	390	U
88-75-5	2-Nitrophenol	390	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	390	U
621-64-7	N-Nitroso-Di-n-propylamine	390	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	4600	
108-95-2	Phenol	3400	
129-00-0	Pyrene	1700	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00017
Client No.

MW00-15

ame: STL Buffalo Contract: _____

ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

x: (soil/water) SOIL Lab Sample ID: A1746501

.e wt/vol: 30.94 (g/mL) G Lab File ID: W44734.MSQ

.: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

isture: 17.8 decanted: (Y/N) N Date Extracted: 08/15/2001

entrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ction Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	390	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00018

Client No.

MW00-15 DUP

) : .e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1746501FD

mple wt/vol: 30.69 (g/mL) G Lab File ID: W44725.MSQ

/el: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	770	
208-96-8	Acenaphthylene	1600	
120-12-7	Anthracene	1400	
56-55-3	Benzo(a)anthracene	940	
205-99-2	Benzo(b)fluoranthene	890	
207-08-9	Benzo(k)fluoranthene	1100	
191-24-2	Benzo(ghi)perylene	290	J
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	3300	
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	840	
53-70-3	Dibenzo(a,h)anthracene	65	J
132-64-9	Dibenzofuran	1400	
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	2100	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00015

Client No.

MW00-15 DUP

I .: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1746501FD

ple wt/vol: 30.69 (g/mL) G Lab File ID: W44725.MSQ

el: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

bisture: 17.8 decanted: (Y/N) N Date Extracted: 08/15/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	2400	
86-73-7	Fluorene	1900	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	290	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	5200	
95-48-7	2-Methylphenol	2400	
106-44-5	4-Methylphenol	3300	
91-20-3	Naphthalene	21000	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	4600	
108-95-2	Phenol	3600	
129-00-0	Pyrene	1800	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00020

Client No.

MW00-15 DUP

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ix: (soil/water) SOIL Lab Sample ID: A1746501FD

le wt/vol: 30.69 (g/mL) G Lab File ID: W44725.MSQ

l: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

isture: 17.8 decanted: (Y/N) N Date Extracted: 08/15/2001

entrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ction Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-15

ontract: NY01-143

ab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7465

atrix (soil/water): SOIL Lab Sample ID: AD114988

evel (low/med): LOW Date Received: 8/3/01

Solids: 82

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2920			P
7440-36-0	Antimony	12.4	U		P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	26.4			P
7440-41-7	Beryllium	0.62	U		P
7440-43-9	Cadmium	0.62	U		P
7440-70-2	Calcium	49100		E	P
7440-47-3	Chromium	5.8			P
7440-48-4	Cobalt	2.5	U		P
7440-50-8	Copper	6.4			P
7439-89-6	Iron	6980		E	P
7439-92-1	Lead	7.7			P
7439-95-4	Magnesium	22800			P
7439-96-5	Manganese	235			P
7440-02-0	Nickel	4.7			P
7440-09-7	Potassium	645			P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	1.2	U		P
7439-97-6	Mercury	0.123	U		CV
7440-23-5	Sodium	217			P
7440-28-0	Thallium	7.5	U		P
7440-62-2	Vanadium	9.7			P
7440-66-6	Zinc	44.2			P

Color Before: GRAY Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: MW00-15 DUP

ontract: NY01-143

ab Code: STLBFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7465

atrix (soil/water): SOIL Lab Sample ID: AD114989

evel (low/med): LOW Date Received: 8/3/01

Solids: 82

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3750			P
7440-36-0	Antimony	12.2	U		P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	31.5			P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	38700		E	P
7440-47-3	Chromium	8.1			P
7440-48-4	Cobalt	2.7			P
7440-50-8	Copper	8.1			P
7439-89-6	Iron	7730		E	P
7439-92-1	Lead	9.4			P
7439-95-4	Magnesium	17900			P
7439-96-5	Manganese	200			P
7440-02-0	Nickel	6.3			P
7440-09-7	Potassium	637			P
7782-49-2	Selenium	3.7	U		P
7440-22-4	Silver	1.2	U		P
7439-97-6	Mercury	0.128	U		CV
7440-23-5	Sodium	206			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	12.1			P
7440-66-6	Zinc	51.6			P

Color Before: GRAY Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

00031

Client Sample No.: MW00-15

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:ix (soil/water): SOIL Lab Sample ID: A1746501

)lids: 82.2 Date Samp/Recv: 08/02/2001 08/03/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
:nable Cyanide	MG/KG	0.50	U			9010	08/14/2001
anide - Total	UG/G	0.50				9010	08/14/2001

nents:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

00032

Client Sample No.: MW00-15 DUP

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1746501FD

Solids: 82.2 Date Samp/Recv: 08/02/2001 08/03/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.57				9010	08/14/2001
anide - Total	UG/G	0.68				9010	08/14/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012

Client No.

MW-0016 (12-14)

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1733203

ample wt/vol: 4.05 (g/mL) G Lab File ID: F3493.RR

evel: (low/med) MED Date Samp/Recv: 07/31/2001 07/31/2001

Moisture: not dec. 17.5 Heated Purge: N Date Analyzed: 08/09/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.00

oil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	6000	U
71-43-2	Benzene	46000	
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	1200	U
56-23-5	Carbon Tetrachloride	1200	U
108-90-7	Chlorobenzene	1200	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	1200	U
107-06-2	1,2-Dichloroethane	1200	U
75-35-4	1,1-Dichloroethene	1200	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	1200	U
10061-01-5	cis-1,3-Dichloropropene	1200	U
10061-02-6	trans-1,3-Dichloropropene	1200	U
100-41-4	Ethylbenzene	21000	
591-78-6	2-Hexanone	7500	U
75-09-2	Methylene chloride	1200	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	50000	
79-34-5	1,1,2,2-Tetrachloroethane	1200	U
127-18-4	Tetrachloroethene	1200	U
108-88-3	Toluene	190000	
71-55-6	1,1,1-Trichloroethane	1200	U
79-00-5	1,1,2-Trichloroethane	1200	U
79-01-6	Trichloroethene	750	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	310000	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000037

Client No.

MW-0016 (12-14)

l : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733203

ple wt/vol: 30.22 (g/mL) G Lab File ID: Y48533.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 14.4 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 10000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	52000	
208-96-8	Acenaphthylene	130000	
120-12-7	Anthracene	150000	
56-55-3	Benzo(a)anthracene	130000	
205-99-2	Benzo(b)fluoranthene	64000	
207-08-9	Benzo(k)fluoranthene	94000	
191-24-2	Benzo(ghi)perylene	18000	
50-32-8	Benzo(a)pyrene	92000	
65-85-0	Benzoic acid	15000	U
100-51-6	Benzyl alcohol	15000	U
111-91-1	Bis(2-chloroethoxy) methane	3900	U
111-44-4	Bis(2-chloroethyl) ether	3900	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	3900	U
117-81-7	Bis(2-ethylhexyl) phthalate	5800	U
101-55-3	4-Bromophenyl phenyl ether	5800	U
85-68-7	Butyl benzyl phthalate	3900	U
106-47-8	4-Chloroaniline	3900	U
59-50-7	4-Chloro-3-methylphenol	3900	U
91-58-7	2-Chloronaphthalene	3900	U
95-57-8	2-Chlorophenol	3900	U
7005-72-3	4-Chlorophenyl phenyl ether	3900	U
218-01-9	Chrysene	110000	
53-70-3	Dibenzo(a,h)anthracene	15000	
132-64-9	Dibenzofuran	170000	
84-74-2	Di-n-butyl phthalate	3900	U
95-50-1	1,2-Dichlorobenzene	3900	U
541-73-1	1,3-Dichlorobenzene	3900	U
106-46-7	1,4-Dichlorobenzene	3900	U
91-94-1	3,3'-Dichlorobenzidine	5800	U
120-83-2	2,4-Dichlorophenol	3100	U
84-66-2	Diethyl phthalate	3900	U
105-67-9	2,4-Dimethylphenol	50000	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000038

Client No.

MW-0016 (12-14)

) l. e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733203

ple wt/vol: 30.22 (g/mL) G Lab File ID: Y48533.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

loisture: 14.4 decanted: (Y/N) N Date Extracted: 08/14/2001

ıcentrated Extract Volume: 10000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	3900	U
534-52-1	4,6-Dinitro-2-methylphenol	5800	U
51-28-5	2,4-Dinitrophenol	7700	U
121-14-2	2,4-Dinitrotoluene	3900	U
606-20-2	2,6-Dinitrotoluene	5800	U
117-84-0	Di-n-octyl phthalate	3900	U
206-44-0	Fluoranthene	280000	
86-73-7	Fluorene	260000	
118-74-1	Hexachlorobenzene	3900	U
87-68-3	Hexachlorobutadiene	3900	U
77-47-4	Hexachlorocyclopentadiene	5800	U
67-72-1	Hexachloroethane	3100	U
193-39-5	Indeno(1,2,3-cd)pyrene	23000	
78-59-1	Isophorone	3900	U
91-57-6	2-Methylnaphthalene	450000	
95-48-7	2-Methylphenol	16000	
106-44-5	4-Methylphenol	45000	
91-20-3	Naphthalene	970000	E
88-74-4	2-Nitroaniline	3900	U
99-09-2	3-Nitroaniline	5800	U
100-01-6	4-Nitroaniline	9700	U
98-95-3	Nitrobenzene	7000	U
88-75-5	2-Nitrophenol	3900	U
100-02-7	4-Nitrophenol	9700	U
86-30-6	N-nitrosodiphenylamine	3900	U
621-64-7	N-Nitroso-Di-n-propylamine	3500	U
87-86-5	Pentachlorophenol	7700	U
85-01-8	Phenanthrene	490000	
108-95-2	Phenol	5300	J
129-00-0	Pyrene	220000	
120-82-1	1,2,4-Trichlorobenzene	1900	U
95-95-4	2,4,5-Trichlorophenol	7700	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000039

Client No.

MW-0016 (12-14)

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1733203

Sample wt/vol: 30.22 (g/mL) G Lab File ID: Y48533.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

% Moisture: 14.4 decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/15/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	12000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040

Client No.

MW-0016 (12-14) DL

Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1733203DL

Sample wt/vol: 30.22 (g/mL) G Lab File ID: Y48549.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

% Moisture: 14.4 decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2001

Injection Volume: 1.00 (uL) Dilution Factor: 40.00

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	43000	D
208-96-8	Acenaphthylene	120000	D
120-12-7	Anthracene	140000	D
56-55-3	Benzo(a)anthracene	120000	D
205-99-2	Benzo(b)fluoranthene	53000	D
207-08-9	Benzo(k)fluoranthene	75000	D
191-24-2	Benzo(ghi)perylene	28000	D
50-32-8	Benzo(a)pyrene	82000	D
65-85-0	Benzoic acid	62000	U
100-51-6	Benzyl alcohol	62000	U
111-91-1	Bis(2-chloroethoxy) methane	15000	U
111-44-4	Bis(2-chloroethyl) ether	15000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	15000	U
117-81-7	Bis(2-ethylhexyl) phthalate	23000	U
101-55-3	4-Bromophenyl phenyl ether	23000	U
85-68-7	Butyl benzyl phthalate	15000	U
106-47-8	4-Chloroaniline	15000	U
59-50-7	4-Chloro-3-methylphenol	15000	U
91-58-7	2-Chloronaphthalene	15000	U
95-57-8	2-Chlorophenol	15000	U
7005-72-3	4-Chlorophenyl phenyl ether	15000	U
218-01-9	Chrysene	100000	D
53-70-3	Dibenzo(a,h)anthracene	11000	DJ
132-64-9	Dibenzofuran	160000	D
84-74-2	Di-n-butyl phthalate	15000	U
95-50-1	1,2-Dichlorobenzene	15000	U
541-73-1	1,3-Dichlorobenzene	15000	U
106-46-7	1,4-Dichlorobenzene	15000	U
91-94-1	3,3'-Dichlorobenzidine	23000	U
120-83-2	2,4-Dichlorophenol	12000	U
84-66-2	Diethyl phthalate	15000	U
105-67-9	2,4-Dimethylphenol	29000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000041

Client No.

MW-0016 (12-14) DL

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733203DL

ple wt/vol: 30.22 (g/mL) G Lab File ID: Y48549.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 14.4 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	15000	U
534-52-1	4,6-Dinitro-2-methylphenol	23000	U
51-28-5	2,4-Dinitrophenol	31000	U
121-14-2	2,4-Dinitrotoluene	15000	U
606-20-2	2,6-Dinitrotoluene	23000	U
117-84-0	Di-n-octyl phthalate	15000	U
206-44-0	Fluoranthene	300000	D
86-73-7	Fluorene	250000	D
118-74-1	Hexachlorobenzene	15000	U
87-68-3	Hexachlorobutadiene	15000	U
77-47-4	Hexachlorocyclopentadiene	23000	U
67-72-1	Hexachloroethane	12000	U
193-39-5	Indeno(1,2,3-cd)pyrene	31000	D
78-59-1	Isophorone	15000	U
91-57-6	2-Methylnaphthalene	490000	D
95-48-7	2-Methylphenol	31000	U
106-44-5	4-Methylphenol	25000	D
91-20-3	Naphthalene	1300000	D
88-74-4	2-Nitroaniline	15000	U
99-09-2	3-Nitroaniline	23000	U
100-01-6	4-Nitroaniline	39000	U
98-95-3	Nitrobenzene	28000	U
88-75-5	2-Nitrophenol	15000	U
100-02-7	4-Nitrophenol	39000	U
86-30-6	N-nitrosodiphenylamine	15000	U
621-64-7	N-Nitroso-Di-n-propylamine	14000	U
87-86-5	Pentachlorophenol	31000	U
85-01-8	Phenanthrene	570000	D
108-95-2	Phenol	31000	U
129-00-0	Pyrene	210000	D
120-82-1	1,2,4-Trichlorobenzene	7700	U
95-95-4	2,4,5-Trichlorophenol	31000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-0016 (12-14) DL

) l. e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733203DL

ple wt/vol: 30.22 (g/mL) G Lab File ID: Y48549.RR

rel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

loisture: 14.4 decanted: (Y/N) N Date Extracted: 08/14/2001

ıcentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	46000	U

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-0016 (12-14)

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7332

Matrix (soil/water): SOIL Lab Sample ID: AD114707

Level (low/med): LOW Date Received: 7/31/01

% Solids: 86

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	851		N	P
7440-36-0	Antimony	11.5	U	N	P
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	15.6			P
7440-41-7	Beryllium	0.57	U		P
7440-43-9	Cadmium	0.57	U		P
7440-70-2	Calcium	8280		N	P
7440-47-3	Chromium	2.3	U		P
7440-48-4	Cobalt	2.3	U		P
7440-50-8	Copper	40.6		N	P
7439-89-6	Iron	2550		E	P
7439-92-1	Lead	24.6			P
7439-95-4	Magnesium	1440		N	P
7439-96-5	Manganese	62.9			P
7440-02-0	Nickel	2.3	U		P
7440-09-7	Potassium	229	U	N	P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.1	U		P
7439-97-6	Mercury	0.485			CV
7440-23-5	Sodium	115	U		P
7440-28-0	Thallium	6.9	U		P
7440-62-2	Vanadium	2.1			P
7440-66-6	Zinc	33.1			P

Color Before: GRAY Clarity Before: Texture: CLAY

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000046

Client Sample No.

MW-0016 (12-14)

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1733203

Solids: 85.6 Date Samp/Recv: 07/31/2001 07/31/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	3.4				9010	08/13/2001
anide - Total	UG/G	11.2				9010	08/08/2001

mments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000011
Client No.

ITMW00-17 (18-20)

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1727401

mple wt/vol: 5.11 (g/mL) G Lab File ID: P5238.RR

vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: not dec. 15.0 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	20	BJ
71-43-2	Benzene	190	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	150	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	14	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	40	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	290	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

ITMW00-17 (18-20)

b . e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1727401

mple wt/vol: 30.92 (g/mL) G Lab File ID: Y48520.RR

vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: 8.4 decanted: (Y/N) N Date Extracted: 08/06/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/14/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	74	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

ITMW00-17 (18-20)

ɔ. e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1727401

mple wt/vol: 30.92 (g/mL) G Lab File ID: Y48520.RR

vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: 8.4 decanted: (Y/N) N Date Extracted: 08/06/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/14/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	160	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

ITMW00-17 (18-20)

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1727401

ple wt/vol: 30.92 (g/mL) G Lab File ID: Y48520.RR

vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: 8.4 decanted: (Y/N) N Date Extracted: 08/06/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/14/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

TL BUFFALO

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-1-

000019

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITMW00-17 (18-20)

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7274

atrix (soil/water): SOIL Lab Sample ID: AD114592

evel (low/med): LOW Date Received: 7/30/01

Solids: 92

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3410			P
7440-36-0	Antimony	11.1	U		P
7440-38-2	Arsenic	2.0			P
7440-39-3	Barium	28.3			P
7440-41-7	Beryllium	0.56	U		P
7440-43-9	Cadmium	0.56	U		P
7440-70-2	Calcium	114000			P
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt	2.6			P
7440-50-8	Copper	6.2			P
7439-89-6	Iron	7320			P
7439-92-1	Lead	5.6	U		P
7439-95-4	Magnesium	29100			P
7439-96-5	Manganese	221			P
7440-02-0	Nickel	6.0			P
7440-09-7	Potassium	1090			P
7782-49-2	Selenium	3.3	U		P
7440-22-4	Silver	1.1	U		P
7439-97-6	Mercury	0.103	U		CV
7440-23-5	Sodium	140			P
7440-28-0	Thallium	6.7	U		P
7440-62-2	Vanadium	9.6			P
7440-66-6	Zinc	39.8			P

Color Before: GRAY Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000021

Client Sample No.

ITMW00-17 (18-20)

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1727401

olids: 91.6 Date Samp/Recv: 07/30/2001 07/30/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/07/2001
anide - Total	UG/G	0.50	U			9010	08/07/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000046

Client No.

MW00-18 (14-24')

Lab: STL Buffalo Contract: _____

Job Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743621

Sample wt/vol: 5.11 (g/mL) G Lab File ID: P5332.RR

Level: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

% Moisture: not dec. 18.5 Heated Purge: Y Date Analyzed: 08/09/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	17	BJ
71-43-2	Benzene	2	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	28	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	5	J
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	5	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000057
Client No.

MW00-18 (14-24') MS

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1743621MS

nple wt/vol: 5.01 (g/mL) G Lab File ID: P5339.RR

vel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: not dec. 18.5 Heated Purge: Y Date Analyzed: 08/10/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	450	B
71-43-2	Benzene	110	
75-27-4	Bromodichloromethane	110	
75-25-2	Bromoform	110	
74-83-9	Bromomethane	120	
78-93-3	2-Butanone	410	
75-15-0	Carbon Disulfide	140	
56-23-5	Carbon Tetrachloride	120	
108-90-7	Chlorobenzene	110	
75-00-3	Chloroethane	120	
67-66-3	Chloroform	110	
74-87-3	Chloromethane	63	
124-48-1	Dibromochloromethane	120	
75-34-3	1,1-Dichloroethane	110	
107-06-2	1,2-Dichloroethane	100	
75-35-4	1,1-Dichloroethene	130	
540-59-0	1,2-Dichloroethene (Total)	240	
78-87-5	1,2-Dichloropropane	100	
10061-01-5	cis-1,3-Dichloropropene	110	
10061-02-6	trans-1,3-Dichloropropene	110	
100-41-4	Ethylbenzene	120	
591-78-6	2-Hexanone	430	
75-09-2	Methylene chloride	100	B
108-10-1	4-Methyl-2-pentanone	440	B
100-42-5	Styrene	110	
79-34-5	1,1,2,2-Tetrachloroethane	99	
127-18-4	Tetrachloroethene	110	
108-88-3	Toluene	120	
71-55-6	1,1,1-Trichloroethane	120	
79-00-5	1,1,2-Trichloroethane	100	
79-01-6	Trichloroethene	110	
108-05-4	Vinyl acetate	280	
75-01-4	Vinyl chloride	100	
1330-20-7	Total Xylenes	350	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000127

Client No.

MW00-18 (14-24')

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743621

mple wt/vol: 30.73 (g/mL) G Lab File ID: Y48567.RR

vel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	3600	
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	59	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	3500	
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	2700	
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	2500	
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000128

Client No.

MW00-18 (14-24')

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743621

ample wt/vol: 30.73 (g/mL) G Lab File ID: Y48567.RR

evel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	3800	
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	69	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	3400	
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	3600	
87-86-5	Pentachlorophenol	3800	
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	2700	
129-00-0	Pyrene	4200	
120-82-1	1,2,4-Trichlorobenzene	2800	
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000129

Client No.

MW00-18 (14-24')

b me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743621

mple wt/vol: 30.73 (g/mL) G Lab File ID: Y48567.RR

vel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000157

Client No.

MW00-18 (14-24') SD

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743621SD

ample wt/vol: 30.26 (g/mL) G Lab File ID: Y48569.RR

evel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	3900	
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	3900	
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	3200	
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	3000	
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000153

Client No.

MW00-18 (14-24') SD

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743621SD

ample wt/vol: 30.26 (g/mL) G Lab File ID: Y48569.RR

evel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	3900	
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	45	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	680	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	3600	
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	4000	
87-86-5	Pentachlorophenol	3900	
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	3200	
129-00-0	Pyrene	4300	
120-82-1	1,2,4-Trichlorobenzene	3200	
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
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Client No.

MW00-18 (14-24') SD

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743621SD

mple wt/vol: 30.26 (g/mL) G Lab File ID: Y48569.RR

vel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000103

Client No.

TP-15A (12-16') RE

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743604RE

mple wt/vol: 10.40 (g/mL) G Lab File ID: Y48672.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/23/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	6500	U
208-96-8	Acenaphthylene	6500	U
120-12-7	Anthracene	8000	
56-55-3	Benzo(a)anthracene	31000	
205-99-2	Benzo(b)fluoranthene	62000	
207-08-9	Benzo(k)fluoranthene	6500	U
191-24-2	Benzo(ghi)perylene	16000	
50-32-8	Benzo(a)pyrene	18000	
65-85-0	Benzoic acid	26000	U
100-51-6	Benzyl alcohol	26000	U
111-91-1	Bis(2-chloroethoxy) methane	6500	U
111-44-4	Bis(2-chloroethyl) ether	6500	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	6500	U
117-81-7	Bis(2-ethylhexyl) phthalate	9800	U
101-55-3	4-Bromophenyl phenyl ether	9800	U
85-68-7	Butyl benzyl phthalate	6500	U
106-47-8	4-Chloroaniline	6500	U
59-50-7	4-Chloro-3-methylphenol	6500	U
91-58-7	2-Chloronaphthalene	6500	U
95-57-8	2-Chlorophenol	6500	U
7005-72-3	4-Chlorophenyl phenyl ether	6500	U
218-01-9	Chrysene	35000	
53-70-3	Dibenzo(a,h)anthracene	4200	J
132-64-9	Dibenzofuran	15000	
84-74-2	Di-n-butyl phthalate	6500	U
95-50-1	1,2-Dichlorobenzene	6500	U
541-73-1	1,3-Dichlorobenzene	6500	U
106-46-7	1,4-Dichlorobenzene	6500	U
91-94-1	3,3'-Dichlorobenzidine	9800	U
120-83-2	2,4-Dichlorophenol	5200	U
84-66-2	Diethyl phthalate	6500	U
5-67-9	2,4-Dimethylphenol	9800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000104

Client No.

TP-15A (12-16') RE

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743604RE

mple wt/vol: 10.40 (g/mL) G Lab File ID: Y48672.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/23/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 08/24/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	6500	U
534-52-1	4,6-Dinitro-2-methylphenol	9800	U
51-28-5	2,4-Dinitrophenol	13000	U
121-14-2	2,4-Dinitrotoluene	6500	U
606-20-2	2,6-Dinitrotoluene	9800	U
117-84-0	Di-n-octyl phthalate	6500	U
206-44-0	Fluoranthene	85000	
86-73-7	Fluorene	4200	J
118-74-1	Hexachlorobenzene	6500	U
87-68-3	Hexachlorobutadiene	6500	U
77-47-4	Hexachlorocyclopentadiene	9800	U
67-72-1	Hexachloroethane	5200	U
193-39-5	Indeno(1,2,3-cd)pyrene	18000	
78-59-1	Isophorone	6500	U
91-57-6	2-Methylnaphthalene	12000	
95-48-7	2-Methylphenol	13000	U
106-44-5	4-Methylphenol	6500	U
91-20-3	Naphthalene	39000	
88-74-4	2-Nitroaniline	6500	U
99-09-2	3-Nitroaniline	9800	U
100-01-6	4-Nitroaniline	16000	U
98-95-3	Nitrobenzene	12000	U
88-75-5	2-Nitrophenol	6500	U
100-02-7	4-Nitrophenol	16000	U
86-30-6	N-nitrosodiphenylamine	6500	U
621-64-7	N-Nitroso-Di-n-propylamine	5900	U
87-86-5	Pentachlorophenol	13000	U
85-01-8	Phenanthrene	96000	
108-95-2	Phenol	13000	U
129-00-0	Pyrene	61000	
120-82-1	1,2,4-Trichlorobenzene	3300	U
95-95-4	2,4,5-Trichlorophenol	13000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000105

Client No.

TP-15A (12-16') RE

ab Name: STL Buffalo Contract: _____

ab ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743604RE

mple wt/vol: 10.40 (g/mL) G Lab File ID: Y48672.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/23/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 08/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	20000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
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000039
Client No.

TP-15C (6-7.5')

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743606

Sample wt/vol: 4.15 (g/mL) G Lab File ID: F3609.RR

Level: (low/med) MED Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: not dec. 28.3 Heated Purge: N Date Analyzed: 08/14/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	13000	U
71-43-2	Benzene	18000	
75-27-4	Bromodichloromethane	670	U
75-25-2	Bromoform	670	U
74-83-9	Bromomethane	2700	U
78-93-3	2-Butanone	6700	U
75-15-0	Carbon Disulfide	2700	U
56-23-5	Carbon Tetrachloride	2700	U
108-90-7	Chlorobenzene	2700	U
75-00-3	Chloroethane	2700	U
67-66-3	Chloroform	670	U
74-87-3	Chloromethane	2700	U
124-48-1	Dibromochloromethane	670	U
75-34-3	1,1-Dichloroethane	2700	U
107-06-2	1,2-Dichloroethane	2700	U
75-35-4	1,1-Dichloroethene	2700	U
540-59-0	1,2-Dichloroethene (Total)	2700	U
78-87-5	1,2-Dichloropropane	2700	U
10061-01-5	cis-1,3-Dichloropropene	2700	U
10061-02-6	trans-1,3-Dichloropropene	2700	U
100-41-4	Ethylbenzene	20000	
591-78-6	2-Hexanone	17000	U
75-09-2	Methylene chloride	2700	U
108-10-1	4-Methyl-2-pentanone	6700	U
100-42-5	Styrene	2700	U
79-34-5	1,1,2,2-Tetrachloroethane	2700	U
127-18-4	Tetrachloroethene	2700	U
108-88-3	Toluene	9600	
71-55-6	1,1,1-Trichloroethane	2700	U
79-00-5	1,1,2-Trichloroethane	2700	U
79-01-6	Trichloroethene	1700	U
108-05-4	Vinyl acetate	2700	U
75-01-4	Vinyl chloride	2700	U
1330-20-7	Total Xylenes	320000	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000106

Client No.

TP-15C (6-7.5')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743606

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48563.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	63000	
208-96-8	Acenaphthylene	17000	
120-12-7	Anthracene	91000	
56-55-3	Benzo(a)anthracene	74000	
205-99-2	Benzo(b)fluoranthene	52000	
207-08-9	Benzo(k)fluoranthene	49000	
191-24-2	Benzo(ghi)perylene	12000	
50-32-8	Benzo(a)pyrene	56000	
65-85-0	Benzoic acid	7600	U
100-51-6	Benzyl alcohol	7600	U
111-91-1	Bis(2-chloroethoxy) methane	1900	U
111-44-4	Bis(2-chloroethyl) ether	1900	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1900	U
117-81-7	Bis(2-ethylhexyl) phthalate	2900	U
101-55-3	4-Bromophenyl phenyl ether	2900	U
85-68-7	Butyl benzyl phthalate	1900	U
106-47-8	4-Chloroaniline	1900	U
59-50-7	4-Chloro-3-methylphenol	1900	U
91-58-7	2-Chloronaphthalene	1900	U
95-57-8	2-Chlorophenol	1900	U
7005-72-3	4-Chlorophenyl phenyl ether	1900	U
218-01-9	Chrysene	67000	
53-70-3	Dibenzo(a,h)anthracene	9600	
132-64-9	Dibenzofuran	66000	
84-74-2	Di-n-butyl phthalate	1900	U
95-50-1	1,2-Dichlorobenzene	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
91-94-1	3,3'-Dichlorobenzidine	2900	U
120-83-2	2,4-Dichlorophenol	1500	U
84-66-2	Diethyl phthalate	1900	U
105-67-9	2,4-Dimethylphenol	2900	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000107

Client No.

TP-15C (6-7.5')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743606

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48563.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1900	U
534-52-1	4,6-Dinitro-2-methylphenol	2900	U
51-28-5	2,4-Dinitrophenol	3800	U
121-14-2	2,4-Dinitrotoluene	1900	U
606-20-2	2,6-Dinitrotoluene	2900	U
117-84-0	Di-n-octyl phthalate	1900	U
206-44-0	Fluoranthene	140000	
86-73-7	Fluorene	84000	
118-74-1	Hexachlorobenzene	1900	U
87-68-3	Hexachlorobutadiene	1900	U
77-47-4	Hexachlorocyclopentadiene	2900	U
67-72-1	Hexachloroethane	1500	U
193-39-5	Indeno(1,2,3-cd)pyrene	14000	
78-59-1	Isophorone	1900	U
91-57-6	2-Methylnaphthalene	150000	
95-48-7	2-Methylphenol	3800	U
106-44-5	4-Methylphenol	1900	U
91-20-3	Naphthalene	780000	E
88-74-4	2-Nitroaniline	1900	U
99-09-2	3-Nitroaniline	2900	U
100-01-6	4-Nitroaniline	4800	U
98-95-3	Nitrobenzene	3400	U
88-75-5	2-Nitrophenol	1900	U
100-02-7	4-Nitrophenol	4800	U
86-30-6	N-nitrosodiphenylamine	1900	U
621-64-7	N-Nitroso-Di-n-propylamine	1700	U
87-86-5	Pentachlorophenol	3800	U
85-01-8	Phenanthrene	210000	
108-95-2	Phenol	3800	U
129-00-0	Pyrene	120000	
120-82-1	1,2,4-Trichlorobenzene	960	U
95-95-4	2,4,5-Trichlorophenol	3800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000198

Client No.

TP-15C (6-7.5')

ıb Name: STL Buffalo Contract: _____

ıb ..ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

.trix: (soil/water) SOIL Lab Sample ID: A1743606

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48563.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	5700	U

000109

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
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Client No.

TP-15C (6-7.5') DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743606DL

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48576.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 100.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	30000	D
208-96-8	Acenaphthylene	5000	D
120-12-7	Anthracene	48000	D
56-55-3	Benzo(a)anthracene	39000	D
205-99-2	Benzo(b)fluoranthene	23000	D
207-08-9	Benzo(k)fluoranthene	22000	D
191-24-2	Benzo(ghi)perylene	9000	D
50-32-8	Benzo(a)pyrene	29000	D
65-85-0	Benzoic acid	19000	U
100-51-6	Benzyl alcohol	19000	U
111-91-1	Bis(2-chloroethoxy) methane	4800	U
111-44-4	Bis(2-chloroethyl) ether	4800	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	4800	U
117-81-7	Bis(2-ethylhexyl) phthalate	7200	U
101-55-3	4-Bromophenyl phenyl ether	7200	U
85-68-7	Butyl benzyl phthalate	4800	U
106-47-8	4-Chloroaniline	4800	U
59-50-7	4-Chloro-3-methylphenol	4800	U
91-58-7	2-Chloronaphthalene	4800	U
95-57-8	2-Chlorophenol	4800	U
7005-72-3	4-Chlorophenyl phenyl ether	4800	U
218-01-9	Chrysene	33000	D
53-70-3	Dibenzo(a,h)anthracene	3900	DJ
132-64-9	Dibenzofuran	32000	D
84-74-2	Di-n-butyl phthalate	4800	U
95-50-1	1,2-Dichlorobenzene	4800	U
541-73-1	1,3-Dichlorobenzene	4800	U
106-46-7	1,4-Dichlorobenzene	4800	U
91-94-1	3,3'-Dichlorobenzidine	7200	U
120-83-2	2,4-Dichlorophenol	3800	U
84-66-2	Diethyl phthalate	4800	U
)5-67-9	2,4-Dimethylphenol	7200	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000110

Client No.

TP-15C (6-7.5') DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743606DL

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48576.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 100.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	7200	U
51-28-5	2,4-Dinitrophenol	9600	U
121-14-2	2,4-Dinitrotoluene	4800	U
606-20-2	2,6-Dinitrotoluene	7200	U
117-84-0	Di-n-octyl phthalate	4800	U
206-44-0	Fluoranthene	84000	D
86-73-7	Fluorene	41000	D
118-74-1	Hexachlorobenzene	4800	U
87-68-3	Hexachlorobutadiene	4800	U
77-47-4	Hexachlorocyclopentadiene	7200	U
67-72-1	Hexachloroethane	3800	U
193-39-5	Indeno(1,2,3-cd)pyrene	9600	D
78-59-1	Isophorone	4800	U
91-57-6	2-Methylnaphthalene	89000	D
95-48-7	2-Methylphenol	9600	U
106-44-5	4-Methylphenol	4800	U
91-20-3	Naphthalene	690000	D
88-74-4	2-Nitroaniline	4800	U
99-09-2	3-Nitroaniline	7200	U
100-01-6	4-Nitroaniline	12000	U
98-95-3	Nitrobenzene	8600	U
88-75-5	2-Nitrophenol	4800	U
100-02-7	4-Nitrophenol	12000	U
86-30-6	N-nitrosodiphenylamine	4800	U
621-64-7	N-Nitroso-Di-n-propylamine	4300	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	140000	D
108-95-2	Phenol	9600	U
129-00-0	Pyrene	66000	D
120-82-1	1,2,4-Trichlorobenzene	2400	U
95-95-4	2,4,5-Trichlorophenol	9600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
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000111

Client No.

TP-15C (6-7.5') DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743606DL

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48576.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

ection Volume: 1.00 (uL) Dilution Factor: 100.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	14000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000145
Client No.

TP-15C (6-7.5') FD

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743606FD

mple wt/vol: 30.83 (g/mL) G Lab File ID: Y48564.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

! Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	30000	
208-96-8	Acenaphthylene	9000	
120-12-7	Anthracene	37000	
56-55-3	Benzo(a)anthracene	34000	
205-99-2	Benzo(b)fluoranthene	29000	
207-08-9	Benzo(k)fluoranthene	23000	
191-24-2	Benzo(ghi)perylene	6400	
50-32-8	Benzo(a)pyrene	29000	
65-85-0	Benzoic acid	7400	U
100-51-6	Benzyl alcohol	7400	U
111-91-1	Bis(2-chloroethoxy) methane	1900	U
111-44-4	Bis(2-chloroethyl) ether	1900	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1900	U
117-81-7	Bis(2-ethylhexyl) phthalate	2800	U
101-55-3	4-Bromophenyl phenyl ether	2800	U
85-68-7	Butyl benzyl phthalate	1900	U
106-47-8	4-Chloroaniline	1900	U
59-50-7	4-Chloro-3-methylphenol	1900	U
91-58-7	2-Chloronaphthalene	1900	U
95-57-8	2-Chlorophenol	1900	U
7005-72-3	4-Chlorophenyl phenyl ether	1900	U
218-01-9	Chrysene	30000	
53-70-3	Dibenzo(a,h)anthracene	3900	
132-64-9	Dibenzofuran	34000	
84-74-2	Di-n-butyl phthalate	1900	U
95-50-1	1,2-Dichlorobenzene	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
91-94-1	3,3'-Dichlorobenzidine	2800	U
120-83-2	2,4-Dichlorophenol	1500	U
84-66-2	Diethyl phthalate	1900	U
105-67-9	2,4-Dimethylphenol	2800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000146
Client No.

TP-15C (6-7.5') FD

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743606FD

mple wt/vol: 30.83 (g/mL) G Lab File ID: Y48564.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1900	U
534-52-1	4,6-Dinitro-2-methylphenol	2800	U
51-28-5	2,4-Dinitrophenol	3700	U
121-14-2	2,4-Dinitrotoluene	1900	U
606-20-2	2,6-Dinitrotoluene	2800	U
117-84-0	Di-n-octyl phthalate	1900	U
206-44-0	Fluoranthene	72000	
86-73-7	Fluorene	42000	
118-74-1	Hexachlorobenzene	1900	U
87-68-3	Hexachlorobutadiene	1900	U
77-47-4	Hexachlorocyclopentadiene	2800	U
67-72-1	Hexachloroethane	1500	U
193-39-5	Indeno(1,2,3-cd)pyrene	7400	
78-59-1	Isophorone	1900	U
91-57-6	2-Methylnaphthalene	85000	
95-48-7	2-Methylphenol	3700	U
106-44-5	4-Methylphenol	1900	U
91-20-3	Naphthalene	510000	E
88-74-4	2-Nitroaniline	1900	U
99-09-2	3-Nitroaniline	2800	U
100-01-6	4-Nitroaniline	4600	U
98-95-3	Nitrobenzene	3400	U
88-75-5	2-Nitrophenol	1900	U
100-02-7	4-Nitrophenol	4600	U
86-30-6	N-nitrosodiphenylamine	1900	U
621-64-7	N-Nitroso-Di-n-propylamine	1700	U
87-86-5	Pentachlorophenol	3700	U
85-01-8	Phenanthrene	110000	
108-95-2	Phenol	3700	U
129-00-0	Pyrene	58000	
120-82-1	1,2,4-Trichlorobenzene	930	U
95-95-4	2,4,5-Trichlorophenol	3700	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000147
Client No.

TP-15C (6-7.5') FD

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743606FD

mple wt/vol: 30.83 (g/mL) G Lab File ID: Y48564.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	5600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000148
Client No.

