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Engineering Report

LOVE CANAL ADDITIONAL CREEK SAMPLING AND SANITARY SEWER INSPECTION



Prepared for:
New York State
Department of
Environmental Conservation
50 Wolf Road, Albany, New York 12233
Henry G. Williams, *Commissioner*

Division of Solid and Hazardous Waste
Norman H. Nosenchuck, P.E., *Director*
NYSDEC Amendment To Contract No. D-000303

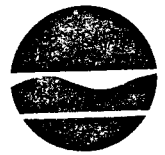
June 1987
Project: 266-30-9

**MALCOLM
PIRNIE**

ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

OCT 28 1987



Thomas C. Jorling
Commissioner

Mr. John Tygert
New York State Department
of Environmental Conservation
Regional Office
600 Delaware Avenue
Buffalo, New York 14202

RE: Love Canal Additional Creek Sampling
and Sanitary Sewer Inspection, Love
Canal, Niagara Falls(C), Niagara
County, Site No. 9-32-020

Enclosed is the Engineering Report, Love Canal Additional Creek Sampling
and Sanitary Sewer Inspection, dated June 1987 and prepared by Malcolm Pirnie
Inc., Niagara Falls, New York.

This report is accepted by the New York State Department of Environmental
Conservation.

If you have any questions, please call Mr. Guy T. Bobersky at 518-457-4343.

Sincerely,

Robert W. Schick, P.E.
Supervisor
Western Remediation Section A
Bureau of Western Remediation
Division of Hazardous Waste Remediation

RWS:tav
Enclosure

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

LOVE CANAL ADDITIONAL CREEK SAMPLING
AND SANITARY SEWER INSPECTION

JUNE 1987

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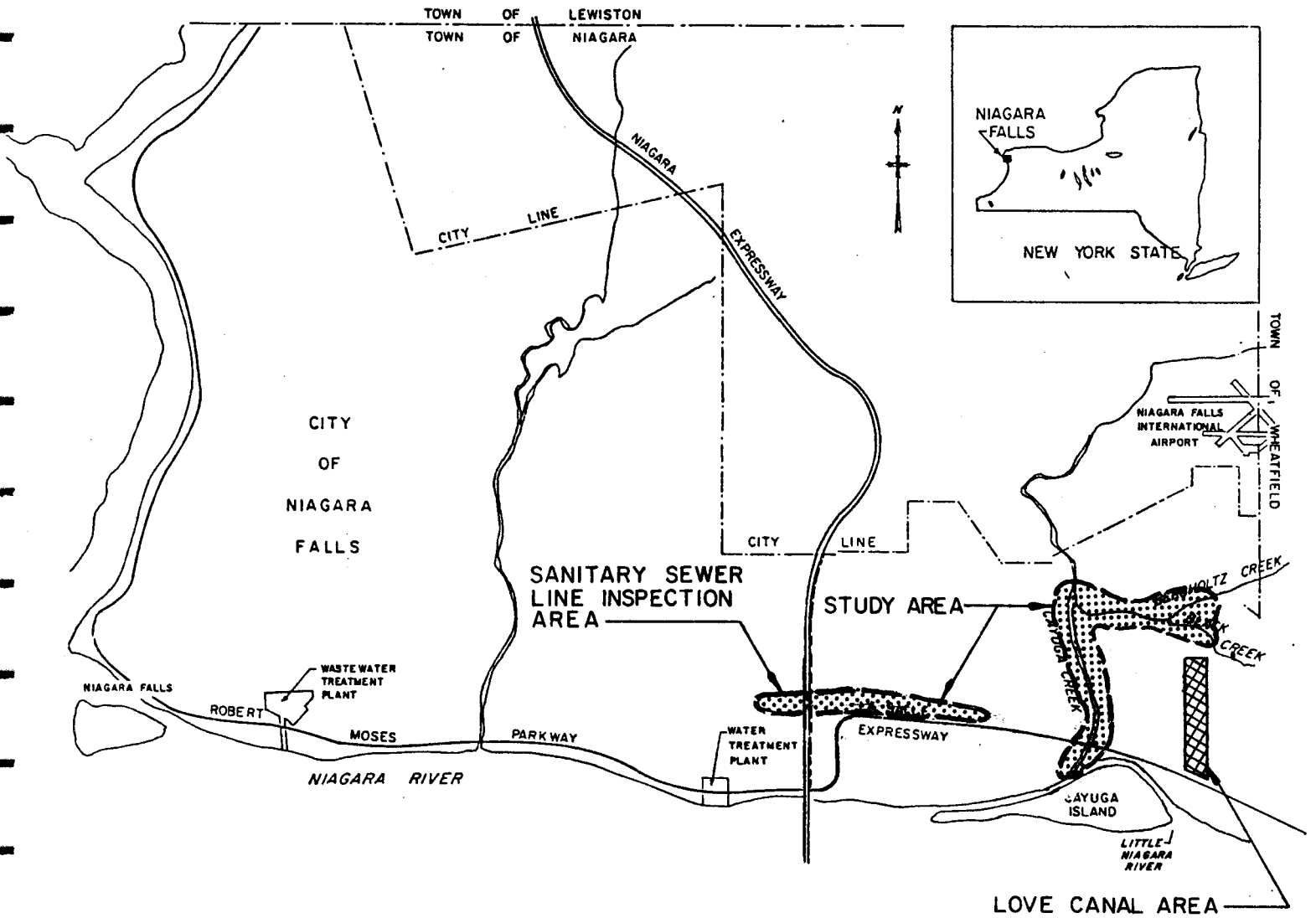
1.0 INTRODUCTION

1.1 Purpose

A sampling and analysis program was undertaken to provide additional information to the New York State Department of Environmental Conservation (NYSDEC) for determining the extent of remedial activities required in creeks and sanitary sewers affected by dioxin at Love Canal, shown in Figure 1. Previous environmental information documents ^(1,2) expressed the need for additional soil and sediment sampling along Bergholtz, Black and Cayuga Creeks, and for additional investigations of sanitary sewers downstream of 81st Street (Lift Station No. 6). The previous studies had detected dioxin in the sediments of Black and Bergholtz Creeks and in the sanitary sewers up to the 81st Street Pump Station. However, several important issues remained unresolved, specifically:

- o Whether dioxin-contaminated soils had been deposited along the banks of Black and Bergholtz Creeks during high stream flow;
- o Whether dioxin-contaminated soils had been used to fill in the former stream channel at Oak Island or deposited on Oak Island during construction of the Cayuga Drive Bridge;
- o The extent of dioxin contamination in Cayuga Creek sediments;
- o The extent of dioxin-contaminated sediment deposition in sanitary sewers between Lift Station 6 and the intersection of 56th Street and John Street; and

-
1. "Site Investigations and Remedial Alternatives: Love Canal.", Malcolm Pirnie, Inc., October 1983.
 2. "Love Canal Sewers and Creeks Remedial Alternatives, Evaluations and Risk Assessment." CH₂M Hill, March 1985.



**LOVE CANAL
ADDITIONAL CREEK SAMPLING
REGIONAL MAP**

- o Whether dioxin contaminated stormwater runoff was entering Bergholtz Creek from the swale behind the 93rd Street School.

Since these investigations were beyond the scope of previous studies, NYSDEC contracted with Malcolm Pirnie, Inc. to provide additional sampling and manhole inspections as an amendment to existing NYSDEC Contract No. D-000303.

1.2 Scope

In March 1986, Malcolm Pirnie submitted a revised Work Plan to NYSDEC which was subsequently approved for implementation. The approved scope of the project included the analysis of samples obtained from:

- o Black and Bergholtz Creek banks;
- o Cayuga Creek bed sediment;
- o Oak Island soils;
- o Stormwater runoff from the 93rd Street School; and
- o Sanitary sewers beyond Lift Station No. 6.

Soil and sediment sampling began in May and was completed in June 1986. The stormwater samples were collected in September 1986. Compositated soil, sediment and runoff samples were shipped to the New York State Department of Health (NYSDOH) for analysis. This report includes a description of field work performed by Malcolm Pirnie and a summary of the laboratory results.

2.0 SAMPLE COLLECTION ACTIVITIES AND OBSERVATIONS

2.1 Sanitary Sewers

A physical inspection of 49 manholes along the main sanitary sewer line from Lift Station No. 6 to the intersection of John and 56th Streets was conducted. Manhole inspection logs are attached in Appendix A. Visual observations indicated that only Manholes 1, 2, 3 and 5 contained a sufficient quantity of deposited sediment for sampling. The location of the manholes which were inspected and where samples were collected is shown in Figure 2.

The degree of sedimentation in manholes generally is controlled by the physical configuration and flow characteristics. Intermittent pump station discharge was observed during the inspection and sampling program. This cyclic variation of flow appeared to prevent the deposition of solids in the sanitary sewers, except in manholes just downstream of the pump station. Manholes 1 through 5 are also older square-shaped structures, in contrast to the downstream manholes (Nos. 6 through 40) which are circular with well-formed flow channels. Higher uniform flows, which would tend to scour the sewers clean, were observed downstream of Manhole No. 5.

Field personnel did not enter the manholes to collect sediment samples. Samples were collected using long-handled stainless steel strainers lowered from the street surface. The sampling equipment was decontaminated following each use to prevent cross-contamination of samples. Details of the sampling protocols are outlined in the approved Work Plan submitted to NYSDEC.

2.2 Black and Bergholtz Creeks

Creek bank samples were obtained along Black and Bergholtz Creeks at the locations shown on Figure 3. The locations of the samples were generally one foot below the top of the bank and one

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SEWERS FOR WHICH
MANHOLES WERE INSPECTED