TP-15C (6-7.5')FDDL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743606FZ

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48577.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 100.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	14000	D
208-96-8	Acenaphthylene	2700	DJ
120-12-7	Anthracene	18000	D
56-55-3	Benzo(a)anthracene	17000	D
205-99-2	Benzo(b)fluoranthene	10000	D
207-08-9	Benzo(k)fluoranthene	11000	D
191-24-2	Benzo(ghi)perylene	4300	DJ
50-32-8	Benzo(a)pyrene	14000	D
65-85-0	Benzoic acid	19000	U
100-51-6	Benzyl alcohol	19000	U
111-91-1	Bis(2-chloroethoxy) methane	4800	U
111-44-4	Bis(2-chloroethyl) ether	4800	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	4800	U
117-81-7	Bis(2-ethylhexyl) phthalate	7200	U
101-55-3	4-Bromophenyl phenyl ether	7200	U
85-68-7	Butyl benzyl phthalate	4800	U
106-47-8	4-Chloroaniline	4800	U
59-50-7	4-Chloro-3-methylphenol	4800	U
91-58-7	2-Chloronaphthalene	4800	U
95-57-8	2-Chlorophenol	4800	U
7005-72-3	4-Chlorophenyl phenyl ether	4800	U
218-01-9	Chrysene	15000	D
53-70-3	Dibenzo(a,h)anthracene	4800	U
132-64-9	Dibenzofuran	16000	D
84-74-2	Di-n-butyl phthalate	4800	U
95-50-1	1,2-Dichlorobenzene	4800	U
541-73-1	1,3-Dichlorobenzene	4800	U
106-46-7	1,4-Dichlorobenzene	4800	U
91-94-1	3,3'-Dichlorobenzidine	7200	U
120-83-2	2,4-Dichlorophenol	3800	U
84-66-2	Diethyl phthalate	4800	U
105-67-9	2,4-Dimethylphenol	7200	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000149

Client No.

TP-15C (6-7.5')FDDL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743606FZ

ample wt/vol: 30.05 (g/mL) G Lab File ID: Y48577.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 100.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	4800	U
534-52-1	4,6-Dinitro-2-methylphenol	7200	U
51-28-5	2,4-Dinitrophenol	9600	U
121-14-2	2,4-Dinitrotoluene	4800	U
606-20-2	2,6-Dinitrotoluene	7200	U
117-84-0	Di-n-octyl phthalate	4800	U
206-44-0	Fluoranthene	38000	D
86-73-7	Fluorene	19000	D
118-74-1	Hexachlorobenzene	4800	U
87-68-3	Hexachlorobutadiene	4800	U
77-47-4	Hexachlorocyclopentadiene	7200	U
67-72-1	Hexachloroethane	3800	U
193-39-5	Indeno(1,2,3-cd)pyrene	4500	DJ
78-59-1	Isophorone	4800	U
91-57-6	2-Methylnaphthalene	45000	D
95-48-7	2-Methylphenol	9600	U
106-44-5	4-Methylphenol	4800	U
91-20-3	Naphthalene	400000	D
88-74-4	2-Nitroaniline	4800	U
99-09-2	3-Nitroaniline	7200	U
100-01-6	4-Nitroaniline	12000	U
98-95-3	Nitrobenzene	8600	U
88-75-5	2-Nitrophenol	4800	U
100-02-7	4-Nitrophenol	12000	U
86-30-6	N-nitrosodiphenylamine	4800	U
621-64-7	N-Nitroso-Di-n-propylamine	4300	U
87-86-5	Pentachlorophenol	9600	U
85-01-8	Phenanthrene	66000	D
108-95-2	Phenol	9600	U
129-00-0	Pyrene	29000	D
120-82-1	1,2,4-Trichlorobenzene	2400	U
95-95-4	2,4,5-Trichlorophenol	9600	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000150

Client No.

TP-15C (6-7.5')FDDL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743606FZ

mple wt/vol: 30.05 (g/mL) G Lab File ID: Y48577.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.3 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 100.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	14000	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-15A (12-16')

oject: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114953

Level (low/med): LOW Date Received: 8/2/01

Solids: 74

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2420		N	P
7440-36-0	Antimony	13.6	U	N	P
7440-38-2	Arsenic	16.3			P
7440-39-3	Barium	39.8		N	P
7440-41-7	Beryllium	0.68	U		P
7440-43-9	Cadmium	0.68	U		P
7440-70-2	Calcium	43100		E	P
7440-47-3	Chromium	26.8			P
7440-48-4	Cobalt	7.1			P
7440-50-8	Copper	6.4			P
7439-89-6	Iron	32500		E	P
7439-92-1	Lead	135		N	P
7439-95-4	Magnesium	617			P
7439-96-5	Manganese	84.5		E	P
7440-02-0	Nickel	7.1			P
7440-09-7	Potassium	638			P
7782-49-2	Selenium	4.1	U		P
7439-97-6	Mercury	1.1		N	CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	516			P
7440-28-0	Thallium	8.2	U		P
7440-62-2	Vanadium	59.1			P
7440-66-6	Zinc	27.1		N	P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-15B (8-12')

Lab Name: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114954

Level (low/med): LOW Date Received: 8/2/01

% Solids: 90

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1680		N	P
7440-36-0	Antimony	10.7	U	N	P
7440-38-2	Arsenic	3.3			P
7440-39-3	Barium	21.8		N	P
7440-41-7	Beryllium	0.54	U		P
7440-43-9	Cadmium	0.54	U		P
7440-70-2	Calcium	87100		E	P
7440-47-3	Chromium	7.6			P
7440-48-4	Cobalt	2.4			P
7440-50-8	Copper	12.8			P
7439-89-6	Iron	17500		E	P
7439-92-1	Lead	30.4		N	P
7439-95-4	Magnesium	9610			P
7439-96-5	Manganese	557		E	P
7440-02-0	Nickel	7.5			P
7440-09-7	Potassium	214	U		P
7782-49-2	Selenium	3.2	U		P
7439-97-6	Mercury	0.111	U	N	CV
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	107	U		P
7440-28-0	Thallium	6.4	U		P
7440-62-2	Vanadium	5.1			P
7440-66-6	Zinc	25.6		N	P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

TT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-15C (6-7.5')

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114955

Level (low/med): LOW Date Received: 8/2/01

% Solids: 70

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5690		N	P
7440-36-0	Antimony	14.6	U	N	P
7440-38-2	Arsenic	11.1			P
7440-39-3	Barium	88.1		N	P
7440-41-7	Beryllium	0.74			P
7440-43-9	Cadmium	0.73	U		P
7440-70-2	Calcium	81200		E	P
7440-47-3	Chromium	6.9			P
7440-48-4	Cobalt	5.1			P
7440-50-8	Copper	25.2			P
7439-89-6	Iron	13000		E	P
7439-92-1	Lead	126		N	P
7439-95-4	Magnesium	6230			P
7439-96-5	Manganese	365		E	P
7440-02-0	Nickel	17.6			P
7440-09-7	Potassium	681			P
7782-49-2	Selenium	4.4	U		P
7439-97-6	Mercury	0.593		N	CV
7440-22-4	Silver	1.5	U		P
7440-23-5	Sodium	284			P
7440-28-0	Thallium	8.8	U		P
7440-62-2	Vanadium	12.6			P
7440-66-6	Zinc	54.7		N	P

Color Before: BLACK Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-15C (6-7.5') FD

o: ..ct: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114956

evel (low/med): LOW Date Received: 8/2/01

Solids: 70

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16300		N	P
7440-36-0	Antimony	14.1	U	N	P
7440-38-2	Arsenic	11.0			P
7440-39-3	Barium	210		N	P
7440-41-7	Beryllium	2.2			P
7440-43-9	Cadmium	0.70	U		P
7440-70-2	Calcium	122000		E	P
7440-47-3	Chromium	7.4			P
7440-48-4	Cobalt	4.5			P
7440-50-8	Copper	18.5			P
7439-89-6	Iron	13100		E	P
7439-92-1	Lead	115		N	P
7439-95-4	Magnesium	9870			P
7439-96-5	Manganese	1160		E	P
7440-02-0	Nickel	6.7			P
7440-09-7	Potassium	1580			P
7782-49-2	Selenium	4.2	U		P
7439-97-6	Mercury	0.599		N	CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	572			P
7440-28-0	Thallium	8.4	U		P
7440-62-2	Vanadium	12.5			P
7440-66-6	Zinc	61.0		N	P

lor Before: BLACK Clarity Before: _____ Texture: SILT

lor After: YELLOW Clarity After: CLOUDY Artifacts: _____

mments: _____

000208

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.

TP-15A (12-16')

b Name: STL Buffalo Contract: _____

b ie: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743604

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/10/2001
anide - Total	UG/G	109				9010	08/09/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000209

Client Sample No.

TP-15C (6-7.5')

b Name: STL Buffalo Contract: _____

b ie: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743606

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/10/2001
anide - Total	UG/G	51.5				9010	08/09/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000220

Client Sample No.

TP-15C (6-7.5') FD

) Name: STL Buffalo Contract: _____

) e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1743606FD

)olids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/10/2001
anide - Total	UG/G	0.50	U			9010	08/09/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040
Client No.

TP-16 (1.5-4')

N e: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743607

ple wt/vol: 5.04 (g/mL) G Lab File ID: P5278.RR

el: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 29.4 Heated Purge: Y Date Analyzed: 08/08/2001

olumn: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

. Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	5	J
71-43-2	Benzene	17	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	3	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	11	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	15	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
5-01-4	Vinyl chloride	10	U
330-20-7	Total Xylenes	4	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000054
Client No.

TP-16 (1.5-4') FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743607FD

Sample wt/vol: 5.01 (g/mL) G Lab File ID: P5279.RR

Level: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: not dec. 29.4 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	6	J
71-43-2	Benzene	25	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	3	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	14	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	21	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
30-20-7	Total Xylenes	5	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000112

Client No.

TP-16 (1.5-4')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743607

ample wt/vol: 30.04 (g/mL) G Lab File ID: Y48578.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	130	J
205-99-2	Benzo(b)fluoranthene	300	J
207-08-9	Benzo(k)fluoranthene	230	J
191-24-2	Benzo(ghi)perylene	210	J
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	890	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	180	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
05-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000113

Client No.

TP-16 (1.5-4')

ab Name: STL Buffalo Contract: _____

ab ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743607

mple wt/vol: 30.04 (g/mL) G Lab File ID: Y48578.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	180	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	440	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	400	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	440	U
129-00-0	Pyrene	220	J
120-82-1	1,2,4-Trichlorobenzene	330	U
5-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000114

Client No.

TP-16 (1.5-4')

ab Name: STL Buffalo Contract: _____

ab ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743607

mple wt/vol: 30.04 (g/mL) G Lab File ID: Y48578.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	660	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000151

Client No.

TP-16 (1.5-4') FD

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743607FD

ample wt/vol: 30.22 (g/mL) G Lab File ID: Y48579.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	260	J
205-99-2	Benzo(b)fluoranthene	420	
207-08-9	Benzo(k)fluoranthene	530	
191-24-2	Benzo(ghi)perylene	300	J
50-32-8	Benzo(a)pyrene	140	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	880	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000152

Client No.

TP-16 (1.5-4') FD

a' ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743607FD

ample wt/vol: 30.22 (g/mL) G Lab File ID: Y48579.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

ijection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	190	J
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	290	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	440	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	400	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	440	U
129-00-0	Pyrene	400	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000153

Client No.

TP-16 (1.5-4') FD

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743607FD

mple wt/vol: 30.22 (g/mL) G Lab File ID: Y48579.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 25.0 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/18/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	660	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-16 (1.5-4')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114957

Level (low/med): LOW Date Received: 8/2/01

% Solids: 75

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2110		N	P
7440-36-0	Antimony	13.6	U	N	P
7440-38-2	Arsenic	1.4	U		P
7440-39-3	Barium	4.2		N	P
7440-41-7	Beryllium	0.68	U		P
7440-43-9	Cadmium	0.68	U		P
7440-70-2	Calcium	330000		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	2.7	U		P
7440-50-8	Copper	2.9			P
7439-89-6	Iron	634		E	P
7439-92-1	Lead	6.8	U	N	P
7439-95-4	Magnesium	1960			P
7439-96-5	Manganese	141		E	P
7440-02-0	Nickel	2.7	U		P
7440-09-7	Potassium	407			P
7782-49-2	Selenium	4.1	U		P
7439-97-6	Mercury	0.130	U	N	CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	858			P
7440-28-0	Thallium	8.2	U		P
7440-62-2	Vanadium	3.3			P
7440-66-6	Zinc	5.9		N	P

Color Before: GRAY Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-16 (1.5-4') FD

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114958

Level (low/med): LOW Date Received: 8/2/01

% Solids: 75

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2070		N	P
7440-36-0	Antimony	13.3	U	N	P
7440-38-2	Arsenic	1.3	U		P
7440-39-3	Barium	3.7		N	P
7440-41-7	Beryllium	0.67	U		P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	309000		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	2.7	U		P
7440-50-8	Copper	3.3			P
7439-89-6	Iron	484		E	P
7439-92-1	Lead	6.7	U	N	P
7439-95-4	Magnesium	1540			P
7439-96-5	Manganese	143		E	P
7440-02-0	Nickel	2.7	U		P
7440-09-7	Potassium	348			P
7782-49-2	Selenium	4.0	U		P
7439-97-6	Mercury	0.130	U	N	CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	577			P
7440-28-0	Thallium	8.0	U		P
7440-62-2	Vanadium	2.9			P
7440-66-6	Zinc	5.1		N	P

Color Before: GRAY Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000210

Client Sample No.

TP-16 (1.5-4')

ıb Name: STL Buffalo Contract: _____

ıt ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743607

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/10/2001
yanide - Total	UG/G	10				9010	08/09/2001

mments:

000221

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.

TP-16 (1.5-4') FD

o Name: STL Buffalo Contract: _____

o ... e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743607FD

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/10/2001
anide - Total	UG/G	0.82				9010	08/09/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000055

Client No.

TP-17 (6.5-7') FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743608FD

Sample wt/vol: 5.20 (g/mL) G Lab File ID: P5281.RR

Level: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: not dec. 30.1 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	160	
71-43-2	Benzene	8	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	38	
75-15-0	Carbon Disulfide	6	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	12	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000041

Client No.

TP-17 (6.5-7')

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:ix: (soil/water) SOIL Lab Sample ID: A1743608

)le wt/vol: 5.06 (g/mL) G Lab File ID: P5280.RR

:l: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

)isture: not dec. 30.1 Heated Purge: Y Date Analyzed: 08/08/2001

'olumn: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	220	
71-43-2	Benzene	10	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	52	
75-15-0	Carbon Disulfide	6	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
5-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	15	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000154

Client No.

TP-17 (6.5-7') FD

al me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743608FD

ample wt/vol: 30.09 (g/mL) G Lab File ID: Y48603.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 28.2 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ajection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	790	
208-96-8	Acenaphthylene	460	U
120-12-7	Anthracene	2900	
56-55-3	Benzo(a)anthracene	8500	
205-99-2	Benzo(b)fluoranthene	6000	
207-08-9	Benzo(k)fluoranthene	9700	
191-24-2	Benzo(ghi)perylene	3100	
50-32-8	Benzo(a)pyrene	9600	
65-85-0	Benzoic acid	1800	U
100-51-6	Benzyl alcohol	1800	U
111-91-1	Bis(2-chloroethoxy) methane	460	U
111-44-4	Bis(2-chloroethyl) ether	460	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	460	U
117-81-7	Bis(2-ethylhexyl) phthalate	690	U
101-55-3	4-Bromophenyl phenyl ether	690	U
85-68-7	Butyl benzyl phthalate	460	U
106-47-8	4-Chloroaniline	460	U
59-50-7	4-Chloro-3-methylphenol	460	U
91-58-7	2-Chloronaphthalene	460	U
95-57-8	2-Chlorophenol	460	U
7005-72-3	4-Chlorophenyl phenyl ether	460	U
218-01-9	Chrysene	7700	
53-70-3	Dibenzo(a,h)anthracene	1900	
132-64-9	Dibenzofuran	390	J
84-74-2	Di-n-butyl phthalate	460	U
95-50-1	1,2-Dichlorobenzene	460	U
541-73-1	1,3-Dichlorobenzene	460	U
106-46-7	1,4-Dichlorobenzene	460	U
91-94-1	3,3'-Dichlorobenzidine	690	U
120-83-2	2,4-Dichlorophenol	370	U
84-66-2	Diethyl phthalate	460	U
105-67-9	2,4-Dimethylphenol	690	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000455

Client No.

TP-17 (6.5-7') FD

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743608FD

Sample wt/vol: 30.09 (g/mL) G Lab File ID: Y48603.RR

Level: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

% Moisture: 28.2 decanted: (Y/N) N Date Extracted: 08/15/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	460	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	460	U
606-20-2	2,6-Dinitrotoluene	690	U
117-84-0	Di-n-octyl phthalate	460	U
206-44-0	Fluoranthene	12000	
86-73-7	Fluorene	1200	
118-74-1	Hexachlorobenzene	460	U
87-68-3	Hexachlorobutadiene	460	U
77-47-4	Hexachlorocyclopentadiene	690	U
67-72-1	Hexachloroethane	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	3500	
78-59-1	Isophorone	460	U
91-57-6	2-Methylnaphthalene	300	J
95-48-7	2-Methylphenol	920	U
106-44-5	4-Methylphenol	460	U
91-20-3	Naphthalene	3600	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	830	U
88-75-5	2-Nitrophenol	460	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	460	U
621-64-7	N-Nitroso-Di-n-propylamine	420	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	5100	
108-95-2	Phenol	920	U
129-00-0	Pyrene	10000	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	920	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000156

Client No.

TP-17 (6.5-7') FD

ıb Name: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743608FD

mple wt/vol: 30.09 (g/mL) G Lab File ID: Y48603.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 28.2 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1400	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000115

Client No.

TP-17 (6.5-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743608

mple wt/vol: 30.61 (g/mL) G Lab File ID: Y48602.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 28.2 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	840	
208-96-8	Acenaphthylene	450	U
120-12-7	Anthracene	2700	
56-55-3	Benzo(a)anthracene	9200	
205-99-2	Benzo(b)fluoranthene	7700	
207-08-9	Benzo(k)fluoranthene	10000	
191-24-2	Benzo(ghi)perylene	4400	
50-32-8	Benzo(a)pyrene	12000	
65-85-0	Benzoic acid	1800	U
100-51-6	Benzyl alcohol	1800	U
111-91-1	Bis(2-chloroethoxy) methane	450	U
111-44-4	Bis(2-chloroethyl) ether	450	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	450	U
117-81-7	Bis(2-ethylhexyl) phthalate	680	U
101-55-3	4-Bromophenyl phenyl ether	680	U
85-68-7	Butyl benzyl phthalate	450	U
106-47-8	4-Chloroaniline	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-58-7	2-Chloronaphthalene	450	U
95-57-8	2-Chlorophenol	450	U
7005-72-3	4-Chlorophenyl phenyl ether	450	U
218-01-9	Chrysene	8300	
53-70-3	Dibenzo(a,h)anthracene	3300	
132-64-9	Dibenzofuran	270	J
84-74-2	Di-n-butyl phthalate	450	U
95-50-1	1,2-Dichlorobenzene	450	U
541-73-1	1,3-Dichlorobenzene	450	U
106-46-7	1,4-Dichlorobenzene	450	U
91-94-1	3,3'-Dichlorobenzidine	680	U
120-83-2	2,4-Dichlorophenol	360	U
84-66-2	Diethyl phthalate	450	U
05-67-9	2,4-Dimethylphenol	680	U

000116

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

TP-17 (6.5-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743608

mple wt/vol: 30.61 (g/mL) G Lab File ID: Y48602.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 28.2 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	450	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	450	U
606-20-2	2,6-Dinitrotoluene	680	U
117-84-0	Di-n-octyl phthalate	450	U
206-44-0	Fluoranthene	11000	
86-73-7	Fluorene	850	
118-74-1	Hexachlorobenzene	450	U
87-68-3	Hexachlorobutadiene	450	U
77-47-4	Hexachlorocyclopentadiene	680	U
67-72-1	Hexachloroethane	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	5100	
78-59-1	Isophorone	450	U
91-57-6	2-Methylnaphthalene	450	U
95-48-7	2-Methylphenol	910	U
106-44-5	4-Methylphenol	450	U
91-20-3	Naphthalene	940	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	820	U
88-75-5	2-Nitrophenol	450	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	450	U
621-64-7	N-Nitroso-Di-n-propylamine	410	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	5500	
108-95-2	Phenol	910	U
129-00-0	Pyrene	8900	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	910	U

000117

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

TP-17 (6.5-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743608

ample wt/vol: 30.61 (g/mL) G Lab File ID: Y48602.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 28.2 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1400	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-17 (6.5-7') FD

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114960

Level (low/med): LOW Date Received: 8/2/01

Solids: 72

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6440		N	P
7440-36-0	Antimony	13.9	U	N	P
7440-38-2	Arsenic	5.3			P
7440-39-3	Barium	81.8		N	P
7440-41-7	Beryllium	0.70	U		P
7440-43-9	Cadmium	0.70	U		P
7440-70-2	Calcium	27500		E	P
7440-47-3	Chromium	9.1			P
7440-48-4	Cobalt	5.6			P
7440-50-8	Copper	18.9			P
7439-89-6	Iron	13300		E	P
7439-92-1	Lead	85.2		N	P
7439-95-4	Magnesium	8790			P
7439-96-5	Manganese	184		E	P
7440-02-0	Nickel	12.8			P
7440-09-7	Potassium	982			P
7782-49-2	Selenium	4.2	U		P
7439-97-6	Mercury	0.140	U	N	CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	210			P
7440-28-0	Thallium	8.4	U		P
7440-62-2	Vanadium	16.2			P
7440-66-6	Zinc	75.3		N	P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-17 (6.5-7')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114959

Level (low/med): LOW Date Received: 8/2/01

Solids: 72

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10400		N	P
7440-36-0	Antimony	13.4	U	N	P
7440-38-2	Arsenic	1.3	U		P
7440-39-3	Barium	153		N	P
7440-41-7	Beryllium	0.67	U		P
7440-43-9	Cadmium	0.67	U		P
7440-70-2	Calcium	14200		E	P
7440-47-3	Chromium	14.5			P
7440-48-4	Cobalt	8.1			P
7440-50-8	Copper	22.9			P
7439-89-6	Iron	13700		E	P
7439-92-1	Lead	34.8		N	P
7439-95-4	Magnesium	7500			P
7439-96-5	Manganese	152		E	P
7440-02-0	Nickel	20.8			P
7440-09-7	Potassium	1300			P
7782-49-2	Selenium	4.0	U		P
7439-97-6	Mercury	0.149	U	N	CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	168			P
7440-28-0	Thallium	8.0	U		P
7440-62-2	Vanadium	19.4			P
7440-66-6	Zinc	121		N	P

Color Before: BROWN Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000222

Client Sample No.

TP-17 (6.5-7') FD

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743608FD

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/10/2001
yanide - Total	UG/G	19.4				9010	08/09/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000211

Client Sample No.

TP-17 (6.5-7')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743608

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/10/2001
yanide - Total	UG/G	0.50	U			9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000133

Client No.

MW00-18 (14-24') RE

ıb ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743621RE

ımple wt/vol: 30.63 (g/mL) G Lab File ID: Y48673.RR

evel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/23/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	46	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-18 (14-24') RE

ıb ame: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743621RE

ımple wt/vol: 30.63 (g/mL) G Lab File ID: Y48673.RR

evel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/23/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	39	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000135

Client No.

MW00-18 (14-24') RE

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743621RE

Sample wt/vol: 30.63 (g/mL) G Lab File ID: Y48673.RR

Level: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

% Moisture: 24.6 decanted: (Y/N) N Date Extracted: 08/23/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-18 (14-24')

ontract: NY01-143

ab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114977

evel (low/med): LOW Date Received: 8/2/01

Solids: 75

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3570		N	P
7440-36-0	Antimony	13.5	U	N	P
7440-38-2	Arsenic	1.4	U		P
7440-39-3	Barium	33.2		N	P
7440-41-7	Beryllium	0.68	U		P
7440-43-9	Cadmium	0.68	U		P
7440-70-2	Calcium	116000		E	P
7440-47-3	Chromium	6.1			P
7440-48-4	Cobalt	2.9			P
7440-50-8	Copper	7.5			P
7439-89-6	Iron	7920		E	P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	34700			P
7439-96-5	Manganese	244		E	P
7440-02-0	Nickel	6.6			P
7440-09-7	Potassium	1070			P
7782-49-2	Selenium	4.1	U		P
7439-97-6	Mercury	0.134	U	N	CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	207			P
7440-28-0	Thallium	8.1	U		P
7440-62-2	Vanadium	10.6			P
7440-66-6	Zinc	52.7		N	P

Color Before: GRAY Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

C ents: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000215

Client Sample No.

MW00-18 (14-24')

b me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743621

Solids: 0.0 Date Samp/Recv: 08/02/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/13/2001
yanide - Total	UG/G	0.50	U			9010	08/13/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

00013
Client No.

MW00-19

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1746502

ple wt/vol: 5.14 (g/mL) G Lab File ID: P5256.RR

el: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

oisture: not dec. 17.7 Heated Purge: Y Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	32	
71-43-2	Benzene	14	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	5	J
75-15-0	Carbon Disulfide	7	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	10	
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	14	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	5	J
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	3	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

00014

Client No.

MW00-19 FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1746502FD

ple wt/vol: 5.03 (g/mL) G Lab File ID: P5245.RR

el: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

bisture: not dec. 17.7 Heated Purge: Y Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	20	BJ
71-43-2	Benzene	2	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	52	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00021

Client No.

MW00-19

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1746502

mple wt/vol: 30.40 (g/mL) G Lab File ID: W44726.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

Moisture: 29.6 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	300	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-19

N. :: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1746502

ple wt/vol: 30.40 (g/mL) G Lab File ID: W44726.MSQ

el: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

oisture: 29.6 decanted: (Y/N) N Date Extracted: 08/15/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00023
Client No.

MW00-19

Na..: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ix: (soil/water) SOIL Lab Sample ID: A1746502

le wt/vol: 30.40 (g/mL) G Lab File ID: W44726.MSQ

l: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

isture: 29.6 decanted: (Y/N) N Date Extracted: 08/15/2001

entrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ction Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00024
Client No.

MW00-19 FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1746502FD

Sample wt/vol: 30.60 (g/mL) G Lab File ID: W44727.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

% Moisture: 29.6 decanted: (Y/N) N Date Extracted: 08/15/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	820	
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

00025

Client No.

MW00-19 FD

Lab: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1746502FD

Sample wt/vol: 30.60 (g/mL) G Lab File ID: W44727.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

% Moisture: 29.6 decanted: (Y/N) N Date Extracted: 08/15/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-19 FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1746502FD

ple wt/vol: 30.60 (g/mL) G Lab File ID: W44727.MSQ

el: (low/med) LOW Date Samp/Recv: 08/02/2001 08/03/2001

oisture: 29.6 decanted: (Y/N) N Date Extracted: 08/15/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW00-19

ontract: NY01-143
ab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7465
atrix (soil/water): SOIL Lab Sample ID: AD114990
evel (low/med): LOW Date Received: 8/3/01
Solids: 70

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7900			P
7440-36-0	Antimony	13.9	U		P
7440-38-2	Arsenic	1.4	U		P
7440-39-3	Barium	104			P
7440-41-7	Beryllium	0.70	U		P
7440-43-9	Cadmium	0.70	U		P
7440-70-2	Calcium	30900		E	P
7440-47-3	Chromium	11.1			P
7440-48-4	Cobalt	4.7			P
7440-50-8	Copper	17.2			P
7439-89-6	Iron	10300		E	P
7439-92-1	Lead	11.5			P
7439-95-4	Magnesium	14800			P
7439-96-5	Manganese	191			P
7440-02-0	Nickel	10.5			P
7440-09-7	Potassium	1070			P
7782-49-2	Selenium	4.2	U		P
7440-22-4	Silver	1.4	U		P
7439-97-6	Mercury	0.137	U		CV
7440-23-5	Sodium	156			P
7440-28-0	Thallium	8.4	U		P
7440-62-2	Vanadium	17.1			P
7440-66-6	Zinc	91.0			P

Color Before: GRAY Clarity Before: Texture: SILT
Color After: YELLOW Clarity After: CLOUDY Artifacts:
Comments:

IT CORP

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-19 FD

ontract: NY01-143

ab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7465

atrix (soil/water): SOIL Lab Sample ID: AD114991

evel (low/med): LOW Date Received: 8/3/01

Solids: 70

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5720			P
7440-36-0	Antimony	13.7	U		P
7440-38-2	Arsenic	1.4	U		P
7440-39-3	Barium	61.8			P
7440-41-7	Beryllium	0.68	U		P
7440-43-9	Cadmium	0.68	U		P
7440-70-2	Calcium	47100		E	P
7440-47-3	Chromium	8.6			P
7440-48-4	Cobalt	4.3			P
7440-50-8	Copper	10.1			P
7439-89-6	Iron	9380		E	P
7439-92-1	Lead	10.1			P
7439-95-4	Magnesium	20800			P
7439-96-5	Manganese	268			P
7440-02-0	Nickel	8.4			P
7440-09-7	Potassium	984			P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.4	U		P
7439-97-6	Mercury	0.130	U		CV
7440-23-5	Sodium	183			P
7440-28-0	Thallium	8.2	U		P
7440-62-2	Vanadium	14.1			P
7440-66-6	Zinc	85.5			P

Color Before: GRAY Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

00033

Client Sample No.

MW00-19

N[illegible]: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1746502

olids: 70.4 Date Samp/Recv: 08/02/2001 08/03/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/14/2001
anide - Total	UG/G	0.50	U			9010	08/14/2001

ments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

00034

Client Sample No.

MW00-19 FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A1746502FD

Solids: 70.4 Date Samp/Recv: 08/02/2001 08/03/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nable Cyanide	MG/KG	0.50	U			9010	08/14/2001
nide - Total	UG/G	0.50	U			9010	08/14/2001

ents:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000047

Client No.

MW00-20 (16-20')

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743620

ple wt/vol: 5.06 (g/mL) G Lab File ID: P5331.RR

el: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

oisture: not dec. 19.5 Heated Purge: Y Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	27	B
71-43-2	Benzene	450	E
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	3	J
75-15-0	Carbon Disulfide	8	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	480	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	130	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	5	J
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	1400	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-20 (16-20') DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743620DL

Sample wt/vol: 1.08 (g/mL) G Lab File ID: P5349.RR

Level: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: not dec. 19.5 Heated Purge: Y Date Analyzed: 08/13/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	49	BD
71-43-2	Benzene	270	D
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	330	D
591-78-6	2-Hexanone	14	U
75-09-2	Methylene chloride	57	BD
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	82	D
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	31	D
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	1100	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000130

Client No.

MW00-20 (16-20')

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743620

mple wt/vol: 30.63 (g/mL) G Lab File ID: Y48552.RR

vel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 16.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	540	
208-96-8	Acenaphthylene	360	
120-12-7	Anthracene	680	
56-55-3	Benzo(a)anthracene	550	
205-99-2	Benzo(b)fluoranthene	610	
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	220	J
50-32-8	Benzo(a)pyrene	460	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	39	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	490	
53-70-3	Dibenzo(a,h)anthracene	93	J
132-64-9	Dibenzofuran	530	
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000131

Client No.

MW00-20 (16-20')

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743620

ample wt/vol: 30.63 (g/mL) G Lab File ID: Y48552.RR

evel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 16.2 decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	1500	
86-73-7	Fluorene	710	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	1300	
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	3300	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	2100	
108-95-2	Phenol	330	U
129-00-0	Pyrene	1000	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000132

Client No.

MW00-20 (16-20')

b name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743620

mple wt/vol: 30.63 (g/mL) G Lab File ID: Y48552.RR

vel: (low/med) LOW Date Samp/Recv: 08/02/2001 08/02/2001

Moisture: 16.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-20 (16-20')

)ntract: NY01-143

ıb Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

ıtrix (soil/water): SOIL Lab Sample ID: AD114974

:vel (low/med): LOW Date Received: 8/2/01

Solids: 84

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4400		N	P
7440-36-0	Antimony	12.2	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	42.2		N	P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	50700		E	P
7440-47-3	Chromium	7.0			P
7440-48-4	Cobalt	3.8			P
7440-50-8	Copper	8.4			P
7439-89-6	Iron	9800		E	P
7439-92-1	Lead	9.2			P
7439-95-4	Magnesium	22600			P
7439-96-5	Manganese	313		E	P
7440-02-0	Nickel	7.6			P
7440-09-7	Potassium	974			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.118	U	N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	142			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	11.9			P
7440-66-6	Zinc	58.3		N	P

Color Before: GRAY Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000216

Client Sample No.

MW00-20 (16-20')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743620

Solids: 83.8 Date Samp/Recv: 08/02/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	3.0				9010	08/13/2001
yanide - Total	UG/G	3.0				9010	08/09/2001

mments:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012

Client No.

ITSB00-21 (16-17)

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1727402

mple wt/vol: 5.10 (g/mL) G Lab File ID: P5239.RR

vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: not dec. 11.0 Heated Purge: Y Date Analyzed: 08/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	16	BJ
71-43-2	Benzene	11	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	1	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	3	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	9	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	8	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	6	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

ITSB00-21 (16-17)

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1727402

mple wt/vol: 30.21 (g/mL) G Lab File ID: Y48521.RR

vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: 13.8 decanted: (Y/N) N Date Extracted: 08/06/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/14/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	190	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITSB00-21 (16-17)

ıb ıme: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1727402

ımple wt/vol: 30.21 (g/mL) G Lab File ID: Y48521.RR

:vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: 13.8 decanted: (Y/N) N Date Extracted: 08/06/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/14/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ℂ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	66	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

ITSB00-21 (16-17)

b . .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1727402

mple wt/vol: 30.21 (g/mL) G Lab File ID: Y48521.RR

vel: (low/med) LOW Date Samp/Recv: 07/30/2001 07/30/2001

Moisture: 13.8 decanted: (Y/N) N Date Extracted: 08/06/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/14/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

ITT CORP

000020

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITSB00-21 (16-17)

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7274

atrix (soil/water): SOIL Lab Sample ID: AD114593

evel (low/med): LOW Date Received: 7/30/01

Solids: 86

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4060			P
7440-36-0	Antimony	11.4	U		P
7440-38-2	Arsenic	1.7			P
7440-39-3	Barium	34.5			P
7440-41-7	Beryllium	0.57	U		P
7440-43-9	Cadmium	0.57	U		P
7440-70-2	Calcium	65100			P
7440-47-3	Chromium	8.4			P
7440-48-4	Cobalt	3.3			P
7440-50-8	Copper	9.1			P
7439-89-6	Iron	9260			P
7439-92-1	Lead	8.7			P
7439-95-4	Magnesium	26100			P
7439-96-5	Manganese	300			P
7440-02-0	Nickel	6.7			P
7440-09-7	Potassium	1040			P
7782-49-2	Selenium	3.4	U		P
7440-22-4	Silver	1.1	U		P
7439-97-6	Mercury	0.110	U		CV
7440-23-5	Sodium	156			P
7440-28-0	Thallium	6.8	U		P
7440-62-2	Vanadium	11.3			P
7440-66-6	Zinc	50.6			P

Color Before: GRAY Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000022

Client Sample No.

ITSB00-21 (16-17)

N : SIL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:ix (soil/water): SOIL Lab Sample ID: A1727402

)lids: 86.2 Date Samp/Recv: 07/30/2001 07/30/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/07/2001
anide - Total	UG/G	0.50	U			9010	08/07/2001

nents:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

ITSB-0022 9.5-10

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) SOIL Lab Sample ID: A1733202

ɱple wt/vol: 4.10 (g/mL) G Lab File ID: F3492.RR

ʌel: (low/med) MED Date Samp/Recv: 07/31/2001 07/31/2001

ʌoisture: not dec. 14.2 Heated Purge: N Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.00

ɪl Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	5700	U
71-43-2	Benzene	850	U
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	1100	U
56-23-5	Carbon Tetrachloride	1100	U
108-90-7	Chlorobenzene	1100	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	1100	U
107-06-2	1,2-Dichloroethane	1100	U
75-35-4	1,1-Dichloroethene	1100	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	1100	U
10061-01-5	cis-1,3-Dichloropropene	1100	U
10061-02-6	trans-1,3-Dichloropropene	1100	U
100-41-4	Ethylbenzene	10000	
591-78-6	2-Hexanone	7100	U
75-09-2	Methylene chloride	1100	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	1100	U
79-34-5	1,1,2,2-Tetrachloroethane	1100	U
127-18-4	Tetrachloroethene	1100	U
108-88-3	Toluene	5400	
71-55-6	1,1,1-Trichloroethane	1100	U
79-00-5	1,1,2-Trichloroethane	1100	U
79-01-6	Trichloroethene	710	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	110000	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

ITSB-0022 16-18

ɔ . e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1733201

mple wt/vol: 1.20 (g/mL) G Lab File ID: P5257.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

Moisture: not dec. 17.0 Heated Purge: Y Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	47	
71-43-2	Benzene	160	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	520	
591-78-6	2-Hexanone	12	U
75-09-2	Methylene chloride	38	
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	
108-88-3	Toluene	500	B
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	22	
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	5200	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

ITSB-0022 16-18 DL

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733201DL

ple wt/vol: 4.10 (g/mL) G Lab File ID: F3491.RR

el: (low/med) MED Date Samp/Recv: 07/31/2001 07/31/2001

bisture: not dec. 17.0 Heated Purge: N Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	170	DJ
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	625	U
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	960	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	625	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	590	DJ
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	11000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

ITSB-0022 9.5-10

N_: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733202

ple wt/vol: 30.84 (g/mL) G Lab File ID: Y48532.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 12.7 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 10000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	100000	
208-96-8	Acenaphthylene	7000	J
120-12-7	Anthracene	12000	
56-55-3	Benzo(a)anthracene	160000	
205-99-2	Benzo(b)fluoranthene	120000	
207-08-9	Benzo(k)fluoranthene	150000	
191-24-2	Benzo(ghi)perylene	54000	
50-32-8	Benzo(a)pyrene	160000	
65-85-0	Benzoic acid	30000	U
100-51-6	Benzyl alcohol	30000	U
111-91-1	Bis(2-chloroethoxy) methane	7400	U
111-44-4	Bis(2-chloroethyl) ether	7400	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	7400	U
117-81-7	Bis(2-ethylhexyl) phthalate	11000	U
101-55-3	4-Bromophenyl phenyl ether	11000	U
85-68-7	Butyl benzyl phthalate	7400	U
106-47-8	4-Chloroaniline	7400	U
59-50-7	4-Chloro-3-methylphenol	7400	U
91-58-7	2-Chloronaphthalene	7400	U
95-57-8	2-Chlorophenol	7400	U
7005-72-3	4-Chlorophenyl phenyl ether	7400	U
218-01-9	Chrysene	170000	
53-70-3	Dibenzo(a,h)anthracene	27000	
132-64-9	Dibenzofuran	210000	
84-74-2	Di-n-butyl phthalate	7400	U
95-50-1	1,2-Dichlorobenzene	7400	U
541-73-1	1,3-Dichlorobenzene	7400	U
106-46-7	1,4-Dichlorobenzene	7400	U
91-94-1	3,3'-Dichlorobenzidine	11000	U
120-83-2	2,4-Dichlorophenol	5900	U
84-66-2	Diethyl phthalate	7400	U
105-67-9	2,4-Dimethylphenol	11000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

ITSB-0022 9.5-10

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733202

ple wt/vol: 30.84 (g/mL) G Lab File ID: Y48532.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

bisture: 12.7 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 10000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	7400	U
534-52-1	4,6-Dinitro-2-methylphenol	11000	U
51-28-5	2,4-Dinitrophenol	15000	U
121-14-2	2,4-Dinitrotoluene	7400	U
606-20-2	2,6-Dinitrotoluene	11000	U
117-84-0	Di-n-octyl phthalate	7400	U
206-44-0	Fluoranthene	480000	
86-73-7	Fluorene	240000	
118-74-1	Hexachlorobenzene	7400	U
87-68-3	Hexachlorobutadiene	7400	U
77-47-4	Hexachlorocyclopentadiene	11000	U
67-72-1	Hexachloroethane	5900	U
193-39-5	Indeno(1,2,3-cd)pyrene	59000	
78-59-1	Isophorone	7400	U
91-57-6	2-Methylnaphthalene	530000	
95-48-7	2-Methylphenol	15000	U
106-44-5	4-Methylphenol	7400	U
91-20-3	Naphthalene	1900000	E
88-74-4	2-Nitroaniline	7400	U
99-09-2	3-Nitroaniline	11000	U
100-01-6	4-Nitroaniline	18000	U
98-95-3	Nitrobenzene	13000	U
88-75-5	2-Nitrophenol	7400	U
100-02-7	4-Nitrophenol	18000	U
86-30-6	N-nitrosodiphenylamine	7400	U
621-64-7	N-Nitroso-Di-n-propylamine	6700	U
87-86-5	Pentachlorophenol	15000	U
85-01-8	Phenanthrene	720000	
108-95-2	Phenol	15000	U
129-00-0	Pyrene	370000	
120-82-1	1,2,4-Trichlorobenzene	3700	U
95-95-4	2,4,5-Trichlorophenol	15000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

MW01-27-12'-14' RE

b . .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907301RA

mple wt/vol: 30.63 (g/mL) G Lab File ID: W45255.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.9 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/05/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1400	
208-96-8	Acenaphthylene	730	
120-12-7	Anthracene	2900	
56-55-3	Benzo(a)anthracene	7800	
205-99-2	Benzo(b)fluoranthene	5900	
207-08-9	Benzo(k)fluoranthene	8900	
191-24-2	Benzo(ghi)perylene	3100	
50-32-8	Benzo(a)pyrene	4400	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	520	U
111-91-1	Bis(2-chloroethoxy) methane	520	U
111-44-4	Bis(2-chloroethyl) ether	520	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	520	U
117-81-7	Bis(2-ethylhexyl) phthalate	520	U
101-55-3	4-Bromophenyl phenyl ether	520	U
85-68-7	Butyl benzyl phthalate	520	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	520	U
91-58-7	2-Chloronaphthalene	520	U
95-57-8	2-Chlorophenol	520	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	7700	
53-70-3	Dibenzo(a,h)anthracene	1300	
132-64-9	Dibenzofuran	8500	
84-74-2	Di-n-butyl phthalate	520	U
95-50-1	1,2-Dichlorobenzene	520	U
541-73-1	1,3-Dichlorobenzene	520	U
106-46-7	1,4-Dichlorobenzene	520	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	420	U
84-66-2	Diethyl phthalate	520	U
105-67-9	2,4-Dimethylphenol	520	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021

Client No.

MW01-27-12'-14' RE

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1907301RA

ple wt/vol: 30.63 (g/mL) G Lab File ID: W45255.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

oisture: 37.9 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/05/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	520	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	520	U
606-20-2	2,6-Dinitrotoluene	520	U
117-84-0	Di-n-octyl phthalate	520	U
206-44-0	Fluoranthene	19000	
86-73-7	Fluorene	4600	
118-74-1	Hexachlorobenzene	520	U
87-68-3	Hexachlorobutadiene	520	U
77-47-4	Hexachlorocyclopentadiene	520	U
67-72-1	Hexachloroethane	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	3700	
78-59-1	Isophorone	520	U
91-57-6	2-Methylnaphthalene	22000	
95-48-7	2-Methylphenol	520	U
106-44-5	4-Methylphenol	520	U
91-20-3	Naphthalene	65000	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	520	U
88-75-5	2-Nitrophenol	520	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	520	U
621-64-7	N-Nitroso-Di-n-propylamine	520	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	26000	
108-95-2	Phenol	520	U
129-00-0	Pyrene	14000	
120-82-1	1,2,4-Trichlorobenzene	370	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

MW01-27-12'-14' RE

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907301RA

mple wt/vol: 30.63 (g/mL) G Lab File ID: W45255.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.9 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/05/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	520	U

I T CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-27-12'-14'

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-9073

Matrix (soil/water): SOIL Lab Sample ID: AD118366

Level (low/med): LOW Date Received: 9/20/01

% Solids: 62

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2590			P
7440-36-0	Antimony	16.8	U		P
7440-38-2	Arsenic	7.7			P
7440-39-3	Barium	90.9			P
7440-41-7	Beryllium	0.84	U		P
7440-43-9	Cadmium	3.3			P
7440-70-2	Calcium	18600			P
7440-47-3	Chromium	5.6			P
7440-48-4	Cobalt	3.4			P
7440-50-8	Copper	56.7			P
7439-89-6	Iron	11200			P
7439-92-1	Lead	427			P
7439-95-4	Magnesium	2720			P
7439-96-5	Manganese	108			P
7440-02-0	Nickel	8.4			P
7440-09-7	Potassium	344			P
7782-49-2	Selenium	5.0	U		P
7439-97-6	Mercury	7.4			CV
7440-22-4	Silver	1.7	U		P
7440-23-5	Sodium	250			P
7440-28-0	Thallium	10.1	U		P
7440-62-2	Vanadium	7.5			P
7440-66-6	Zinc	169			P

Color Before: BLACK Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000031
Client Sample No.

MW01-27-12'-14'

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): SOIL Lab Sample ID: A1907301

Solids: 62.1 Date Samp/Recv: 09/20/2001 09/20/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	5.0	U			9012A	10/02/2001
Cyanide - Total	UG/G	42.5				9010	10/02/2001

omments:

_____
_____
_____
_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021
Client No.

TP-1 (4-7')

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743609

Sample wt/vol: 5.10 (g/mL) G Lab File ID: P5282.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: not dec. 11.5 Heated Purge: Y Date Analyzed: 08/08/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	74	
71-43-2	Benzene	8	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	8	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000053

Client No.

TP-1 (4-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743609

mple wt/vol: 30.39 (g/mL) G Lab File ID: Y48535.RR

evel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 14.5 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	380	U
208-96-8	Acenaphthylene	380	U
120-12-7	Anthracene	380	U
56-55-3	Benzo(a)anthracene	380	U
205-99-2	Benzo(b)fluoranthene	220	J
207-08-9	Benzo(k)fluoranthene	380	U
191-24-2	Benzo(ghi)perylene	380	U
50-32-8	Benzo(a)pyrene	380	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1500	U
111-91-1	Bis(2-chloroethoxy) methane	380	U
111-44-4	Bis(2-chloroethyl) ether	380	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	380	U
117-81-7	Bis(2-ethylhexyl) phthalate	580	U
101-55-3	4-Bromophenyl phenyl ether	580	U
85-68-7	Butyl benzyl phthalate	380	U
106-47-8	4-Chloroaniline	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-58-7	2-Chloronaphthalene	380	U
95-57-8	2-Chlorophenol	380	U
7005-72-3	4-Chlorophenyl phenyl ether	380	U
218-01-9	Chrysene	380	U
53-70-3	Dibenzo(a,h)anthracene	380	U
132-64-9	Dibenzofuran	380	U
84-74-2	Di-n-butyl phthalate	380	U
95-50-1	1,2-Dichlorobenzene	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	380	U
105-67-9	2,4-Dimethylphenol	580	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

0000-3

Client No.

TP-1 (4-7')

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

.trix: (soil/water) SOIL Lab Sample ID: A1743609

mple wt/vol: 30.39 (g/mL) G Lab File ID: Y48535.RR

:vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 14.5 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	380	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	380	U
606-20-2	2,6-Dinitrotoluene	580	U
117-84-0	Di-n-octyl phthalate	380	U
206-44-0	Fluoranthene	290	J
86-73-7	Fluorene	580	U
118-74-1	Hexachlorobenzene	380	U
87-68-3	Hexachlorobutadiene	380	U
77-47-4	Hexachlorocyclopentadiene	580	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	770	U
78-59-1	Isophorone	380	U
91-57-6	2-Methylnaphthalene	380	U
95-48-7	2-Methylphenol	770	U
106-44-5	4-Methylphenol	380	U
91-20-3	Naphthalene	720	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	690	U
88-75-5	2-Nitrophenol	380	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	380	U
621-64-7	N-Nitroso-Di-n-propylamine	350	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	250	J
108-95-2	Phenol	770	U
129-00-0	Pyrene	260	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

ITSB-0022 9.5-10

) : : STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733202

ple wt/vol: 30.84 (g/mL) G Lab File ID: Y48532.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

bisture: 12.7 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 10000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	22000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021

Client No.

ITSB-0022 9.5-10 DL

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733202DL

ple wt/vol: 30.84 (g/mL) G Lab File ID: Y48548.RR

rel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

loisture: 12.7 decanted: (Y/N) N Date Extracted: 08/14/2001

icentrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 80.00

! Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	81000	D
208-96-8	Acenaphthylene	30000	U
120-12-7	Anthracene	30000	U
56-55-3	Benzo(a)anthracene	150000	D
205-99-2	Benzo(b)fluoranthene	99000	D
207-08-9	Benzo(k)fluoranthene	140000	D
191-24-2	Benzo(ghi)perylene	78000	D
50-32-8	Benzo(a)pyrene	150000	D
65-85-0	Benzoic acid	120000	U
100-51-6	Benzyl alcohol	120000	U
111-91-1	Bis(2-chloroethoxy) methane	30000	U
111-44-4	Bis(2-chloroethyl) ether	30000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	30000	U
117-81-7	Bis(2-ethylhexyl) phthalate	44000	U
101-55-3	4-Bromophenyl phenyl ether	44000	U
85-68-7	Butyl benzyl phthalate	30000	U
106-47-8	4-Chloroaniline	30000	U
59-50-7	4-Chloro-3-methylphenol	30000	U
91-58-7	2-Chloronaphthalene	30000	U
95-57-8	2-Chlorophenol	30000	U
7005-72-3	4-Chlorophenyl phenyl ether	30000	U
218-01-9	Chrysene	160000	D
53-70-3	Dibenzo(a,h)anthracene	20000	DJ
132-64-9	Dibenzofuran	200000	D
84-74-2	Di-n-butyl phthalate	30000	U
95-50-1	1,2-Dichlorobenzene	30000	U
541-73-1	1,3-Dichlorobenzene	30000	U
106-46-7	1,4-Dichlorobenzene	30000	U
91-94-1	3,3'-Dichlorobenzidine	44000	U
120-83-2	2,4-Dichlorophenol	24000	U
84-66-2	Diethyl phthalate	30000	U
105-67-9	2,4-Dimethylphenol	44000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

ITSB-0022 9.5-10 DL

e: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733202DL

ple wt/vol: 30.84 (g/mL) G Lab File ID: Y48548.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 12.7 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 80.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	30000	U
534-52-1	4,6-Dinitro-2-methylphenol	44000	U
51-28-5	2,4-Dinitrophenol	59000	U
121-14-2	2,4-Dinitrotoluene	30000	U
606-20-2	2,6-Dinitrotoluene	44000	U
117-84-0	Di-n-octyl phthalate	30000	U
206-44-0	Fluoranthene	510000	D
86-73-7	Fluorene	220000	D
118-74-1	Hexachlorobenzene	30000	U
87-68-3	Hexachlorobutadiene	30000	U
77-47-4	Hexachlorocyclopentadiene	44000	U
67-72-1	Hexachloroethane	24000	U
193-39-5	Indeno(1,2,3-cd)pyrene	76000	D
78-59-1	Isophorone	30000	U
91-57-6	2-Methylnaphthalene	570000	D
95-48-7	2-Methylphenol	59000	U
106-44-5	4-Methylphenol	30000	U
91-20-3	Naphthalene	2800000	D
88-74-4	2-Nitroaniline	30000	U
99-09-2	3-Nitroaniline	44000	U
100-01-6	4-Nitroaniline	74000	U
98-95-3	Nitrobenzene	53000	U
88-75-5	2-Nitrophenol	30000	U
100-02-7	4-Nitrophenol	74000	U
86-30-6	N-nitrosodiphenylamine	30000	U
621-64-7	N-Nitroso-Di-n-propylamine	27000	U
87-86-5	Pentachlorophenol	59000	U
85-01-8	Phenanthrene	840000	D
108-95-2	Phenol	59000	U
129-00-0	Pyrene	350000	D
120-82-1	1,2,4-Trichlorobenzene	15000	U
95-95-4	2,4,5-Trichlorophenol	59000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

ITSB-0022 9.5-10 DL

l .: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733202DL

ple wt/vol: 30.84 (g/mL) G Lab File ID: Y48548.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 12.7 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 10000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 80.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	89000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025

Client No.

ITSB-0022 16-18

: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733201

ple wt/vol: 30.86 (g/mL) G Lab File ID: Y48531.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 17.2 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	4800	
208-96-8	Acenaphthylene	320	J
120-12-7	Anthracene	560	
56-55-3	Benzo(a)anthracene	8200	
205-99-2	Benzo(b)fluoranthene	12000	
207-08-9	Benzo(k)fluoranthene	390	U
191-24-2	Benzo(ghi)perylene	3400	
50-32-8	Benzo(a)pyrene	8700	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1600	U
111-91-1	Bis(2-chloroethoxy) methane	390	U
111-44-4	Bis(2-chloroethyl) ether	390	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	390	U
117-81-7	Bis(2-ethylhexyl) phthalate	590	U
101-55-3	4-Bromophenyl phenyl ether	590	U
85-68-7	Butyl benzyl phthalate	390	U
106-47-8	4-Chloroaniline	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-58-7	2-Chloronaphthalene	390	U
95-57-8	2-Chlorophenol	390	U
7005-72-3	4-Chlorophenyl phenyl ether	390	U
218-01-9	Chrysene	9100	
53-70-3	Dibenzo(a,h)anthracene	1600	
132-64-9	Dibenzofuran	11000	
84-74-2	Di-n-butyl phthalate	390	U
95-50-1	1,2-Dichlorobenzene	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	390	U
105-67-9	2,4-Dimethylphenol	590	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000026

Client No.

ITSB-0022 16-18

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1733201

ımple wt/vol: 30.86 (g/mL) G Lab File ID: Y48531.RR

:vel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

Moisture: 17.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 10.00

ℂ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	390	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	390	U
606-20-2	2,6-Dinitrotoluene	590	U
117-84-0	Di-n-octyl phthalate	390	U
206-44-0	Fluoranthene	25000	
86-73-7	Fluorene	12000	
118-74-1	Hexachlorobenzene	390	U
87-68-3	Hexachlorobutadiene	390	U
77-47-4	Hexachlorocyclopentadiene	590	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	3600	
78-59-1	Isophorone	390	U
91-57-6	2-Methylnaphthalene	26000	
95-48-7	2-Methylphenol	780	U
106-44-5	4-Methylphenol	390	U
91-20-3	Naphthalene	94000	E
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	700	U
88-75-5	2-Nitrophenol	390	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	390	U
621-64-7	N-Nitroso-Di-n-propylamine	350	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	38000	
108-95-2	Phenol	780	U
129-00-0	Pyrene	19000	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000027

Client No.

ITSB-0022 16-18

) . e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733201

ple wt/vol: 30.86 (g/mL) G Lab File ID: Y48531.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 17.2 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1200	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028

Client No.

ITSB-0022 16-18 DL

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733201DL

ple wt/vol: 30.86 (g/mL) G Lab File ID: Y48547.RR

rel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 17.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	4300	D
208-96-8	Acenaphthylene	1600	U
120-12-7	Anthracene	1600	U
56-55-3	Benzo(a)anthracene	8000	D
205-99-2	Benzo(b)fluoranthene	11000	D
207-08-9	Benzo(k)fluoranthene	1600	U
191-24-2	Benzo(ghi)perylene	4500	D
50-32-8	Benzo(a)pyrene	8000	D
65-85-0	Benzoic acid	6300	U
100-51-6	Benzyl alcohol	6300	U
111-91-1	Bis(2-chloroethoxy) methane	1600	U
111-44-4	Bis(2-chloroethyl) ether	1600	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1600	U
117-81-7	Bis(2-ethylhexyl) phthalate	2300	U
101-55-3	4-Bromophenyl phenyl ether	2300	U
85-68-7	Butyl benzyl phthalate	1600	U
106-47-8	4-Chloroaniline	1600	U
59-50-7	4-Chloro-3-methylphenol	1600	U
91-58-7	2-Chloronaphthalene	1600	U
95-57-8	2-Chlorophenol	1600	U
7005-72-3	4-Chlorophenyl phenyl ether	1600	U
218-01-9	Chrysene	8800	D
53-70-3	Dibenzo(a,h)anthracene	1400	DJ
132-64-9	Dibenzofuran	10000	D
84-74-2	Di-n-butyl phthalate	1600	U
95-50-1	1,2-Dichlorobenzene	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
91-94-1	3,3'-Dichlorobenzidine	2300	U
120-83-2	2,4-Dichlorophenol	1200	U
84-66-2	Diethyl phthalate	1600	U
105-67-9	2,4-Dimethylphenol	2300	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000029

Client No.

ITSB-0022 16-18 DL

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix: (soil/water) SOIL Lab Sample ID: A1733201DL

mple wt/vol: 30.86 (g/mL) G Lab File ID: Y48547.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

Moisture: 17.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

ɛ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	2300	U
51-28-5	2,4-Dinitrophenol	3100	U
121-14-2	2,4-Dinitrotoluene	1600	U
606-20-2	2,6-Dinitrotoluene	2300	U
117-84-0	Di-n-octyl phthalate	1600	U
206-44-0	Fluoranthene	26000	D
86-73-7	Fluorene	12000	D
118-74-1	Hexachlorobenzene	1600	U
87-68-3	Hexachlorobutadiene	1600	U
77-47-4	Hexachlorocyclopentadiene	2300	U
67-72-1	Hexachloroethane	1200	U
193-39-5	Indeno(1,2,3-cd)pyrene	4200	D
78-59-1	Isophorone	1600	U
91-57-6	2-Methylnaphthalene	27000	D
95-48-7	2-Methylphenol	3100	U
106-44-5	4-Methylphenol	1600	U
91-20-3	Naphthalene	120000	D
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	2300	U
100-01-6	4-Nitroaniline	3900	U
98-95-3	Nitrobenzene	2800	U
88-75-5	2-Nitrophenol	1600	U
100-02-7	4-Nitrophenol	3900	U
86-30-6	N-nitrosodiphenylamine	1600	U
621-64-7	N-Nitroso-Di-n-propylamine	1400	U
87-86-5	Pentachlorophenol	3100	U
85-01-8	Phenanthrene	43000	D
108-95-2	Phenol	3100	U
129-00-0	Pyrene	19000	D
120-82-1	1,2,4-Trichlorobenzene	780	U
95-95-4	2,4,5-Trichlorophenol	3100	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000030
Client No.

ITSB-0022 16-18 DL

) : : STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733201DL

ple wt/vol: 30.86 (g/mL) G Lab File ID: Y48547.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

bisture: 17.2 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 40.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	4700	U

STL BUFFALO

I T CORP

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITSB-0022 16-18

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7332

Matrix (soil/water): SOIL Lab Sample ID: AD114706

Level (low/med): LOW Date Received: 7/31/01

% Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3580		N	P
7440-36-0	Antimony	12.1	U	N	P
7440-38-2	Arsenic	6.4			P
7440-39-3	Barium	28.6			P
7440-41-7	Beryllium	0.60	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	33300		N	P
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt	3.1			P
7440-50-8	Copper	6.3		N	P
7439-89-6	Iron	6710		E	P
7439-92-1	Lead	11.5			P
7439-95-4	Magnesium	18900		N	P
7439-96-5	Manganese	228			P
7440-02-0	Nickel	6.2			P
7440-09-7	Potassium	655		N	P
7782-49-2	Selenium	3.6	U		P
7440-22-4	Silver	1.2	U		P
7439-97-6	Mercury	0.113	U		CV
7440-23-5	Sodium	136			P
7440-28-0	Thallium	7.2	U		P
7440-62-2	Vanadium	8.1			P
7440-66-6	Zinc	50.9			P

Color Before: BROWN Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000047

Client Sample No.

ITSB-0022 16-18

) N e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1733201

Solids: 0.0 Date Samp/Recv: 07/31/2001 07/31/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/08/2001
yanide - Total	UG/G	0.50	U			9010	08/08/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

ITSB-0023 (8-10)

ɔ : e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733204

mple wt/vol: 4.03 (g/mL) G Lab File ID: F3405.RR

/el: (low/med) MED Date Samp/Recv: 07/31/2001 07/31/2001

/oisture: not dec. 29.4 Heated Purge: N Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.00

il Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	7000	U
71-43-2	Benzene	1700000	E
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1400	U
78-93-3	2-Butanone	3500	U
75-15-0	Carbon Disulfide	1400	U
56-23-5	Carbon Tetrachloride	1400	U
108-90-7	Chlorobenzene	1400	U
75-00-3	Chloroethane	1400	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1400	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	1400	U
107-06-2	1,2-Dichloroethane	1400	U
75-35-4	1,1-Dichloroethene	1400	U
540-59-0	1,2-Dichloroethene (Total)	1400	U
78-87-5	1,2-Dichloropropane	1400	U
10061-01-5	cis-1,3-Dichloropropene	1400	U
10061-02-6	trans-1,3-Dichloropropene	1400	U
100-41-4	Ethylbenzene	620000	E
591-78-6	2-Hexanone	8800	U
75-09-2	Methylene chloride	1400	U
108-10-1	4-Methyl-2-pentanone	3500	U
100-42-5	Styrene	1600000	E
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
127-18-4	Tetrachloroethene	1400	U
108-88-3	Toluene	2900000	E
71-55-6	1,1,1-Trichloroethane	1400	U
79-00-5	1,1,2-Trichloroethane	1400	U
79-01-6	Trichloroethene	880	U
108-05-4	Vinyl acetate	1400	U
75-01-4	Vinyl chloride	1400	U
1330-20-7	Total Xylenes	2700000	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

ITSB-0023 (8-10) DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1733204DL

Sample wt/vol: 4.03 (g/mL) G Lab File ID: F3444.RR

Level: (low/med) MED Date Samp/Recv: 07/31/2001 07/31/2001

% Moisture: not dec. 29.4 Heated Purge: N Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	140000	U
71-43-2	Benzene	3000000	D
75-27-4	Bromodichloromethane	7000	U
75-25-2	Bromoform	7000	U
74-83-9	Bromomethane	28000	U
78-93-3	2-Butanone	70000	U
75-15-0	Carbon Disulfide	28000	U
56-23-5	Carbon Tetrachloride	28000	U
108-90-7	Chlorobenzene	28000	U
75-00-3	Chloroethane	28000	U
67-66-3	Chloroform	7000	U
74-87-3	Chloromethane	28000	U
124-48-1	Dibromochloromethane	7000	U
75-34-3	1,1-Dichloroethane	28000	U
107-06-2	1,2-Dichloroethane	28000	U
75-35-4	1,1-Dichloroethene	28000	U
540-59-0	1,2-Dichloroethene (Total)	28000	U
78-87-5	1,2-Dichloropropane	28000	U
10061-01-5	cis-1,3-Dichloropropene	28000	U
10061-02-6	trans-1,3-Dichloropropene	28000	U
100-41-4	Ethylbenzene	610000	D
591-78-6	2-Hexanone	180000	U
75-09-2	Methylene chloride	28000	U
108-10-1	4-Methyl-2-pentanone	70000	U
100-42-5	Styrene	2100000	D
79-34-5	1,1,2,2-Tetrachloroethane	28000	U
127-18-4	Tetrachloroethene	28000	U
108-88-3	Toluene	5100000	D
71-55-6	1,1,1-Trichloroethane	28000	U
79-00-5	1,1,2-Trichloroethane	28000	U
79-01-6	Trichloroethene	18000	U
108-05-4	Vinyl acetate	28000	U
75-01-4	Vinyl chloride	28000	U
1330-20-7	Total Xylenes	3100000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000031

Client No.

ITSB-0023 (5-7)

ɔ. e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733205

mple wt/vol: 30.15 (g/mL) G Lab File ID: Y48534.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

Moisture: 33.1 decanted: (Y/N) N Date Extracted: 08/14/2001

ıcentrated Extract Volume: 50000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1200000	
208-96-8	Acenaphthylene	3300000	
120-12-7	Anthracene	2900000	
56-55-3	Benzo(a)anthracene	2000000	
205-99-2	Benzo(b)fluoranthene	860000	
207-08-9	Benzo(k)fluoranthene	1200000	
191-24-2	Benzo(ghi)perylene	780000	
50-32-8	Benzo(a)pyrene	2100000	
65-85-0	Benzoic acid	200000	U
100-51-6	Benzyl alcohol	200000	U
111-91-1	Bis(2-chloroethoxy) methane	50000	U
111-44-4	Bis(2-chloroethyl) ether	50000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	50000	U
117-81-7	Bis(2-ethylhexyl) phthalate	74000	U
101-55-3	4-Bromophenyl phenyl ether	74000	U
85-68-7	Butyl benzyl phthalate	50000	U
106-47-8	4-Chloroaniline	50000	U
59-50-7	4-Chloro-3-methylphenol	50000	U
91-58-7	2-Chloronaphthalene	50000	U
95-57-8	2-Chlorophenol	50000	U
7005-72-3	4-Chlorophenyl phenyl ether	50000	U
218-01-9	Chrysene	2000000	
53-70-3	Dibenzo(a,h)anthracene	260000	
132-64-9	Dibenzofuran	310000	
84-74-2	Di-n-butyl phthalate	50000	U
95-50-1	1,2-Dichlorobenzene	50000	U
541-73-1	1,3-Dichlorobenzene	50000	U
106-46-7	1,4-Dichlorobenzene	50000	U
91-94-1	3,3'-Dichlorobenzidine	74000	U
120-83-2	2,4-Dichlorophenol	40000	U
84-66-2	Diethyl phthalate	50000	U
105-67-9	2,4-Dimethylphenol	74000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000032

Client No.

ITSB-0023 (5-7)

): STL Buffalo Contract: _____

): Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733205

mple wt/vol: 30.15 (g/mL) G Lab File ID: Y48534.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

Moisture: 33.1 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 50000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	50000	U
534-52-1	4,6-Dinitro-2-methylphenol	74000	U
51-28-5	2,4-Dinitrophenol	99000	U
121-14-2	2,4-Dinitrotoluene	50000	U
606-20-2	2,6-Dinitrotoluene	74000	U
117-84-0	Di-n-octyl phthalate	50000	U
206-44-0	Fluoranthene	3200000	
86-73-7	Fluorene	3400000	
118-74-1	Hexachlorobenzene	50000	U
87-68-3	Hexachlorobutadiene	50000	U
77-47-4	Hexachlorocyclopentadiene	74000	U
67-72-1	Hexachloroethane	40000	U
193-39-5	Indeno(1,2,3-cd)pyrene	480000	
78-59-1	Isophorone	50000	U
91-57-6	2-Methylnaphthalene	11000000	E
95-48-7	2-Methylphenol	99000	U
106-44-5	4-Methylphenol	50000	U
91-20-3	Naphthalene	20000000	E
88-74-4	2-Nitroaniline	50000	U
99-09-2	3-Nitroaniline	74000	U
100-01-6	4-Nitroaniline	120000	U
98-95-3	Nitrobenzene	89000	U
88-75-5	2-Nitrophenol	50000	U
100-02-7	4-Nitrophenol	120000	U
86-30-6	N-nitrosodiphenylamine	50000	U
621-64-7	N-Nitroso-Di-n-propylamine	45000	U
87-86-5	Pentachlorophenol	99000	U
85-01-8	Phenanthrene	9400000	E
108-95-2	Phenol	99000	U
129-00-0	Pyrene	6700000	
120-82-1	1,2,4-Trichlorobenzene	25000	U
95-95-4	2,4,5-Trichlorophenol	99000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

ITSB-0023 (5-7)

) l e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733205

ple wt/vol: 30.15 (g/mL) G Lab File ID: Y48534.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

bisture: 33.1 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 50000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	150000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034
Client No.

ITSB-0023 (5-7) DL

I : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733205DL

ple wt/vol: 30.15 (g/mL) G Lab File ID: Y48550.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 33.1 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 50000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 100.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1100000	D
208-96-8	Acenaphthylene	3400000	D
120-12-7	Anthracene	3000000	D
56-55-3	Benzo(a)anthracene	1900000	D
205-99-2	Benzo(b)fluoranthene	680000	D
207-08-9	Benzo(k)fluoranthene	970000	D
191-24-2	Benzo(ghi)perylene	1300000	D
50-32-8	Benzo(a)pyrene	2100000	D
65-85-0	Benzoic acid	990000	U
100-51-6	Benzyl alcohol	990000	U
111-91-1	Bis(2-chloroethoxy) methane	250000	U
111-44-4	Bis(2-chloroethyl) ether	250000	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	250000	U
117-81-7	Bis(2-ethylhexyl) phthalate	370000	U
101-55-3	4-Bromophenyl phenyl ether	370000	U
85-68-7	Butyl benzyl phthalate	250000	U
106-47-8	4-Chloroaniline	250000	U
59-50-7	4-Chloro-3-methylphenol	250000	U
91-58-7	2-Chloronaphthalene	250000	U
95-57-8	2-Chlorophenol	250000	U
7005-72-3	4-Chlorophenyl phenyl ether	250000	U
218-01-9	Chrysene	2000000	D
53-70-3	Dibenzo(a,h)anthracene	220000	DJ
132-64-9	Dibenzofuran	220000	DJ
84-74-2	Di-n-butyl phthalate	250000	U
95-50-1	1,2-Dichlorobenzene	250000	U
541-73-1	1,3-Dichlorobenzene	250000	U
106-46-7	1,4-Dichlorobenzene	250000	U
91-94-1	3,3'-Dichlorobenzidine	370000	U
120-83-2	2,4-Dichlorophenol	200000	U
84-66-2	Diethyl phthalate	250000	U
105-67-9	2,4-Dimethylphenol	370000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000035

Client No.

ITSB-0023 (5-7) DL

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1733205DL

ple wt/vol: 30.15 (g/mL) G Lab File ID: Y48550.RR

/el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

Moisture: 33.1 decanted: (Y/N) N Date Extracted: 08/14/2001

ıcentrated Extract Volume: 50000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 100.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	250000	U
534-52-1	4,6-Dinitro-2-methylphenol	370000	U
51-28-5	2,4-Dinitrophenol	500000	U
121-14-2	2,4-Dinitrotoluene	250000	U
606-20-2	2,6-Dinitrotoluene	370000	U
117-84-0	Di-n-octyl phthalate	250000	U
206-44-0	Fluoranthene	3500000	D
86-73-7	Fluorene	3400000	D
118-74-1	Hexachlorobenzene	250000	U
87-68-3	Hexachlorobutadiene	250000	U
77-47-4	Hexachlorocyclopentadiene	370000	U
67-72-1	Hexachloroethane	200000	U
193-39-5	Indeno(1,2,3-cd)pyrene	610000	D
78-59-1	Isophorone	250000	U
91-57-6	2-Methylnaphthalene	14000000	D
95-48-7	2-Methylphenol	500000	U
106-44-5	4-Methylphenol	250000	U
91-20-3	Naphthalene	30000000	D
88-74-4	2-Nitroaniline	250000	U
99-09-2	3-Nitroaniline	370000	U
100-01-6	4-Nitroaniline	620000	U
98-95-3	Nitrobenzene	450000	U
88-75-5	2-Nitrophenol	250000	U
100-02-7	4-Nitrophenol	620000	U
86-30-6	N-nitrosodiphenylamine	250000	U
621-64-7	N-Nitroso-Di-n-propylamine	220000	U
87-86-5	Pentachlorophenol	500000	U
85-01-8	Phenanthrene	12000000	D
108-95-2	Phenol	500000	U
129-00-0	Pyrene	7900000	D
120-82-1	1,2,4-Trichlorobenzene	120000	U
95-95-4	2,4,5-Trichlorophenol	500000	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000036
Client No.

ITSB-0023 (5-7) DL

l : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1733205DL

ple wt/vol: 30.15 (g/mL) G Lab File ID: Y48550.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 07/31/2001

oisture: 33.1 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 50000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 100.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	740000	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITSB-0023 (5-7)

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7332

Matrix (soil/water): SOIL Lab Sample ID: AD114708

Level (low/med): LOW Date Received: 7/31/01

Solids: 67

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3620		N	P
7440-36-0	Antimony	14.7	U	N	P
7440-38-2	Arsenic	12.6			P
7440-39-3	Barium	226			P
7440-41-7	Beryllium	0.73	U		P
7440-43-9	Cadmium	0.73	U		P
7440-70-2	Calcium	5560		N	P
7440-47-3	Chromium	15.7			P
7440-48-4	Cobalt	11.9			P
7440-50-8	Copper	145		N	P
7439-89-6	Iron	48100		E	P
7439-92-1	Lead	460			P
7439-95-4	Magnesium	1740		N	P
7439-96-5	Manganese	255			P
7440-02-0	Nickel	14.2			P
7440-09-7	Potassium	616		N	P
7782-49-2	Selenium	4.4	U		P
7440-22-4	Silver	1.5	U		P
7439-97-6	Mercury	0.152	U		CV
7440-23-5	Sodium	244			P
7440-28-0	Thallium	8.8	U		P
7440-62-2	Vanadium	13.0			P
7440-66-6	Zinc	202			P

Color Before: BLACK Clarity Before: Texture: SAND

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000048

Client Sample No.

ITSB-0023 (5-7)

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): SOIL Lab Sample ID: A1733205

Solids: 66.9 Date Samp/Recv: 07/31/2001 07/31/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	2.1				9010	08/13/2001
/anide - Total	UG/G	2.1				9010	08/08/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000011

Client No.

MW01 24-4

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1902201

nple wt/vol: 5.02 (g/mL) G Lab File ID: P6018.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: not dec. 9.3 Heated Purge: Y Date Analyzed: 09/20/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	9	BJ
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	15	J
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	2	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014
Client No.

MW01 24-4

ɔ . e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix: (soil/water) SOIL Lab Sample ID: A1902201

mple wt/vol: 30.05 (g/mL) G Lab File ID: X49042.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 7.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ɲcentrated Extract Volume: 1000 (uL) Date Analyzed: 09/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	840	
120-12-7	Anthracene	2000	
56-55-3	Benzo(a)anthracene	11000	
205-99-2	Benzo(b)fluoranthene	8800	
207-08-9	Benzo(k)fluoranthene	13000	
191-24-2	Benzo(ghi)perylene	3800	
50-32-8	Benzo(a)pyrene	12000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	200	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	11000	
53-70-3	Dibenzo(a,h)anthracene	2200	
132-64-9	Dibenzofuran	220	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015
Client No.

MW01 24-4

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902201

mple wt/vol: 30.05 (g/mL) G Lab File ID: X49042.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 7.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	16000	
86-73-7	Fluorene	370	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	4400	
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	280	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	6100	
108-95-2	Phenol	330	U
129-00-0	Pyrene	14000	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016
Client No.

MW01 24-4

b .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902201

mple wt/vol: 30.05 (g/mL) G Lab File ID: X49042.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 7.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01 24-4

ontract: NY01-143

ab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-9022

atrix (soil/water): SOIL Lab Sample ID: AD117946

evel (low/med): LOW Date Received: 9/19/01

Solids: 92

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5630			P
7440-36-0	Antimony	10.6	U		P
7440-38-2	Arsenic	6.2			P
7440-39-3	Barium	54.3			P
7440-41-7	Beryllium	0.53	U		P
7440-43-9	Cadmium	0.53	U		P
7440-70-2	Calcium	22400		E	P
7440-47-3	Chromium	7.8			P
7440-48-4	Cobalt	3.7			P
7440-50-8	Copper	21.5			P
7439-89-6	Iron	10500		E	P
7439-92-1	Lead	101			P
7439-95-4	Magnesium	3700			P
7439-96-5	Manganese	375		E	P
7440-02-0	Nickel	8.6			P
7440-09-7	Potassium	861			P
7782-49-2	Selenium	3.2	U		P
7439-97-6	Mercury	0.366			CV
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	237			P
7440-28-0	Thallium	6.4	U		P
7440-62-2	Vanadium	10.1			P
7440-66-6	Zinc	45.0			P

Color Before: BROWN Clarity Before: Texture: SAND

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000029

Client Sample No.

MW01 24-4

N .: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1902201

olids: 92.2 Date Samp/Recv: 09/19/2001 09/19/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9012A	10/02/2001
anide - Total	UG/G	0.50	U			9010	10/02/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012

Client No.