AREA WHERE SAMPLES
WERE COLLECTED

LOVE CANAL ADDITIONAL CREEK SAMPLING
SANITARY SEWER LOCATION MAP

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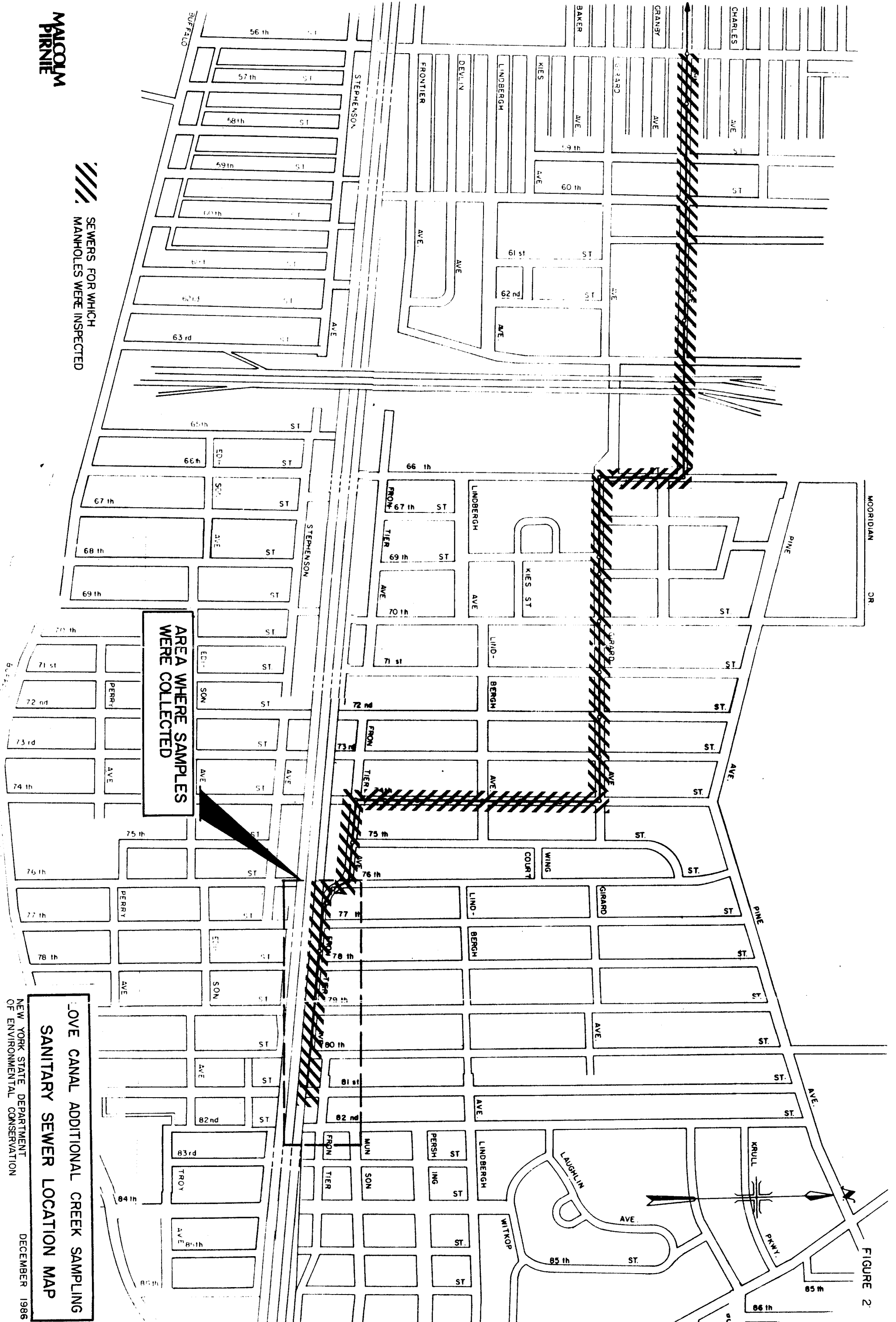
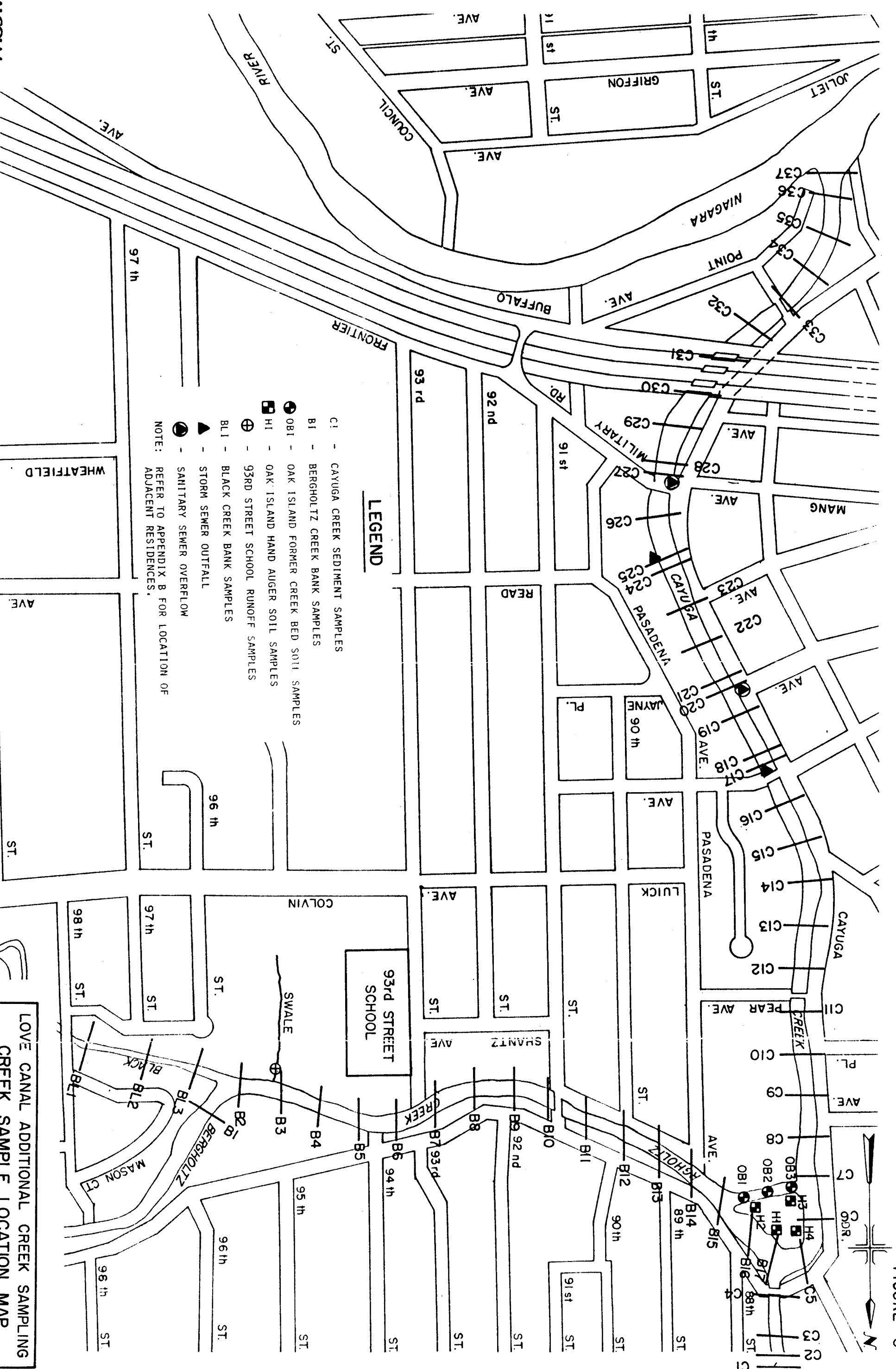


FIGURE 2

FIGURE 3



- LEGEND**
- C1 - CAYUGA CREEK SEDIMENT SAMPLES
 - B1 - BERGHOLTZ CREEK BANK SAMPLES
 - OB1 - OAK ISLAND FORMER CREEK BED SOIL SAMPLES
 - HI - OAK ISLAND HAND AUGER SOIL SAMPLES
 - ⊕ - 93RD STREET SCHOOL RUNOFF SAMPLES
 - BL1 - BLACK CREEK BANK SAMPLES
 - ▲ - STORM SEWER OUTFALL
 - - SANITARY SEWER OVERFLOW
- NOTE: REFER TO APPENDIX B FOR LOCATION OF ADJACENT RESIDENCES.

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LOVE CANAL ADDITIONAL CREEK SAMPLING
CREEK SAMPLE LOCATION MAP

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to two feet above the creek water surface at each cross section. The cross sections were delineated by survey stakes and flagging at intervals of approximately 200 feet. The locations were determined by survey activities performed prior to sampling. Survey notes are attached as Appendix B.

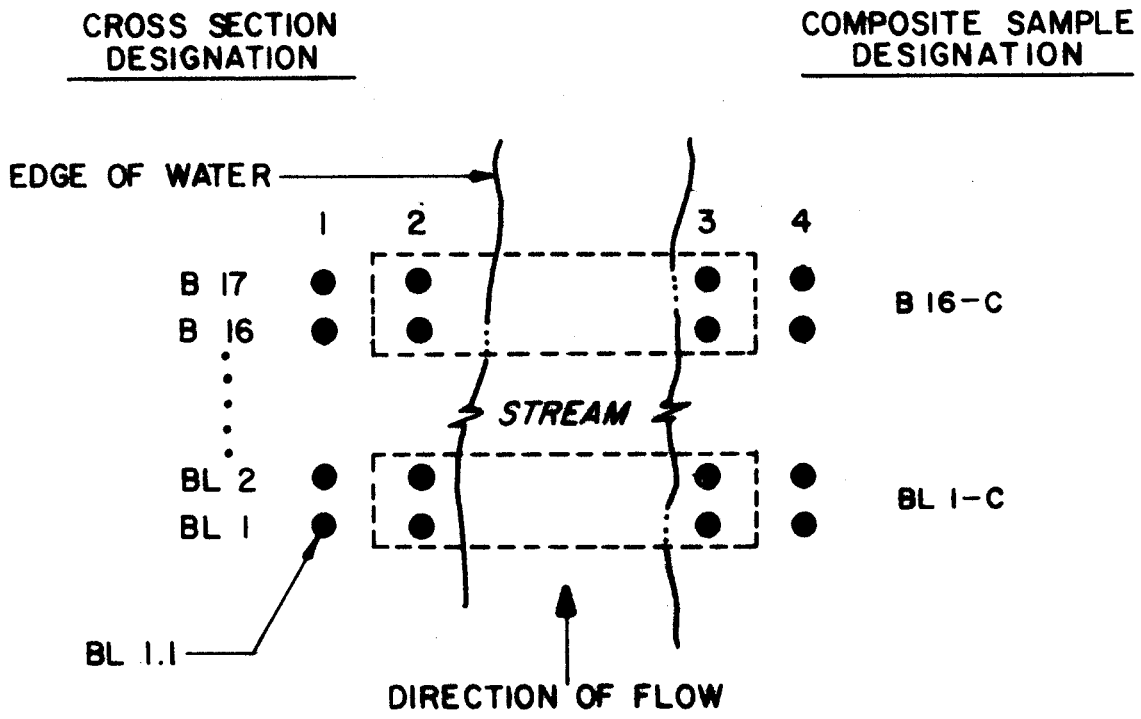
A total of 79 discrete bank soil samples were collected at 17 cross sections along Bergholtz Creek beginning approximately 150 feet upstream of the Bergholtz/Black Creek confluence. Samples were also collected at three locations on Black Creek. Four discrete soil samples were typically collected at each cross section. Soil samples were obtained at a maximum depth of two to three inches using small garden shovels. The samples were placed into mason jars which had been pedigreed and provided by NYSDOH.

Composited samples consisted of the four discrete samples collected from the lower bank elevations for every two adjacent cross sections. The sample compositing and labeling format is illustrated in Figure 4. Ten composite samples were submitted to the NYSDOH for analysis. All individual samples were sent to NYSDOH for future reference or analysis, if required. A detailed discussion of the compositing procedure and Quality Assurance/Quality Control (QA/QC) protocol is included in the Work Plan.

A discrete soil sample could not be obtained at B17.4 because the sample site was on a bridge approach. However, this discrete sample was not required for composite sample B17, therefore, the omission does not affect the analytical results presented in this report.