MW01 25-8

ab ..ume: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1902202

ample wt/vol: 5.13 (g/mL) G Lab File ID: P6019.RR

evel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: not dec. 18.0 Heated Purge: Y Date Analyzed: 09/20/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	17	BJ
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	97	
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	11	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	14	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017
Client No.

MW01 25-8

b ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902202

mple wt/vol: 30.63 (g/mL) G Lab File ID: X49045.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 16.9 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	2000	
205-99-2	Benzo(b)fluoranthene	1600	
207-08-9	Benzo(k)fluoranthene	2600	
191-24-2	Benzo(ghi)perylene	640	
50-32-8	Benzo(a)pyrene	2400	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	210	J
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	1900	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018
Client No.

MW01 25-8

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902202

mple wt/vol: 30.63 (g/mL) G Lab File ID: X49045.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 16.9 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	2300	
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	700	
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	1400	
108-95-2	Phenol	330	U
129-00-0	Pyrene	2000	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

MW01 25-8

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) SOIL Lab Sample ID: A1902202

ɪple wt/vol: 30.63 (g/mL) G Lab File ID: X49045.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 16.9 decanted: (Y/N) N Date Extracted: 09/21/2001

ɪcentrated Extract Volume: 1000 (uL) Date Analyzed: 09/24/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORP
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: MW01 25-8

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-9022

Matrix (soil/water): SOIL Lab Sample ID: AD117947

Level (low/med): LOW Date Received: 9/19/01

Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6440			P
7440-36-0	Antimony	12.5	U		P
7440-38-2	Arsenic	3.4			P
7440-39-3	Barium	107			P
7440-41-7	Beryllium	0.63	U		P
7440-43-9	Cadmium	0.63	U		P
7440-70-2	Calcium	31300		E	P
7440-47-3	Chromium	9.2			P
7440-48-4	Cobalt	4.4			P
7440-50-8	Copper	18.7			P
7439-89-6	Iron	9570		E	P
7439-92-1	Lead	77.9			P
7439-95-4	Magnesium	10200			P
7439-96-5	Manganese	214		E	P
7440-02-0	Nickel	12.5			P
7440-09-7	Potassium	1060			P
7782-49-2	Selenium	3.8	U		P
7439-97-6	Mercury	0.160			CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	411			P
7440-28-0	Thallium	7.5	U		P
7440-62-2	Vanadium	12.0			P
7440-66-6	Zinc	87.3			P

Color Before: BROWN Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000030

Client Sample No.

MW01 25-8

N. .: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1902202

olids: 83.1 Date Samp/Recv: 09/19/2001 09/19/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9012A	10/02/2001
anide - Total	UG/G	0.50	U			9010	10/02/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013
Client No.

MW01 26-12

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902203

mple wt/vol: 5.13 (g/mL) G Lab File ID: P6020.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: not dec. 18.4 Heated Purge: Y Date Analyzed: 09/20/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	14	BJ
71-43-2	Benzene	6	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	32	
75-15-0	Carbon Disulfide	3	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	16	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	15	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	240	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020
Client No.

MW01 26-12

o Name: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902203

mple wt/vol: 30.55 (g/mL) G Lab File ID: X49049.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	6300	
208-96-8	Acenaphthylene	5600	
120-12-7	Anthracene	18000	
56-55-3	Benzo(a)anthracene	22000	
205-99-2	Benzo(b)fluoranthene	16000	
207-08-9	Benzo(k)fluoranthene	15000	
191-24-2	Benzo(ghi)perylene	7200	
50-32-8	Benzo(a)pyrene	14000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	20000	
53-70-3	Dibenzo(a,h)anthracene	2900	
132-64-9	Dibenzofuran	27000	
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021
Client No.

MW01 26-12

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902203

mple wt/vol: 30.55 (g/mL) G Lab File ID: X49049.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	53000	
86-73-7	Fluorene	13000	
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	8400	
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	68000	E
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	120000	E
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	69000	E
108-95-2	Phenol	330	U
129-00-0	Pyrene	36000	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022
Client No.

MW01 26-12

b . .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902203

mple wt/vol: 30.55 (g/mL) G Lab File ID: X49049.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023
Client No.

MW01 26-12 DL

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1902203DL

mple wt/vol: 30.55 (g/mL) G Lab File ID: X49056.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 50.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	5200	D
208-96-8	Acenaphthylene	3700	D
120-12-7	Anthracene	17000	D
56-55-3	Benzo(a)anthracene	21000	D
205-99-2	Benzo(b)fluoranthene	15000	D
207-08-9	Benzo(k)fluoranthene	15000	D
191-24-2	Benzo(ghi)perylene	8400	D
50-32-8	Benzo(a)pyrene	13000	D
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1500	U
111-91-1	Bis(2-chloroethoxy) methane	1500	U
111-44-4	Bis(2-chloroethyl) ether	1500	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1500	U
117-81-7	Bis(2-ethylhexyl) phthalate	1500	U
101-55-3	4-Bromophenyl phenyl ether	1500	U
85-68-7	Butyl benzyl phthalate	1500	U
106-47-8	4-Chloroaniline	1500	U
59-50-7	4-Chloro-3-methylphenol	1500	U
91-58-7	2-Chloronaphthalene	1500	U
95-57-8	2-Chlorophenol	1500	U
7005-72-3	4-Chlorophenyl phenyl ether	1500	U
218-01-9	Chrysene	20000	D
53-70-3	Dibenzo(a,h)anthracene	1500	U
132-64-9	Dibenzofuran	28000	D
84-74-2	Di-n-butyl phthalate	1500	U
95-50-1	1,2-Dichlorobenzene	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	1500	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
120-83-2	2,4-Dichlorophenol	1500	U
84-66-2	Diethyl phthalate	1500	U
105-67-9	2,4-Dimethylphenol	1500	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

MW01 26-12 DL

b . .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902203DL

mple wt/vol: 30.55 (g/mL) G Lab File ID: X49056.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 50.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	1500	U
606-20-2	2,6-Dinitrotoluene	1500	U
117-84-0	Di-n-octyl phthalate	1500	U
206-44-0	Fluoranthene	60000	D
86-73-7	Fluorene	12000	D
118-74-1	Hexachlorobenzene	1500	U
87-68-3	Hexachlorobutadiene	1500	U
77-47-4	Hexachlorocyclopentadiene	1500	U
67-72-1	Hexachloroethane	1500	U
193-39-5	Indeno(1,2,3-cd)pyrene	6600	D
78-59-1	Isophorone	1500	U
91-57-6	2-Methylnaphthalene	80000	D
95-48-7	2-Methylphenol	1500	U
106-44-5	4-Methylphenol	1500	U
91-20-3	Naphthalene	170000	D
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	1500	U
88-75-5	2-Nitrophenol	1500	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	1500	U
621-64-7	N-Nitroso-Di-n-propylamine	1500	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	86000	D
108-95-2	Phenol	1500	U
129-00-0	Pyrene	41000	D
120-82-1	1,2,4-Trichlorobenzene	1500	U
95-95-4	2,4,5-Trichlorophenol	1500	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025

Client No.

MW01 26-12 DL

o e: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1902203DL

mple wt/vol: 30.55 (g/mL) G Lab File ID: X49056.RR

vel: (low/med) LOW Date Samp/Recv: 09/19/2001 09/19/2001

Moisture: 17.8 decanted: (Y/N) N Date Extracted: 09/21/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 50.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1500	U

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-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW01 26-12

Contract: NY01-143
Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-9022
Matrix (soil/water): SOIL Lab Sample ID: AD117948
Level (low/med): LOW Date Received: 9/19/01
Solids: 82

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2790			P
7440-36-0	Antimony	12.4	U		P
7440-38-2	Arsenic	3.1			P
7440-39-3	Barium	24.2			P
7440-41-7	Beryllium	0.62	U		P
7440-43-9	Cadmium	0.62	U		P
7440-70-2	Calcium	41200		E	P
7440-47-3	Chromium	6.0			P
7440-48-4	Cobalt	2.5	U		P
7440-50-8	Copper	7.4			P
7439-89-6	Iron	6530		E	P
7439-92-1	Lead	19.8			P
7439-95-4	Magnesium	17300			P
7439-96-5	Manganese	226		E	P
7440-02-0	Nickel	5.2			P
7440-09-7	Potassium	671			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.723			CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	154			P
7440-28-0	Thallium	7.4	U		P
7440-62-2	Vanadium	8.9			P
7440-66-6	Zinc	38.9			P

Color Before: BROWN Clarity Before: Texture: CLAY
Color After: BROWN Clarity After: CLOUDY Artifacts:
Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000031

Client Sample No.

MW01 26-12

: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1902203

olids: 82.2 Date Samp/Recv: 09/19/2001 09/19/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9012A	10/02/2001
anide - Total	UG/G	0.50	U			9010	10/02/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

MW01-27-12'-14'

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1907301

:ple wt/vol: 4.08 (g/mL) G Lab File ID: N5181.RR

/el: (low/med) MED Date Samp/Recv: 09/20/2001 09/20/2001

foisture: not dec. 35.1 Heated Purge: N Date Analyzed: 09/28/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

.l Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	27000	
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	625	U
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	21000	
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	260	J
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	35000	
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	82000	E
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	260000	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

MW01-27-12'-14' DL

e: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1907301DL

ple wt/vol: 4.08 (g/mL) G Lab File ID: F4657.RR

el: (low/med) MED Date Samp/Recv: 09/20/2001 09/20/2001

oisture: not dec. 35.1 Heated Purge: N Date Analyzed: 10/03/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.00

l Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	6000	U
71-43-2	Benzene	38000	D
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	1200	U
56-23-5	Carbon Tetrachloride	1200	U
108-90-7	Chlorobenzene	1200	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	1200	U
107-06-2	1,2-Dichloroethane	1200	U
75-35-4	1,1-Dichloroethene	1200	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	1200	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	24000	D
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	1200	U
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	41000	D
79-34-5	1,1,2,2-Tetrachloroethane	1200	U
127-18-4	Tetrachloroethene	1200	U
108-88-3	Toluene	100000	D
71-55-6	1,1,1-Trichloroethane	1200	U
79-00-5	1,1,2-Trichloroethane	1200	U
79-01-6	Trichloroethene	750	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	380000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

MW01-27-12'-14'

o . .ne: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907301

mple wt/vol: 30.65 (g/mL) G Lab File ID: W45140.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.9 decanted: (Y/N) Y Date Extracted: 09/24/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	520	U
208-96-8	Acenaphthylene	520	U
120-12-7	Anthracene	610	
56-55-3	Benzo(a)anthracene	520	U
205-99-2	Benzo(b)fluoranthene	1800	
207-08-9	Benzo(k)fluoranthene	1900	
191-24-2	Benzo(ghi)perylene	960	
50-32-8	Benzo(a)pyrene	1000	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	520	U
111-91-1	Bis(2-chloroethoxy) methane	520	U
111-44-4	Bis(2-chloroethyl) ether	520	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	520	U
117-81-7	Bis(2-ethylhexyl) phthalate	520	U
101-55-3	4-Bromophenyl phenyl ether	520	U
85-68-7	Butyl benzyl phthalate	520	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	520	U
91-58-7	2-Chloronaphthalene	520	U
95-57-8	2-Chlorophenol	520	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	2300	
53-70-3	Dibenzo(a,h)anthracene	520	U
132-64-9	Dibenzofuran	1500	
84-74-2	Di-n-butyl phthalate	520	U
95-50-1	1,2-Dichlorobenzene	520	U
541-73-1	1,3-Dichlorobenzene	520	U
106-46-7	1,4-Dichlorobenzene	520	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	420	U
84-66-2	Diethyl phthalate	520	U
105-67-9	2,4-Dimethylphenol	520	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

009018

Client No.

MW01-27-12'-14'

b .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907301

mple wt/vol: 30.65 (g/mL) G Lab File ID: W45140.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.9 decanted: (Y/N) Y Date Extracted: 09/24/2001

ncentrated Extract Volume: 10000 (uL) Date Analyzed: 09/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	520	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	520	U
606-20-2	2,6-Dinitrotoluene	520	U
117-84-0	Di-n-octyl phthalate	520	U
206-44-0	Fluoranthene	5400	
86-73-7	Fluorene	520	U
118-74-1	Hexachlorobenzene	520	U
87-68-3	Hexachlorobutadiene	520	U
77-47-4	Hexachlorocyclopentadiene	520	U
67-72-1	Hexachloroethane	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000	
78-59-1	Isophorone	520	U
91-57-6	2-Methylnaphthalene	2600	B
95-48-7	2-Methylphenol	520	U
106-44-5	4-Methylphenol	520	U
91-20-3	Naphthalene	7900	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	520	U
88-75-5	2-Nitrophenol	520	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	520	U
621-64-7	N-Nitroso-Di-n-propylamine	520	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	6800	
108-95-2	Phenol	520	U
129-00-0	Pyrene	4000	
120-82-1	1,2,4-Trichlorobenzene	370	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

MW01-27-12'-14'

ıb .ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1907301

ımple wt/vol: 30.65 (g/mL) G Lab File ID: W45140.MSQ

:vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.9 decanted: (Y/N) Y Date Extracted: 09/24/2001

ıncentrated Extract Volume: 10000 (uL) Date Analyzed: 09/25/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	520	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

MW01-27-12'-14' RE

b .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907301RA

mple wt/vol: 30.63 (g/mL) G Lab File ID: W45255.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.9 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/05/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1400	
208-96-8	Acenaphthylene	730	
120-12-7	Anthracene	2900	
56-55-3	Benzo(a)anthracene	7800	
205-99-2	Benzo(b)fluoranthene	5900	
207-08-9	Benzo(k)fluoranthene	8900	
191-24-2	Benzo(ghi)perylene	3100	
50-32-8	Benzo(a)pyrene	4400	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	520	U
111-91-1	Bis(2-chloroethoxy) methane	520	U
111-44-4	Bis(2-chloroethyl) ether	520	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	520	U
117-81-7	Bis(2-ethylhexyl) phthalate	520	U
101-55-3	4-Bromophenyl phenyl ether	520	U
85-68-7	Butyl benzyl phthalate	520	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	520	U
91-58-7	2-Chloronaphthalene	520	U
95-57-8	2-Chlorophenol	520	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	7700	
53-70-3	Dibenzo(a,h)anthracene	1300	
132-64-9	Dibenzofuran	8500	
84-74-2	Di-n-butyl phthalate	520	U
95-50-1	1,2-Dichlorobenzene	520	U
541-73-1	1,3-Dichlorobenzene	520	U
106-46-7	1,4-Dichlorobenzene	520	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	420	U
84-66-2	Diethyl phthalate	520	U
105-67-9	2,4-Dimethylphenol	520	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021

Client No.

MW01-27-12'-14' RE

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1907301RA

ple wt/vol: 30.63 (g/mL) G Lab File ID: W45255.MSQ

rel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

loisture: 37.9 decanted: (Y/N) N Date Extracted: 10/04/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 10/05/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	520	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	520	U
606-20-2	2,6-Dinitrotoluene	520	U
117-84-0	Di-n-octyl phthalate	520	U
206-44-0	Fluoranthene	19000	
86-73-7	Fluorene	4600	
118-74-1	Hexachlorobenzene	520	U
87-68-3	Hexachlorobutadiene	520	U
77-47-4	Hexachlorocyclopentadiene	520	U
67-72-1	Hexachloroethane	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	3700	
78-59-1	Isophorone	520	U
91-57-6	2-Methylnaphthalene	22000	
95-48-7	2-Methylphenol	520	U
106-44-5	4-Methylphenol	520	U
91-20-3	Naphthalene	65000	B
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	520	U
88-75-5	2-Nitrophenol	520	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	520	U
621-64-7	N-Nitroso-Di-n-propylamine	520	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	26000	
108-95-2	Phenol	520	U
129-00-0	Pyrene	14000	
120-82-1	1,2,4-Trichlorobenzene	370	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

MW01-27-12'-14' RE

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1907301RA

mple wt/vol: 30.63 (g/mL) G Lab File ID: W45255.MSQ

vel: (low/med) LOW Date Samp/Recv: 09/20/2001 09/20/2001

Moisture: 37.9 decanted: (Y/N) N Date Extracted: 10/04/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/05/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	520	U

TT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-27-12'-14'

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-9073

Matrix (soil/water): SOIL Lab Sample ID: AD118366

Level (low/med): LOW Date Received: 9/20/01

% Solids: 62

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2590			P
7440-36-0	Antimony	16.8	U		P
7440-38-2	Arsenic	7.7			P
7440-39-3	Barium	90.9			P
7440-41-7	Beryllium	0.84	U		P
7440-43-9	Cadmium	3.3			P
7440-70-2	Calcium	18600			P
7440-47-3	Chromium	5.6			P
7440-48-4	Cobalt	3.4			P
7440-50-8	Copper	56.7			P
7439-89-6	Iron	11200			P
7439-92-1	Lead	427			P
7439-95-4	Magnesium	2720			P
7439-96-5	Manganese	108			P
7440-02-0	Nickel	8.4			P
7440-09-7	Potassium	344			P
7782-49-2	Selenium	5.0	U		P
7439-97-6	Mercury	7.4			CV
7440-22-4	Silver	1.7	U		P
7440-23-5	Sodium	250			P
7440-28-0	Thallium	10.1	U		P
7440-62-2	Vanadium	7.5			P
7440-66-6	Zinc	169			P

Color Before: BLACK Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000031
Client Sample No.

MW01-27-12'-14'

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): SOIL Lab Sample ID: A1907301

Solids: 62.1 Date Samp/Recv: 09/20/2001 09/20/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	5.0	U			9012A	10/02/2001
Cyanide - Total	UG/G	42.5				9010	10/02/2001

omments:

_____
_____
_____
_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021
Client No.

TP-1 (4-7')

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743609

Sample wt/vol: 5.10 (g/mL) G Lab File ID: P5282.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

% Moisture: not dec. 11.5 Heated Purge: Y Date Analyzed: 08/08/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	74	
71-43-2	Benzene	8	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	8	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000053

Client No.

TP-1 (4-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743609

mple wt/vol: 30.39 (g/mL) G Lab File ID: Y48535.RR

evel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 14.5 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	380	U
208-96-8	Acenaphthylene	380	U
120-12-7	Anthracene	380	U
56-55-3	Benzo(a)anthracene	380	U
205-99-2	Benzo(b)fluoranthene	220	J
207-08-9	Benzo(k)fluoranthene	380	U
191-24-2	Benzo(ghi)perylene	380	U
50-32-8	Benzo(a)pyrene	380	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1500	U
111-91-1	Bis(2-chloroethoxy) methane	380	U
111-44-4	Bis(2-chloroethyl) ether	380	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	380	U
117-81-7	Bis(2-ethylhexyl) phthalate	580	U
101-55-3	4-Bromophenyl phenyl ether	580	U
85-68-7	Butyl benzyl phthalate	380	U
106-47-8	4-Chloroaniline	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-58-7	2-Chloronaphthalene	380	U
95-57-8	2-Chlorophenol	380	U
7005-72-3	4-Chlorophenyl phenyl ether	380	U
218-01-9	Chrysene	380	U
53-70-3	Dibenzo(a,h)anthracene	380	U
132-64-9	Dibenzofuran	380	U
84-74-2	Di-n-butyl phthalate	380	U
95-50-1	1,2-Dichlorobenzene	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	380	U
105-67-9	2,4-Dimethylphenol	580	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

0000-9

Client No.

TP-1 (4-7')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743609

mple wt/vol: 30.39 (g/mL) G Lab File ID: Y48535.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 14.5 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	380	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	380	U
606-20-2	2,6-Dinitrotoluene	580	U
117-84-0	Di-n-octyl phthalate	380	U
206-44-0	Fluoranthene	290	J
86-73-7	Fluorene	580	U
118-74-1	Hexachlorobenzene	380	U
87-68-3	Hexachlorobutadiene	380	U
77-47-4	Hexachlorocyclopentadiene	580	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	770	U
78-59-1	Isophorone	380	U
91-57-6	2-Methylnaphthalene	380	U
95-48-7	2-Methylphenol	770	U
106-44-5	4-Methylphenol	380	U
91-20-3	Naphthalene	720	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	690	U
88-75-5	2-Nitrophenol	380	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	380	U
621-64-7	N-Nitroso-Di-n-propylamine	350	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	250	J
108-95-2	Phenol	770	U
129-00-0	Pyrene	260	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000080

Client No.

TP-1 (4-7')

b . .ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743609

mple wt/vol: 30.39 (g/mL) G Lab File ID: Y48535.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 14.5 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1200	U

STL BUFFALO

000163

TT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-1 (4-7')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114961

Level (low/med): LOW Date Received: 8/2/01

% Solids: 86

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10000		N	P
7440-36-0	Antimony	11.5	U	N	P
7440-38-2	Arsenic	2.1			P
7440-39-3	Barium	70.8		N	P
7440-41-7	Beryllium	0.57	U		P
7440-43-9	Cadmium	0.57	U		P
7440-70-2	Calcium	32600		E	P
7440-47-3	Chromium	13.5			P
7440-48-4	Cobalt	6.5			P
7440-50-8	Copper	15.7			P
7439-89-6	Iron	15600		E	P
7439-92-1	Lead	26.5		N	P
7439-95-4	Magnesium	13100			P
7439-96-5	Manganese	304		E	P
7440-02-0	Nickel	14.4			P
7440-09-7	Potassium	2070			P
7782-49-2	Selenium	3.4	U		P
7439-97-6	Mercury	0.123	U	N	CV
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	356			P
7440-28-0	Thallium	6.9	U		P
7440-62-2	Vanadium	19.4			P
7440-66-6	Zinc	66.7		N	P

Color Before: BROWN Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000194

Client Sample No.

TP-1 (4-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): SOIL Lab Sample ID: A1743609

Solids: 85.5 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	2.8				9010	08/13/2001
yanide - Total	UG/G	3.2				9010	08/08/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022
Client No.

TP-2 (6')

ɔ. .e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1743610

mple wt/vol: 5.02 (g/mL) G Lab File ID: P5283.RR

/el: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: not dec. 12.8 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	4	J
71-43-2	Benzene	3	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	1	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000061

Client No.

TP-2 (6')

b me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743610

mple wt/vol: 30.80 (g/mL) G Lab File ID: Y48536.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 10.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	330	U
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000082

Client No.

TP-2 (6')

ıb .me: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743610

ımple wt/vol: 30.80 (g/mL) G Lab File ID: Y48536.RR

ɛvel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 10.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ℋC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	330	U
86-73-7	Fluorene	330	U
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
108-95-2	Phenol	330	U
129-00-0	Pyrene	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000063

Client No.

TP-2 (6')

b me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743610

mple wt/vol: 30.80 (g/mL) G Lab File ID: Y48536.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 10.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-2 (6')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114962

Level (low/med): LOW Date Received: 8/2/01

% Solids: 90

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2760		N	P
7440-36-0	Antimony	10.7	U	N	P
7440-38-2	Arsenic	1.1	U		P
7440-39-3	Barium	18.0		N	P
7440-41-7	Beryllium	0.54	U		P
7440-43-9	Cadmium	0.54	U		P
7440-70-2	Calcium	105000		E	P
7440-47-3	Chromium	4.0			P
7440-48-4	Cobalt	2.1	U		P
7440-50-8	Copper	17.7			P
7439-89-6	Iron	5140		E	P
7439-92-1	Lead	70.2		N	P
7439-95-4	Magnesium	28300			P
7439-96-5	Manganese	187		E	P
7440-02-0	Nickel	4.2			P
7440-09-7	Potassium	699			P
7782-49-2	Selenium	3.2	U		P
7439-97-6	Mercury	0.172		N	CV
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	241			P
7440-28-0	Thallium	6.4	U		P
7440-62-2	Vanadium	7.8			P
7440-66-6	Zinc	50.0		N	P

Color Before: BROWN Clarity Before: Texture: SAND

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000195
Client Sample No.

TP-2 (6')

ıb ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix (soil/water): SOIL Lab Sample ID: A1743610

Solids: 0.0 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
ımenable Cyanide	MG/KG	0.50	U			9010	08/08/2001
Cyanide - Total	UG/G	0.50	U			9010	08/08/2001

ɔmments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

009033 Client No.

TP-3 (7-8')

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1743611

mple wt/vol: 5.07 (g/mL) G Lab File ID: P5284.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: not dec. 16.4 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	22	J
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	1	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	5	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000064

Client No.

TP-3 (7-8')

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743611

ımple wt/vol: 30.71 (g/mL) G Lab File ID: Y48537.RR

ɔvel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 15.7 decanted: (Y/N) N Date Extracted: 08/14/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	21	J
208-96-8	Acenaphthylene	29	J
120-12-7	Anthracene	71	J
56-55-3	Benzo(a)anthracene	100	J
205-99-2	Benzo(b)fluoranthene	70	J
207-08-9	Benzo(k)fluoranthene	75	J
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	82	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	90	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	48	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000065

Client No.

TP-3 (7-8')

b .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743611

mple wt/vol: 30.71 (g/mL) G Lab File ID: Y48537.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 15.7 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	200	J
86-73-7	Fluorene	71	J
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	60	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	310	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	280	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	170	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000066

Client No.

TP-3 (7-8')

ıb ıme: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743611

ımple wt/vol: 30.71 (g/mL) G Lab File ID: Y48537.RR

ɔvel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 15.7 decanted: (Y/N) N Date Extracted: 08/14/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: TP-3 (7-8')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114963

Level (low/med): LOW Date Received: 8/2/01

Solids: 84

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5130		N	P
7440-36-0	Antimony	11.6	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	36.3		N	P
7440-41-7	Beryllium	0.58	U		P
7440-43-9	Cadmium	0.58	U		P
7440-70-2	Calcium	50800		E	P
7440-47-3	Chromium	7.7			P
7440-48-4	Cobalt	3.7			P
7440-50-8	Copper	5.8			P
7439-89-6	Iron	9090		E	P
7439-92-1	Lead	19.2		N	P
7439-95-4	Magnesium	20500			P
7439-96-5	Manganese	248		E	P
7440-02-0	Nickel	7.3			P
7440-09-7	Potassium	1540			P
7782-49-2	Selenium	3.5	U		P
7439-97-6	Mercury	0.122	U	N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	409			P
7440-28-0	Thallium	7.0	U		P
7440-62-2	Vanadium	15.3			P
7440-66-6	Zinc	321		N	P

Color Before: GRAY Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000196

Client Sample No.

TP-3 (7-8')

b me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743611

Solids: 84.3 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	30.8				9010	08/13/2001
yanide - Total	UG/G	40.0				9010	08/08/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: TP-4 (6-8.5')

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743612

Sample wt/vol: 5.02 (g/mL) G Lab File ID: P5285.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

% Moisture: not dec. 15.2 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	21	J
71-43-2	Benzene	120	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	23	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	6	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	270	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000067

Client No.

TP-4 (6-8.5')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743612

mple wt/vol: 30.96 (g/mL) G Lab File ID: Y48538.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.1 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	330	U
56-55-3	Benzo(a)anthracene	28	J
205-99-2	Benzo(b)fluoranthene	46	J
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	330	U
50-32-8	Benzo(a)pyrene	30	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	25	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000068

Client No.

TP-4 (6-8.5')

ıb . ıme: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743612

ımple wt/vol: 30.96 (g/mL) G Lab File ID: Y48538.RR

ɜvel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.1 decanted: (Y/N) N Date Extracted: 08/14/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	43	J
86-73-7	Fluorene	30	J
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	110	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	1000	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	49	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	40	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000069

Client No.

TP-4 (6-8.5')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743612

mple wt/vol: 30.96 (g/mL) G Lab File ID: Y48538.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.1 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

TT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-4 (6-8.5')

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114964

Level (low/med): LOW Date Received: 8/2/01

% Solids: 84

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3370		N	P
7440-36-0	Antimony	11.7	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	29.4		N	P
7440-41-7	Beryllium	0.58	U		P
7440-43-9	Cadmium	0.58	U		P
7440-70-2	Calcium	26200		E	P
7440-47-3	Chromium	5.1			P
7440-48-4	Cobalt	2.6			P
7440-50-8	Copper	4.7			P
7439-89-6	Iron	6190		E	P
7439-92-1	Lead	5.8	U	N	P
7439-95-4	Magnesium	9280			P
7439-96-5	Manganese	186		E	P
7440-02-0	Nickel	5.7			P
7440-09-7	Potassium	957			P
7782-49-2	Selenium	3.5	U		P
7439-97-6	Mercury	0.123	U	N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	186			P
7440-28-0	Thallium	7.0	U		P
7440-62-2	Vanadium	7.5			P
7440-66-6	Zinc	23.7		N	P

Color Before: GRAY Clarity Before: _____ Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000197

Client Sample No.

TP-4 (6-8.5')

b ' me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743612

Solids: 83.9 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	3.9				9010	08/13/2001
yanide - Total	UG/G	4.5				9010	08/08/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025
Client No.

TP-5 (6-7')

): STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743613

ple wt/vol: 5.09 (g/mL) G Lab File ID: P5286.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

oisture: not dec. 18.7 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	120	
71-43-2	Benzene	60	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	21	J
75-15-0	Carbon Disulfide	3	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	180	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	49	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000070

Client No.

TP-5 (6-7')

ıb _ ıne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743613

ımple wt/vol: 30.62 (g/mL) G Lab File ID: Y48539.RR

:vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 17.3 decanted: (Y/N) N Date Extracted: 08/14/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 5.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	130	J
56-55-3	Benzo(a)anthracene	640	
205-99-2	Benzo(b)fluoranthene	830	
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	100	J
50-32-8	Benzo(a)pyrene	580	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	790	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	560	
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

000071

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

TP-5 (6-7')

ıb .ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743613

ımple wt/vol: 30.62 (g/mL) G Lab File ID: Y48539.RR

:vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 17.3 decanted: (Y/N) N Date Extracted: 08/14/2001

ıncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 5.00

'C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	990	
86-73-7	Fluorene	100	J
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	120	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	390	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	740	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	360	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	550	
108-95-2	Phenol	390	U
129-00-0	Pyrene	870	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000072

Client No.

TP-5 (6-7')

b . .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743613

mple wt/vol: 30.62 (g/mL) G Lab File ID: Y48539.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 17.3 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	590	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: TP-5 (6-7')

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114965

Level (low/med): LOW Date Received: 8/2/01

% Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3780		N	P
7440-36-0	Antimony	11.6	U	N	P
7440-38-2	Arsenic	2.0			P
7440-39-3	Barium	44.9		N	P
7440-41-7	Beryllium	0.58	U		P
7440-43-9	Cadmium	0.58	U		P
7440-70-2	Calcium	37300		E	P
7440-47-3	Chromium	5.6			P
7440-48-4	Cobalt	3.0			P
7440-50-8	Copper	11.6			P
7439-89-6	Iron	7100		E	P
7439-92-1	Lead	46.4		N	P
7439-95-4	Magnesium	11900			P
7439-96-5	Manganese	188		E	P
7440-02-0	Nickel	8.3			P
7440-09-7	Potassium	869			P
7782-49-2	Selenium	3.5	U		P
7439-97-6	Mercury	0.149		N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	431			P
7440-28-0	Thallium	7.0	U		P
7440-62-2	Vanadium	10.0			P
7440-66-6	Zinc	53.7		N	P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000198

Client Sample No.

TP-5 (6-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): SOIL Lab Sample ID: A1743613

Solids: 82.8 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	4.2				9010	08/13/2001
Cyanide - Total	UG/G	5.4				9010	08/08/2001

omments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000026

Client No.

TP-6 (5-7')

) .e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1743614

mple wt/vol: 5.13 (g/mL) G Lab File ID: P5287.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: not dec. 17.5 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	26	
71-43-2	Benzene	14	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	3	J
75-15-0	Carbon Disulfide	6	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	61	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	31	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000073

Client No.

TP-6 (5-7')

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A1743614

Sample wt/vol: 30.21 (g/mL) G Lab File ID: Y48540.RR

Level: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

% Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	330	U
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	53	J
56-55-3	Benzo(a)anthracene	160	J
205-99-2	Benzo(b)fluoranthene	220	J
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	39	J
50-32-8	Benzo(a)pyrene	150	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	150	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	26	J
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000074

Client No.

TP-6 (5-7')

ıb .ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743614

ımple wt/vol: 30.21 (g/mL) G Lab File ID: Y48540.RR

ɛvel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/14/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	260	J
86-73-7	Fluorene	27	J
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	48	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	28	J
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	770	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	230	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	220	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000075

Client No.

TP-6 (5-7')

ıb ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743614

mple wt/vol: 30.21 (g/mL) G Lab File ID: Y48540.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

TT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-6 (5-7')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114966

Level (low/med): LOW Date Received: 8/2/01

% Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5000		N	P
7440-36-0	Antimony	11.8	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	43.3		N	P
7440-41-7	Beryllium	0.59	U		P
7440-43-9	Cadmium	0.59	U		P
7440-70-2	Calcium	51400		E	P
7440-47-3	Chromium	7.3			P
7440-48-4	Cobalt	3.7			P
7440-50-8	Copper	8.5			P
7439-89-6	Iron	8750		E	P
7439-92-1	Lead	14.8		N	P
7439-95-4	Magnesium	24000			P
7439-96-5	Manganese	247		E	P
7440-02-0	Nickel	7.8			P
7440-09-7	Potassium	1310			P
7782-49-2	Selenium	3.5	U		P
7439-97-6	Mercury	0.130	U	N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	279			P
7440-28-0	Thallium	7.1	U		P
7440-62-2	Vanadium	13.7			P
7440-66-6	Zinc	50.5		N	P

Color Before: BROWN Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000199

Client Sample No.

TP-6 (5-7')

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A1743614

% Solids: 83.4 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	22.1				9010	08/13/2001
Cyanide - Total	UG/G	26.7				9010	08/08/2001

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000027

Client No.

TP-7 (3.5-4')

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɔrix: (soil/water) SOIL Lab Sample ID: A1743615

mple wt/vol: 5.15 (g/mL) G Lab File ID: P5288.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: not dec. 16.8 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	45	
71-43-2	Benzene	3	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	5	J
75-15-0	Carbon Disulfide	1	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	1	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000076

Client No.

TP-7 (3.5-4')

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743615

ample wt/vol: 30.67 (g/mL) G Lab File ID: Y48541.RR

evel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 15.0 decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	380	U
208-96-8	Acenaphthylene	380	U
120-12-7	Anthracene	350	J
56-55-3	Benzo(a)anthracene	2100	
205-99-2	Benzo(b)fluoranthene	4500	
207-08-9	Benzo(k)fluoranthene	380	U
191-24-2	Benzo(ghi)perylene	1300	
50-32-8	Benzo(a)pyrene	3300	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1500	U
111-91-1	Bis(2-chloroethoxy) methane	380	U
111-44-4	Bis(2-chloroethyl) ether	380	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	380	U
117-81-7	Bis(2-ethylhexyl) phthalate	580	U
101-55-3	4-Bromophenyl phenyl ether	580	U
85-68-7	Butyl benzyl phthalate	380	U
106-47-8	4-Chloroaniline	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-58-7	2-Chloronaphthalene	380	U
95-57-8	2-Chlorophenol	380	U
7005-72-3	4-Chlorophenyl phenyl ether	380	U
218-01-9	Chrysene	2200	
53-70-3	Dibenzo(a,h)anthracene	670	
132-64-9	Dibenzofuran	380	U
84-74-2	Di-n-butyl phthalate	380	U
95-50-1	1,2-Dichlorobenzene	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	380	U
105-67-9	2,4-Dimethylphenol	580	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000077

Client No.

TP-7 (3.5-4')

ıb ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743615

ımple wt/vol: 30.67 (g/mL) G Lab File ID: Y48541.RR

:vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 15.0 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	380	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	380	U
606-20-2	2,6-Dinitrotoluene	580	U
117-84-0	Di-n-octyl phthalate	380	U
206-44-0	Fluoranthene	2400	
86-73-7	Fluorene	580	U
118-74-1	Hexachlorobenzene	380	U
87-68-3	Hexachlorobutadiene	380	U
77-47-4	Hexachlorocyclopentadiene	580	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	1300	
78-59-1	Isophorone	380	U
91-57-6	2-Methylnaphthalene	380	U
95-48-7	2-Methylphenol	770	U
106-44-5	4-Methylphenol	380	U
91-20-3	Naphthalene	380	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	690	U
88-75-5	2-Nitrophenol	380	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	380	U
621-64-7	N-Nitroso-Di-n-propylamine	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	1200	
108-95-2	Phenol	770	U
129-00-0	Pyrene	2500	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000078

Client No.

TP-7 (3.5-4')

ıb ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743615

ımple wt/vol: 30.67 (g/mL) G Lab File ID: Y48541.RR

:vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 15.0 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1200	U

TT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-7 (3.5-4')

'ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114967

evel (low/med): LOW Date Received: 8/2/01

Solids: 85

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5400		N	P
7440-36-0	Antimony	11.3	U	N	P
7440-38-2	Arsenic	2.0			P
7440-39-3	Barium	54.8		N	P
7440-41-7	Beryllium	0.57	U		P
7440-43-9	Cadmium	0.57	U		P
7440-70-2	Calcium	72000		E	P
7440-47-3	Chromium	8.0			P
7440-48-4	Cobalt	4.1			P
7440-50-8	Copper	9.4			P
7439-89-6	Iron	10500		E	P
7439-92-1	Lead	24.1		N	P
7439-95-4	Magnesium	20700			P
7439-96-5	Manganese	319		E	P
7440-02-0	Nickel	8.5			P
7440-09-7	Potassium	1440			P
7782-49-2	Selenium	3.4	U		P
7439-97-6	Mercury	0.144		N	CV
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	365			P
7440-28-0	Thallium	6.8	U		P
7440-62-2	Vanadium	13.5			P
7440-66-6	Zinc	50.7		N	P

Color Before: BROWN Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Co ıts:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000200

Client Sample No.

TP-7 (3.5-4')

ıb Name: STL Buffalo Contract: _____

ıb ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix (soil/water): SOIL Lab Sample ID: A1743615

Solids: 85.0 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/09/2001
yanide - Total	UG/G	0.50	U			9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028
Client No.

TP-8 (5-6.5')

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix: (soil/water) SOIL Lab Sample ID: A1743616

mple wt/vol: 5.16 (g/mL) G Lab File ID: P5289.RR

ɛel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

ɛoisture: not dec. 17.9 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

.l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	48	
71-43-2	Benzene	36	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	5	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	340	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	7	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	40	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	830	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000029

Client No.

TP-8 (5-6.5') DL

) ? :: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743616DL

ple wt/vol: 1.20 (g/mL) G Lab File ID: P5329.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

oisture: not dec. 17.9 Heated Purge: Y Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	93	BD
71-43-2	Benzene	34	D
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	300	D
591-78-6	2-Hexanone	13	U
75-09-2	Methylene chloride	82	BD
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	50	D
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	23	D
'5-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	970	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000079

Client No.

TP-8 (5-6.5')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743616

mple wt/vol: 30.34 (g/mL) G Lab File ID: Y48542.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 18.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	28	J
208-96-8	Acenaphthylene	42	J
120-12-7	Anthracene	40	J
56-55-3	Benzo(a)anthracene	110	J
205-99-2	Benzo(b)fluoranthene	260	J
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	79	J
50-32-8	Benzo(a)pyrene	150	J
65-85-0	Benzoic acid	50	J
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	120	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	130	J
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
34-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000080

Client No.

TP-8 (5-6.5')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743616

mple wt/vol: 30.34 (g/mL) G Lab File ID: Y48542.RR

evel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 18.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	180	J
86-73-7	Fluorene	110	J
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	78	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	730	
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	5000	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	300	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	180	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000081

Client No.

TP-8 (5-6.5')

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1743616

ple wt/vol: 30.34 (g/mL) G Lab File ID: Y48542.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

oisture: 18.2 decanted: (Y/N) N Date Extracted: 08/14/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

I T CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-8 (5-6.5')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114968

Level (low/med): LOW Date Received: 8/2/01

% Solids: 82

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4860		N	P
7440-36-0	Antimony	12.7	U	N	P
7440-38-2	Arsenic	1.3	U		P
7440-39-3	Barium	45.0		N	P
7440-41-7	Beryllium	0.64	U		P
7440-43-9	Cadmium	0.64	U		P
7440-70-2	Calcium	42500		E	P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	3.9			P
7440-50-8	Copper	13.9			P
7439-89-6	Iron	8600		E	P
7439-92-1	Lead	29.0		N	P
7439-95-4	Magnesium	20800			P
7439-96-5	Manganese	238		E	P
7440-02-0	Nickel	7.8			P
7440-09-7	Potassium	1180			P
7782-49-2	Selenium	3.8	U		P
7439-97-6	Mercury	0.114		N	CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	302			P
7440-28-0	Thallium	7.6	U		P
7440-62-2	Vanadium	13.3			P
7440-66-6	Zinc	134		N	P

Color Before: BROWN Clarity Before: Texture: CLAY

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000201

Client Sample No.

TP-8 (5-6.5')

ab Name: STL Buffalo Contract: _____

ab ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): SOIL Lab Sample ID: A1743616

Solids: 81.8 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/09/2001
yanide - Total	UG/G	14.7				9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000030

Client No.

TP-9 (5-6')

) ' e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743617

ple wt/vol: 5.16 (g/mL) G Lab File ID: P5290.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

bisture: not dec. 18.7 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	30	
71-43-2	Benzene	8	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	3	J
75-15-0	Carbon Disulfide	6	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	9	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	6	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000082

Client No.

TP-9 (5-6')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743617

mple wt/vol: 30.07 (g/mL) G Lab File ID: Y48543.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	81	J
208-96-8	Acenaphthylene	34	J
120-12-7	Anthracene	300	J
56-55-3	Benzo(a)anthracene	750	
205-99-2	Benzo(b)fluoranthene	520	
207-08-9	Benzo(k)fluoranthene	630	
191-24-2	Benzo(ghi)perylene	170	J
50-32-8	Benzo(a)pyrene	610	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	720	
53-70-3	Dibenzo(a,h)anthracene	98	J
132-64-9	Dibenzofuran	29	J
84-74-2	Di-n-butyl phthalate	30	J
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
34-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

TP-9 (5-6')

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743617

mple wt/vol: 30.07 (g/mL) G Lab File ID: Y48543.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	1400	
86-73-7	Fluorene	89	J
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	180	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	59	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	1100	
108-95-2	Phenol	330	U
129-00-0	Pyrene	1300	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

TP-9 (5-6')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743617

mple wt/vol: 30.07 (g/mL) G Lab File ID: Y48543.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.6 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-9 (5-6')

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114969

evel (low/med): LOW Date Received: 8/2/01

Solids: 83

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4210		N	P
7440-36-0	Antimony	12.2	U	N	P
7440-38-2	Arsenic	1.7			P
7440-39-3	Barium	38.8		N	P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.61	U		P
7440-70-2	Calcium	47600		E	P
7440-47-3	Chromium	5.1			P
7440-48-4	Cobalt	2.4			P
7440-50-8	Copper	9.4			P
7439-89-6	Iron	6200		E	P
7439-92-1	Lead	98.8		N	P
7439-95-4	Magnesium	16700			P
7439-96-5	Manganese	236		E	P
7440-02-0	Nickel	4.9			P
7440-09-7	Potassium	807			P
7782-49-2	Selenium	3.7	U		P
7439-97-6	Mercury	0.322		N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	464			P
7440-28-0	Thallium	7.3	U		P
7440-62-2	Vanadium	11.0			P
7440-66-6	Zinc	71.8		N	P

lor Before: BROWN Clarity Before: Texture: SAND

lor After: YELLOW Clarity After: CLOUDY Artifacts:

m s:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000202
Client Sample No.

TP-9 (5-6')

ıb Name: STL Buffalo Contract: _____

ıb de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix (soil/water): SOIL Lab Sample ID: A1743617

Solids: 83.4 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/09/2001
yanide - Total	UG/G	0.50	U			9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000031

Client No.

TP-10 (5.5-6')

e: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743618

ple wt/vol: 5.07 (g/mL) G Lab File ID: P5291.RR

el: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

oisture: not dec. 17.9 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	21	J
71-43-2	Benzene	2	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	2	J
75-15-0	Carbon Disulfide	2	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	2	J
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000085

Client No.

TP-10 (5.5-6')

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743618

ample wt/vol: 30.28 (g/mL) G Lab File ID: Y48544.RR

evel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.2 decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	26	J
208-96-8	Acenaphthylene	330	U
120-12-7	Anthracene	56	J
56-55-3	Benzo(a)anthracene	140	J
205-99-2	Benzo(b)fluoranthene	220	J
207-08-9	Benzo(k)fluoranthene	330	U
191-24-2	Benzo(ghi)perylene	44	J
50-32-8	Benzo(a)pyrene	130	J
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	330	U
111-91-1	Bis(2-chloroethoxy) methane	330	U
111-44-4	Bis(2-chloroethyl) ether	330	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	330	U
117-81-7	Bis(2-ethylhexyl) phthalate	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
85-68-7	Butyl benzyl phthalate	330	U
106-47-8	4-Chloroaniline	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-58-7	2-Chloronaphthalene	330	U
95-57-8	2-Chlorophenol	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
218-01-9	Chrysene	140	J
53-70-3	Dibenzo(a,h)anthracene	330	U
132-64-9	Dibenzofuran	330	U
84-74-2	Di-n-butyl phthalate	330	U
95-50-1	1,2-Dichlorobenzene	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	330	U
105-67-9	2,4-Dimethylphenol	330	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000086

Client No.

TP-10 (5.5-6')

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

.trix: (soil/water) SOIL Lab Sample ID: A1743618

mple wt/vol: 30.28 (g/mL) G Lab File ID: Y48544.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔ Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	330	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
117-84-0	Di-n-octyl phthalate	330	U
206-44-0	Fluoranthene	320	J
86-73-7	Fluorene	25	J
118-74-1	Hexachlorobenzene	330	U
87-68-3	Hexachlorobutadiene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	39	J
78-59-1	Isophorone	330	U
91-57-6	2-Methylnaphthalene	330	U
95-48-7	2-Methylphenol	330	U
106-44-5	4-Methylphenol	330	U
91-20-3	Naphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	330	U
88-75-5	2-Nitrophenol	330	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	190	J
108-95-2	Phenol	330	U
129-00-0	Pyrene	260	J
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000087

Client No.

TP-10 (5.5-6')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743618

mple wt/vol: 30.28 (g/mL) G Lab File ID: Y48544.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 16.2 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	330	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: TP-10 (5.5-6')

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114972

Level (low/med): LOW Date Received: 8/2/01

% Solids: 84

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3360		N	P
7440-36-0	Antimony	11.7	U	N	P
7440-38-2	Arsenic	1.2	U		P
7440-39-3	Barium	27.7		N	P
7440-41-7	Beryllium	0.58	U		P
7440-43-9	Cadmium	0.58	U		P
7440-70-2	Calcium	65900		E	P
7440-47-3	Chromium	5.3			P
7440-48-4	Cobalt	2.7			P
7440-50-8	Copper	9.7			P
7439-89-6	Iron	6950		E	P
7439-92-1	Lead	65.6			P
7439-95-4	Magnesium	24600			P
7439-96-5	Manganese	292		E	P
7440-02-0	Nickel	5.4			P
7440-09-7	Potassium	809			P
7782-49-2	Selenium	3.5	U		P
7439-97-6	Mercury	0.128		N	CV
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	190			P
7440-28-0	Thallium	7.0	U		P
7440-62-2	Vanadium	9.9			P
7440-66-6	Zinc	70.5		N	P

Color Before: BROWN Clarity Before: _____ Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

000203

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.

TP-10 (5.5-6')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): SOIL Lab Sample ID: A1743618

Solids: 83.8 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/KG	0.50	U			9010	08/09/2001
yanide - Total	UG/G	0.50	U			9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000032

Client No.

TP-11 (6-7')

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɜrix: (soil/water) SOIL Lab Sample ID: A1743619

ɱple wt/vol: 5.05 (g/mL) G Lab File ID: P5292.RR

ɜel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

ɱoisture: not dec. 19.5 Heated Purge: Y Date Analyzed: 08/08/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

ɹl Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	110	
71-43-2	Benzene	4	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	16	J
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000088

Client No.

TP-11 (6-7')

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743619

mple wt/vol: 30.27 (g/mL) G Lab File ID: Y48551.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 19.7 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

ː Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	410	U
208-96-8	Acenaphthylene	280	J
120-12-7	Anthracene	410	U
56-55-3	Benzo(a)anthracene	790	
205-99-2	Benzo(b)fluoranthene	1200	
207-08-9	Benzo(k)fluoranthene	1100	
191-24-2	Benzo(ghi)perylene	1200	
50-32-8	Benzo(a)pyrene	1300	
65-85-0	Benzoic acid	1600	U
100-51-6	Benzyl alcohol	1600	U
111-91-1	Bis(2-chloroethoxy) methane	410	U
111-44-4	Bis(2-chloroethyl) ether	410	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	410	U
117-81-7	Bis(2-ethylhexyl) phthalate	620	U
101-55-3	4-Bromophenyl phenyl ether	620	U
85-68-7	Butyl benzyl phthalate	410	U
106-47-8	4-Chloroaniline	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-58-7	2-Chloronaphthalene	410	U
95-57-8	2-Chlorophenol	410	U
7005-72-3	4-Chlorophenyl phenyl ether	410	U
218-01-9	Chrysene	760	
53-70-3	Dibenzo(a,h)anthracene	250	J
132-64-9	Dibenzofuran	410	U
84-74-2	Di-n-butyl phthalate	410	U
95-50-1	1,2-Dichlorobenzene	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
91-94-1	3,3'-Dichlorobenzidine	660	U
120-83-2	2,4-Dichlorophenol	330	U
84-66-2	Diethyl phthalate	410	U
105-67-9	2,4-Dimethylphenol	620	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

TP-11 (6-7')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743619

mple wt/vol: 30.27 (g/mL) G Lab File ID: Y48551.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 19.7 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	410	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	410	U
606-20-2	2,6-Dinitrotoluene	620	U
117-84-0	Di-n-octyl phthalate	410	U
206-44-0	Fluoranthene	1200	
86-73-7	Fluorene	620	U
118-74-1	Hexachlorobenzene	410	U
87-68-3	Hexachlorobutadiene	410	U
77-47-4	Hexachlorocyclopentadiene	620	U
67-72-1	Hexachloroethane	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000	
78-59-1	Isophorone	410	U
91-57-6	2-Methylnaphthalene	410	U
95-48-7	2-Methylphenol	820	U
106-44-5	4-Methylphenol	410	U
91-20-3	Naphthalene	360	J
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	740	U
88-75-5	2-Nitrophenol	410	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	410	U
621-64-7	N-Nitroso-Di-n-propylamine	370	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	260	J
108-95-2	Phenol	820	U
129-00-0	Pyrene	1100	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	820	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000090

Client No.

TP-11 (6-7')

b e: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743619

mple wt/vol: 30.27 (g/mL) G Lab File ID: Y48551.RR

vel: (low/med) LOW Date Samp/Recv: 07/31/2001 08/02/2001

Moisture: 19.7 decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/16/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1200	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-11 (6-7')

or ject: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114973

evel (low/med): LOW Date Received: 8/2/01

Solids: 80

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5180		N	P
7440-36-0	Antimony	13.0	U	N	P
7440-38-2	Arsenic	2.2			P
7440-39-3	Barium	64.2		N	P
7440-41-7	Beryllium	0.65	U		P
7440-43-9	Cadmium	0.81			P
7440-70-2	Calcium	110000		E	P
7440-47-3	Chromium	6.5			P
7440-48-4	Cobalt	2.8			P
7440-50-8	Copper	12.6			P
7439-89-6	Iron	8810		E	P
7439-92-1	Lead	58.8			P
7439-95-4	Magnesium	16800			P
7439-96-5	Manganese	359		E	P
7440-02-0	Nickel	7.7			P
7440-09-7	Potassium	887			P
7782-49-2	Selenium	3.9	U		P
7439-97-6	Mercury	0.118	U	N	CV
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	326			P
7440-28-0	Thallium	7.8	U		P
7440-62-2	Vanadium	13.1			P
7440-66-6	Zinc	64.3		N	P

lor Before: BROWN Clarity Before: Texture: SILT

lor After: YELLOW Clarity After: CLOUDY Artifacts:

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000204

Client Sample No.

TP-11 (6-7')

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A1743619

Solids: 80.3 Date Samp/Recv: 07/31/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	0.50	U			9010	08/09/2001
Cyanide - Total	UG/G	9.3				9010	08/09/2001

Comments:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

TP-12 (6-7')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743601

mple wt/vol: 5.18 (g/mL) G Lab File ID: P5276.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: not dec. 24.6 Heated Purge: Y Date Analyzed: 08/07/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	170	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	3	J
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	480	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5	U
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	21	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	780	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034

Client No.

TP-12 (6-7') DL

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) SOIL Lab Sample ID: A1743601DL

ple wt/vol: 1.07 (g/mL) G Lab File ID: P5328.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 24.6 Heated Purge: Y Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	170	D
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	7	D
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	610	D
591-78-6	2-Hexanone	15	U
75-09-2	Methylene chloride	110	BD
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	38	D
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	1000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000091

Client No.

TP-12 (6-7')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743601

mple wt/vol: 30.19 (g/mL) G Lab File ID: Y48559.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 24.5 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	2400	
208-96-8	Acenaphthylene	2800	
120-12-7	Anthracene	13000	
56-55-3	Benzo(a)anthracene	19000	
205-99-2	Benzo(b)fluoranthene	15000	
207-08-9	Benzo(k)fluoranthene	17000	
191-24-2	Benzo(ghi)perylene	7500	
50-32-8	Benzo(a)pyrene	16000	
65-85-0	Benzoic acid	3500	U
100-51-6	Benzyl alcohol	3500	U
111-91-1	Bis(2-chloroethoxy) methane	880	U
111-44-4	Bis(2-chloroethyl) ether	880	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	880	U
117-81-7	Bis(2-ethylhexyl) phthalate	1300	U
101-55-3	4-Bromophenyl phenyl ether	1300	U
85-68-7	Butyl benzyl phthalate	880	U
106-47-8	4-Chloroaniline	880	U
59-50-7	4-Chloro-3-methylphenol	880	U
91-58-7	2-Chloronaphthalene	880	U
95-57-8	2-Chlorophenol	880	U
7005-72-3	4-Chlorophenyl phenyl ether	880	U
218-01-9	Chrysene	18000	
53-70-3	Dibenzo(a,h)anthracene	2700	
132-64-9	Dibenzofuran	6400	
84-74-2	Di-n-butyl phthalate	880	U
95-50-1	1,2-Dichlorobenzene	880	U
541-73-1	1,3-Dichlorobenzene	880	U
106-46-7	1,4-Dichlorobenzene	880	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
120-83-2	2,4-Dichlorophenol	700	U
84-66-2	Diethyl phthalate	880	U
105-67-9	2,4-Dimethylphenol	1300	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000092

Client No.

TP-12 (6-7')

al me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743601

ample wt/vol: 30.19 (g/mL) G Lab File ID: Y48559.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 24.5 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 20.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	880	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1800	U
121-14-2	2,4-Dinitrotoluene	880	U
606-20-2	2,6-Dinitrotoluene	1300	U
117-84-0	Di-n-octyl phthalate	880	U
206-44-0	Fluoranthene	48000	
86-73-7	Fluorene	9500	
118-74-1	Hexachlorobenzene	880	U
87-68-3	Hexachlorobutadiene	880	U
77-47-4	Hexachlorocyclopentadiene	1300	U
67-72-1	Hexachloroethane	700	U
193-39-5	Indeno(1,2,3-cd)pyrene	8100	
78-59-1	Isophorone	880	U
91-57-6	2-Methylnaphthalene	500	J
95-48-7	2-Methylphenol	1800	U
106-44-5	4-Methylphenol	880	U
91-20-3	Naphthalene	1400	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	2200	U
98-95-3	Nitrobenzene	1600	U
88-75-5	2-Nitrophenol	880	U
100-02-7	4-Nitrophenol	2200	U
86-30-6	N-nitrosodiphenylamine	880	U
621-64-7	N-Nitroso-Di-n-propylamine	790	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	2700	
108-95-2	Phenol	1800	U
129-00-0	Pyrene	36000	
120-82-1	1,2,4-Trichlorobenzene	440	U
95-95-4	2,4,5-Trichlorophenol	1800	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000093

Client No.

TP-12 (6-7')

ıb ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743601

mple wt/vol: 30.19 (g/mL) G Lab File ID: Y48559.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 24.5 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	2600	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-12 (6-7')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114950

Level (low/med): LOW Date Received: 8/2/01

% Solids: 75

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12400		N	P
7440-36-0	Antimony	13.8	U	N	P
7440-38-2	Arsenic	6.9			P
7440-39-3	Barium	207		N	P
7440-41-7	Beryllium	1.4			P
7440-43-9	Cadmium	0.69	U		P
7440-70-2	Calcium	157000		E	P
7440-47-3	Chromium	8.3			P
7440-48-4	Cobalt	4.1			P
7440-50-8	Copper	21.0			P
7439-89-6	Iron	12100		E	P
7439-92-1	Lead	223		N	P
7439-95-4	Magnesium	11300			P
7439-96-5	Manganese	695		E	P
7440-02-0	Nickel	9.0			P
7440-09-7	Potassium	1370			P
7782-49-2	Selenium	4.1	U		P
7439-97-6	Mercury	4.9		N	CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	461			P
7440-28-0	Thallium	8.3	U		P
7440-62-2	Vanadium	11.5			P
7440-66-6	Zinc	91.4		N	P

Color Before: BLACK Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000205

Client Sample No.

TP-12 (6-7')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): SOIL Lab Sample ID: A1743601

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/KG	0.50	U			9010	08/10/2001
Cyanide - Total	UG/G	21.0				9010	08/09/2001

omments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000035

Client No.

TP-13 (5-7')

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743602

ple wt/vol: 5.02 (g/mL) G Lab File ID: P5396.RR

el: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 46.5 Heated Purge: Y Date Analyzed: 08/15/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

. Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	54	
71-43-2	Benzene	4	J
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	25	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	8	BJ
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	3	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000036

Client No.

TP-13 (5-7') RI

: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743602RI

ple wt/vol: 5.15 (g/mL) G Lab File ID: P5397.RR

el: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 46.5 Heated Purge: Y Date Analyzed: 08/15/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	32	
71-43-2	Benzene	10	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	4	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	33	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	22	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	6	BJ
75-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	12	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000094

Client No.

TP-13 (5-7')

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) SOIL Lab Sample ID: A1743602

mple wt/vol: 30.15 (g/mL) G Lab File ID: Y48560.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 41.4 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

ː Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	7800	
208-96-8	Acenaphthylene	4600	
120-12-7	Anthracene	29000	
56-55-3	Benzo(a)anthracene	40000	
205-99-2	Benzo(b)fluoranthene	25000	
207-08-9	Benzo(k)fluoranthene	29000	
191-24-2	Benzo(ghi)perylene	7600	
50-32-8	Benzo(a)pyrene	30000	
65-85-0	Benzoic acid	4500	U
100-51-6	Benzyl alcohol	4500	U
111-91-1	Bis(2-chloroethoxy) methane	1100	U
111-44-4	Bis(2-chloroethyl) ether	1100	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1100	U
117-81-7	Bis(2-ethylhexyl) phthalate	1700	U
101-55-3	4-Bromophenyl phenyl ether	1700	U
85-68-7	Butyl benzyl phthalate	1100	U
106-47-8	4-Chloroaniline	1100	U
59-50-7	4-Chloro-3-methylphenol	1100	U
91-58-7	2-Chloronaphthalene	1100	U
95-57-8	2-Chlorophenol	1100	U
7005-72-3	4-Chlorophenyl phenyl ether	1100	U
218-01-9	Chrysene	37000	
53-70-3	Dibenzo(a,h)anthracene	4800	
132-64-9	Dibenzofuran	7600	
84-74-2	Di-n-butyl phthalate	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
120-83-2	2,4-Dichlorophenol	900	U
84-66-2	Diethyl phthalate	1100	U
105-67-9	2,4-Dimethylphenol	1700	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000095

Client No.

TP-13 (5-7')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743602

mple wt/vol: 30.15 (g/mL) G Lab File ID: Y48560.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 41.4 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
51-28-5	2,4-Dinitrophenol	2300	U
121-14-2	2,4-Dinitrotoluene	1100	U
606-20-2	2,6-Dinitrotoluene	1700	U
117-84-0	Di-n-octyl phthalate	1100	U
206-44-0	Fluoranthene	76000	
86-73-7	Fluorene	13000	
118-74-1	Hexachlorobenzene	1100	U
87-68-3	Hexachlorobutadiene	1100	U
77-47-4	Hexachlorocyclopentadiene	1700	U
67-72-1	Hexachloroethane	900	U
193-39-5	Indeno(1,2,3-cd)pyrene	9400	
78-59-1	Isophorone	1100	U
91-57-6	2-Methylnaphthalene	3400	
95-48-7	2-Methylphenol	2300	U
106-44-5	4-Methylphenol	1100	U
91-20-3	Naphthalene	3600	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1700	U
100-01-6	4-Nitroaniline	2800	U
98-95-3	Nitrobenzene	2000	U
88-75-5	2-Nitrophenol	1100	U
100-02-7	4-Nitrophenol	2800	U
86-30-6	N-nitrosodiphenylamine	1100	U
621-64-7	N-Nitroso-Di-n-propylamine	1000	U
87-86-5	Pentachlorophenol	2300	U
85-01-8	Phenanthrene	79000	
108-95-2	Phenol	2300	U
129-00-0	Pyrene	60000	
120-82-1	1,2,4-Trichlorobenzene	570	U
95-95-4	2,4,5-Trichlorophenol	2300	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000096

Client No.

TP-13 (5-7')

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743602

mple wt/vol: 30.15 (g/mL) G Lab File ID: Y48560.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 41.4 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	3400	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-13 (5-7')

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

Matrix (soil/water): SOIL Lab Sample ID: AD114951

Level (low/med): LOW Date Received: 8/2/01

Solids: 59

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1900		N	P
7440-36-0	Antimony	16.4	U	N	P
7440-38-2	Arsenic	10.7			P
7440-39-3	Barium	25.5		N	P
7440-41-7	Beryllium	0.82	U		P
7440-43-9	Cadmium	0.82	U		P
7440-70-2	Calcium	139000		E	P
7440-47-3	Chromium	3.9			P
7440-48-4	Cobalt	3.3	U		P
7440-50-8	Copper	14.9			P
7439-89-6	Iron	6150		E	P
7439-92-1	Lead	23.6		N	P
7439-95-4	Magnesium	5250			P
7439-96-5	Manganese	192		E	P
7440-02-0	Nickel	5.0			P
7440-09-7	Potassium	378			P
7782-49-2	Selenium	4.9	U		P
7439-97-6	Mercury	0.556		N	CV
7440-22-4	Silver	1.6	U		P
7440-23-5	Sodium	284			P
7440-28-0	Thallium	9.8	U		P
7440-62-2	Vanadium	8.8			P
7440-66-6	Zinc	72.8		N	P

Color Before: BLACK Clarity Before: Texture: SILT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000206

Client Sample No.

TP-13 (5-7')

ıb Name: STL Buffalo Contract: _____

ıb ..de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix (soil/water): SOIL Lab Sample ID: A1743602

Solids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/KG	0.50	U			9010	08/10/2001
yanide - Total	UG/G	61.8				9010	08/09/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000037

Client No.

TP-14 (7.7.5')

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743603

ole wt/vol: 5.09 (g/mL) G Lab File ID: P5277.RR

el: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 32.9 Heated Purge: Y Date Analyzed: 08/08/2001

olumn: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

. Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	42	
71-43-2	Benzene	37	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	7	J
75-15-0	Carbon Disulfide	12	
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
540-59-0	1,2-Dichloroethene (Total)	10	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	13	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	10	B
108-10-1	4-Methyl-2-pentanone	25	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	6	
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
108-05-4	Vinyl acetate	10	U
5-01-4	Vinyl chloride	10	U
1330-20-7	Total Xylenes	12	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000097

Client No.

TP-14 (7.7.5')

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743603

mple wt/vol: 30.07 (g/mL) G Lab File ID: Y48561.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.9 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	480	U
208-96-8	Acenaphthylene	480	U
120-12-7	Anthracene	600	
56-55-3	Benzo(a)anthracene	3100	
205-99-2	Benzo(b)fluoranthene	5300	
207-08-9	Benzo(k)fluoranthene	480	U
191-24-2	Benzo(ghi)perylene	1500	
50-32-8	Benzo(a)pyrene	3900	
65-85-0	Benzoic acid	1900	U
100-51-6	Benzyl alcohol	1900	U
111-91-1	Bis(2-chloroethoxy) methane	480	U
111-44-4	Bis(2-chloroethyl) ether	480	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	480	U
117-81-7	Bis(2-ethylhexyl) phthalate	720	U
101-55-3	4-Bromophenyl phenyl ether	720	U
85-68-7	Butyl benzyl phthalate	480	U
106-47-8	4-Chloroaniline	480	U
59-50-7	4-Chloro-3-methylphenol	480	U
91-58-7	2-Chloronaphthalene	480	U
95-57-8	2-Chlorophenol	480	U
7005-72-3	4-Chlorophenyl phenyl ether	480	U
218-01-9	Chrysene	3100	
53-70-3	Dibenzo(a,h)anthracene	760	
132-64-9	Dibenzofuran	480	U
84-74-2	Di-n-butyl phthalate	480	U
95-50-1	1,2-Dichlorobenzene	480	U
541-73-1	1,3-Dichlorobenzene	480	U
106-46-7	1,4-Dichlorobenzene	480	U
91-94-1	3,3'-Dichlorobenzidine	720	U
120-83-2	2,4-Dichlorophenol	380	U
84-66-2	Diethyl phthalate	480	U
105-67-9	2,4-Dimethylphenol	720	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000098

Client No.

TP-14 (7.7.5')

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743603

ample wt/vol: 30.07 (g/mL) G Lab File ID: Y48561.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.9 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	480	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	480	U
606-20-2	2,6-Dinitrotoluene	720	U
117-84-0	Di-n-octyl phthalate	480	U
206-44-0	Fluoranthene	4700	
86-73-7	Fluorene	720	U
118-74-1	Hexachlorobenzene	480	U
87-68-3	Hexachlorobutadiene	480	U
77-47-4	Hexachlorocyclopentadiene	720	U
67-72-1	Hexachloroethane	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	1600	
78-59-1	Isophorone	480	U
91-57-6	2-Methylnaphthalene	480	U
95-48-7	2-Methylphenol	960	U
106-44-5	4-Methylphenol	480	U
91-20-3	Naphthalene	3100	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	870	U
88-75-5	2-Nitrophenol	480	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	480	U
621-64-7	N-Nitroso-Di-n-propylamine	430	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	1400	
108-95-2	Phenol	960	U
129-00-0	Pyrene	3600	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	960	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000099

Client No.

TP-14 (7.7.5')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) SOIL Lab Sample ID: A1743603

ample wt/vol: 30.07 (g/mL) G Lab File ID: Y48561.RR

evel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 30.9 decanted: (Y/N) N Date Extracted: 08/15/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1400	U

TT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

TP-14 (7.7.5')

o. ict: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7436

atrix (soil/water): SOIL Lab Sample ID: AD114952

evel (low/med): LOW Date Received: 8/2/01

Solids: 69

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2060		N	P
7440-36-0	Antimony	14.2	U	N	P
7440-38-2	Arsenic	3.2			P
7440-39-3	Barium	33.2		N	P
7440-41-7	Beryllium	0.71	U		P
7440-43-9	Cadmium	0.71	U		P
7440-70-2	Calcium	273000		E	P
7440-47-3	Chromium	2.8	U		P
7440-48-4	Cobalt	2.8	U		P
7440-50-8	Copper	5.0			P
7439-89-6	Iron	3510		E	P
7439-92-1	Lead	7.1	U	N	P
7439-95-4	Magnesium	5530			P
7439-96-5	Manganese	340		E	P
7440-02-0	Nickel	6.3			P
7440-09-7	Potassium	400			P
7782-49-2	Selenium	4.3	U		P
7439-97-6	Mercury	0.143	U	N	CV
7440-22-4	Silver	1.4	U		P
7440-23-5	Sodium	142	U		P
7440-28-0	Thallium	8.5	U		P
7440-62-2	Vanadium	5.1			P
7440-66-6	Zinc	8.4		N	P

.or Before: BLACK Clarity Before: Texture: SILT

or After: YELLOW Clarity After: CLOUDY Artifacts:

me-ks:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000207

Client Sample No.

TP-14 (7.7.5')

) Name: STL Buffalo Contract: _____

) e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): SOIL Lab Sample ID: A1743603

olids: 0.0 Date Samp/Recv: 08/01/2001 08/02/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/KG	0.50	U			9010	08/10/2001
anide - Total	UG/G	3.8				9010	08/09/2001

ents:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000038

Client No.

TP-15A (12-16')

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) SOIL Lab Sample ID: A1743604

ple wt/vol: 4.02 (g/mL) G Lab File ID: F3613.RR

el: (low/med) MED Date Samp/Recv: 08/01/2001 08/02/2001

oisture: not dec. 26.1 Heated Purge: N Date Analyzed: 08/14/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	3125	U
71-43-2	Benzene	280	J
75-27-4	Bromodichloromethane	625	U
75-25-2	Bromoform	625	U
74-83-9	Bromomethane	1250	U
78-93-3	2-Butanone	3125	U
75-15-0	Carbon Disulfide	1600	
56-23-5	Carbon Tetrachloride	625	U
108-90-7	Chlorobenzene	625	U
75-00-3	Chloroethane	1250	U
67-66-3	Chloroform	625	U
74-87-3	Chloromethane	1250	U
124-48-1	Dibromochloromethane	625	U
75-34-3	1,1-Dichloroethane	625	U
107-06-2	1,2-Dichloroethane	625	U
75-35-4	1,1-Dichloroethene	625	U
540-59-0	1,2-Dichloroethene (Total)	1250	U
78-87-5	1,2-Dichloropropane	625	U
10061-01-5	cis-1,3-Dichloropropene	625	U
10061-02-6	trans-1,3-Dichloropropene	625	U
100-41-4	Ethylbenzene	260	J
591-78-6	2-Hexanone	1250	U
75-09-2	Methylene chloride	190	BJ
108-10-1	4-Methyl-2-pentanone	3125	U
100-42-5	Styrene	625	U
79-34-5	1,1,2,2-Tetrachloroethane	625	U
127-18-4	Tetrachloroethene	625	U
108-88-3	Toluene	280	J
71-55-6	1,1,1-Trichloroethane	625	U
79-00-5	1,1,2-Trichloroethane	625	U
79-01-6	Trichloroethene	625	U
108-05-4	Vinyl acetate	1250	U
75-01-4	Vinyl chloride	1250	U
1330-20-7	Total Xylenes	1875	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000053

Client No.

TP-15C (6-7.5') FD

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ix: (soil/water) SOIL Lab Sample ID: A1743606FD

le wt/vol: 4.05 (g/mL) G Lab File ID: F3610.RR

l: (low/med) MED Date Samp/Recv: 08/01/2001 08/02/2001

isture: not dec. 28.3 Heated Purge: N Date Analyzed: 08/14/2001

olumn: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
67-64-1	Acetone	14000	U
71-43-2	Benzene	13000	
75-27-4	Bromodichloromethane	690	U
75-25-2	Bromoform	690	U
74-83-9	Bromomethane	2800	U
78-93-3	2-Butanone	6900	U
75-15-0	Carbon Disulfide	2800	U
56-23-5	Carbon Tetrachloride	2800	U
108-90-7	Chlorobenzene	2800	U
75-00-3	Chloroethane	2800	U
67-66-3	Chloroform	690	U
74-87-3	Chloromethane	2800	U
124-48-1	Dibromochloromethane	690	U
75-34-3	1,1-Dichloroethane	2800	U
107-06-2	1,2-Dichloroethane	2800	U
75-35-4	1,1-Dichloroethene	2800	U
540-59-0	1,2-Dichloroethene (Total)	2800	U
78-87-5	1,2-Dichloropropane	2800	U
10061-01-5	cis-1,3-Dichloropropene	2800	U
10061-02-6	trans-1,3-Dichloropropene	2800	U
100-41-4	Ethylbenzene	13000	
591-78-6	2-Hexanone	17000	U
75-09-2	Methylene chloride	2800	U
108-10-1	4-Methyl-2-pentanone	6900	U
100-42-5	Styrene	2800	U
79-34-5	1,1,2,2-Tetrachloroethane	2800	U
127-18-4	Tetrachloroethene	2800	U
108-88-3	Toluene	6500	
71-55-6	1,1,1-Trichloroethane	2800	U
79-00-5	1,1,2-Trichloroethane	2800	U
79-01-6	Trichloroethene	1700	U
108-05-4	Vinyl acetate	2800	U
75-01-4	Vinyl chloride	2800	U
1330-20-7	Total Xylenes	220000	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000100

Client No.

TP-15A (12-16')

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743604

mple wt/vol: 30.09 (g/mL) G Lab File ID: Y48562.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/15/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

: Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	450	U
208-96-8	Acenaphthylene	450	U
120-12-7	Anthracene	580	
56-55-3	Benzo(a)anthracene	2100	
205-99-2	Benzo(b)fluoranthene	4100	
207-08-9	Benzo(k)fluoranthene	450	U
191-24-2	Benzo(ghi)perylene	860	
50-32-8	Benzo(a)pyrene	1300	
65-85-0	Benzoic acid	1800	U
100-51-6	Benzyl alcohol	1800	U
111-91-1	Bis(2-chloroethoxy) methane	450	U
111-44-4	Bis(2-chloroethyl) ether	450	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	450	U
117-81-7	Bis(2-ethylhexyl) phthalate	680	U
101-55-3	4-Bromophenyl phenyl ether	680	U
85-68-7	Butyl benzyl phthalate	450	U
106-47-8	4-Chloroaniline	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-58-7	2-Chloronaphthalene	450	U
95-57-8	2-Chlorophenol	450	U
7005-72-3	4-Chlorophenyl phenyl ether	450	U
218-01-9	Chrysene	2400	
53-70-3	Dibenzo(a,h)anthracene	450	U
132-64-9	Dibenzofuran	900	
84-74-2	Di-n-butyl phthalate	450	U
95-50-1	1,2-Dichlorobenzene	450	U
541-73-1	1,3-Dichlorobenzene	450	U
106-46-7	1,4-Dichlorobenzene	450	U
91-94-1	3,3'-Dichlorobenzidine	680	U
120-83-2	2,4-Dichlorophenol	360	U
84-66-2	Diethyl phthalate	450	U
105-67-9	2,4-Dimethylphenol	680	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000101

Client No.

TP-15A (12-16')

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743604

mple wt/vol: 30.09 (g/mL) G Lab File ID: Y48562.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

Moisture: 26.5 decanted: (Y/N) N Date Extracted: 08/15/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
131-11-3	Dimethyl phthalate	450	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
51-28-5	2,4-Dinitrophenol	1600	U
121-14-2	2,4-Dinitrotoluene	450	U
606-20-2	2,6-Dinitrotoluene	680	U
117-84-0	Di-n-octyl phthalate	450	U
206-44-0	Fluoranthene	5800	
86-73-7	Fluorene	290	J
118-74-1	Hexachlorobenzene	450	U
87-68-3	Hexachlorobutadiene	450	U
77-47-4	Hexachlorocyclopentadiene	680	U
67-72-1	Hexachloroethane	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000	
78-59-1	Isophorone	450	U
91-57-6	2-Methylnaphthalene	690	
95-48-7	2-Methylphenol	900	U
106-44-5	4-Methylphenol	450	U
91-20-3	Naphthalene	1800	
88-74-4	2-Nitroaniline	1600	U
99-09-2	3-Nitroaniline	1600	U
100-01-6	4-Nitroaniline	1600	U
98-95-3	Nitrobenzene	810	U
88-75-5	2-Nitrophenol	450	U
100-02-7	4-Nitrophenol	1600	U
86-30-6	N-nitrosodiphenylamine	450	U
621-64-7	N-Nitroso-Di-n-propylamine	410	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	5800	
108-95-2	Phenol	900	U
129-00-0	Pyrene	3900	
120-82-1	1,2,4-Trichlorobenzene	330	U
95-95-4	2,4,5-Trichlorophenol	900	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000192

Client No.