2.3 Cayuga Creek

The Cayuga Creek bed samples were obtained on May 30 and June 2, 3 and 4, 1986 from the locations shown in Figure 3. Sediment samples were collected at cross sections spaced approximately 200 feet apart along the length of Cayuga Creek, beginning approximately 600 feet above the Bergholtz Creek confluence. Additional sampling was performed about fifty feet downstream of



● DISCRETE BANK SAMPLE

[- - -] INDIVIDUAL SAMPLES USED FOR COMPOSITE

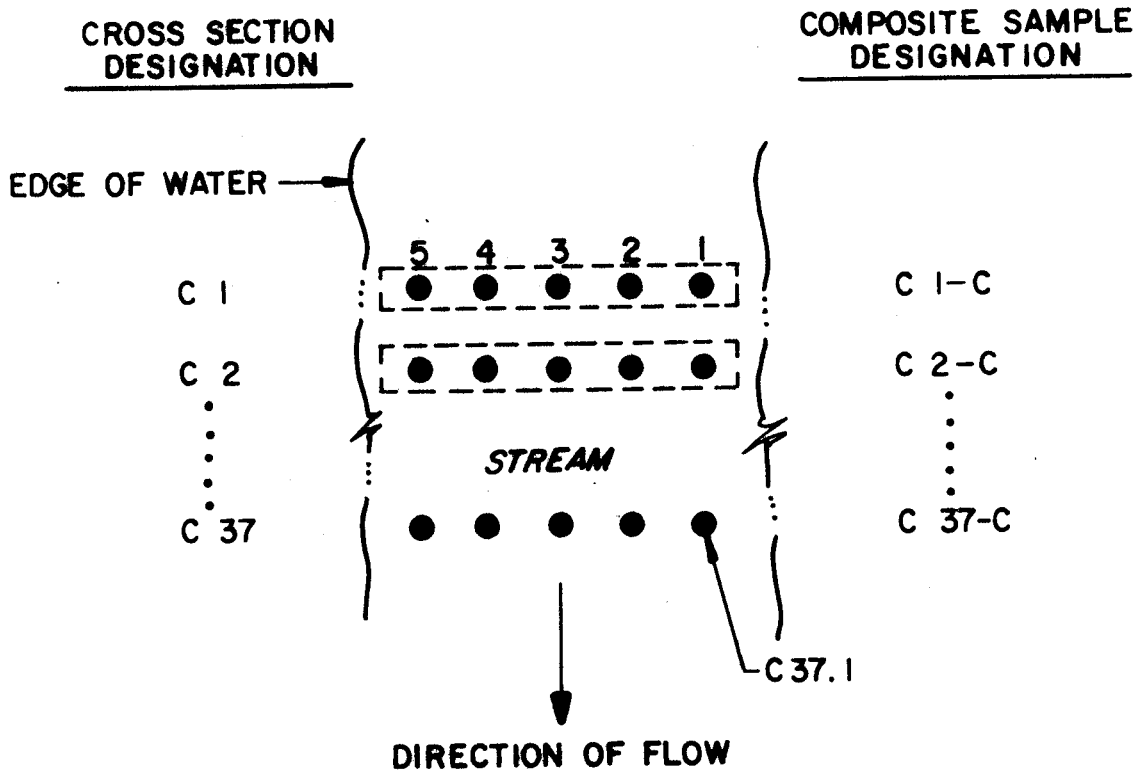
LOVE CANAL ADDITIONAL CREEK SAMPLING
 BANK SAMPLE LABELING AND
 COMPOSITING FORMAT

three storm sewer outfalls (e.g. Lindbergh Avenue Bridge, Read Avenue, and the Pershing Avenue overflow bypass from Lift Station #6), and the Military Road sanitary sewer overflow to Cayuga Creek. Five samples were collected at even intervals across the stream bed at each cross section.

The samples from cross sections C1, C2, C3 and C4 upstream of Cayuga Drive were obtained by wading. All samples in cross sections C5 through C37 were obtained by a crew which operated from a pontoon boat. Sample tubes consisted of 1½-inch steel tubing cut into two-foot sections, with each section used for a single sample. A total of 177 individual cores were taken and 37 cross section composite samples prepared. The creek bed samples were extruded from the sample tubes on June 5 and composited on June 6 and June 9, 1986. All composite samples were shipped to NYSDOH for laboratory analysis. The individual samples were shipped to NYSDOH for future reference or analysis. The compositing and labeling format is illustrated in Figure 5.

Discrete samples could not be obtained at eight of the scheduled sample locations (i.e. locations C31.1, C30.1, C30.2, C29.1, C27.1, C27.3, C27.5 and C3.2). The sample tubes could not penetrate the sediment due to the presence of construction rubble (at cross sections 27, 29, 30 and 31), stones and tree stumps (cross section 3). The composite sample for cross-section 31 was broken during transport to the laboratory, therefore the results are not available.

Work Plan compositing protocols were followed, although the composites prepared for the cross sections where samples could not be collected consisted of proportionately greater portions of the available discrete samples. Cross section C27 is represented by a composite of two samples (i.e. C27.2 and C27.4) which are evenly spaced. Three samples at cross section C30 are more representative of the west side of Cayuga Creek. Cross sections C31, C29 and C3 are each represented by composites of four discrete samples.



● DISCRETE SEDIMENT SAMPLE

□ DISCRETE SAMPLES USED FOR COMPOSITE

LOVE CANAL ADDITIONAL CREEK SAMPLING
CREEK SAMPLE LABELING AND
COMPOSITING FORMAT

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2.4 Oak Island

Soil borings with continuous split spoon sampling were taken at three locations on Oak Island over the former creek bed. The Oak Island soil boring logs are attached as Appendix D. Samples of the apparent former creek bed were collected at borings OB-1 and OB-2. Overburden in each of the three borings was composited as described in the Work Plan. Composite sample OB-1 consisted of four individual two-foot deep samples representing the first eight feet of soil depth. Composite sample OB-2 consisted of five individual samples representative of a ten foot depth. Composite sample OB-3 consisted of two individual samples representative of the boring from two to six feet deep. An individual sample of boring OB-3 to two feet deep could not be obtained because the "soil" was mostly discarded concrete rubble. Drilling was stopped at a six foot depth because of the presence of concrete boulders. Attempts at relocating the boring were unsuccessful for the same reason.

Four hand auger samples were collected on Oak Island per the approved sampling protocol (see Figure 3). However, hand augering at location H-2 could not be completed beyond a 30-inch depth because of buried concrete rubble. Composites representative of the entire depth of each hand-augered boring were submitted for analysis, and individual samples were sent to NYSDOH for future reference or analysis.

2.5 93rd Street School Runoff

Storm water runoff samples were collected from the swale located adjacent to the 93rd Street School as shown on Figure 3. One grab sample was collected at 10:30 a.m. during a storm on September 11, 1986. According to the National Weather Service at Buffalo International Airport, the storm of September 11 began at 3:30 a.m. Approximately 0.24 inches of precipitation was recorded by 10:30 a.m., and approximately 0.32 inches of rainfall

was recorded by 1:00 p.m. A second grab sample was collected during a storm on September 15 at 3:00 p.m. Precipitation was measured at 0.42 inches over the eight-hour storm duration from 7:00 a.m. to 3:00 p.m.

3.0 SUMMARY OF ANALYTICAL RESULTS

3.1 Quality Assurance/Quality Control

All sample containers were supplied by the NYSDOH Laboratory for Organic Analytical Chemistry, Wadsworth Center for Laboratories and Research (WCLR). Sample bottles and teflon liners were prepared and "pedigreed" per WCLR protocol. Chain of custody forms were prepared and maintained throughout the sampling and analytical procedure. All individual and composite samples were returned to WCLR for analysis, along with soil field blanks and samples of hexane rinse.

3.2 Methodology

The analysis of samples for 2,3,7,8-tetrachlorodibenzodioxin (2,3,7,8 TCDD) is a complex series of steps involving the use of solvent extraction, liquid chromatography sample "cleanup", followed by capillary gas chromatography/mass spectrometry. WCLR followed a modified USEPA Method 8280 for the dioxin analysis. Quality control criteria included: initial multi-standard calibration curve, daily calibration standard, chromatographic resolution performance check sample, internal standard recovery, blanks, spiked samples and duplicate samples.

During the course of the analysis, different quality assurance techniques were used. The comparison of results from duplicate samples indicated that the repeatability of the analysis was good. Results obtained from spiked samples were consistent with the spiked values. Several blanks and rinse samples were analyzed and found to contain no detectable dioxin at the stated detection limits.

The samples were analyzed for dioxin and results were reported as 2,3,7,8 TCDD. Analytical results are contained in Appendix C. Concentrations of dioxin in soil and sediment samples were reported in nanograms per gram (ng/g); aqueous samples were reported in nanograms per liter (ng/l).

For this contract, NYSDEC required a minimum sample detection limit of 0.2 ng/g dioxin. In practice, sample detection limits vary depending on the percent recovery of a known spike and the degree to which interferences with 2,3,7,8-TCDD are removed during the extraction (cleanup) process. Analytical results which exceeded the sample detection limit were reported as the measured value. Those samples which did not exceed the sample detection limit were reported as "less than" that limit. This designation indicates that the analytical procedure detected no 2,3,7,8 TCDD at the stated limit.