TP-15A (12-16')

b Name: STL Buffalo Contract: _____

b . de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) SOIL Lab Sample ID: A1743604

mple wt/vol: 30.09 (g/mL) G Lab File ID: Y48562.RR

vel: (low/med) LOW Date Samp/Recv: 08/01/2001 08/02/2001

bisture: 26.5 decanted: (Y/N) N Date Extracted: 08/15/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
88-06-2	2,4,6-Trichlorophenol	1400	U

APPENDIX J

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-07

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

Matrix (soil/water): WATER Lab Sample ID: AD114480

Level (low/med): LOW Date Received: 7/26/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	37800			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	30.5			P
7440-39-3	Barium	3470		N	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	3.7			P
7440-70-2	Calcium	1490000		E	P
7440-47-3	Chromium	77.9			P
7440-48-4	Cobalt	28.5			P
7440-50-8	Copper	415			P
7439-89-6	Iron	45900			P
7439-92-1	Lead	3090			P
7439-95-4	Magnesium	466000			P
7439-96-5	Manganese	10800			P
7440-02-0	Nickel	79.5			P
7440-09-7	Potassium	132000		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	1.6			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	488000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	64.5			P
7440-66-6	Zinc	1240			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000107

Client Sample No.

IT-GP-07

ab Name: STL Buffalo Contract: _____

ab de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1713601

Solids: 0.0 Date Samp/Recv: 07/25/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/L	0.34				9010	08/07/2001
yanide - Total	UG/L	5.0	U			9010	07/31/2001

mments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

IT-GP-08

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1713602

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: N4170.RR

Level: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 07/31/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	13	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000032

Client No.

IT-GP-08

al me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1713602

ample wt/vol: 500.00 (g/mL) ML Lab File ID: X48478.RR

evel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2	J
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	2	J
205-99-2	Benzo(b)fluoranthene	2	J
207-08-9	Benzo(k)fluoranthene	0.8	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	2	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	2	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

IT-GP-08

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1713602

mple wt/vol: 500.00 (g/mL) ML Lab File ID: X48478.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	4	J
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	4	J
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	5	J
108-95-2	Phenol	10	U
129-00-0	Pyrene	4	J
20-82-1	1,2,4-Trichlorobenzene	10	U
5-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034

Client No.

IT-GP-08

ɔ ' ne: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1713602

ple wt/vol: 500.00 (g/mL) ML Lab File ID: X48478.RR

el: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-08

ct: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

atrix (soil/water): WATER Lab Sample ID: AD114481

vel (low/med): LOW Date Received: 7/26/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27800			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	27.5			P
7440-39-3	Barium	485		N	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	1300000		E	P
7440-47-3	Chromium	54.8			P
7440-48-4	Cobalt	15.0			P
7440-50-8	Copper	78.2			P
7439-89-6	Iron	35600			P
7439-92-1	Lead	833			P
7439-95-4	Magnesium	90700			P
7439-96-5	Manganese	1500			P
7440-02-0	Nickel	40.1			P
7440-09-7	Potassium	76900		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	1.0			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	572000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	44.6			P
7440-66-6	Zinc	192			P

or Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

or After: BROWN Clarity After: CLOUDY Artifacts:

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000108

Client Sample No.

IT-GP-08

ab Name: STL Buffalo Contract: _____

ab de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1713602

Solids: 0.0 Date Samp/Recv: 07/25/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/L	0.65				9010	08/07/2001
anide - Total	UG/L	5.0	U			9010	07/31/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000035

Client No.

IT-GP-09

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1713603

mple wt/vol: 200.00 (g/mL) ML Lab File ID: X48479.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	19	U
208-96-8	Acenaphthylene	19	U
120-12-7	Anthracene	19	U
56-55-3	Benzo(a)anthracene	19	U
205-99-2	Benzo(b)fluoranthene	19	U
207-08-9	Benzo(k)fluoranthene	19	U
191-24-2	Benzo(ghi)perylene	19	U
50-32-8	Benzo(a)pyrene	19	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	19	U
111-44-4	Bis(2-chloroethyl) ether	19	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	19	U
117-81-7	Bis(2-ethylhexyl) phthalate	19	U
101-55-3	4-Bromophenyl phenyl ether	19	U
85-68-7	Butyl benzyl phthalate	19	U
106-47-8	4-Chloroaniline	19	U
59-50-7	4-Chloro-3-methylphenol	19	U
91-58-7	2-Chloronaphthalene	19	U
95-57-8	2-Chlorophenol	19	U
7005-72-3	4-Chlorophenyl phenyl ether	19	U
218-01-9	Chrysene	19	U
53-70-3	Dibenzo(a,h)anthracene	19	U
132-64-9	Dibenzofuran	19	U
84-74-2	Di-n-butyl phthalate	19	U
95-50-1	1,2-Dichlorobenzene	19	U
541-73-1	1,3-Dichlorobenzene	19	U
106-46-7	1,4-Dichlorobenzene	19	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	19	U
4-66-2	Diethyl phthalate	19	U
105-67-9	2,4-Dimethylphenol	19	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000036

Client No.

IT-GP-09

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1713603

mple wt/vol: 200.00 (g/mL) ML Lab File ID: X48479.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	19	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	19	U
606-20-2	2,6-Dinitrotoluene	19	U
117-84-0	Di-n-octyl phthalate	19	U
206-44-0	Fluoranthene	19	U
86-73-7	Fluorene	19	U
118-74-1	Hexachlorobenzene	19	U
87-68-3	Hexachlorobutadiene	19	U
77-47-4	Hexachlorocyclopentadiene	19	U
67-72-1	Hexachloroethane	19	U
193-39-5	Indeno(1,2,3-cd)pyrene	19	U
78-59-1	Isophorone	19	U
91-57-6	2-Methylnaphthalene	19	U
95-48-7	2-Methylphenol	19	U
106-44-5	4-Methylphenol	19	U
91-20-3	Naphthalene	19	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	19	U
88-75-5	2-Nitrophenol	19	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	19	U
621-64-7	N-Nitroso-Di-n-propylamine	19	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	19	U
108-95-2	Phenol	19	U
129-00-0	Pyrene	19	U
120-82-1	1,2,4-Trichlorobenzene	19	U
95-95-4	2,4,5-Trichlorophenol	19	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000037

Client No.

IT-GP-09

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1713603

mple wt/vol: 200.00 (g/mL) ML Lab File ID: X48479.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/06/2001

ıection Volume: 1.00 (uL) Dilution Factor: 5.00

ı Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	19	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-09

on ect: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

atrix (soil/water): WATER Lab Sample ID: AD114482

evel (low/med): LOW Date Received: 7/26/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	141000			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	63.5			P
7440-39-3	Barium	1550		N	P
7440-41-7	Beryllium	7.0			P
7440-43-9	Cadmium	13.0			P
7440-70-2	Calcium	406000		E	P
7440-47-3	Chromium	502			P
7440-48-4	Cobalt	98.5			P
7440-50-8	Copper	476			P
7439-89-6	Iron	253000			P
7439-92-1	Lead	1660			P
7439-95-4	Magnesium	96700			P
7439-96-5	Manganese	12100			P
7440-02-0	Nickel	294			P
7440-09-7	Potassium	32800		E	P
7782-49-2	Selenium	10.4			P
7439-97-6	Mercury	6.3			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	78700			P
7440-28-0	Thallium	21.8			P
7440-62-2	Vanadium	410			P
7440-66-6	Zinc	2060			P

.or Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

.or After: BROWN Clarity After: CLOUDY Artifacts:

me s:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000109

Client Sample No.

IT-GP-09

b Name: STL Buffalo Contract: _____

b e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1713603

Solids: 0.0 Date Samp/Recv: 07/25/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/L	0.018				9010	08/07/2001
anide - Total	UG/L	5.0	U			9010	07/31/2001

ments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000038

Client No.

IT-GP-10

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1713604

mple wt/vol: 240.00 (g/mL) ML Lab File ID: X48484.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	16	U
208-96-8	Acenaphthylene	16	U
120-12-7	Anthracene	16	U
56-55-3	Benzo(a)anthracene	16	U
205-99-2	Benzo(b)fluoranthene	16	U
207-08-9	Benzo(k)fluoranthene	16	U
191-24-2	Benzo(ghi)perylene	16	U
50-32-8	Benzo(a)pyrene	16	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	16	U
111-44-4	Bis(2-chloroethyl) ether	16	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	16	U
117-81-7	Bis(2-ethylhexyl) phthalate	16	U
101-55-3	4-Bromophenyl phenyl ether	16	U
85-68-7	Butyl benzyl phthalate	16	U
106-47-8	4-Chloroaniline	16	U
59-50-7	4-Chloro-3-methylphenol	16	U
91-58-7	2-Chloronaphthalene	16	U
95-57-8	2-Chlorophenol	16	U
7005-72-3	4-Chlorophenyl phenyl ether	16	U
218-01-9	Chrysene	16	U
53-70-3	Dibenzo(a,h)anthracene	16	U
132-64-9	Dibenzofuran	16	U
84-74-2	Di-n-butyl phthalate	16	U
95-50-1	1,2-Dichlorobenzene	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	16	U
84-66-2	Diethyl phthalate	16	U
105-67-9	2,4-Dimethylphenol	16	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000039

Client No.

IT-GP-10

b ~ ~e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1713604

mple wt/vol: 240.00 (g/mL) ML Lab File ID: X48484.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	16	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	16	U
606-20-2	2,6-Dinitrotoluene	16	U
117-84-0	Di-n-octyl phthalate	16	U
206-44-0	Fluoranthene	16	U
86-73-7	Fluorene	16	U
118-74-1	Hexachlorobenzene	16	U
87-68-3	Hexachlorobutadiene	16	U
77-47-4	Hexachlorocyclopentadiene	16	U
67-72-1	Hexachloroethane	16	U
193-39-5	Indeno(1,2,3-cd)pyrene	16	U
78-59-1	Isophorone	16	U
91-57-6	2-Methylnaphthalene	16	U
95-48-7	2-Methylphenol	16	U
106-44-5	4-Methylphenol	16	U
91-20-3	Naphthalene	16	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	16	U
88-75-5	2-Nitrophenol	16	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	16	U
621-64-7	N-Nitroso-Di-n-propylamine	16	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	16	U
108-95-2	Phenol	16	U
129-00-0	Pyrene	16	U
20-82-1	1,2,4-Trichlorobenzene	16	U
95-95-4	2,4,5-Trichlorophenol	16	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040

Client No.

IT-GP-10

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1713604

mple wt/vol: 240.00 (g/mL) ML Lab File ID: X48484.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	16	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-10

ontract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7136

Matrix (soil/water): WATER Lab Sample ID: AD114483

Level (low/med): LOW Date Received: 7/26/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	38700			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	20.1			P
7440-39-3	Barium	733		N	P
7440-41-7	Beryllium	6.6			P
7440-43-9	Cadmium	2.8			P
7440-70-2	Calcium	647000		E	P
7440-47-3	Chromium	59.9			P
7440-48-4	Cobalt	15.3			P
7440-50-8	Copper	145			P
7439-89-6	Iron	40000			P
7439-92-1	Lead	893			P
7439-95-4	Magnesium	104000			P
7439-96-5	Manganese	5520			P
7440-02-0	Nickel	43.4			P
7440-09-7	Potassium	30800		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	1.9			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	191000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	44.6			P
7440-66-6	Zinc	619			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000110

Client Sample No.

IT-GP-10

) Name: STL Buffalo Contract: _____

) e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): WATER Lab Sample ID: A1713604

)olids: 0.0 Date Samp/Recv: 07/25/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/L	0.027				9010	08/07/2001
anide - Total	UG/L	5.0	U			9010	07/31/2001

ments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

IT-GP-11

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1713605

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: N4171.RR

Level: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 07/31/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	28	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	38	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	8.0	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	8.2	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	26	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000041

Client No.

IT-GP-11

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) WATER Lab Sample ID: A1713605

ɲple wt/vol: 500.00 (g/mL) ML Lab File ID: X48549.RR

ɾel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

ɓisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ɕentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000042

Client No.

IT-GP-11

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1713605

mple wt/vol: 500.00 (g/mL) ML Lab File ID: X48549.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	34	
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	700	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
20-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000043

Client No.

IT-GP-11

b ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1713605

mple wt/vol: 500.00 (g/mL) ML Lab File ID: X48549.RR

vel: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

' Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-11

ntract: NY01-143

b Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

trix (soil/water): WATER Lab Sample ID: AD114484

vel (low/med): LOW Date Received: 7/26/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18300			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	47.0			P
7440-39-3	Barium	504		N	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	6.2			P
7440-70-2	Calcium	386000		E	P
7440-47-3	Chromium	50.2			P
7440-48-4	Cobalt	18.6			P
7440-50-8	Copper	480			P
7439-89-6	Iron	113000			P
7439-92-1	Lead	1230			P
7439-95-4	Magnesium	38500			P
7439-96-5	Manganese	3640			P
7440-02-0	Nickel	37.9			P
7440-09-7	Potassium	10100		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	1.2			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	186000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	58.7			P
7440-66-6	Zinc	1340			P

lor Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

lor After: BROWN Clarity After: CLOUDY Artifacts: _____

mr s: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000111

Client Sample No.

IT-GP-11

b Name: STL Buffalo Contract: _____

b de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1713605

Solids: 0.0 Date Samp/Recv: 07/25/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/L	0.16				9010	08/07/2001
anide - Total	UG/L	5.0	U			9010	07/31/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

IT-GP-12

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1713606

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: N4172.RR

Level: (low/med) LOW Date Samp/Recv: 07/25/2001 07/26/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 07/31/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	1.6	J

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

IT-GP-12

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7136

Matrix (soil/water): WATER Lab Sample ID: AD114494

Level (low/med): LOW Date Received: 7/26/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2490			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	34.0			P
7440-39-3	Barium	458		N	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.5			P
7440-70-2	Calcium	419000		E	P
7440-47-3	Chromium	12.9			P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	54.5			P
7439-89-6	Iron	90000			P
7439-92-1	Lead	122			P
7439-95-4	Magnesium	73900			P
7439-96-5	Manganese	5020			P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	40200		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	381000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	6.3			P
7440-66-6	Zinc	65.1			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000112

Client Sample No.

IT-GP-12

b Name: STL Buffalo Contract: _____

b ue: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1713606

Solids: 0.0 Date Samp/Recv: 07/25/2001 07/26/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/L	0.017				9010	08/07/2001
anide - Total	UG/L	5.0	U			9010	08/07/2001

ments:

[illegible] - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014
Client No.

ITGP-13

b Name: STL Buffalo Contract: _____

ɔ ⌄ ɹe: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1717706

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3480.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

bisture: not dec. _____ Heated Purge: N Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	33	
71-43-2	Benzene	3.0	J
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	180	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	22	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	4.5	J
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
330-20-7	Total Xylenes	79	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

ITGP-13

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1717706

Sample wt/vol: 800.00 (g/mL) ML Lab File ID: X48551.RR

Level: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	110	
208-96-8	Acenaphthylene	3	J
120-12-7	Anthracene	15	
56-55-3	Benzo(a)anthracene	1	J
205-99-2	Benzo(b)fluoranthene	0.8	J
207-08-9	Benzo(k)fluoranthene	0.2	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	0.6	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	1	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	83	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	5	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023

Client No.

ITGP-13

) N e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1717706

ple wt/vol: 800.00 (g/mL) ML Lab File ID: X48551.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ction Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	7	J
86-73-7	Fluorene	85	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	460	E
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	3	J
91-20-3	Naphthalene	1400	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	50	
108-95-2	Phenol	10	U
129-00-0	Pyrene	4	J
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

ITGP-13

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:ix: (soil/water) WATER Lab Sample ID: A1717706

)le wt/vol: 800.00 (g/mL) ML Lab File ID: X48551.RR

:l: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

)isture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

entrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ction Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025

Client No.

ITGP-13 DL

) N e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1717706DL

ple wt/vol: 800.00 (g/mL) ML Lab File ID: X48608.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	130	D
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	92	D
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
-66-2	Diethyl phthalate	10	U
5-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000026

Client No.

ITGP-13 DL

): STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1717706DL

ple wt/vol: 800.00 (g/mL) ML Lab File ID: X48608.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	95	D
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	530	D
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	1900	D
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	55	D
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000027

Client No.

ITGP-13 DL

) N e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1717706DL

ple wt/vol: 800.00 (g/mL) ML Lab File ID: X48608.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/15/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
ITGP-13

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7177

Matrix (soil/water): WATER Lab Sample ID: AD114824

Level (low/med): LOW Date Received: 7/27/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	89400			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	108			P
7440-39-3	Barium	2290			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	4.5			P
7440-70-2	Calcium	678000		E	P
7440-47-3	Chromium	201			P
7440-48-4	Cobalt	61.4			P
7440-50-8	Copper	492			P
7439-89-6	Iron	167000			P
7439-92-1	Lead	3130			P
7439-95-4	Magnesium	119000			P
7439-96-5	Manganese	5030			P
7440-02-0	Nickel	150			P
7440-09-7	Potassium	60900			P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	35.3			CV
7440-22-4	Silver	6.8			P
7440-23-5	Sodium	145000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	144			P
7440-66-6	Zinc	7050		E	P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000052

Client Sample No.

ITGP-13

ab Name: STL Buffalo Contract: _____

al de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1717706

Solids: 0.0 Date Samp/Recv: 07/26/2001 07/27/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.0050	U			9010	08/10/2001
Cyanide - Total	UG/L	5.0	U			9010	08/07/2001

mments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

ITGP-18

ɔ ' e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1717704

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3478.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

bisture: not dec. _____ Heated Purge: N Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	140	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	16	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	1.2	J
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	1.1	J
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	46	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	14	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	92	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028

Client No.

ITGP-18

) N e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1717704

ple wt/vol: 900.00 (g/mL) ML Lab File ID: X48488.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

ction Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	190	
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	12	
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	120	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
-66-2	Diethyl phthalate	10	U
5-67-9	2,4-Dimethylphenol	12	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000029

Client No.

ITGP-18

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1717704

Sample wt/vol: 900.00 (g/mL) ML Lab File ID: X48488.RR

Level: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	6	J
86-73-7	Fluorene	110	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	300	
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	1900	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	71	
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000030

Client No.

ITGP-18

) ' e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1717704

ple wt/vol: 900.00 (g/mL) ML Lab File ID: X48488.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000031

Client No.

ITGP-18 DL

b ''me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1717704DL

mple wt/vol: 900.00 (g/mL) ML Lab File ID: X48725.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	190	D
208-96-8	Acenaphthylene	17	U
120-12-7	Anthracene	17	U
56-55-3	Benzo(a)anthracene	17	U
205-99-2	Benzo(b)fluoranthene	17	U
207-08-9	Benzo(k)fluoranthene	17	U
191-24-2	Benzo(ghi)perylene	17	U
50-32-8	Benzo(a)pyrene	17	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	17	U
111-44-4	Bis(2-chloroethyl) ether	17	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	17	U
117-81-7	Bis(2-ethylhexyl) phthalate	17	U
101-55-3	4-Bromophenyl phenyl ether	17	U
85-68-7	Butyl benzyl phthalate	17	U
106-47-8	4-Chloroaniline	17	U
59-50-7	4-Chloro-3-methylphenol	17	U
91-58-7	2-Chloronaphthalene	17	U
95-57-8	2-Chlorophenol	17	U
7005-72-3	4-Chlorophenyl phenyl ether	17	U
218-01-9	Chrysene	17	U
53-70-3	Dibenzo(a,h)anthracene	17	U
132-64-9	Dibenzofuran	120	D
84-74-2	Di-n-butyl phthalate	17	U
95-50-1	1,2-Dichlorobenzene	17	U
541-73-1	1,3-Dichlorobenzene	17	U
106-46-7	1,4-Dichlorobenzene	17	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	17	U
4-66-2	Diethyl phthalate	17	U
105-67-9	2,4-Dimethylphenol	17	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000032

Client No.

ITGP-18 DL

b ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1717704DL

mple wt/vol: 900.00 (g/mL) ML Lab File ID: X48725.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	17	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	17	U
606-20-2	2,6-Dinitrotoluene	17	U
117-84-0	Di-n-octyl phthalate	17	U
206-44-0	Fluoranthene	17	U
86-73-7	Fluorene	110	D
118-74-1	Hexachlorobenzene	17	U
87-68-3	Hexachlorobutadiene	17	U
77-47-4	Hexachlorocyclopentadiene	17	U
67-72-1	Hexachloroethane	17	U
193-39-5	Indeno(1,2,3-cd)pyrene	17	U
78-59-1	Isophorone	17	U
91-57-6	2-Methylnaphthalene	300	D
95-48-7	2-Methylphenol	17	U
106-44-5	4-Methylphenol	17	U
91-20-3	Naphthalene	2000	D
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	17	U
88-75-5	2-Nitrophenol	17	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	17	U
621-64-7	N-Nitroso-Di-n-propylamine	17	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	73	D
108-95-2	Phenol	17	U
129-00-0	Pyrene	17	U
120-82-1	1,2,4-Trichlorobenzene	17	U
95-95-4	2,4,5-Trichlorophenol	17	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

ITGP-18 DL

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1717704DL

ple wt/vol: 900.00 (g/mL) ML Lab File ID: X48725.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 20.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	17	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-18

on..act: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7177

atrix (soil/water): WATER Lab Sample ID: AD114822

evel (low/med): LOW Date Received: 7/27/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4340			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	8.3			P
7440-39-3	Barium	168			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	889000		E	P
7440-47-3	Chromium	12.6			P
7440-48-4	Cobalt	13.8			P
7440-50-8	Copper	20.5			P
7439-89-6	Iron	96800			P
7439-92-1	Lead	64.8			P
7439-95-4	Magnesium	76700			P
7439-96-5	Manganese	4010			P
7440-02-0	Nickel	22.5			P
7440-09-7	Potassium	13300			P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	160000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	11.0			P
7440-66-6	Zinc	153		E	P

›lor Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

›lor After: GRAY Clarity After: CLOUDY Artifacts:

‹mm ts:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000053

Client Sample No.

ITGP-18

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix (soil/water): WATER Lab Sample ID: A1717704

Solids: 0.0 Date Samp/Recv: 07/26/2001 07/27/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/L	0.29				9010	08/10/2001
yanide - Total	UG/L	5.0	U			9010	08/07/2001

mments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016

Client No.

ITGP-19

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1717705

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3479.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	17	J
71-43-2	Benzene	31	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	120	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	15	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	13	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	66	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034

Client No.

ITGP-19

b ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1717705

mple wt/vol: 900.00 (g/mL) ML Lab File ID: X48489.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	12	
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	13	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000035

Client No.

ITGP-19

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1717705

Sample wt/vol: 900.00 (g/mL) ML Lab File ID: X48489.RR

Level: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	44	
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	650	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	12	
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000036

Client No.

ITGP-19

b .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1717705

mple wt/vol: 900.00 (g/mL) ML Lab File ID: X48489.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/07/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-19

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7177

Matrix (soil/water): WATER Lab Sample ID: AD114823

Level (low/med): LOW Date Received: 7/27/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1430			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	15.0			P
7440-39-3	Barium	86.7			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	323000		E	P
7440-47-3	Chromium	9.5			P
7440-48-4	Cobalt	11.1			P
7440-50-8	Copper	100			P
7439-89-6	Iron	53600			P
7439-92-1	Lead	74.8			P
7439-95-4	Magnesium	28400			P
7439-96-5	Manganese	2120			P
7440-02-0	Nickel	16.8			P
7440-09-7	Potassium	6580			P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.462			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	159000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	7.8			P
7440-66-6	Zinc	115		E	P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000054

Client Sample No.

ITGP-19

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1717705

Solids: 0.0 Date Samp/Recv: 07/26/2001 07/27/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
amenable Cyanide	MG/L	0.14				9010	08/10/2001
yanide - Total	UG/L	5.0	U			9010	08/07/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

ITGP-20

N : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1717703

ple wt/vol: 5.00 (g/mL) ML Lab File ID: F3477.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: not dec. _____ Heated Purge: N Date Analyzed: 08/09/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	1.3	J
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	17	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	39	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000037
Client No.

ITGP-20

) l. .e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

.rix: (soil/water) WATER Lab Sample ID: A1717703

ple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48550.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 50.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	270	
208-96-8	Acenaphthylene	35	U
120-12-7	Anthracene	35	U
56-55-3	Benzo(a)anthracene	35	U
205-99-2	Benzo(b)fluoranthene	35	U
207-08-9	Benzo(k)fluoranthene	35	U
191-24-2	Benzo(ghi)perylene	35	U
50-32-8	Benzo(a)pyrene	35	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	35	U
111-91-1	Bis(2-chloroethoxy) methane	35	U
111-44-4	Bis(2-chloroethyl) ether	35	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	35	U
117-81-7	Bis(2-ethylhexyl) phthalate	35	U
101-55-3	4-Bromophenyl phenyl ether	35	U
85-68-7	Butyl benzyl phthalate	35	U
106-47-8	4-Chloroaniline	35	U
59-50-7	4-Chloro-3-methylphenol	35	U
91-58-7	2-Chloronaphthalene	35	U
95-57-8	2-Chlorophenol	35	U
7005-72-3	4-Chlorophenyl phenyl ether	35	U
218-01-9	Chrysene	35	U
53-70-3	Dibenzo(a,h)anthracene	35	U
132-64-9	Dibenzofuran	140	
84-74-2	Di-n-butyl phthalate	35	U
95-50-1	1,2-Dichlorobenzene	35	U
541-73-1	1,3-Dichlorobenzene	35	U
106-46-7	1,4-Dichlorobenzene	35	U
91-94-1	3,3'-Dichlorobenzidine	35	U
120-83-2	2,4-Dichlorophenol	35	U
84-66-2	Diethyl phthalate	35	U
105-67-9	2,4-Dimethylphenol	35	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000038

Client No.

ITGP-20

) l e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1717703

ple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48550.RR

el: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

bisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 50.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	35	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	35	U
606-20-2	2,6-Dinitrotoluene	35	U
117-84-0	Di-n-octyl phthalate	35	U
206-44-0	Fluoranthene	35	U
86-73-7	Fluorene	120	
118-74-1	Hexachlorobenzene	35	U
87-68-3	Hexachlorobutadiene	35	U
77-47-4	Hexachlorocyclopentadiene	35	U
67-72-1	Hexachloroethane	35	U
193-39-5	Indeno(1,2,3-cd)pyrene	35	U
78-59-1	Isophorone	35	U
91-57-6	2-Methylnaphthalene	630	
95-48-7	2-Methylphenol	35	U
106-44-5	4-Methylphenol	35	U
91-20-3	Naphthalene	390	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	35	U
88-75-5	2-Nitrophenol	35	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	35	U
621-64-7	N-Nitroso-Di-n-propylamine	35	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	100	
108-95-2	Phenol	35	U
129-00-0	Pyrene	35	U
120-82-1	1,2,4-Trichlorobenzene	35	U
95-95-4	2,4,5-Trichlorophenol	35	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000039

Client No.

ITGP-20

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1717703

:ple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48550.RR

vel: (low/med) LOW Date Samp/Recv: 07/26/2001 07/27/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/01/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/11/2001

ection Volume: 1.00 (uL) Dilution Factor: 50.00

: Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	35	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ITGP-20

ntract: NY01-143

b Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7177

trix (soil/water): WATER Lab Sample ID: AD114821

vel (low/med): LOW Date Received: 7/27/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	123000			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	102			P
7440-39-3	Barium	1750			P
7440-41-7	Beryllium	7.0			P
7440-43-9	Cadmium	6.0			P
7440-70-2	Calcium	924000		E	P
7440-47-3	Chromium	221			P
7440-48-4	Cobalt	92.6			P
7440-50-8	Copper	291			P
7439-89-6	Iron	232000			P
7439-92-1	Lead	1080			P
7439-95-4	Magnesium	204000			P
7439-96-5	Manganese	4330			P
7440-02-0	Nickel	218			P
7440-09-7	Potassium	56200			P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	2.6			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	666000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	213			P
7440-66-6	Zinc	1050		E	P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000055
Client Sample No.
ITGP-20

Na . STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ix (soil/water): WATER Lab Sample ID: A1717703

lids: 0.0 Date Samp/Recv: 07/26/2001 07/27/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nable Cyanide	MG/L	2.0				9010	08/10/2001
nide - Total	UG/L	5.0	U			9010	08/07/2001

ents:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000012

Client No.

MW01-1

N. :: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1940405

ple wt/vol: 5.00 (g/mL) ML Lab File ID: F4765.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

oisture: not dec. _____ Heated Purge: N Date Analyzed: 10/06/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	40	U
71-43-2	Benzene	63	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	20	U
75-15-0	Carbon Disulfide	160	
56-23-5	Carbon Tetrachloride	8.0	U
108-90-7	Chlorobenzene	8.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	8.0	U
107-06-2	1,2-Dichloroethane	8.0	U
75-35-4	1,1-Dichloroethene	8.0	U
540-59-0	1,2-Dichloroethene (Total)	8.0	U
78-87-5	1,2-Dichloropropane	8.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	8.0	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	8.0	U
108-10-1	4-Methyl-2-pentanone	20	U
100-42-5	Styrene	8.0	U
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U
127-18-4	Tetrachloroethene	8.0	U
108-88-3	Toluene	13	
71-55-6	1,1,1-Trichloroethane	8.0	U
79-00-5	1,1,2-Trichloroethane	8.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	32	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

MW01-1

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1940405

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49172.RR

evel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 3.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

FORM I - GC/MS BNA

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

MW01-1

b ~ me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1940405

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49172.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 3.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	2	J
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	26	
86-73-7	Fluorene	6	J
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	77	
95-48-7	2-Methylphenol	8	J
106-44-5	4-Methylphenol	8	J
91-20-3	Naphthalene	340	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	34	
108-95-2	Phenol	1	J
129-00-0	Pyrene	18	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

MW01-1

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1940405

Sample wt/vol: 1070.0 (g/mL) ML Lab File ID: X49172.RR

Level: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 3.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	3	J
208-96-8	Acenaphthylene	1	J
120-12-7	Anthracene	4	J
56-55-3	Benzo(a)anthracene	10	
205-99-2	Benzo(b)fluoranthene	8	J
207-08-9	Benzo(k)fluoranthene	8	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	5	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	3	J
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	22	
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	21	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021

Client No.

MW01-1 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1940405DL

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: X49175.RR

evel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

njection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: 3.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	8	DJ
205-99-2	Benzo(b)fluoranthene	4	DJ
207-08-9	Benzo(k)fluoranthene	8	DJ
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	2	DJ
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	16	D
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	7	DJ
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	20	D
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	6	DJ

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

MW01-1 DL

b ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1940405DL

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49175.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: 3.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	24	D
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	76	D
95-48-7	2-Methylphenol	6	DJ
106-44-5	4-Methylphenol	5	DJ
91-20-3	Naphthalene	470	D
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	34	D
108-95-2	Phenol	10	U
129-00-0	Pyrene	17	D
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023

Client No.

MW01-1 DL

b' e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1940405DL

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49175.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: 3.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-1

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-9404

Matrix (soil/water): WATER Lab Sample ID: AD118739

Level (low/med): LOW Date Received: 9/28/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12300			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	27.9			P
7440-39-3	Barium	30.4		E	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.8			P
7440-70-2	Calcium	355000		E	P
7440-47-3	Chromium	9.7			P
7440-48-4	Cobalt	17.6			P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	226000		E	P
7439-92-1	Lead	361			P
7439-95-4	Magnesium	59400		E	P
7439-96-5	Manganese	6940		E	P
7440-02-0	Nickel	35.2			P
7440-09-7	Potassium	5290		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	114000			P
7440-28-0	Thallium	33.3			P
7440-62-2	Vanadium	25.0			P
7440-66-6	Zinc	113			P

Color Before: GREEN Clarity Before: CLEAR Texture: NONE

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments: _____

Wet Chemistry Analysis

000047

Client Sample No.

MW01-1

ab Name: STL Buffalo Contract: _____

al ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

latrix (soil/water): WATER Lab Sample ID: A1940405

; Solids: 0.0 Date Samp/Recv: 09/27/2001 09/28/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	4.9				9010	10/08/2001
Cyanide - Total	UG/L	50.0	U			9010	10/08/2001

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000026

Client No.

MW-2

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770009

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3836.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/22/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	78	
71-43-2	Benzene	8.4	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	5.5	J
75-15-0	Carbon Disulfide	44	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	2.2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	4.8	J
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	14	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000061

Client No.

MW-2

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770009

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44774.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2	J
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	4	J
56-55-3	Benzo(a)anthracene	6	J
205-99-2	Benzo(b)fluoranthene	5	J
207-08-9	Benzo(k)fluoranthene	6	J
191-24-2	Benzo(ghi)perylene	1	J
50-32-8	Benzo(a)pyrene	3	J
65-85-0	Benzoic acid	24	J
100-51-6	Benzyl alcohol	1	J
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	6	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	22	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	5	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000062

Client No.

MW-2

ɔ ...e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770009

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44774.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ɟection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	4	J
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	17	
86-73-7	Fluorene	5	J
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	2	J
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	86	
95-48-7	2-Methylphenol	2	J
106-44-5	4-Methylphenol	3	J
91-20-3	Naphthalene	390	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	34	
108-95-2	Phenol	10	U
129-00-0	Pyrene	12	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000063

Client No.

MW-2

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770009

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44774.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-2 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770009DL

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44780.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000065

Client No.

MW-2 DL

b ...e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770009DL

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44780.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	96	
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	730	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	34	
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000066

Client No.

MW-2 DL

b . .e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

.trix: (soil/water) WATER Lab Sample ID: A1770009DL

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44780.MSQ

:vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: MW-2

Contract: NY01-143

Lab Code: STLBFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115543

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7750		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	63.8			P
7440-39-3	Barium	203			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	2.1			P
7440-70-2	Calcium	270000		E	P
7440-47-3	Chromium	25.4			P
7440-48-4	Cobalt	13.3			P
7440-50-8	Copper	17.9			P
7439-89-6	Iron	113000			P
7439-92-1	Lead	753			P
7439-95-4	Magnesium	32700			P
7439-96-5	Manganese	4150			P
7440-02-0	Nickel	16.2			P
7440-09-7	Potassium	6850		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.215			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	76300		E	P
7440-28-0	Thallium	30.7			P
7440-62-2	Vanadium	22.1			P
7440-66-6	Zinc	107			P

Color Before: BLACK Clarity Before: CLOUDY Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts: _____

nents: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000106

Client Sample No.

MW-2

ab Name: STL Buffalo Contract: _____

al de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1770009

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	8.2				9010	08/17/2001
Cyanide - Total	UG/L	50.0	U			9010	08/17/2001

omments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000029

Client No.

MW-3

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770012

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3839.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/22/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.00

GC Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	27	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	7.3	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	330	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	2.8	J
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	190	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000076

Client No.

MW-3

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1770012

ple wt/vol: 1060.0 (g/mL) ML Lab File ID: W44782.MSQ

el: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	12	
208-96-8	Acenaphthylene	2	J
120-12-7	Anthracene	16	
56-55-3	Benzo(a)anthracene	13	
205-99-2	Benzo(b)fluoranthene	10	
207-08-9	Benzo(k)fluoranthene	11	
191-24-2	Benzo(ghi)perylene	5	J
50-32-8	Benzo(a)pyrene	9	J
65-85-0	Benzoic acid	1	J
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	12	
53-70-3	Dibenzo(a,h)anthracene	2	J
132-64-9	Dibenzofuran	22	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	1	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000077

Client No.

MW-3

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɔrix: (soil/water) WATER Lab Sample ID: A1770012

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: W44782.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

ɔ Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	38	
86-73-7	Fluorene	29	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	5	J
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	1	J
91-20-3	Naphthalene	250	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	48	
108-95-2	Phenol	10	U
129-00-0	Pyrene	28	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000078

Client No.

MW-3

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770012

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: W44782.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000079

Client No.

MW-3 DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770012DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: W44788.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/23/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	12	
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	14	
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	8	J
207-08-9	Benzo(k)fluoranthene	8	J
191-24-2	Benzo(ghi)perylene	5	J
50-32-8	Benzo(a)pyrene	6	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	22	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000080

Client No.

MW-3 DL

) ..e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1770012DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: W44788.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/23/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

: Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	42	
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	4	J
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	450	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	59	
108-95-2	Phenol	10	U
129-00-0	Pyrene	31	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-3 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770012DL

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: W44788.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/23/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-3

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115546

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4470		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	31.4			P
7440-39-3	Barium	89.2			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	441000		E	P
7440-47-3	Chromium	11.8			P
7440-48-4	Cobalt	9.9			P
7440-50-8	Copper	24.7			P
7439-89-6	Iron	20000			P
7439-92-1	Lead	156			P
7439-95-4	Magnesium	26500			P
7439-96-5	Manganese	721			P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	9170		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.248			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	113000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	11.4			P
7440-66-6	Zinc	81.2			P

Color Before: GRAY Clarity Before: CLOUDY Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

009109

Client Sample No.

MW-3

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Lab Sample ID: A1770012

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	10.7				9010	08/17/2001
Cyanide - Total	UG/L	100	U			9010	08/17/2001

Comments:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028

Client No.

MW-4

o Name: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770011

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3838.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/22/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	48	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	1.0	J
107-06-2	1,2-Dichloroethane	1.5	J
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	28	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	3.8	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000073
Client No.

MW-4

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1770011

ple wt/vol: 1060.0 (g/mL) ML Lab File ID: W44781.MSQ

el: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	39	
208-96-8	Acenaphthylene	4	J
120-12-7	Anthracene	2	J
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	6	J
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	1	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000074

Client No.

MW-4

› Name: STL Buffalo Contract: _____

› Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1770011

ple wt/vol: 1060.0 (g/mL) ML Lab File ID: W44781.MSQ

el: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	8	J
86-73-7	Fluorene	25	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	1	J
106-44-5	4-Methylphenol	2	J
91-20-3	Naphthalene	11	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	0.6	J
108-95-2	Phenol	10	U
129-00-0	Pyrene	5	J
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000075

Client No.

MW-4

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:ix: (soil/water) WATER Lab Sample ID: A1770011

)le wt/vol: 1060.0 (g/mL) ML Lab File ID: W44781.MSQ

:l: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

)isture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

:entrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

:ction Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

FORM I - GC/MS BNA

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INORGANIC ANALYSIS DATA SHEET

000094

SAMPLE NO.

MW-4

ontract: NY01-143

ab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

atrix (soil/water): WATER Lab Sample ID: AD115545

evel (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	678		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U		P
7440-39-3	Barium	51.1			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	527000		E	P
7440-47-3	Chromium	2.0			P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	4500			P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	25300			P
7439-96-5	Manganese	1400			P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	5950		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	99000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: NONE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

000108

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.

MW-4

) l :: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): WATER Lab Sample ID: A1770011

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nenable Cyanide	MG/L	4.1				9010	08/17/2001
yanide - Total	UG/L	50.0	U			9010	08/17/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025
Client No.

MW-5

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770008

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3835.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/22/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	40	U
71-43-2	Benzene	240	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	20	U
75-15-0	Carbon Disulfide	8.0	U
56-23-5	Carbon Tetrachloride	8.0	U
108-90-7	Chlorobenzene	8.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	8.0	U
107-06-2	1,2-Dichloroethane	8.0	U
75-35-4	1,1-Dichloroethene	8.0	U
540-59-0	1,2-Dichloroethene (Total)	8.0	U
78-87-5	1,2-Dichloropropane	8.0	U
10061-01-5	cis-1,3-Dichloropropene	8.0	U
10061-02-6	trans-1,3-Dichloropropene	8.0	U
100-41-4	Ethylbenzene	880	
591-78-6	2-Hexanone	50	U
75-09-2	Methylene chloride	8.0	U
108-10-1	4-Methyl-2-pentanone	160	
100-42-5	Styrene	8.0	U
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U
127-18-4	Tetrachloroethene	8.0	U
108-88-3	Toluene	16	
71-55-6	1,1,1-Trichloroethane	8.0	U
79-00-5	1,1,2-Trichloroethane	8.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	8.0	U
1330-20-7	Total Xylenes	120	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000058
Client No.

MW-5

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1770008

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44773.MSQ

el: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	12	
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	7	J
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	6	J
207-08-9	Benzo(k)fluoranthene	8	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	7	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	9	J
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000059

Client No.

MW-5

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1770008

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44773.MSQ

el: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	22	
86-73-7	Fluorene	11	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	190	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	28	
108-95-2	Phenol	10	U
129-00-0	Pyrene	18	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000060

Client No.

MW-5

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770008

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44773.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

njection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-5

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115542

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13800		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	42.6			P
7440-39-3	Barium	381			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.9			P
7440-70-2	Calcium	426000		E	P
7440-47-3	Chromium	22.6			P
7440-48-4	Cobalt	17.4			P
7440-50-8	Copper	358			P
7439-89-6	Iron	36500			P
7439-92-1	Lead	626			P
7439-95-4	Magnesium	38200			P
7439-96-5	Manganese	783			P
7440-02-0	Nickel	29.9			P
7440-09-7	Potassium	7450		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	6.4			CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	57200		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	34.3			P
7440-66-6	Zinc	1150			P

Color Before: BLACK Clarity Before: CLOUDY Texture: LIGHT

Color After: BROWN Clarity After: CLOUDY Artifacts:

mments:

Wet Chemistry Analysis

Client Sample No.

MW-5

ab Name: STL Buffalo Contract: _____

at de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1770008

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.90				9010	08/17/2001
Cyanide - Total	UG/L	50.0	U			9010	08/17/2001

omments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

MW-8

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3778.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/19/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	1.2	J
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	15	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-8

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770001

Sample wt/vol: 1050.0 (g/mL) ML Lab File ID: W44764.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.5	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-8

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770001

Sample wt/vol: 1050.0 (g/mL) ML Lab File ID: W44764.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

MW-8

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770001

Sample wt/vol: 1050.0 (g/mL) ML Lab File ID: W44764.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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000096

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-8

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115533

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2900		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U		P
7440-39-3	Barium	337			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	185000		E	P
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	20600			P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	33700			P
7439-96-5	Manganese	1260			P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	12500		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	187000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	6.6			P
7440-66-6	Zinc	89.4			P

Color Before: YELLOW Clarity Before: CLOUDY Texture: NONE

Color After: YELLOW Clarity After: CLEAR Artifacts:

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000098
Client Sample No.

MW-8

ıb Name: STL Buffalo Contract: _____

ıb de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix (soil/water): WATER Lab Sample ID: A1770001

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
ımenable Cyanide	MG/L	0.0050	U			9010	08/16/2001
Cyanide - Total	UG/L	5.0	U			9010	08/16/2001

ɔmments:

FORM I - WC

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028

Client No.

MW-9

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768912

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3711.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/16/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	770	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	15	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	2.4	J
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	24	

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-9 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768912DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3719.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/17/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	40	U
71-43-2	Benzene	1700	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	20	U
75-15-0	Carbon Disulfide	8.0	U
56-23-5	Carbon Tetrachloride	8.0	U
108-90-7	Chlorobenzene	8.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	8.0	U
107-06-2	1,2-Dichloroethane	8.0	U
75-35-4	1,1-Dichloroethene	8.0	U
540-59-0	1,2-Dichloroethene (Total)	8.0	U
78-87-5	1,2-Dichloropropane	8.0	U
10061-01-5	cis-1,3-Dichloropropene	8.0	U
10061-02-6	trans-1,3-Dichloropropene	8.0	U
100-41-4	Ethylbenzene	8.0	U
591-78-6	2-Hexanone	50	U
75-09-2	Methylene chloride	8.0	U
108-10-1	4-Methyl-2-pentanone	20	U
100-42-5	Styrene	8.0	U
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U
127-18-4	Tetrachloroethene	8.0	U
108-88-3	Toluene	8.0	U
71-55-6	1,1,1-Trichloroethane	8.0	U
79-00-5	1,1,2-Trichloroethane	8.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	8.0	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000078

Client No.

MW-9

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768912

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48705.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	17	
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	1	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000079

Client No.

MW-9

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768912

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48705.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	1	J
86-73-7	Fluorene	5	J
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	5	BJ
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	6	J
108-95-2	Phenol	48	
129-00-0	Pyrene	0.9	J
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000089

Client No.

MW-9

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768912

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48705.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-9

C. ract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115249

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5140		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U	N	P
7440-39-3	Barium	830		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.1		N	P
7440-70-2	Calcium	209000		E	P
7440-47-3	Chromium	9.2		N	P
7440-48-4	Cobalt	5.0	U	N	P
7440-50-8	Copper	10.0	U	N	P
7439-89-6	Iron	29900		E	P
7439-92-1	Lead	17.3		N	P
7439-95-4	Magnesium	63000		NE	P
7439-96-5	Manganese	1190		NE	P
7440-02-0	Nickel	10.0	U	N	P
7440-09-7	Potassium	51600		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	171000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	12.6		N	P
7440-66-6	Zinc	63.4		N	P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts: _____

Comments: _____

Wet Chemistry Analysis

Client Sample No.

MW-9

b Name: STL Buffalo Contract: _____

b le: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1768912

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/L	0.14				9010	08/16/2001
yanide - Total	UG/L	5.0	U			9010	08/15/2001

mments:

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-9

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768906

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3644.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	8.9	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	1.2	J
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	2.4	J
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	15	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000054
Client No.

MW00-9

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768906

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48664.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000055
Client No.

MW00-9

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768906

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48664.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	0.6	BJ
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000056
Client No.

MW00-9

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768906

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48664.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-9

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115241

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3430		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U	N	P
7440-39-3	Barium	184		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.0	U	N	P
7440-70-2	Calcium	103000		E	P
7440-47-3	Chromium	6.4		N	P
7440-48-4	Cobalt	5.0	U	N	P
7440-50-8	Copper	15.7		N	P
7439-89-6	Iron	4910		E	P
7439-92-1	Lead	50.9		N	P
7439-95-4	Magnesium	39600		NE	P
7439-96-5	Manganese	361		NE	P
7440-02-0	Nickel	10.0	U	N	P
7440-09-7	Potassium	18600		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.265			CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	162000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	7.2		N	P
7440-66-6	Zinc	78.8		N	P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts:

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.

MW00-9

b Name: STL Buffalo Contract: _____

b ..e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1768906

Solids: 0.0 Date Samp/Recv: 08/08/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/L	0.068				9010	08/15/2001
yanide - Total	UG/L	5.0	U			9010	08/15/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014
Client No.

MW00-10

al me: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770002

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3779.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/19/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	770	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	1.3	J
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	59	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	3.0	J
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	17	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015

Client No.

MW00-10 DL

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770002DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3840.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/22/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	80	U
71-43-2	Benzene	2000	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	16	U
78-93-3	2-Butanone	40	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	16	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
540-59-0	1,2-Dichloroethene (Total)	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
100-41-4	Ethylbenzene	54	D
591-78-6	2-Hexanone	100	U
75-09-2	Methylene chloride	16	U
108-10-1	4-Methyl-2-pentanone	40	U
100-42-5	Styrene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	16	U
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	10	U
108-05-4	Vinyl acetate	16	U
75-01-4	Vinyl chloride	16	U
1330-20-7	Total Xylenes	16	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034

Client No.

MW00-10

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770002

ample wt/vol: 1040.0 (g/mL) ML Lab File ID: W44765.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	1	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000035

Client No.

MW00-10

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770002

ample wt/vol: 1040.0 (g/mL) ML Lab File ID: W44765.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	52	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	3	J
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000036

Client No.

MW00-10

ab ''me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770002

ample wt/vol: 1040.0 (g/mL) ML Lab File ID: W44765.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW00-10

C. ract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115534

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19900		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U		P
7440-39-3	Barium	1130			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.6			P
7440-70-2	Calcium	294000		E	P
7440-47-3	Chromium	30.2			P
7440-48-4	Cobalt	11.7			P
7440-50-8	Copper	24.9			P
7439-89-6	Iron	29800			P
7439-92-1	Lead	26.3			P
7439-95-4	Magnesium	80300			P
7439-96-5	Manganese	1130			P
7440-02-0	Nickel	23.5			P
7440-09-7	Potassium	26000		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	267000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	37.5			P
7440-66-6	Zinc	125			P

Color Before: BROWN Clarity Before: CLOUDY Texture: LIGHT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000099
Client Sample No.

MW00-10

ab Name: STL Buffalo Contract: _____

a. ode: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

latrix (soil/water): WATER Lab Sample ID: A1770002

; Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.15				9010	08/16/2001
Cyanide - Total	UG/L	5.0	U			9010	08/16/2001

Comments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016
Client No.

MW11

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770003

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3780.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/19/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	480	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	9.4	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	
100-41-4	Ethylbenzene	320	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	12	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	34	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

MW11 DL

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770003DL

ample wt/vol: 5.00 (g/mL) ML Lab File ID: F3815.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	410	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	12	D
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	200	D
591-78-6	2-Hexanone	20	U
75-09-2	Methylene chloride	6.6	D
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	8.2	D
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	17	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW11

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770003

mple wt/vol: 1010.0 (g/mL) ML Lab File ID: W44768.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.9	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000038

Client No.

MW11

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770003

ample wt/vol: 1010.0 (g/mL) ML Lab File ID: W44768.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000039
Client No.

MW11

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770003

Sample wt/vol: 1010.0 (g/mL) ML Lab File ID: W44768.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW11

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115537

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1870		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U		P
7440-39-3	Barium	85.9			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	118000		E	P
7440-47-3	Chromium	7.1			P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	5460			P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	65200			P
7439-96-5	Manganese	95.0			P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	4650		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	57000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	5.1			P
7440-66-6	Zinc	20.0	U		P

Color Before: YELLOW Clarity Before: CLOUDY Texture: LIGHT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

mments:

Wet Chemistry Analysis

000100

Client Sample No.

MW11

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Lab Sample ID: A1770003

% Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.022				9010	08/16/2001
Cyanide - Total	UG/L	5.0	U			9010	08/16/2001

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

MW00-11

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770005

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3798.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000046

Client No.

MW00-11

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770005

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44770.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	6	J
208-96-8	Acenaphthylene	2	J
120-12-7	Anthracene	11	
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	0.4	J
207-08-9	Benzo(k)fluoranthene	0.4	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	0.4	J
65-85-0	Benzoic acid	0.4	J
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	3	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	5	J
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	7	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000047

Client No.

MW00-11

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770005

Sample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44770.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	19	
86-73-7	Fluorene	6	J
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	1	J
95-48-7	2-Methylphenol	3	J
106-44-5	4-Methylphenol	.9	J
91-20-3	Naphthalene		
88-74-4	2-Nitroaniline		U
99-09-2	3-Nitroaniline	5	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	32	
108-95-2	Phenol	1	J
129-00-0	Pyrene	12	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000048

Client No.

MW00-11

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770005

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44770.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-11

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115539

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7210		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	9.8			P
7440-39-3	Barium	78.1			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	10.2			P
7440-70-2	Calcium	354000		E	P
7440-47-3	Chromium	12.4			P
7440-48-4	Cobalt	5.4			P
7440-50-8	Copper	13.2			P
7439-89-6	Iron	10400			P
7439-92-1	Lead	14.3			P
7439-95-4	Magnesium	62600			P
7439-96-5	Manganese	189			P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	18500		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	100000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	19.6			P
7440-66-6	Zinc	250			P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000102

Client Sample No.

MW00-11

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1770005

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.69				9010	08/16/2001
Cyanide - Total	UG/L	25.0	U			9010	08/16/2001

omments:

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-12

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768911

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3678.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	40	U
71-43-2	Benzene	590	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	20	U
75-15-0	Carbon Disulfide	8.0	U
56-23-5	Carbon Tetrachloride	8.0	U
108-90-7	Chlorobenzene	8.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	8.0	U
107-06-2	1,2-Dichloroethane	8.0	U
75-35-4	1,1-Dichloroethene	8.0	U
540-59-0	1,2-Dichloroethene (Total)	8.0	U
78-87-5	1,2-Dichloropropane	8.0	U
10061-01-5	cis-1,3-Dichloropropene	8.0	U
10061-02-6	trans-1,3-Dichloropropene	8.0	U
100-41-4	Ethylbenzene	1800	
591-78-6	2-Hexanone	50	U
75-09-2	Methylene chloride	8.0	U
108-10-1	4-Methyl-2-pentanone	20	U
100-42-5	Styrene	8.0	U
79-34-5	1,1,2,2-Tetrachloroethane	8.0	U
127-18-4	Tetrachloroethene	8.0	U
108-88-3	Toluene	1200	
71-55-6	1,1,1-Trichloroethane	8.0	U
79-00-5	1,1,2-Trichloroethane	8.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	8.0	U
1330-20-7	Total Xylenes	9000	E

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.: MW-12 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768911DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3701.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/16/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	80	U
71-43-2	Benzene	360	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	16	U
78-93-3	2-Butanone	40	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	16	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
540-59-0	1,2-Dichloroethene (Total)	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
100-41-4	Ethylbenzene	1200	D
591-78-6	2-Hexanone	100	U
75-09-2	Methylene chloride	16	U
108-10-1	4-Methyl-2-pentanone	40	U
100-42-5	Styrene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	730	D
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	10	U
108-05-4	Vinyl acetate	16	U
75-01-4	Vinyl chloride	16	U
1330-20-7	Total Xylenes	6300	D

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-12

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768911

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48704.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	89	
208-96-8	Acenaphthylene	98	
120-12-7	Anthracene	18	
56-55-3	Benzo(a)anthracene	4	J
205-99-2	Benzo(b)fluoranthene	3	J
207-08-9	Benzo(k)fluoranthene	2	J
191-24-2	Benzo(ghi)perylene	1	J
50-32-8	Benzo(a)pyrene	3	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.8	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	3	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	78	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	57	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW-12

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768911

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48704.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	12	
86-73-7	Fluorene	56	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	J
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	950	E
95-48-7	2-Methylphenol	15	
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	8000	BE
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	64	
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000074

Client No.

MW-12

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768911

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48704.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000075

Client No.

MW-12 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768911DL

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48751.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

Injection Volume: 1.00 (uL) Dilution Factor: 100.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	71	U
208-96-8	Acenaphthylene	71	U
120-12-7	Anthracene	71	U
56-55-3	Benzo(a)anthracene	71	U
205-99-2	Benzo(b)fluoranthene	71	U
207-08-9	Benzo(k)fluoranthene	71	U
191-24-2	Benzo(ghi)perylene	71	U
50-32-8	Benzo(a)pyrene	71	U
65-85-0	Benzoic acid	140	
100-51-6	Benzyl alcohol	71	U
111-91-1	Bis(2-chloroethoxy) methane	71	U
111-44-4	Bis(2-chloroethyl) ether	71	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	71	U
117-81-7	Bis(2-ethylhexyl) phthalate	71	U
101-55-3	4-Bromophenyl phenyl ether	71	U
85-68-7	Butyl benzyl phthalate	71	U
106-47-8	4-Chloroaniline	71	U
59-50-7	4-Chloro-3-methylphenol	71	U
91-58-7	2-Chloronaphthalene	71	U
95-57-8	2-Chlorophenol	71	U
7005-72-3	4-Chlorophenyl phenyl ether	71	U
218-01-9	Chrysene	71	U
53-70-3	Dibenzo(a,h)anthracene	71	U
132-64-9	Dibenzofuran	71	U
84-74-2	Di-n-butyl phthalate	71	U
95-50-1	1,2-Dichlorobenzene	71	U
541-73-1	1,3-Dichlorobenzene	71	U
106-46-7	1,4-Dichlorobenzene	71	U
91-94-1	3,3'-Dichlorobenzidine	71	U
120-83-2	2,4-Dichlorophenol	71	U
84-66-2	Diethyl phthalate	71	U
105-67-9	2,4-Dimethylphenol	71	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000076

Client No.

MW-12 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768911DL

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48751.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

Injection Volume: 1.00 (uL) Dilution Factor: 100.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	71	U
534-52-1	4,6-Dinitro-2-methylphenol	71	U
51-28-5	2,4-Dinitrophenol	71	U
121-14-2	2,4-Dinitrotoluene	71	U
606-20-2	2,6-Dinitrotoluene	71	U
117-84-0	Di-n-octyl phthalate	71	U
206-44-0	Fluoranthene	71	U
86-73-7	Fluorene	71	U
118-74-1	Hexachlorobenzene	71	U
87-68-3	Hexachlorobutadiene	71	U
77-47-4	Hexachlorocyclopentadiene	71	U
67-72-1	Hexachloroethane	71	U
193-39-5	Indeno(1,2,3-cd)pyrene	71	U
78-59-1	Isophorone	71	U
91-57-6	2-Methylnaphthalene	540	
95-48-7	2-Methylphenol	71	U
106-44-5	4-Methylphenol	71	U
91-20-3	Naphthalene	13000	B
88-74-4	2-Nitroaniline	71	U
99-09-2	3-Nitroaniline	71	U
100-01-6	4-Nitroaniline	71	U
98-95-3	Nitrobenzene	110	
88-75-5	2-Nitrophenol	71	U
100-02-7	4-Nitrophenol	71	U
86-30-6	N-nitrosodiphenylamine	71	U
621-64-7	N-Nitroso-Di-n-propylamine	71	U
87-86-5	Pentachlorophenol	71	U
85-01-8	Phenanthrene	71	U
108-95-2	Phenol	71	U
129-00-0	Pyrene	71	U
120-82-1	1,2,4-Trichlorobenzene	71	U
95-95-4	2,4,5-Trichlorophenol	71	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000077

Client No.

MW-12 DL

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768911DL

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48751.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/24/2001

njection Volume: 1.00 (uL) Dilution Factor: 100.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	71	U

FORM I - GC/MS BNA

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW-12

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115248

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	721		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	14.6		N	P
7440-39-3	Barium	156		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.0	U	N	P
7440-70-2	Calcium	319000		E	P
7440-47-3	Chromium	2.6		N	P
7440-48-4	Cobalt	5.0	U	N	P
7440-50-8	Copper	10.0	U	N	P
7439-89-6	Iron	2280		E	P
7439-92-1	Lead	10.0	U	N	P
7439-95-4	Magnesium	45800		NE	P
7439-96-5	Manganese	64.4		NE	P
7440-02-0	Nickel	10.0	U	N	P
7440-09-7	Potassium	9200		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	140000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	5.0	U	N	P
7440-66-6	Zinc	59.3		N	P

Color Before: COLORLESS Clarity Before: CLEAR Texture: NONE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000105

Client Sample No.

MW-12

Name: STL Buffalo Contract: _____

(: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): WATER Lab Sample ID: A1768911

olids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
nable Cyanide	MG/L	0.0050	U			9010	08/16/2001
nide - Total	UG/L	95.0				9010	08/15/2001

ents:

_____

_____

_____

_____

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

MW00-12

) ? e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1770004

ple wt/vol: 5.00 (g/mL) ML Lab File ID: F3797.RR

el: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.00

. Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	3300	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	450	
591-78-6	2-Hexanone	25	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	130	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
5-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	830	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

MW00-12 DL

b `` me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770004DL

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3816.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	100	U
71-43-2	Benzene	4200	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	20	U
78-93-3	2-Butanone	50	U
75-15-0	Carbon Disulfide	20	U
56-23-5	Carbon Tetrachloride	20	U
108-90-7	Chlorobenzene	20	U
75-00-3	Chloroethane	20	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	20	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	20	U
107-06-2	1,2-Dichloroethane	110	D
75-35-4	1,1-Dichloroethene	20	U
540-59-0	1,2-Dichloroethene (Total)	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
100-41-4	Ethylbenzene	390	D
591-78-6	2-Hexanone	120	U
75-09-2	Methylene chloride	33	D
108-10-1	4-Methyl-2-pentanone	50	U
100-42-5	Styrene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
127-18-4	Tetrachloroethene	20	U
108-88-3	Toluene	99	D
71-55-6	1,1,1-Trichloroethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
79-01-6	Trichloroethene	12	U
108-05-4	Vinyl acetate	20	U
5-01-4	Vinyl chloride	20	U
1330-20-7	Total Xylenes	580	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040

Client No.

MW00-12

) . .e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1770004

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44769.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	0.4	J
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	0.9	J
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	4	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000041

Client No.

MW00-12

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1770004

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44769.MSQ

rel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	2	J
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	3	J
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	200	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	3	J
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000042

Client No.

MW00-12

ıb ıme: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) WATER Lab Sample ID: A1770004

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44769.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000043

Client No.

MW00-12 DL

b ne: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770004DL

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44778.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000044

Client No.

MW00-12 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770004DL

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44778.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	290	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000045

Client No.

MW00-12 DL

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix: (soil/water) WATER Lab Sample ID: A1770004DL

ɑple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44778.MSQ

ʏel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

ʔoisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ɪcentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

' Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-12

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115538

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16000		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U		P
7440-39-3	Barium	1790			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	217000		E	P
7440-47-3	Chromium	21.1			P
7440-48-4	Cobalt	12.6			P
7440-50-8	Copper	21.5			P
7439-89-6	Iron	21700			P
7439-92-1	Lead	30.0			P
7439-95-4	Magnesium	113000			P
7439-96-5	Manganese	532			P
7440-02-0	Nickel	22.0			P
7440-09-7	Potassium	63300		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	481000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	27.4			P
7440-66-6	Zinc	99.1			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000101

Client Sample No.

MW00-12

ıb me: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix (soil/water): WATER Lab Sample ID: A1770004

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
ımenable Cyanide	MG/L	0.37				9010	08/16/2001
yanide - Total	UG/L	25.0	U			9010	08/16/2001

ımments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000021

Client No.

MW00-13

b . .me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770006

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3799.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	530	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	1.0	J
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	49	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	36	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	130	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

MW00-13 DL

a' me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770006DL

ample wt/vol: 5.00 (g/mL) ML Lab File ID: F3811.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	32	U
71-43-2	Benzene	270	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	16	U
75-15-0	Carbon Disulfide	6.4	U
56-23-5	Carbon Tetrachloride	6.4	U
108-90-7	Chlorobenzene	6.4	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	6.4	U
107-06-2	1,2-Dichloroethane	8.9	D
75-35-4	1,1-Dichloroethene	6.4	U
540-59-0	1,2-Dichloroethene (Total)	6.4	U
78-87-5	1,2-Dichloropropane	6.4	U
10061-01-5	cis-1,3-Dichloropropene	6.4	U
10061-02-6	trans-1,3-Dichloropropene	6.4	U
100-41-4	Ethylbenzene	23	D
591-78-6	2-Hexanone	40	U
75-09-2	Methylene chloride	14	D
108-10-1	4-Methyl-2-pentanone	16	U
100-42-5	Styrene	6.4	U
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U
127-18-4	Tetrachloroethene	6.4	U
108-88-3	Toluene	20	D
71-55-6	1,1,1-Trichloroethane	6.4	U
79-00-5	1,1,2-Trichloroethane	6.4	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	6.4	U
1330-20-7	Total Xylenes	68	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000049

Client No.

MW00-13

b e: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770006

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44771.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	26	
208-96-8	Acenaphthylene	2	J
120-12-7	Anthracene	7	J
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	0.3	J
207-08-9	Benzo(k)fluoranthene	0.4	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	0.4	J
65-85-0	Benzoic acid	2	J
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.6	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	23	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	15	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000050

Client No.

MW00-13

ɔ ' ɐe: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1770006

ɒple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44771.MSQ

ɐel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

ɒoisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

ɐection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	6	J
86-73-7	Fluorene	24	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	15	
95-48-7	2-Methylphenol	3	J
106-44-5	4-Methylphenol	2	J
91-20-3	Naphthalene	14	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	18	
108-95-2	Phenol	5	J
129-00-0	Pyrene	3	J
20-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000051

Client No.

MW00-13

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1770006

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44771.MSQ

el: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-13

Contract: NY01-143

Lab Code: STLBFLO Case No.: SAS No.: SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115540

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21700		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	22.4			P
7440-39-3	Barium	157			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	383000		E	P
7440-47-3	Chromium	29.2			P
7440-48-4	Cobalt	12.6			P
7440-50-8	Copper	26.7			P
7439-89-6	Iron	30700			P
7439-92-1	Lead	35.2			P
7439-95-4	Magnesium	106000			P
7439-96-5	Manganese	885			P
7440-02-0	Nickel	25.7			P
7440-09-7	Potassium	22300		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	262000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	42.2			P
7440-66-6	Zinc	132			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000103

Client Sample No.

MW00-13

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Lab Sample ID: A1770006

% Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.16				9010	08/17/2001
Cyanide - Total	UG/L	5.0	U			9010	08/17/2001

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000020

Client No.

MW00-14

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768905

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3677.RR

vel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	16	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	6.0	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	1.2	J
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	17	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	38	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000051

Client No.

MW00-14

a' me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768905

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48702.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2	J
208-96-8	Acenaphthylene	1	J
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	1	J
205-99-2	Benzo(b)fluoranthene	1	J
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	1	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.6	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	1	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	0.8	J
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000052

Client No.

MW00-14

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768905

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48702.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	3	J
86-73-7	Fluorene	2	J
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.6	J
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	1	J
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	1	BJ
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	1	J
108-95-2	Phenol	10	U
129-00-0	Pyrene	2	J
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000053

Client No.

MW00-14

b me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1768905

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48702.RR

vel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

STL BUFFALO

000084

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-14

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115240

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4730		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U	N	P
7440-39-3	Barium	85.4		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.0	U	N	P
7440-70-2	Calcium	213000		E	P
7440-47-3	Chromium	7.7		N	P
7440-48-4	Cobalt	5.3		N	P
7440-50-8	Copper	10.3		N	P
7439-89-6	Iron	26300		E	P
7439-92-1	Lead	26.3		N	P
7439-95-4	Magnesium	26400		NE	P
7439-96-5	Manganese	399		NE	P
7440-02-0	Nickel	10.8		N	P
7440-09-7	Potassium	16100		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	325000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	8.9		N	P
7440-66-6	Zinc	64.8		N	P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000039

Client Sample No.

MW00-14

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix (soil/water): WATER Lab Sample ID: A1768905

Solids: 0.0 Date Samp/Recv: 08/08/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
ɪenable Cyanide	MG/L	0.052				9010	08/15/2001
yanide - Total	UG/L	5.0	U			9010	08/14/2001

ɪments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023

Client No.

MW00-15

ıb ne: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) WATER Lab Sample ID: A1770007

ımple wt/vol: 5.00 (g/mL) ML Lab File ID: F3800.RR

:vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

: Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

›il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	73	
71-43-2	Benzene	900	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	15	
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	320	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	1200	E
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	790	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

MW00-15 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770007DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3812.RR

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/21/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 50.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	200	U
71-43-2	Benzene	4900	D
75-27-4	Bromodichloromethane	10	U
75-25-2	Bromoform	10	U
74-83-9	Bromomethane	40	U
78-93-3	2-Butanone	100	U
75-15-0	Carbon Disulfide	40	U
56-23-5	Carbon Tetrachloride	40	U
108-90-7	Chlorobenzene	40	U
75-00-3	Chloroethane	40	U
67-66-3	Chloroform	10	U
74-87-3	Chloromethane	40	U
124-48-1	Dibromochloromethane	10	U
75-34-3	1,1-Dichloroethane	40	U
107-06-2	1,2-Dichloroethane	130	D
75-35-4	1,1-Dichloroethene	40	U
540-59-0	1,2-Dichloroethene (Total)	40	U
78-87-5	1,2-Dichloropropane	40	U
10061-01-5	cis-1,3-Dichloropropene	40	U
10061-02-6	trans-1,3-Dichloropropene	40	U
100-41-4	Ethylbenzene	390	D
591-78-6	2-Hexanone	250	U
75-09-2	Methylene chloride	67	D
108-10-1	4-Methyl-2-pentanone	100	U
100-42-5	Styrene	40	U
79-34-5	1,1,2,2-Tetrachloroethane	40	U
127-18-4	Tetrachloroethene	40	U
108-88-3	Toluene	3100	D
71-55-6	1,1,1-Trichloroethane	40	U
79-00-5	1,1,2-Trichloroethane	40	U
79-01-6	Trichloroethene	25	U
108-05-4	Vinyl acetate	40	U
75-01-4	Vinyl chloride	40	U
1330-20-7	Total Xylenes	2800	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000052

Client No.

MW00-15

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1770007

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44772.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	40	
208-96-8	Acenaphthylene	120	
120-12-7	Anthracene	12	
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	590	
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
[illegible]	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	60	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	2800	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000053

Client No.

MW00-15

ɔ e: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770007

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44772.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	7	J
86-73-7	Fluorene	59	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	320	
95-48-7	2-Methylphenol	1900	E
106-44-5	4-Methylphenol	3600	E
91-20-3	Naphthalene	2100	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	44	
108-95-2	Phenol	1400	E
129-00-0	Pyrene	5	J
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000054

Client No.

MW00-15

ıb me: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) WATER Lab Sample ID: A1770007

ımple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44772.MSQ

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ɔncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/21/2001

ıjection Volume: 1.00 (uL) Dilution Factor: 5.00

ɔC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000055

Client No.

MW00-15 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770007DL

Sample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44819.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/25/2001

Injection Volume: 1.00 (uL) Dilution Factor: 40.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	38	
208-96-8	Acenaphthylene	120	
120-12-7	Anthracene	37	U
56-55-3	Benzo(a)anthracene	37	U
205-99-2	Benzo(b)fluoranthene	37	U
207-08-9	Benzo(k)fluoranthene	37	U
191-24-2	Benzo(ghi)perylene	37	U
50-32-8	Benzo(a)pyrene	37	U
65-85-0	Benzoic acid	83	
100-51-6	Benzyl alcohol	37	U
111-91-1	Bis(2-chloroethoxy) methane	37	U
111-44-4	Bis(2-chloroethyl) ether	37	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	37	U
117-81-7	Bis(2-ethylhexyl) phthalate	37	U
101-55-3	4-Bromophenyl phenyl ether	37	U
85-68-7	Butyl benzyl phthalate	37	U
106-47-8	4-Chloroaniline	19	U
59-50-7	4-Chloro-3-methylphenol	37	U
91-58-7	2-Chloronaphthalene	37	U
95-57-8	2-Chlorophenol	37	U
7005-72-3	4-Chlorophenyl phenyl ether	19	U
218-01-9	Chrysene	37	U
53-70-3	Dibenzo(a,h)anthracene	37	U
132-64-9	Dibenzofuran	37	U
84-74-2	Di-n-butyl phthalate	37	U
95-50-1	1,2-Dichlorobenzene	37	U
541-73-1	1,3-Dichlorobenzene	37	U
106-46-7	1,4-Dichlorobenzene	37	U
91-94-1	3,3'-Dichlorobenzidine	37	U
120-83-2	2,4-Dichlorophenol	30	U
84-66-2	Diethyl phthalate	37	U
105-67-9	2,4-Dimethylphenol	3200	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000056
Client No.

MW00-15 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1770007DL

Sample wt/vol: 1070.0 (g/mL) ML Lab File ID: W44819.MSQ

Level: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/25/2001

Injection Volume: 1.00 (uL) Dilution Factor: 40.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	37	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	37	U
606-20-2	2,6-Dinitrotoluene	37	U
117-84-0	Di-n-octyl phthalate	37	U
206-44-0	Fluoranthene	37	U
86-73-7	Fluorene	37	U
118-74-1	Hexachlorobenzene	37	U
87-68-3	Hexachlorobutadiene	37	U
77-47-4	Hexachlorocyclopentadiene	37	U
67-72-1	Hexachloroethane	30	U
193-39-5	Indeno(1,2,3-cd)pyrene	37	U
78-59-1	Isophorone	37	U
91-57-6	2-Methylnaphthalene	340	
95-48-7	2-Methylphenol	2500	
106-44-5	4-Methylphenol	4600	
91-20-3	Naphthalene	4100	
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	37	U
88-75-5	2-Nitrophenol	37	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	37	U
621-64-7	N-Nitroso-Di-n-propylamine	37	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	40	
108-95-2	Phenol	1800	
129-00-0	Pyrene	37	U
120-82-1	1,2,4-Trichlorobenzene	26	U
95-95-4	2,4,5-Trichlorophenol	37	U

NATIONAL FUEL GAS - BUFFALO PROJECT

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000057

Client No.

MW00-15 DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1770007DL

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: W44819.MSQ

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/16/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/25/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	37	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-15

Contract: NY01-143

Lab Code: STLBFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7700

Matrix (soil/water): WATER Lab Sample ID: AD115541

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11200		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	10.1			P
7440-39-3	Barium	147			P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	628000		E	P
7440-47-3	Chromium	16.8			P
7440-48-4	Cobalt	16.9			P
7440-50-8	Copper	23.1			P
7439-89-6	Iron	16900			P
7439-92-1	Lead	20.1			P
7439-95-4	Magnesium	92100			P
7439-96-5	Manganese	1740			P
7440-02-0	Nickel	15.7			P
7440-09-7	Potassium	32300		N	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	356000		E	P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	21.2			P
7440-66-6	Zinc	95.9			P

Color Before: BROWN Clarity Before: CLOUDY Texture: LIGHT

Color After: YELLOW Clarity After: CLOUDY Artifacts: _____

Comments: _____

Wet Chemistry Analysis

Client Sample No.

MW00-15

ab Name: STL Buffalo Contract: _____

a' de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1770007

Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.13				9010	08/17/2001
Cyanide - Total	UG/L	50.0	U			9010	08/17/2001

omments:

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-16

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768902

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3640.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	790	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	6.1	J
75-15-0	Carbon Disulfide	8.1	
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	1.6	J
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	340	E
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	230	E
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	1200	E
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	2200	E

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-16 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768902DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3674.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	80	U
71-43-2	Benzene	2400	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	16	U
78-93-3	2-Butanone	40	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	16	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
540-59-0	1,2-Dichloroethene (Total)	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
100-41-4	Ethylbenzene	320	D
591-78-6	2-Hexanone	100	U
75-09-2	Methylene chloride	16	U
108-10-1	4-Methyl-2-pentanone	40	U
100-42-5	Styrene	280	D
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	2700	D
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	10	U
108-05-4	Vinyl acetate	16	U
75-01-4	Vinyl chloride	16	U
1330-20-7	Total Xylenes	2800	D

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-16

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768902

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48660.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	80	
208-96-8	Acenaphthylene	190	
120-12-7	Anthracene	93	
56-55-3	Benzo(a)anthracene	71	
205-99-2	Benzo(b)fluoranthene	42	
207-08-9	Benzo(k)fluoranthene	21	
191-24-2	Benzo(ghi)perylene	11	
50-32-8	Benzo(a)pyrene	41	
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	54	
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	230	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	1300	

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000037
Client No.

MW00-16

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768902

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48660.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	150	
86-73-7	Fluorene	270	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	14	
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	640	
95-48-7	2-Methylphenol	900	
106-44-5	4-Methylphenol	1600	E
91-20-3	Naphthalene	3400	BE
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	380	
108-95-2	Phenol	320	
129-00-0	Pyrene	130	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000038
Client No.

MW00-16

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768902

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48660.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000039

Client No.

MW00-16 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768902DL

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48707.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 40.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	79	
208-96-8	Acenaphthylene	200	
120-12-7	Anthracene	89	
56-55-3	Benzo(a)anthracene	68	
205-99-2	Benzo(b)fluoranthene	33	
207-08-9	Benzo(k)fluoranthene	28	U
191-24-2	Benzo(ghi)perylene	28	U
50-32-8	Benzo(a)pyrene	32	
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	28	U
111-91-1	Bis(2-chloroethoxy) methane	28	U
111-44-4	Bis(2-chloroethyl) ether	28	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	28	U
117-81-7	Bis(2-ethylhexyl) phthalate	28	U
101-55-3	4-Bromophenyl phenyl ether	28	U
85-68-7	Butyl benzyl phthalate	28	U
106-47-8	4-Chloroaniline	28	U
59-50-7	4-Chloro-3-methylphenol	28	U
91-58-7	2-Chloronaphthalene	28	U
95-57-8	2-Chlorophenol	28	U
7005-72-3	4-Chlorophenyl phenyl ether	28	U
218-01-9	Chrysene	51	
53-70-3	Dibenzo(a,h)anthracene	28	U
132-64-9	Dibenzofuran	250	
84-74-2	Di-n-butyl phthalate	28	U
95-50-1	1,2-Dichlorobenzene	28	U
541-73-1	1,3-Dichlorobenzene	28	U
106-46-7	1,4-Dichlorobenzene	28	U
91-94-1	3,3'-Dichlorobenzidine	28	U
120-83-2	2,4-Dichlorophenol	28	U
84-66-2	Diethyl phthalate	28	U
105-67-9	2,4-Dimethylphenol	1400	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040

Client No.