3.3 Creek Sampling Results

3.3.1 Black and Bergholtz Creek Bank Samples

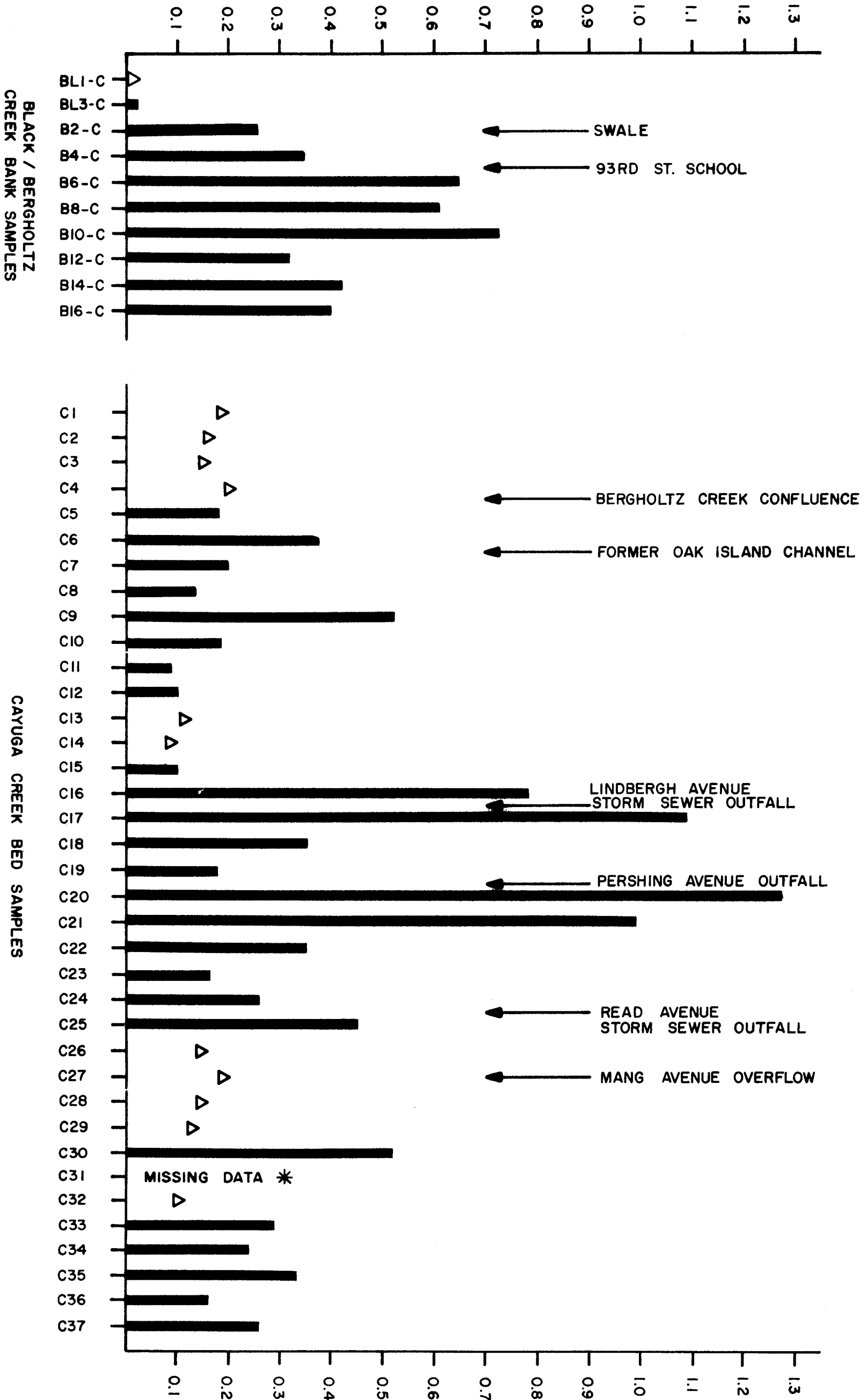
The results of laboratory analysis of Black and Bergholtz Creek bank samples are summarized in Figure 6 and Appendix C. The dioxin concentration in one of the composite bank samples from Black Creek was reported at less than 0.01 ng/g; dioxin in the other sample was measured at 0.02 ng/g.

Figure 6 illustrates that dioxin concentrations increase steadily as one progresses downstream along Bergholtz Creek. The greatest concentrations of dioxin found in Bergholtz Creek bank composite samples were 0.65 ng/g, 0.61 ng/g and 0.73 ng/g, downstream of the 93rd Street School.

3.3.2 Cayuga Creek Sediment Samples

The analytical results obtained from Cayuga Creek sediment samples are also summarized in Figure 6 and Appendix C. The results indicate a possible relationship between dioxin concentrations and storm sewer outfalls to the creek. A regular pattern of increased concentrations in the vicinity of known storm and sanitary sewer discharges can be observed along the entire length of the creek.

DIOXIN AS 2, 3, 7, 8 TCDD (ng/g) *PRG*



△ - REPORTED AS "LESS THAN" DETECTION LIMIT
* COMPOSITE SAMPLE BROKEN DURING SHIPPING

LOVE CANAL ADDITIONAL CREEK SAMPLING
CREEK SAMPLE RESULTS
NEW YORK STATE DEPARTMENT
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DECEMBER 1986

FIGURE 6

The first increase in concentration was detected downstream of the Cayuga/Bergholtz Creek confluence, at a level of 0.38 ng/g. Elevated concentrations of dioxin were also detected at C-16 (0.78 ng/g), C-17 (1.09 ng/g), C-20 (1.28 ng/g) and C-21 (0.99 ng/g). Survey notes which show the exact location of these cross-sections are attached in Appendix B.

The locations of these dioxin "hot spots" are summarized in Figure 7. Shading indicates the degree of relative concentration. It is clear that dioxin is present in most of the sediments in Cayuga Creek and the bank soils of Bergholtz Creek. The concurrence of detectable dioxin with the location of sewer outfalls is also illustrated in this figure.

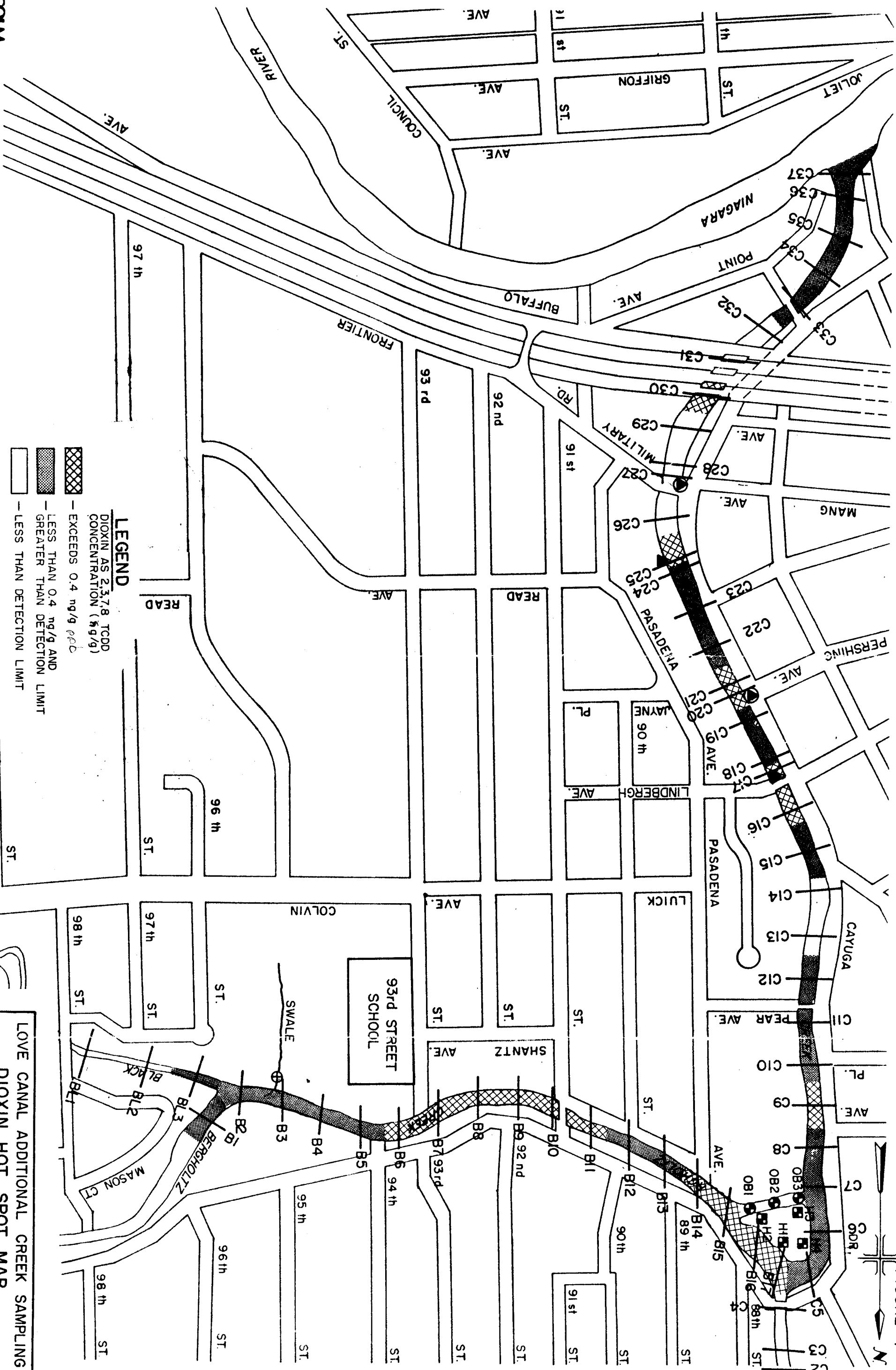
3.3.3 Oak Island Soil Samples

Results for Oak Island soil samples obtained from the NYSDEC are reported in Appendix C. Analysis of three composite boring samples (OB1-C, OB2-C, OB3-C) and an individual boring sample (OB1-S5) from the former creek bed did not detect any dioxin at detection limits ranging from 0.08 to 0.27 ng/g. A dioxin concentration of 0.43 ng/g was detected in an individual boring sample (OB2-S6) representative of the former stream bed. Analytical results for the hand auger composite samples were not received from the NYSDOH laboratory.

3.3.4 93rd Street School Stormwater Runoff




Two samples of stormwater runoff from the swale adjacent to the 93rd Street School were collected on September 11, 1986 at 10:30 a.m. and September 15, 1986 at 3:00 p.m. Reported dioxin concentrations were less than the sample detection limits of 1.39 ng/l and 0.49 ng/l, respectively.

FIGURE 7



LEGEND

DIOXIN AS 2,3,7,8 TCDD
CONCENTRATION (ng/g)

-  — EXCEEDS 0.4 ng/g *ppb*
-  — LESS THAN 0.4 ng/g AND GREATER THAN DETECTION LIMIT
-  — LESS THAN DETECTION LIMIT

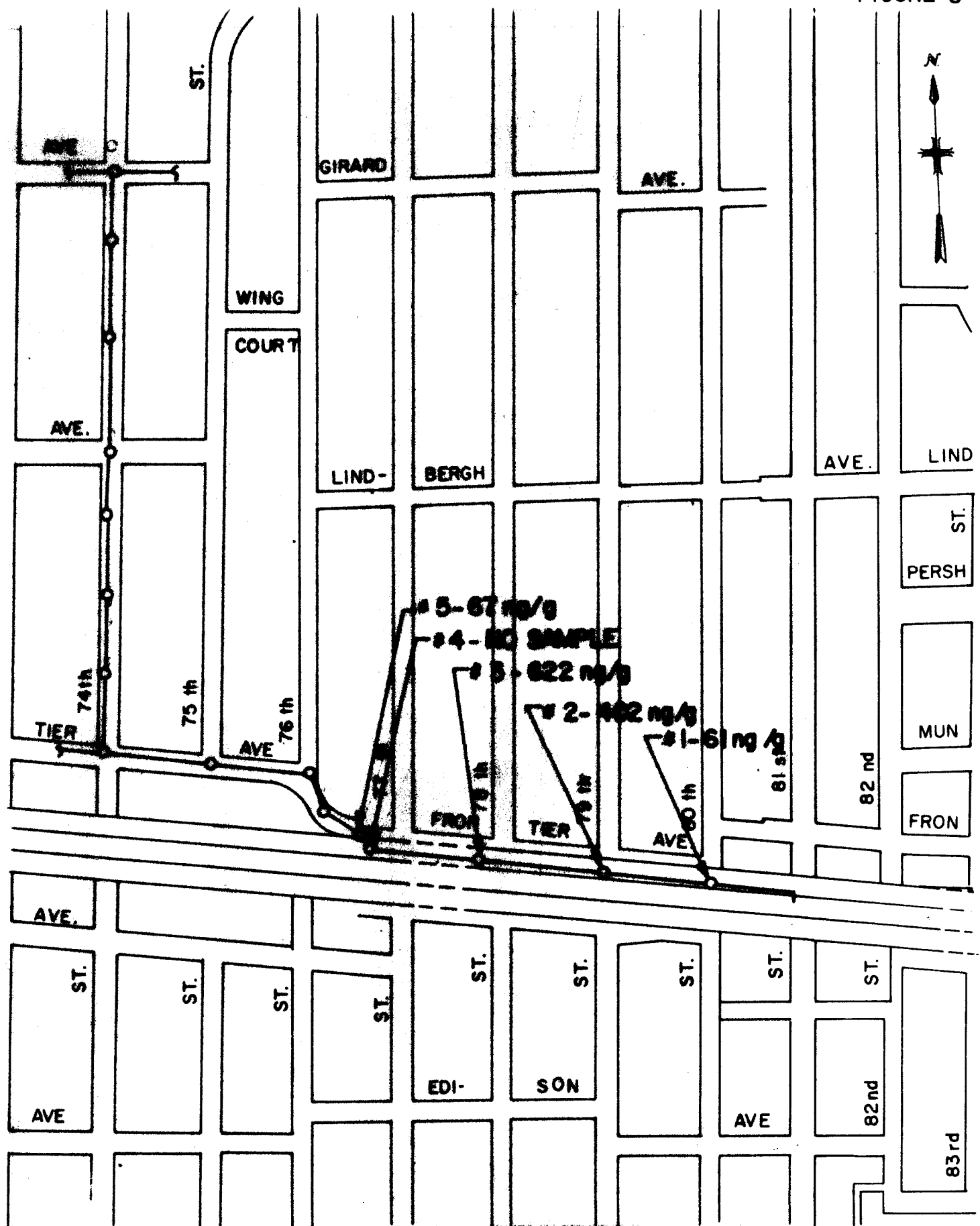
LOVE CANAL ADDITIONAL CREEK SAMPLING
DIOXIN HOT SPOT MAP

3.4 Sanitary Sewer Sampling Results

Dioxin concentrations in the manholes sampled near Lift Station No. 6 are shown in Figure 8. As previously discussed, sediments could be collected at only four of the sanitary sewers along Frontier Avenue.

<u>Location on Frontier Ave.</u>	<u>Measured Dioxin (ng/g)</u>
80th Street	61
79th Street	402
78th Street	622
100 feet west of 77th Street	67

FIGURE 8



LOVE CANAL ADDITIONAL CREEK SAMPLING
 DIOXIN CONCENTRATIONS IN
 FRONTIER AVENUE SANITARY SEWER

4.0 SUMMARY OF FINDINGS

1. An inspection of 49 sanitary sewer manholes downstream of Lift Station No. 6 on Frontier Avenue was conducted. Sediment samples were obtained from four manholes. The remaining 45 manholes did not contain sufficient sediment quantity for sampling.
2. Surficial soil samples were obtained at 79 locations along the Black and Bergholtz Creek banks. Detectable concentrations of dioxin ranged from 0.02 to 0.73 ng/g in the composite bank samples. Only one composite bank sample did not exceed the sample detection limit.
3. A total of 177 creek bed sediment samples were obtained from Cayuga Creek. Dioxin was found in most of the Cayuga Creek locations at detectable concentrations ranging from 0.09 to 1.28 ng/g.
4. A spatial relationship appears to exist between the location of sewer outfalls and natural drainages, and the occurrence of elevated dioxin concentrations in creek bank soil and creek bed sediments.
5. Soil borings to a maximum depth of 12 feet were obtained at three locations on Oak Island along the alignment of the former creek bed. Hand-augered soil cores to a maximum depth of four feet were also obtained on Oak Island. Dioxin was detected in one individual sample of the apparent former creek bed at a concentration of 0.43 ng/g.

APPENDIX A
MANHOLE INSPECTION LOGS

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LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

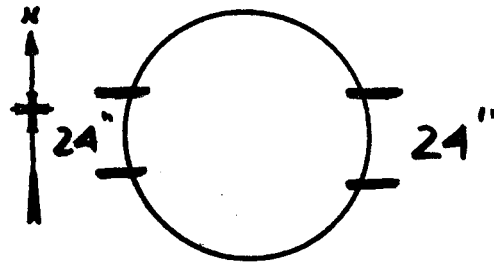
MANHOLE NO. 1

STREET FRONTIER

@ 80th St.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

5-22-86

SEDIMENT ± 1/2 FOOT

FLOW 12"

8' DEEP ±

SAMPLE TAKEN ④

2:30 PM 5-22-86

860197

2:30 PM

BLACK GRITTY
SOLIDS W/
SMALL STONES

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

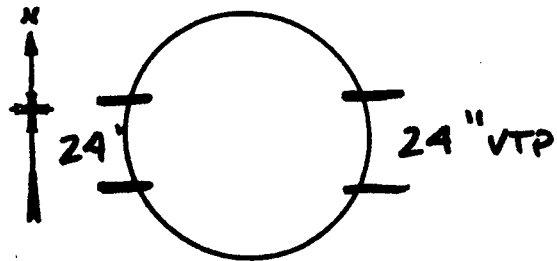
MANHOLE INSPECTION LOG

MANHOLE NO. 2

STREET FRONTIER AVE
@ 79th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	SEDIMENT 1/2 FOOT ± 8' DEEP ± SAMPLE TAKEN # 860193	5-22-86	3:15	BLACK SANDY DIRT & STONES

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

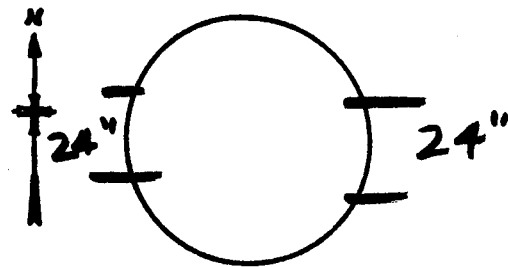
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 3
 STREET FRONTIER AVE
@ 78th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

2" SEDIMENT ±
 12" FLOW
 8" DEEP ±
 SAMPLE TAKEN
 # 860206

5-22-86

3:30

BLACK & GREY
 SLIME & DIAT

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 4

STREET FRONTIER AVE
25' WEST OF 77th ST.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	8' DEEP ± NOT OPEN IN MANHOLE (NO SAMPLE)	5-22-86		

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

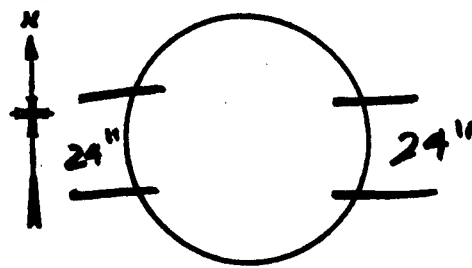
MANHOLE NO. 5

STREET FRONTIER AVE

100' WEST OF 77th St

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

5-22-86

8' DEEP ±
18" DEPTH FLOW
SAMPLE TAKEN
860195

5-22-86

3:45

BLACK GRIT &
SAND

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

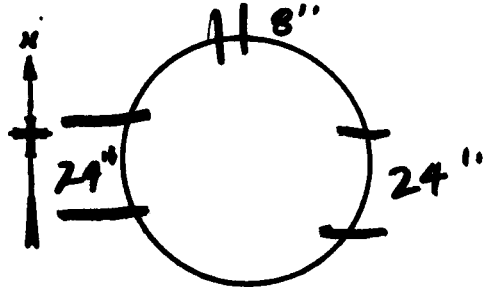
MANHOLE INSPECTION LOG

MANHOLE NO. 6

STREET FRONTIER AVE

@ 76th ST.

MANHOLE LOCATION ①	MANHOLE PLAN VIEW ②			
DATE	COMMENTS ③	TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.	
5-22-86	MINOR SEDIMENT TO NONE 9'-0" DEPTH			



- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 7
STREET FRONTIER AVE

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	SANITARY SOLID THRU MANHOLE			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 9
 STREET FRONTIER
@ 75th ST.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION COLOR, TEXTURE, ETC.
5-22-86	LITTLE TO NO SEDIMENT 8" INLET 9'-9" DEPTH			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 9
 STREET FRONTIER AVE
74th ST. (INTERSECT)

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
	MAKES A TURN @ 74th 24" INLET 10.5' DEPTH	<p>The diagram shows a circular manhole with a diameter of 24 inches. A north arrow is positioned to the left of the circle. A curved arrow inside the circle indicates a clockwise rotation. A 24-inch inlet pipe is shown entering the manhole from the right side.</p>		

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 10
 STREET FRONTIER AVE
 @ 74th ST.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	STRAIGHT FLOW 10.3' DEPTH NO SEDIMENT			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

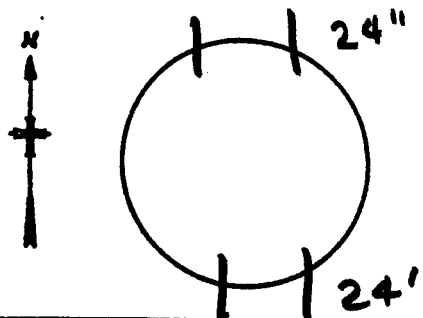
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 11
 STREET FRONTIER AVE
 ② 74th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

NO SEDIMENT

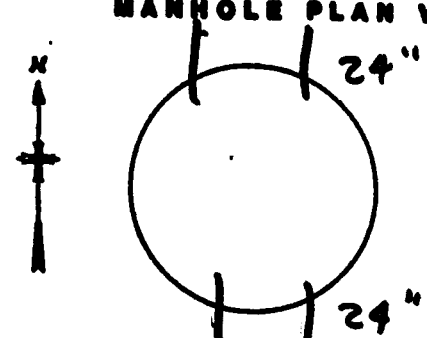
11.3' DEPTH

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 12
 STREET FRONTIER AVE
 @ 74th ST.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ② 		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
	NO SEDIMENT 8" FLOW 11.6' DEPTH			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

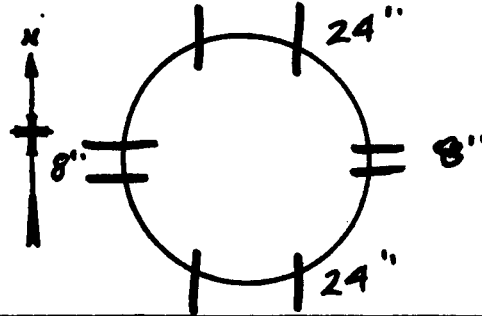
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 13
 STREET 74th ST.
 @ LINDBERGH AVE.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

5-22-66

11.8' DEPTH
 NO SEDIMENT

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

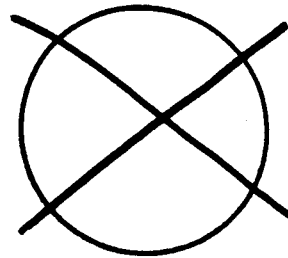
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 14
STREET 74th St.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



SEE NOTE

DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

5-22-86

NOT ABLE
TO LOCATE

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

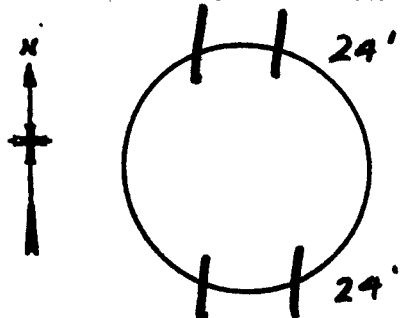
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 15
STREET 74th St.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86				

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

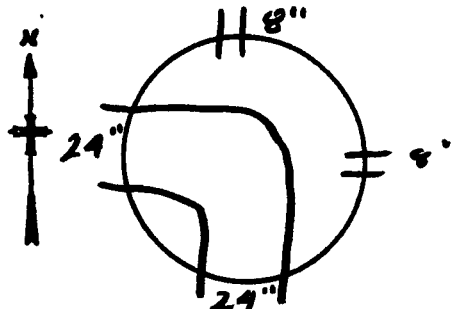
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 16
 STREET 74th ST
 @ GIRARD AVE.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

5-27-86


12" FLOW
 13.5' DEEP ~
 SMALL AMOUNT OF
 SEDIMENT

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 17
STREET GIARD AVE

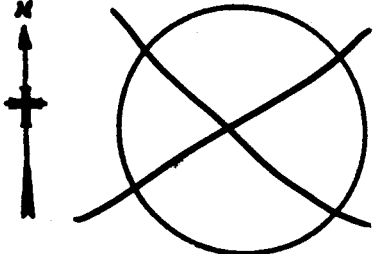
MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
				
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
1-22-86	NOT INCLUDED IN INSPECTION			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 18
STREET GIRARD AVE

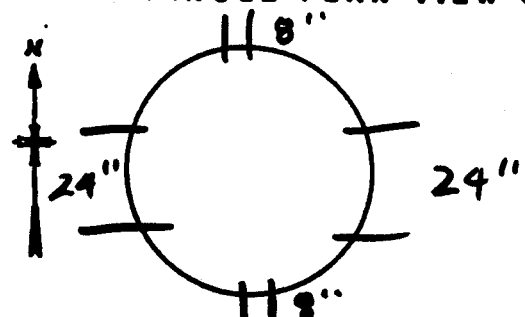
MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
		 <p>OUT OF AREA</p>		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	NOT INCLUDED IN INSPECTION			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 19
 STREET GIRARD AVE.
 @ 73RD St.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ② 		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
	14' ± DEEP NO SEDIMENT			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

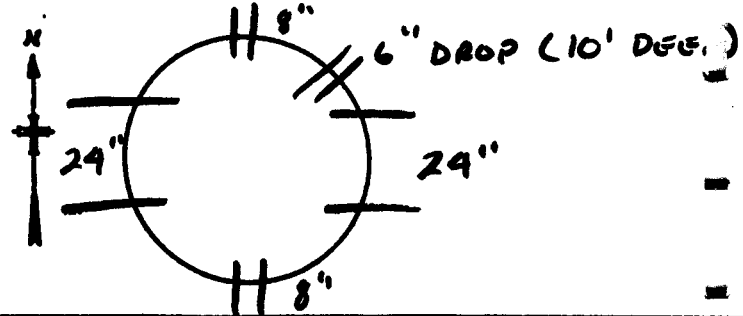
MANHOLE NO. 20

STREET GIRARD AVE

@ 72ND St.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

8" Flow

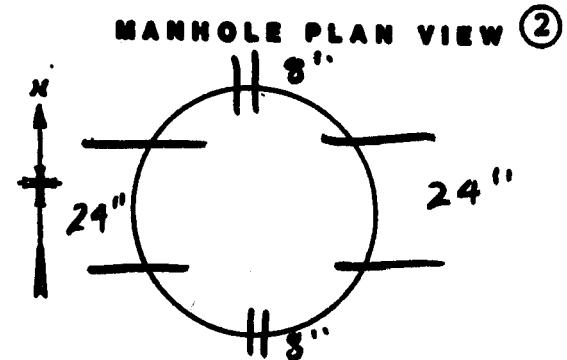
- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 21
 STREET GIRARD AVE
 @ 71st St.

MANHOLE LOCATION ①	MANHOLE PLAN VIEW ②			
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
	NO SEDIMENT			



- ① Location of MI to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

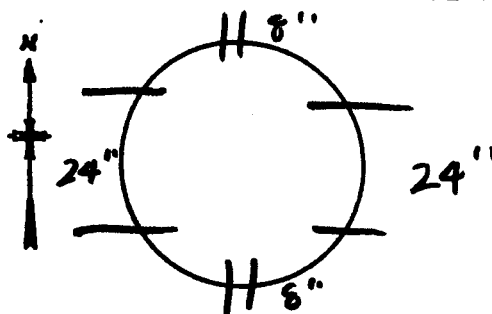
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 22
 STREET GIRARD AVE
 @ 70th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

5-22-86

6-8" FLOW
 15' DEEP

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, et. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

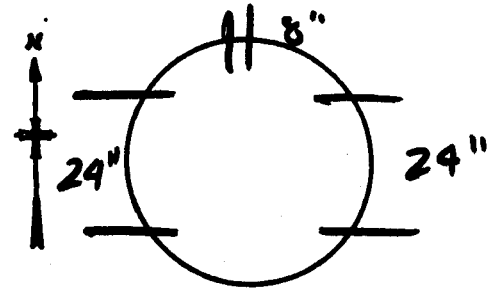
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 23
 STREET GIRARD AVE
 @ 69th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-27-86	8" LINES DRY 15'-16' ~ DEPTH NO SEDIMENT			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

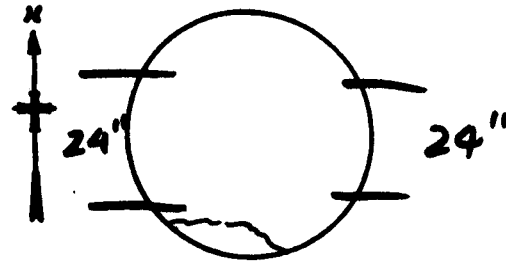
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 24
 STREET GIRARD AVE
@ 68th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

5-22-86


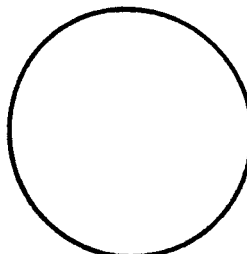
COULD NOT OPEN
 MANHOLE COVER
 WAS CRACKED

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 25
 STREET GIRARD AVE
 @ 68th ST.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
				SEE NOTE
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	COULD NOT BE OPENED			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 26
 STREET GIRARD AV
@ 67th ST

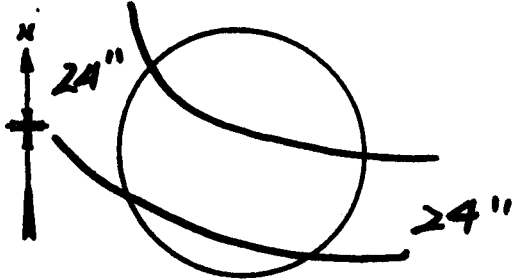
MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTIC, COLOR, TEXTURE, ETC.
5-22-86	NO SEDIMENT 8" FLOW ± 15' DEEP			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 27
STREET GIRARD AVE
@ 66th ST.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
	NO SEDIMENT 16' DEEP			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 28
STREET 66th ST.

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	6" From SCHOOL 16' DEEP NO SEDIMENT			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

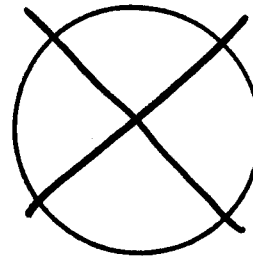
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 29
STREET 66th ST.
@ JOHN AVE.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



(SEE NOTE)

DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

5-22-86

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, et
A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and
effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth)
of sediment present.

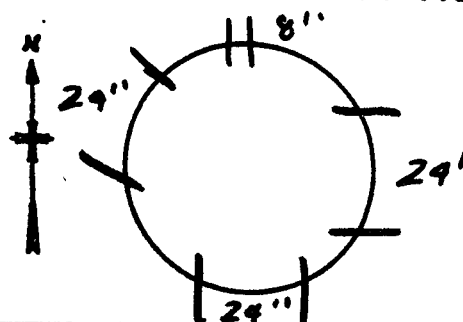
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 30
 STREET 66th ST.
 @ JOHN AVE

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

5-22-86

NO SEDIMENT

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

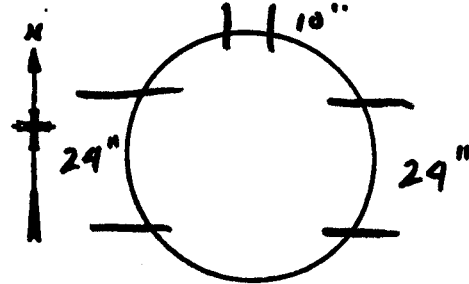
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 31
STREET JOHN AVE

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

CORRODATED RUNGS
17' ± DEEP

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

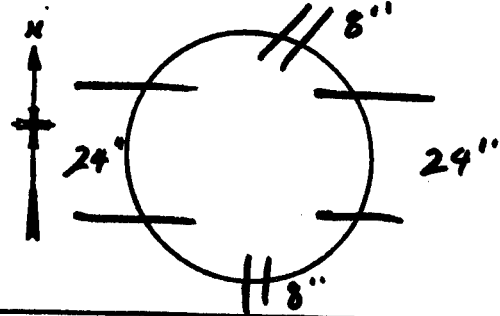
MANHOLE NO. 32

STREET JOHN AVE

@ CHEVY ROAD

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

5-22-86

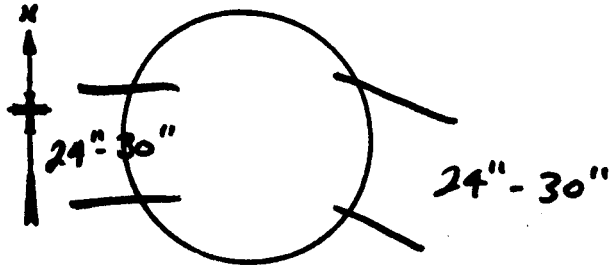
NO SEDIMENT

- ① Location of MI to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 33
STREET JOHN AVE

<p>MANHOLE LOCATION ①</p> <p>20' WEST OF CHEVY ROAD</p>		<p>MANHOLE PLAN VIEW ②</p> 		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86				

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 34

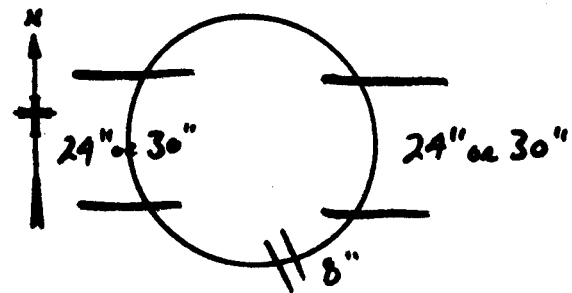
STREET JOHN AVE

DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	NO SEDIMENT DEPTH OF 18'			

MANHOLE LOCATION ①

75' NW OF CHEVY'S
TALKING SIGN

MANHOLE PLAN VIEW ②

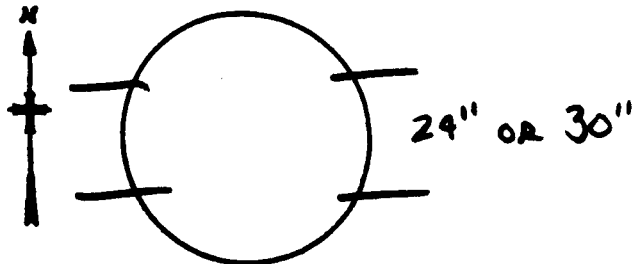


- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 35
STREET JOHN AVE

MANHOLE LOCATION ① 200'-300' IN FIELD BY CHEVY		MANHOLE PLAN VIEW ② 		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	20' DEEP 12" FLOW LOOSE BRICKS RUNGS DESOLVED			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

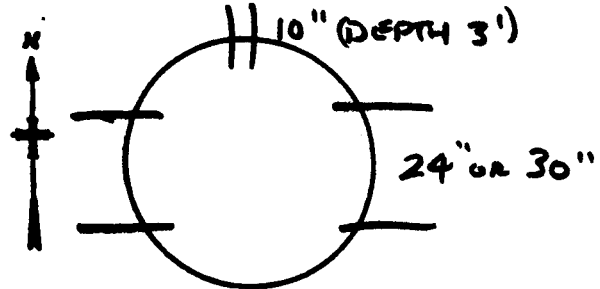
MANHOLE NO. 36

STREET JOHN AVE

@ 61st ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE	COMMENTS ③	TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	18' DEEP VERY TURBULENT FLOW RUNGS SHOT LOOSE BRICKS IN WALLS NO VISIBLE SEDIMENT		

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

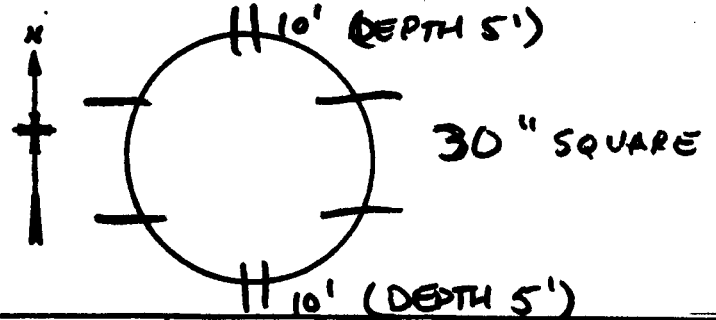
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 37
 STREET JOHN AVE
 @ 60th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

5-22-86

VERY TURBULENT FLOW
 NO SEDIMENT
 VISIBLE

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

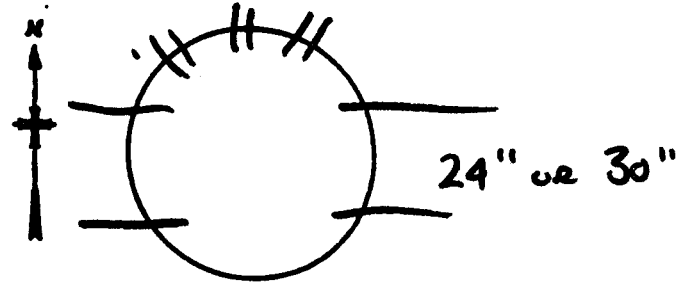
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 38
 STREET JOHN A E
 @ 59th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION
 COLOR, TEXTURE, Etc.

5-22-86

NO SEDIMENT VISIBLE

12" FLOW

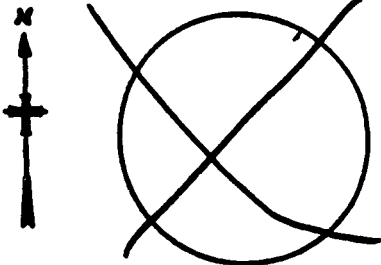
18' ± DEEP

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 39
STREET JOHN AVE

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
				(SEE NOTE)
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	NOT ABLE TO LOCATE			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 40
STREET JOHN AVE

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	10" PIPE ~ 3'-5" BELOW GRADE 18' DEEP RUNGS DISSOLVED NO SEDIMENT			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

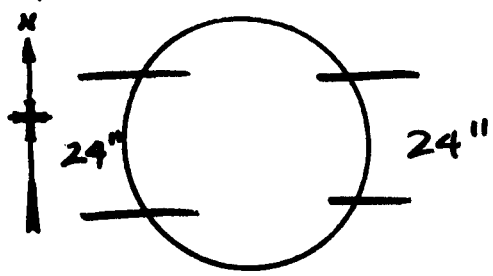
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 21A
 STREET GIRARD AVE
 BETWEEN 70 & 71st St.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86				

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 22A
 STREET GIRARD AVE
 BETWEEN 69th & 70th ST

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	16' ± DEEP			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

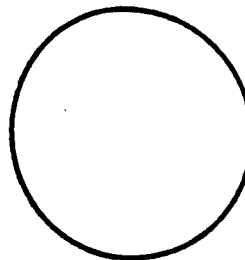
MANHOLE INSPECTION LOG

MANHOLE NO. 23 A
STREET GIRARD AVE

MANHOLE LOCATION ①

100' EAST OF 69th ST.

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

5-22-86

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

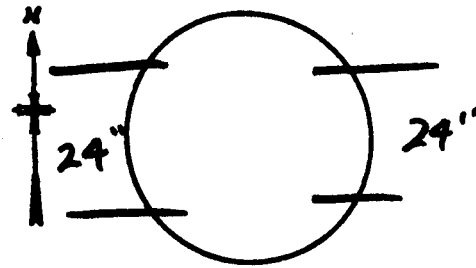
MANHOLE NO. 26A

STREET GIRARD AVE

BETWEEN 66th & 67th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

5-22-86

APP
16' ± DEEP
8"-10" FLOW
MANHOLE IN FAIR
CONDITION

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

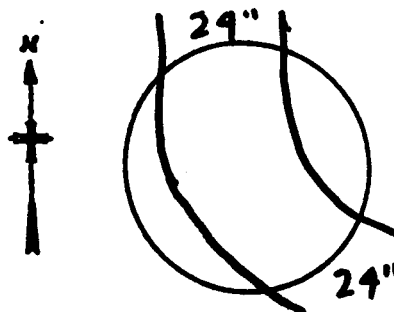
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 27A
 STREET ~~5~~ GIRARD
 & 66th ST.

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
 COLOR, TEXTURE, ETC.

1-22-86

16' ± DEEP
 12" FLOW
 VERY TURBULENT
 RUNGS ROTTED AWAY

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

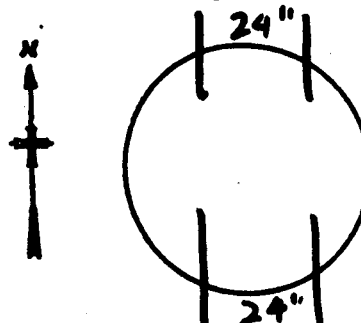
LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 28A
 STREET 66th ST
 @ JOHN (SOUTH)

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION
 COLOR, TEXTURE, ETC

16' DEEP
 VERY SLOW FLOW
 8" DEEP

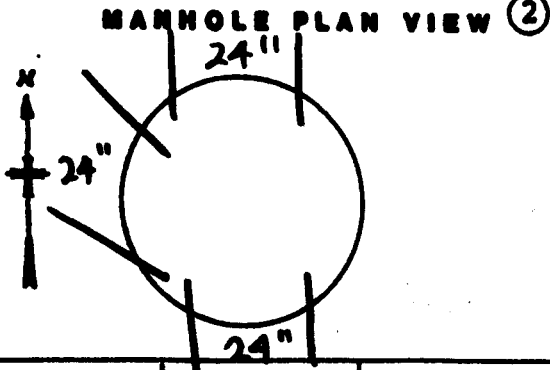
- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 29A

STREET 66th St.

MANHOLE LOCATION ①	MANHOLE PLAN VIEW ②			
				
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
	<p>16' ± DEEP</p> <p>12" FLOW</p> <p>NO VISIBLE SEDIMENT</p>			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 30A
 STREET JOHN AVE
 10' WEST OF 66th

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86				

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

MANHOLE INSPECTION LOG

MANHOLE NO. 31A
STREET CHEVY DRIVE

MANHOLE LOCATION ①		MANHOLE PLAN VIEW ②		
DATE	COMMENTS ③		TIME	SAMPLE DESCRIPTION, COLOR, TEXTURE, ETC.
5-22-86	31A-35 WEST SIDE OF EXPRESSWAY			

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

LOVE CANAL ADDITIONAL SAMPLING

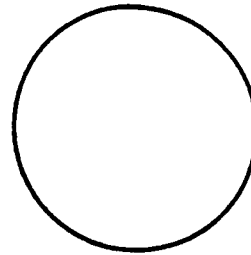
MANHOLE INSPECTION LOG

MANHOLE NO. _____

STREET _____

MANHOLE LOCATION ①

MANHOLE PLAN VIEW ②



DATE

COMMENTS ③

TIME

SAMPLE DESCRIPTION,
COLOR, TEXTURE, ETC.

- ① Location of MH to be shown w/respect to existing telephone poles, edge of driveways, etc. A house number should appear in the description.
- ② Information required - depth to all inverts, relative location of all influent and effluent pipe, diameter and material of pipe.
- ③ Examples - Weather, odors from manhole, detection of unsafe condition, volume (depth) of sediment present.

APPENDIX B
SAMPLE POINT LOCATION SURVEY NOTES

MALCOLM
PIRNIE

LOVE
CAMEL

1911

WALTON
FIELD BOOK

OK-3

HTD
JIM

01-14-86

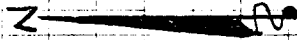
SNOW 10°

ESTABLISHING A BASELINE
AROUND BLACK & BERGHOLTZ
CREEKS WITH TIES TO STAKES
ON TOP OF BANKS.

BASELINE BEGINS BY USING POINTS
LC #1 & LC #2 FROM FB #1; PG. 9

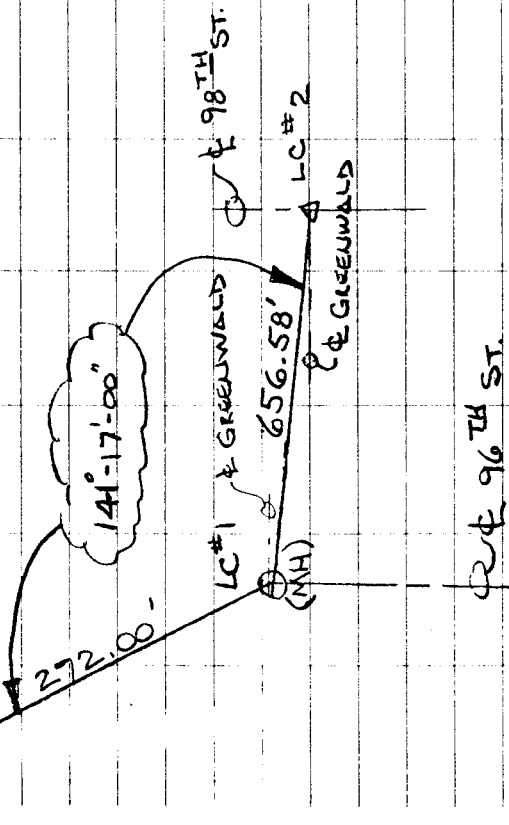
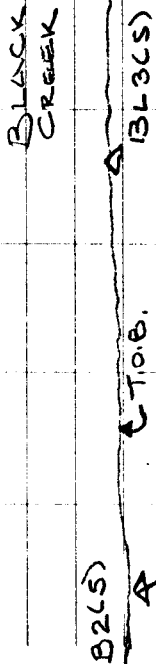
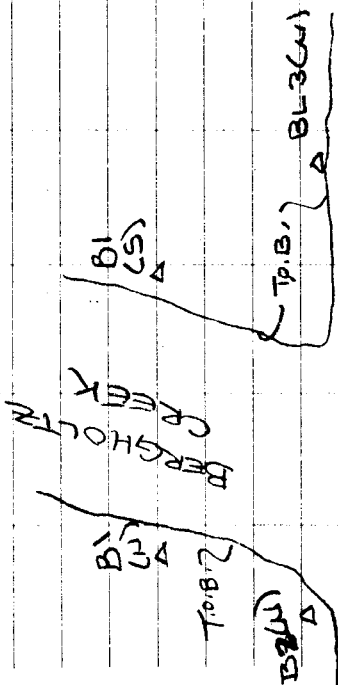
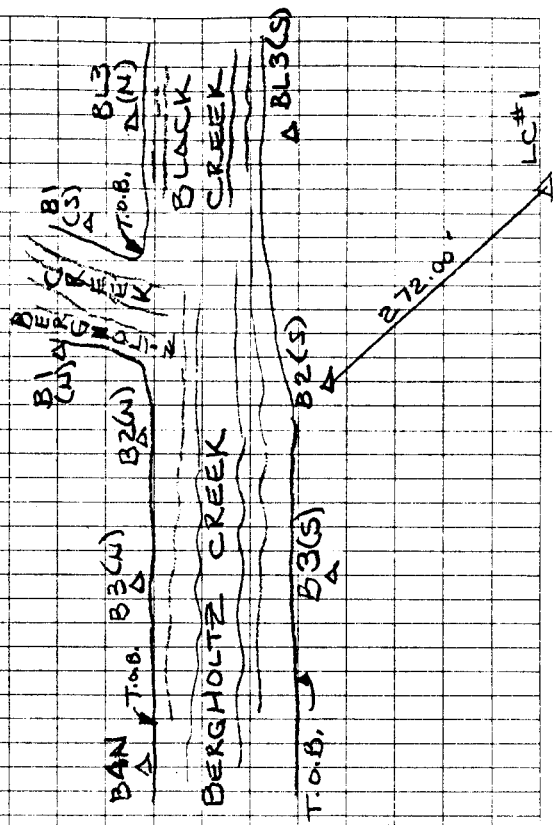
SURVEY STAKES ARE SET 200'
APART FROM EACH OTHER
ALONG BOTH SIDES OF BANKS

2



TL @ B2(S); BS @ LC#1
X'S RIGHT; SITE 0°00'-00"

HORIZ. X	DIST	P.T.
321-38-40	210	B13(S)
310-24-20	216	BL3(W)
271-06-00	219	B1(S)
252-36-20	200	B1(W)
221-50-40	92	B2(W)
169-49-40	232	B3(W)
160-40-20	428	B4(W)
149-53-40	201	B3(S)



96TH ST.

B3(S) 56' WEST OF FENCE COR. W. OF
B3(N) 83' " " " " WINTER SHED
B2(S) 26' WEST " " ON S/S CREEK @
INTER. BERGHOLTZ & BLACK CREEKS

JTD
JIM

01-15-86

2 GOLD

CONTINUING TIES TO STAKES ALONG
BLACK & BERGHOLTZ CREEKS

POINT HORIEX DIST

X @ PT. BL3(N); 4'S - RIGHT

BSC @ PT. BL3(S); SITE 0°-00'-00"

BL2(S) 191°-41'00" 194

X @ PT. BL2(S); 4'S - RIGHT

BSC @ PT. BL3(N); SITE 0°-00'-00"

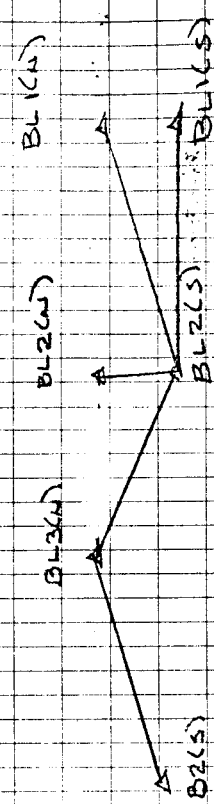
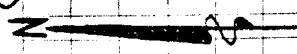
BL2(N) 99°-13'-00" 36

BL1(N) 170°-03'-00" 208

BL1(S) 179°-17'-40" 205

HSE ON			
N/S CREEK			
"	"	"	"
"	"	"	"
HSE ON GREENWALD	S/S	"	"
"	MASON CT.	N/S	"
HSE ON GREENWALD		S/S	"
"	MASON CT.		

④



BL1(N)	2' EAST OF E/S	BROWN HSE # 11
BL2(S)	4' "	" " " # 11
BL2(N)	27' "	" W/S (GRN) " " # 23
BL2(S)	10' "	" W/S " " # 9620
BL3(N)	12' WEST " W/S	WHITE HSE # 37
BL3(S)	GREENWALD	
BL3(S)	PT. HSE & GRN - WHITE HSE #	9600
BL1(S)	17' EAST OF BRCK HSE #	41
BL1(N)	15' WEST OF " "	# 41

POINT HORIZ. & DIST

T @ PT. B3(S); BS PT. B2(S)
X'S RIGHT; SITE 0°-00'-00"

BAC(S) 174°-36'-20" 200

T @ PT. B4(S); BS PT. B3(S)
X'S RIGHT; SITE 0°-00'-00"

B5(S) 182°-56'-00" 200

B6(S) 183°-52'-40" 402

B6(N) 193°-30'-2" 420

B5(N) 248°-55'-00" 240

N/S CREEK
HSE
N/S CREEK
HSE

T @ PT. B6(S); BS @ PT. B6(N)
SITE 0°-00'-00"; X'S RIGHT

4 93°-34' 259°-18'-00" 106
(AT END)

WALK-
BRIDGE 293°-35'-20" 103

INTER-
93°-34' 317°-09'-20" 160
CAYOGA

B7(S) 264°-06'-00" 198

B7(N) 288°-36'-00" 210

1' WEST OF FENCE LINE AND S/S CREEK
18' WEST OF W/S SCHOOL AND S/S CREEK
30' WEST OF W/S RICHASE # 9309 (CAYOGA)
25' EAST OF E/S GREEN HSE # 9302 (CAYOGA)

(BRICK HSE)
6' EAST OF W/S HSE # 1130 OR 9302 SI-
26' WEST; E/S " # 1130 " " "

POINT HEIGHT DIST

K @ PT B7(N); BSC PT B6(N)
X" RIGHT; SITE 0°-00'-00"

B8(N) 149°-26'-40" 200

~~B9(N) 149°-56'-40" 200~~

B8(S) 126°-50'-20" 262

B9(S) 136°-51'-20" 454

K @ PT B9(S); BSC PT B7(W)
X" RIGHT; SITE 0°-00'-00"

~~B9(N)~~ 304°-24'-00" 111

INTER
CAYUGA ST. 322°-08'-00" 186
92ND ST.

B10(N) 259°-48'-00" 246

B10(S) 240°-31'-00" 200

6

15' EAST #9210

WEST OF W/S HSE # ~~9210~~ (WHITE W/PAV) CLAYUGA ST.

(GRAY)

ON W/S HSE # 9138 ON SHADTZE ST.

8' WEST OF E/S HSE # (FALLING DOWN) ON SHADTZE ST.

4' E. OF E/S HSE # 9120 ON 92ND ST. (GREEN)

10' EAST OF BRIDGE @ 91ST

7.5' EAST OF BRIDGE @ 91ST

POINT HORIZ. DIST

X @ PT B10(S), B @ PT B9(N)
SITE 0°-00'-00"; X'S RIGHT

INTER. 228-21-20" 200
911E
BROOKSIDE 230°-49'-40" 38

B11(S) 228°-21'-20" 200

X @ PT B11(S), B @ PT B10(S)
X'S RIGHT; SITE 0°-00'-00"

B11(N) 241°-11'-00" 96

INTER. 289°-05'-20" 151
913E
CAYUGA

B12(N) 191°-03'-00" 240

B12(S) 179°-11'-20" 192

3' WEST OF E/S HSE # 7017 BROOKSIDE
(GREEN)

12' EAST OF E/S HSE # 9017 BROOKSIDE
(GREEN)

(GREEN)

16' WEST OF E/S HSE # 8920 ON CAYUGA

ON E/S HSE # 8920 CAYUGA

E.G.W. OF E/S HSE # 8920 BROOKSIDE

POINT ¹⁹ ₁₁ Aug 12 X DIST

TO PT B12(N), BESEPT B11(N)
X'S - RIGHT SIDE 0°-00'-00"
CAYUGA 315°-04'-20" 57
90TH ST.

B13(N) 174°-30'-00" 200

INTER. CAYUGA 190°-11'-00" 232
89TH ST.

B14(N) 182°-04'-20" 392

B13(S) 153°-48'-40" 184

B14(S) 164°-37'-00" 370

B15(N) 8' E. OF GREEN HSE # 8850 ON N/S
E 14' S. OF E. CAYUGA DR.

B15(S) 43' E. " " " "

B16(N) 18' W. OF E 88TH ST E 33' S. OF

B16(S) 23' E. " " " "

B17(S) 15' W. OF INSIDE E. EDGE BOX CURVE

B17(N) AT " " " "

3' WEST OF E/S HSE # 8911 (WHITE) BROOKSIDE

1' WEST OF W/S HSE # 8872 CAYUGA

ON E/S HSE # 8911 (WHITE) BROOKSIDE

32' WEST OF W/S HSE # 8850 BROOKSIDE

OF CAYUGA DR.

" " "

E CAYUGA

UNDER CAYUGA DR

" " " " E 20' S. OF E CAYUGA DR.

TIES TO CAYUGA CREEK
STAKES ON BOTH SIDES OF
BANK @ 200' INTERVALS

TTD
TIM

03-12-86
SON 32°

* ALL TIES TO ROADS ARE ALONG
T.O.B. PROJECTED TO ♀ ROAD

STAKE

C1(W) 95' TO E. N. FAULTS BLVD.

C1(E) " " " " " "

C2(W) 19' N. OF SE COR. BRAND

C2(E) 21' " " " " " "

C3(W) 18' S. OF N/S GRAY HSE # 1234 ON

C3(E) 3' N. OF N/S GRAY HSE # 1234 ON

C4(W) 28' N. OF E. CANYON DR.

C4(E) 95' " " " " " "

C5(W) 41' E. OF E. CANYON DR. &

C5(E) 29' W. OF E. EDGE OF INSIDE BOX

C6(W) 5' N. OF N/S HSE # 1234 CANYON DR.

C6(E) ON N/S HSE " " " "

& 55