MW00-16 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768902DL

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48707.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 40.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	28	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	28	U
606-20-2	2,6-Dinitrotoluene	28	U
117-84-0	Di-n-octyl phthalate	28	U
206-44-0	Fluoranthene	160	
86-73-7	Fluorene	290	
118-74-1	Hexachlorobenzene	28	U
87-68-3	Hexachlorobutadiene	28	U
77-47-4	Hexachlorocyclopentadiene	28	U
67-72-1	Hexachloroethane	28	U
193-39-5	Indeno(1,2,3-cd)pyrene	28	U
78-59-1	Isophorone	28	U
91-57-6	2-Methylnaphthalene	720	
95-48-7	2-Methylphenol	640	
106-44-5	4-Methylphenol	1300	
91-20-3	Naphthalene	4700	B
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	28	U
88-75-5	2-Nitrophenol	28	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	28	U
621-64-7	N-Nitroso-Di-n-propylamine	28	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	430	
108-95-2	Phenol	190	
129-00-0	Pyrene	120	
120-82-1	1,2,4-Trichlorobenzene	28	U
95-95-4	2,4,5-Trichlorophenol	28	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-16 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768902DL

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48707.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 40.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	28	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-16

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115237

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	40600		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	158		N	P
7440-39-3	Barium	448		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	2.6		N	P
7440-70-2	Calcium	433000		E	P
7440-47-3	Chromium	53.6		N	P
7440-48-4	Cobalt	29.4		N	P
7440-50-8	Copper	76.3		N	P
7439-89-6	Iron	59800		E	P
7439-92-1	Lead	118		N	P
7439-95-4	Magnesium	78200		NE	P
7439-96-5	Manganese	1330		NE	P
7440-02-0	Nickel	70.4		N	P
7440-09-7	Potassium	12200		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	7.5			CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	22900			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	74.5		N	P
7440-66-6	Zinc	474		N	P

Color Before: BLACK Clarity Before: CLOUDY Texture: MEDIUM

Color After: BROWN Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000096

Client Sample No.

MW00-16

b Name: STL Buffalo Contract: _____

b de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1768902

Solids: 0.0 Date Samp/Recv: 08/08/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/L	0.018				9010	08/14/2001
yanide - Total	UG/L	5.0	U			9010	08/14/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-17

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768901

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F3639.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	72	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	26	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	260	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000030

Client No.

MW00-17

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768901

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48659.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.7	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	6	J

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-17

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768901

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48659.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	8	J
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	250	BE
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	2	J
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000032

Client No.

MW00-17

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768901

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48659.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

MW00-17 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768901DL

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48706.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034

Client No.

MW00-17 DL

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768901DL

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48706.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

Injection Volume: 1.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	3	J
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	320	B
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

Client No.

MW00-17 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768901DL

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48706.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

njection Volume: 1.00 (uL) Dilution Factor: 5.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-17

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115236

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31700		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	16.3		N	P
7440-39-3	Barium	797		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.9		N	P
7440-70-2	Calcium	641000		E	P
7440-47-3	Chromium	45.3		N	P
7440-48-4	Cobalt	21.0		N	P
7440-50-8	Copper	91.4		N	P
7439-89-6	Iron	66500		E	P
7439-92-1	Lead	95.7		N	P
7439-95-4	Magnesium	163000		NE	P
7439-96-5	Manganese	1580		NE	P
7440-02-0	Nickel	43.3		N	P
7440-09-7	Potassium	13400		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	104000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	66.4		N	P
7440-66-6	Zinc	421		N	P

Color Before: BROWN Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000095
Client Sample No.

MW00-17

b Name: STL Buffalo Contract: _____

b de: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix (soil/water): WATER Lab Sample ID: A1768901

Solids: 0.0 Date Samp/Recv: 08/08/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
menable Cyanide	MG/L	0.024				9010	08/15/2001
yanide - Total	UG/L	5.0	U			9010	08/14/2001

mments:

METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000023

Client No.

MW00-18

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768908

ample wt/vol: 5.00 (g/mL) ML Lab File ID: F3646.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

C Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000063
Client No.

MW00-18

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768908

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48666.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.5	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000064

Client No.

MW00-18

a' me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768908

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48666.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000065

Client No.

MW00-18

b ..me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1768908

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48666.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 1.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

TT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-18

ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

atrix (soil/water): WATER Lab Sample ID: AD115243

evel (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	42900		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	47.4		N	P
7440-39-3	Barium	590		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	2.4		N	P
7440-70-2	Calcium	294000		E	P
7440-47-3	Chromium	66.6		N	P
7440-48-4	Cobalt	28.9		N	P
7440-50-8	Copper	227		N	P
7439-89-6	Iron	82800		E	P
7439-92-1	Lead	805		N	P
7439-95-4	Magnesium	110000		NE	P
7439-96-5	Manganese	2050		NE	P
7440-02-0	Nickel	70.4		N	P
7440-09-7	Potassium	20900		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	5.3			CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	209000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	114		N	P
7440-66-6	Zinc	471		N	P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

Client Sample No.

MW00-18

Lab: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Lab Sample ID: A1768908

% Solids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.022				9010	08/15/2001
Cyanide - Total	UG/L	5.0	U			9010	08/15/2001

Comments:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

MW00-19

ab .me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768909

ample wt/vol: 5.00 (g/mL) ML Lab File ID: F3647.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

: Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	15	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000066

Client No.

MW00-19

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768909

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48667.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	31	
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.8	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	0.6	J
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000067

Client No.

MW00-19

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1768909

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48667.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	0.7	BJ
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000068

Client No.

MW00-19

b ' ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1768909

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48667.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

' Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: MW00-19

Contract: NY01-143

Lab Code: STL BFLO Case No.: _____ SAS No.: _____ SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115244

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9690		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U	N	P
7440-39-3	Barium	290		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.0	U	N	P
7440-70-2	Calcium	204000		E	P
7440-47-3	Chromium	12.5		N	P
7440-48-4	Cobalt	5.0	U	N	P
7440-50-8	Copper	11.7		N	P
7439-89-6	Iron	10400		E	P
7439-92-1	Lead	17.4		N	P
7439-95-4	Magnesium	35600		NE	P
7439-96-5	Manganese	582		NE	P
7440-02-0	Nickel	10.9		N	P
7440-09-7	Potassium	18300		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	301000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	20.7		N	P
7440-66-6	Zinc	69.2		N	P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts: _____

Comments: _____

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000103

Client Sample No.

MW00-19

) Name: STL Buffalo Contract: _____

) (: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): WATER Lab Sample ID: A1768909

olids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/L	0.048				9010	08/15/2001
anide - Total	UG/L	5.0	U			9010	08/15/2001

ents:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000022

Client No.

MW00-20

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768907

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3645.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	20	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	18	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	1.9	J
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	6.9	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	57	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000057

Client No.

MW00-20

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768907

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48665.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	5	J
208-96-8	Acenaphthylene	4	J
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	0.6	J
205-99-2	Benzo(b)fluoranthene	0.5	J
207-08-9	Benzo(k)fluoranthene	0.2	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	0.4	J
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	2	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	0.4	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	3	J
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	2	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000058

Client No.

MW00-20

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768907

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48665.RR

evel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	1	J
86-73-7	Fluorene	3	J
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	23	
95-48-7	2-Methylphenol	0.3	J
106-44-5	4-Methylphenol	2	J
91-20-3	Naphthalene	170	BE
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	2	J
108-95-2	Phenol	10	U
129-00-0	Pyrene	1	J
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000059

Client No.

MW00-20

b ' ne: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1768907

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48665.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000060

Client No.

MW00-20 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768907DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48709.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000061

Client No.

MW00-20 DL

b `` me: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1768907DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48709.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

ection Volume: 1.00 (uL) Dilution Factor: 5.00

' Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	21	
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	230	B
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000062

Client No.

MW00-20 DL

b Name: STL Buffalo Contract: _____

b Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1768907DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48709.RR

vel: (low/med) LOW Date Samp/Recv: 08/09/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

: Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-20

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115242

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12000		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	7.0	U	N	P
7440-39-3	Barium	151		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.0	U	N	P
7440-70-2	Calcium	338000		E	P
7440-47-3	Chromium	15.5		N	P
7440-48-4	Cobalt	7.9		N	P
7440-50-8	Copper	19.7		N	P
7439-89-6	Iron	31800		E	P
7439-92-1	Lead	21.2		N	P
7439-95-4	Magnesium	39300		NE	P
7439-96-5	Manganese	677		NE	P
7440-02-0	Nickel	15.6		N	P
7440-09-7	Potassium	30300		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	296000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	22.6		N	P
7440-66-6	Zinc	112		N	P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000101

Client Sample No.

MW00-20

) Name: STL Buffalo Contract: _____

) e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): WATER Lab Sample ID: A1768907

olids: 0.0 Date Samp/Recv: 08/09/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/L	0.15				9010	08/15/2001
anide - Total	UG/L	5.0	U			9010	08/15/2001

nents:

FORM I - WC

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

MW00-22

a me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768903

ample wt/vol: 5.00 (g/mL) ML Lab File ID: F3675.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.00

oil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	25	U
71-43-2	Benzene	160	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (Total)	3.2	J
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	69	
591-78-6	2-Hexanone	10	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	2.0	J
108-88-3	Toluene	27	
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	1.4	J
108-05-4	Vinyl acetate	10	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	200	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000042
Client No.

MW00-22

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768903

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48661.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	53	
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	170	
56-55-3	Benzo(a)anthracene	25	
205-99-2	Benzo(b)fluoranthene	22	
207-08-9	Benzo(k)fluoranthene	8	J
191-24-2	Benzo(ghi)perylene	6	J
50-32-8	Benzo(a)pyrene	20	
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	23	
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	99	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000043

Client No.

MW00-22

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768903

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48661.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	83	
86-73-7	Fluorene	90	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	8	J
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	190	
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	1200	B
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	180	
108-95-2	Phenol	10	U
129-00-0	Pyrene	62	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000044

Client No.

MW00-22

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768903

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48661.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

IT CORPORATION

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-22

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115238

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12600		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	26.0		N	P
7440-39-3	Barium	138		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	1.0	U	N	P
7440-70-2	Calcium	360000		E	P
7440-47-3	Chromium	19.0		N	P
7440-48-4	Cobalt	8.0		N	P
7440-50-8	Copper	18.6		N	P
7439-89-6	Iron	20700		E	P
7439-92-1	Lead	31.3		N	P
7439-95-4	Magnesium	43500		NE	P
7439-96-5	Manganese	453		NE	P
7440-02-0	Nickel	17.0		N	P
7440-09-7	Potassium	13100		N	P
7782-49-2	Selenium	10.0	U	N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	87000			P
7440-28-0	Thallium	20.0	U	N	P
7440-62-2	Vanadium	36.6		N	P
7440-66-6	Zinc	119		N	P

Color Before: GRAY Clarity Before: CLOUDY Texture: LIGHT

Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000097

Client Sample No.

MW00-22

) Name: STL Buffalo Contract: _____

) C e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix (soil/water): WATER Lab Sample ID: A1768903

olids: 0.0 Date Samp/Recv: 08/08/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/L	0.0050	U			9010	08/14/2001
anide - Total	UG/L	5.0	U			9010	08/14/2001

nents:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000018

Client No.

MW00-23

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) WATER Lab Sample ID: A1768904

ımple wt/vol: 5.00 (g/mL) ML Lab File ID: F3676.RR

ıvel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/15/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 200.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	800	U
71-43-2	Benzene	95000	E
75-27-4	Bromodichloromethane	40	U
75-25-2	Bromoform	40	U
74-83-9	Bromomethane	160	U
78-93-3	2-Butanone	400	U
75-15-0	Carbon Disulfide	160	U
56-23-5	Carbon Tetrachloride	160	U
108-90-7	Chlorobenzene	160	U
75-00-3	Chloroethane	160	U
67-66-3	Chloroform	40	U
74-87-3	Chloromethane	160	U
124-48-1	Dibromochloromethane	40	U
75-34-3	1,1-Dichloroethane	160	U
107-06-2	1,2-Dichloroethane	160	U
75-35-4	1,1-Dichloroethene	160	U
540-59-0	1,2-Dichloroethene (Total)	160	U
78-87-5	1,2-Dichloropropane	160	U
10061-01-5	cis-1,3-Dichloropropene	160	U
10061-02-6	trans-1,3-Dichloropropene	160	U
100-41-4	Ethylbenzene	1700	
591-78-6	2-Hexanone	1000	U
75-09-2	Methylene chloride	240	
108-10-1	4-Methyl-2-pentanone	400	U
100-42-5	Styrene	6500	
79-34-5	1,1,2,2-Tetrachloroethane	160	U
127-18-4	Tetrachloroethene	160	U
108-88-3	Toluene	49000	E
71-55-6	1,1,1-Trichloroethane	160	U
79-00-5	1,1,2-Trichloroethane	160	U
79-01-6	Trichloroethene	100	U
108-05-4	Vinyl acetate	160	U
75-01-4	Vinyl chloride	160	U
1330-20-7	Total Xylenes	7900	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000019

Client No.

MW00-23 DL

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768904DL

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F3700.RR

vel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 08/16/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 800.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	3200	U
71-43-2	Benzene	110000	D
75-27-4	Bromodichloromethane	160	U
75-25-2	Bromoform	160	U
74-83-9	Bromomethane	640	U
78-93-3	2-Butanone	1600	U
75-15-0	Carbon Disulfide	640	U
56-23-5	Carbon Tetrachloride	640	U
108-90-7	Chlorobenzene	640	U
75-00-3	Chloroethane	640	U
67-66-3	Chloroform	160	U
74-87-3	Chloromethane	640	U
124-48-1	Dibromochloromethane	160	U
75-34-3	1,1-Dichloroethane	640	U
107-06-2	1,2-Dichloroethane	640	U
75-35-4	1,1-Dichloroethene	640	U
540-59-0	1,2-Dichloroethene (Total)	640	U
78-87-5	1,2-Dichloropropane	640	U
10061-01-5	cis-1,3-Dichloropropene	640	U
10061-02-6	trans-1,3-Dichloropropene	640	U
100-41-4	Ethylbenzene	1700	D
591-78-6	2-Hexanone	4000	U
75-09-2	Methylene chloride	640	U
108-10-1	4-Methyl-2-pentanone	1600	U
100-42-5	Styrene	5700	D
79-34-5	1,1,2,2-Tetrachloroethane	640	U
127-18-4	Tetrachloroethene	640	U
108-88-3	Toluene	52000	D
71-55-6	1,1,1-Trichloroethane	640	U
79-00-5	1,1,2-Trichloroethane	640	U
79-01-6	Trichloroethene	400	U
108-05-4	Vinyl acetate	640	U
75-01-4	Vinyl chloride	640	U
1330-20-7	Total Xylenes	7200	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000045

Client No.

MW00-23

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1768904

Sample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48662.RR

Level: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

Injection Volume: 1.00 (uL) Dilution Factor: 10.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	28	
208-96-8	Acenaphthylene	140	
120-12-7	Anthracene	28	
56-55-3	Benzo(a)anthracene	7	J
205-99-2	Benzo(b)fluoranthene	3	J
207-08-9	Benzo(k)fluoranthene	0.6	J
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	5	J
65-85-0	Benzoic acid	1000	
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	6	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	37	
105-67-9	2,4-Dimethylphenol	820	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000046

Client No.

MW00-23

ab ame: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768904

ample wt/vol: 1060.0 (g/mL) ML Lab File ID: X48662.RR

evel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

oncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

njection Volume: 1.00 (uL) Dilution Factor: 10.00

PC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	14	
86-73-7	Fluorene	44	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	620	
95-48-7	2-Methylphenol	1000	
106-44-5	4-Methylphenol	1200	
91-20-3	Naphthalene	4200	BE
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	13	J
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	90	
108-95-2	Phenol	800	
129-00-0	Pyrene	36	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000047

Client No.

MW00-23

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768904

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48662.RR

vel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/17/2001

jection Volume: 1.00 (uL) Dilution Factor: 10.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000048
Client No.

MW00-23 DL

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768904DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48708.RR

vel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	28	U
208-96-8	Acenaphthylene	120	
120-12-7	Anthracene	28	U
56-55-3	Benzo(a)anthracene	28	U
205-99-2	Benzo(b)fluoranthene	28	U
207-08-9	Benzo(k)fluoranthene	28	U
191-24-2	Benzo(ghi)perylene	28	U
50-32-8	Benzo(a)pyrene	28	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	28	U
111-91-1	Bis(2-chloroethoxy) methane	28	U
111-44-4	Bis(2-chloroethyl) ether	28	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	28	U
117-81-7	Bis(2-ethylhexyl) phthalate	28	U
101-55-3	4-Bromophenyl phenyl ether	28	U
85-68-7	Butyl benzyl phthalate	28	U
106-47-8	4-Chloroaniline	28	U
59-50-7	4-Chloro-3-methylphenol	28	U
91-58-7	2-Chloronaphthalene	28	U
95-57-8	2-Chlorophenol	28	U
7005-72-3	4-Chlorophenyl phenyl ether	28	U
218-01-9	Chrysene	28	U
53-70-3	Dibenzo(a,h)anthracene	28	U
132-64-9	Dibenzofuran	28	U
84-74-2	Di-n-butyl phthalate	28	U
95-50-1	1,2-Dichlorobenzene	28	U
541-73-1	1,3-Dichlorobenzene	28	U
106-46-7	1,4-Dichlorobenzene	28	U
91-94-1	3,3'-Dichlorobenzidine	28	U
120-83-2	2,4-Dichlorophenol	28	U
84-66-2	Diethyl phthalate	28	U
105-67-9	2,4-Dimethylphenol	640	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000049

Client No.

MW00-23 DL

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768904DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48708.RR

vel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	28	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	28	U
606-20-2	2,6-Dinitrotoluene	28	U
117-84-0	Di-n-octyl phthalate	28	U
206-44-0	Fluoranthene	28	U
86-73-7	Fluorene	28	U
118-74-1	Hexachlorobenzene	28	U
87-68-3	Hexachlorobutadiene	28	U
77-47-4	Hexachlorocyclopentadiene	28	U
67-72-1	Hexachloroethane	28	U
193-39-5	Indeno(1,2,3-cd)pyrene	28	U
78-59-1	Isophorone	28	U
91-57-6	2-Methylnaphthalene	520	
95-48-7	2-Methylphenol	660	
106-44-5	4-Methylphenol	720	
91-20-3	Naphthalene	5200	B
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	28	U
88-75-5	2-Nitrophenol	28	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	28	U
621-64-7	N-Nitroso-Di-n-propylamine	28	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	78	
108-95-2	Phenol	470	
129-00-0	Pyrene	24	J
120-82-1	1,2,4-Trichlorobenzene	28	U
95-95-4	2,4,5-Trichlorophenol	28	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000050

Client No.

MW00-23 DL

ab ~ me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1768904DL

mple wt/vol: 1060.0 (g/mL) ML Lab File ID: X48708.RR

vel: (low/med) LOW Date Samp/Recv: 08/08/2001 08/09/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 08/14/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/2001

jection Volume: 1.00 (uL) Dilution Factor: 40.00

C Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	28	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW00-23

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-7689

Matrix (soil/water): WATER Lab Sample ID: AD115239

Level (low/med): LOW Date Received: 8/9/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5530		N	P
7440-36-0	Antimony	20.0	U	N	P
7440-38-2	Arsenic	31.9		N	P
7440-39-3	Barium	222		NE	P
7440-41-7	Beryllium	5.0	U	N	P
7440-43-9	Cadmium	3.8		N	P
7440-70-2	Calcium	388000		E	P
7440-47-3	Chromium	14.0		N	P
7440-48-4	Cobalt	19.7		N	P
7440-50-8	Copper	52.8		N	P
7439-89-6	Iron	231000		E	P
7439-92-1	Lead	79.8		N	P
7439-95-4	Magnesium	133000		NE	P
7439-96-5	Manganese	1710		NE	P
7440-02-0	Nickel	27.2		N	P
7440-09-7	Potassium	59500		N	P
7782-49-2	Selenium	11.5		N	P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	112000			P
7440-28-0	Thallium	41.7		N	P
7440-62-2	Vanadium	33.2		N	P
7440-66-6	Zinc	109		N	P

Color Before: ORANGE Clarity Before: CLOUDY Texture: LIGHT

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000098

Client Sample No.

MW00-23

ɔ Name: STL Buffalo Contract: _____

ɔ .e: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix (soil/water): WATER Lab Sample ID: A1768904

Solids: 0.0 Date Samp/Recv: 08/08/2001 08/09/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
enable Cyanide	MG/L	0.035				9010	08/15/2001
anide - Total	UG/L	5.0	U			9010	08/14/2001

ments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000013

Client No.

MW01-24

o e: STL Buffalo Contract: _____

o Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

trix: (soil/water) WATER Lab Sample ID: A1940401

mple wt/vol: 5.00 (g/mL) ML Lab File ID: F4710.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: not dec. _____ Heated Purge: N Date Analyzed: 10/04/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

il Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	80	U
71-43-2	Benzene	12	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	40	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	16	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
540-59-0	1,2-Dichloroethene (Total)	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	16	U
591-78-6	2-Hexanone	16	U
75-09-2	Methylene chloride	16	U
108-10-1	4-Methyl-2-pentanone	40	U
100-42-5	Styrene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	16	U
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	10	U
108-05-4	Vinyl acetate	16	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	16	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000024

Client No.

MW01-24

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1940401

ample wt/vol: 1070.0 (g/mL) ML Lab File ID: X49168.RR

evel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	1	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000025

Client No.

MW01-24

ıb ıe: STL Buffalo Contract: _____

ıb Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ıtrix: (soil/water) WATER Lab Sample ID: A1940401

ımple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49168.RR

ıvel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	5	J
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000026

Client No.

MW01-24

) e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1940401

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49168.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

bisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-24

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-9404

Matrix (soil/water): WATER Lab Sample ID: AD118733

Level (low/med): LOW Date Received: 9/28/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	586			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	7.0			P
7440-39-3	Barium	452		E	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	142000		E	P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	4970		E	P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	23200		E	P
7439-96-5	Manganese	1030		E	P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	47700		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	604000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	23.2			P

Color Before: YELLOW Clarity Before: CLEAR Texture: NONE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000048

Client Sample No.

MW01-24

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1940401

Solids: 0.0 Date Samp/Recv: 09/27/2001 09/28/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.0050	U			9010	10/08/2001
Cyanide - Total	UG/L	5.0	U			9010	10/08/2001

mments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000014

Client No.

MW01-25

ab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1940402

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: F4711.RR

Level: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 10/04/2001

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	80	U
71-43-2	Benzene	12	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	40	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	16	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
540-59-0	1,2-Dichloroethene (Total)	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	16	U
591-78-6	2-Hexanone	16	U
75-09-2	Methylene chloride	16	U
108-10-1	4-Methyl-2-pentanone	40	U
100-42-5	Styrene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	16	U
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	10	U
108-05-4	Vinyl acetate	16	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	16	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000027

Client No.

MW01-25

) ...e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940402

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49169.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

bisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	0.5	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000028

Client No.

MW01-25

) . .e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940402

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49169.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

bisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000029

Client No.

MW01-25

) . e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1940402

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49169.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

FORM I - GC/MS BNA

TT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-25

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-9404

Matrix (soil/water): WATER Lab Sample ID: AD118736

Level (low/med): LOW Date Received: 9/28/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	442			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	7.0	U		P
7440-39-3	Barium	69.0		E	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	117000		E	P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	588		E	P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	12500		E	P
7439-96-5	Manganese	95.8		E	P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	8280		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	232000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: NONE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000049

Client Sample No.

MW01-25

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1940402

Solids: 0.0 Date Samp/Recv: 09/27/2001 09/28/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.022				9010	10/08/2001
Cyanide - Total	UG/L	5.0	U			9010	10/08/2001

omments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000015
Client No.

MW01-26

l : STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1940403

ple wt/vol: 5.00 (g/mL) ML Lab File ID: F4712.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

oisture: not dec. _____ Heated Purge: N Date Analyzed: 10/04/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	80	U
71-43-2	Benzene	100	
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	40	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	16	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
540-59-0	1,2-Dichloroethene (Total)	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	41	
591-78-6	2-Hexanone	16	U
75-09-2	Methylene chloride	16	U
108-10-1	4-Methyl-2-pentanone	40	U
100-42-5	Styrene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	59	
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	10	U
108-05-4	Vinyl acetate	16	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	280	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000030

Client No.

MW01-26

) . .e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940403

:ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49170.RR

/el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

foisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

: Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	11	
208-96-8	Acenaphthylene	8	J
120-12-7	Anthracene	4	J
56-55-3	Benzo(a)anthracene	2	J
205-99-2	Benzo(b)fluoranthene	1	J
207-08-9	Benzo(k)fluoranthene	1	J
191-24-2	Benzo(ghi)perylene	0.5	J
50-32-8	Benzo(a)pyrene	1	J
65-85-0	Benzoic acid	2	J
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	1	J
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	2	J
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	21	
84-74-2	Di-n-butyl phthalate	2	J
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	8	J

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000031

Client No.

MW01-26

ab ne: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix: (soil/water) WATER Lab Sample ID: A1940403

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49170.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 1.00

C Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	6	J
86-73-7	Fluorene	9	J
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	J
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	88	
95-48-7	2-Methylphenol	4	J
106-44-5	4-Methylphenol	7	J
91-20-3	Naphthalene	610	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	14	
108-95-2	Phenol	3	J
129-00-0	Pyrene	4	J
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000032

Client No.

MW01-26

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940403

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49170.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

loisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 1.00

: Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000033

Client No.

MW01-26 DL

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940403DL

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49173.RR

rel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

loisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

: Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
50-32-8	Benzo(a)pyrene	10	U
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
132-64-9	Dibenzofuran	15	D
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000034

Client No.

MW01-26 DL

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1940403DL

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49173.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

bisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	69	D
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	860	D
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	D
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000035

Client No.

MW01-26 DL

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) WATER Lab Sample ID: A1940403DL

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49173.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 10.00

Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

I T CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-26

'ontract: NY01-143

ab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-9404

atrix (soil/water): WATER Lab Sample ID: AD118737

evel (low/med): LOW Date Received: 9/28/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5430			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	7.0	U		P
7440-39-3	Barium	183		E	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	186000		E	P
7440-47-3	Chromium	6.9			P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	10.9			P
7439-89-6	Iron	12100		E	P
7439-92-1	Lead	12.6			P
7439-95-4	Magnesium	21600		E	P
7439-96-5	Manganese	469		E	P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	20100		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	204000			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	10.1			P
7440-66-6	Zinc	43.1			P

Color Before: BROWN Clarity Before: CLOUDY Texture: NONE

Color After: GRAY Clarity After: CLOUDY Artifacts:

Co..ents:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000050
Client Sample No.

MW01-26

ab Name: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1940403

Solids: 0.0 Date Samp/Recv: 09/27/2001 09/28/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	0.27				9010	10/08/2001
Cyanide - Total	UG/L	5.0	U			9010	10/08/2001

omments:

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000016
Client No.

MW01-27

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) WATER Lab Sample ID: A1940404

ɱple wt/vol: 5.00 (g/mL) ML Lab File ID: F4713.RR

ɾel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

ɓoisture: not dec. _____ Heated Purge: N Date Analyzed: 10/04/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.00

ɹl Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	80	U
71-43-2	Benzene	8100	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	40	U
75-15-0	Carbon Disulfide	16	U
56-23-5	Carbon Tetrachloride	16	U
108-90-7	Chlorobenzene	16	U
75-00-3	Chloroethane	16	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	16	U
124-48-1	Dibromochloromethane	5.0	U
75-34-3	1,1-Dichloroethane	16	U
107-06-2	1,2-Dichloroethane	16	U
75-35-4	1,1-Dichloroethene	16	U
540-59-0	1,2-Dichloroethene (Total)	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	310	
591-78-6	2-Hexanone	16	U
75-09-2	Methylene chloride	16	U
108-10-1	4-Methyl-2-pentanone	40	U
100-42-5	Styrene	1400	
79-34-5	1,1,2,2-Tetrachloroethane	16	U
127-18-4	Tetrachloroethene	16	U
108-88-3	Toluene	5900	E
71-55-6	1,1,1-Trichloroethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
79-01-6	Trichloroethene	10	U
108-05-4	Vinyl acetate	16	U
75-01-4	Vinyl chloride	5.0	U
1330-20-7	Total Xylenes	5300	

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8260 - TCL VOLATILE ORGANICS
ANALYSIS DATA SHEET

000017

Client No.

MW01-27 DL

ɔ ɜ: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɪrix: (soil/water) WATER Lab Sample ID: A1940404DL

ɲple wt/vol: 5.00 (g/mL) ML Lab File ID: F4732.RR

ɾel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

ɓoisture: not dec. _____ Heated Purge: N Date Analyzed: 10/05/2001

Column: DB-624 ID: 0.25 (mm) Dilution Factor: 80.00

l Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
67-64-1	Acetone	320	U
71-43-2	Benzene	11000	D
75-27-4	Bromodichloromethane	16	U
75-25-2	Bromoform	16	U
74-83-9	Bromomethane	16	U
78-93-3	2-Butanone	160	U
75-15-0	Carbon Disulfide	64	U
56-23-5	Carbon Tetrachloride	64	U
108-90-7	Chlorobenzene	64	U
75-00-3	Chloroethane	64	U
67-66-3	Chloroform	16	U
74-87-3	Chloromethane	64	U
124-48-1	Dibromochloromethane	16	U
75-34-3	1,1-Dichloroethane	64	U
107-06-2	1,2-Dichloroethane	64	U
75-35-4	1,1-Dichloroethene	64	U
540-59-0	1,2-Dichloroethene (Total)	64	U
78-87-5	1,2-Dichloropropane	64	U
10061-01-5	cis-1,3-Dichloropropene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
100-41-4	Ethylbenzene	390	D
591-78-6	2-Hexanone	64	U
75-09-2	Methylene chloride	64	U
108-10-1	4-Methyl-2-pentanone	160	U
100-42-5	Styrene	1700	D
79-34-5	1,1,2,2-Tetrachloroethane	64	U
127-18-4	Tetrachloroethene	64	U
108-88-3	Toluene	8000	D
71-55-6	1,1,1-Trichloroethane	64	U
79-00-5	1,1,2-Trichloroethane	64	U
79-01-6	Trichloroethene	40	U
108-05-4	Vinyl acetate	64	U
75-01-4	Vinyl chloride	16	U
1330-20-7	Total Xylenes	6600	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000036

Client No.

MW01-27

) ... e: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940404

nple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49171.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ncentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

: Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	51	
208-96-8	Acenaphthylene	410	
120-12-7	Anthracene	100	
56-55-3	Benzo(a)anthracene	54	
205-99-2	Benzo(b)fluoranthene	31	
207-08-9	Benzo(k)fluoranthene	33	
191-24-2	Benzo(ghi)perylene	14	
50-32-8	Benzo(a)pyrene	42	
65-85-0	Benzoic acid	50	U
100-51-6	Benzyl alcohol	20	U
111-91-1	Bis(2-chloroethoxy) methane	10	U
111-44-4	Bis(2-chloroethyl) ether	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
117-81-7	Bis(2-ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	46	
53-70-3	Dibenzo(a,h)anthracene	6	J
132-64-9	Dibenzofuran	160	
84-74-2	Di-n-butyl phthalate	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
120-83-2	2,4-Dichlorophenol	10	U
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	8700	E

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000037

Client No.

MW01-27

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A1940404

Sample wt/vol: 1070.0 (g/mL) ML Lab File ID: X49171.RR

Level: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

Injection Volume: 1.00 (uL) Dilution Factor: 5.00

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	10	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
51-28-5	2,4-Dinitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
117-84-0	Di-n-octyl phthalate	10	U
206-44-0	Fluoranthene	150	
86-73-7	Fluorene	160	
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	15	
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	880	E
95-48-7	2-Methylphenol	7400	E
106-44-5	4-Methylphenol	14000	E
91-20-3	Naphthalene	5500	E
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
86-30-6	N-nitrosodiphenylamine	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	300	
108-95-2	Phenol	7400	E
129-00-0	Pyrene	110	
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000038

Client No.

MW01-27

ɔ Name: STL Buffalo Contract: _____

ɔ Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

ɛrix: (soil/water) WATER Lab Sample ID: A1940404

mple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49171.RR

vel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

Moisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ɲcentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

jection Volume: 1.00 (uL) Dilution Factor: 5.00

ɔ Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	10	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000039

Client No.

MW01-27 DL

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940404DL

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49174.RR

rel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 200.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	140	U
208-96-8	Acenaphthylene	260	D
120-12-7	Anthracene	140	U
56-55-3	Benzo(a)anthracene	140	U
205-99-2	Benzo(b)fluoranthene	140	U
207-08-9	Benzo(k)fluoranthene	140	U
191-24-2	Benzo(ghi)perylene	140	U
50-32-8	Benzo(a)pyrene	140	U
65-85-0	Benzoic acid	140	U
100-51-6	Benzyl alcohol	140	U
111-91-1	Bis(2-chloroethoxy) methane	140	U
111-44-4	Bis(2-chloroethyl) ether	140	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	140	U
117-81-7	Bis(2-ethylhexyl) phthalate	140	U
101-55-3	4-Bromophenyl phenyl ether	140	U
85-68-7	Butyl benzyl phthalate	140	U
106-47-8	4-Chloroaniline	140	U
59-50-7	4-Chloro-3-methylphenol	140	U
91-58-7	2-Chloronaphthalene	140	U
95-57-8	2-Chlorophenol	140	U
7005-72-3	4-Chlorophenyl phenyl ether	140	U
218-01-9	Chrysene	140	U
53-70-3	Dibenzo(a,h)anthracene	140	U
132-64-9	Dibenzofuran	110	DJ
84-74-2	Di-n-butyl phthalate	140	U
95-50-1	1,2-Dichlorobenzene	140	U
541-73-1	1,3-Dichlorobenzene	140	U
106-46-7	1,4-Dichlorobenzene	140	U
91-94-1	3,3'-Dichlorobenzidine	140	U
120-83-2	2,4-Dichlorophenol	140	U
84-66-2	Diethyl phthalate	140	U
105-67-9	2,4-Dimethylphenol	11000	D

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000040

Client No.

MW01-27 DL

) Name: STL Buffalo Contract: _____

) Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

:rix: (soil/water) WATER Lab Sample ID: A1940404DL

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49174.RR

rel: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

loisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

ıcentrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 200.00

: Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethyl phthalate	140	U
534-52-1	4,6-Dinitro-2-methylphenol	140	U
51-28-5	2,4-Dinitrophenol	140	U
121-14-2	2,4-Dinitrotoluene	140	U
606-20-2	2,6-Dinitrotoluene	140	U
117-84-0	Di-n-octyl phthalate	140	U
206-44-0	Fluoranthene	140	U
86-73-7	Fluorene	140	U
118-74-1	Hexachlorobenzene	140	U
87-68-3	Hexachlorobutadiene	140	U
77-47-4	Hexachlorocyclopentadiene	140	U
67-72-1	Hexachloroethane	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	140	U
78-59-1	Isophorone	140	U
91-57-6	2-Methylnaphthalene	670	D
95-48-7	2-Methylphenol	12000	D
106-44-5	4-Methylphenol	24000	D
91-20-3	Naphthalene	13000	D
88-74-4	2-Nitroaniline	140	U
99-09-2	3-Nitroaniline	140	U
100-01-6	4-Nitroaniline	140	U
98-95-3	Nitrobenzene	140	U
88-75-5	2-Nitrophenol	140	U
100-02-7	4-Nitrophenol	140	U
86-30-6	N-nitrosodiphenylamine	140	U
621-64-7	N-Nitroso-Di-n-propylamine	140	U
87-86-5	Pentachlorophenol	140	U
85-01-8	Phenanthrene	230	D
108-95-2	Phenol	11000	D
129-00-0	Pyrene	140	U
120-82-1	1,2,4-Trichlorobenzene	140	U
95-95-4	2,4,5-Trichlorophenol	140	U

NATIONAL FUEL GAS - BUFFALO PROJECT
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS
ANALYSIS DATA SHEET

000041

Client No.

MW01-27 DL

Name: STL Buffalo Contract: _____

Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

rix: (soil/water) WATER Lab Sample ID: A1940404DL

ple wt/vol: 1070.0 (g/mL) ML Lab File ID: X49174.RR

el: (low/med) LOW Date Samp/Recv: 09/27/2001 09/28/2001

oisture: _____ decanted: (Y/N) N Date Extracted: 10/02/2001

centrated Extract Volume: 1000 (uL) Date Analyzed: 10/04/2001

ection Volume: 1.00 (uL) Dilution Factor: 200.00

Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
88-06-2	2,4,6-Trichlorophenol	140	U

IT CORPORATION

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW01-27

Contract: NY01-143

Lab Code: STL BFLO Case No.: SAS No.: SDG NO.: A01-9404

Matrix (soil/water): WATER Lab Sample ID: AD118738

Level (low/med): LOW Date Received: 9/28/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	234			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	9.4			P
7440-39-3	Barium	107		E	P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	216000		E	P
7440-47-3	Chromium	4.0			P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	10.0	U		P
7439-89-6	Iron	749		E	P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	23700		E	P
7439-96-5	Manganese	82.6		E	P
7440-02-0	Nickel	10.0	U		P
7440-09-7	Potassium	37700		E	P
7782-49-2	Selenium	10.0	U		P
7439-97-6	Mercury	0.200	U		CV
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	50700			P
7440-28-0	Thallium	20.0	U		P
7440-62-2	Vanadium	22.1			P
7440-66-6	Zinc	20.0	U		P

Color Before: RED Clarity Before: CLEAR Texture: NONE

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

NATIONAL FUEL GAS - BUFFALO PROJECT
Wet Chemistry Analysis

000051
Client Sample No.

MW01-27

ab me: STL Buffalo Contract: _____

ab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

atrix (soil/water): WATER Lab Sample ID: A1940404

Solids: 0.0 Date Samp/Recv: 09/27/2001 09/28/2001

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Amenable Cyanide	MG/L	1.0				9010	10/08/2001
Cyanide - Total	UG/L	25.0	U			9010	10/08/2001

omments: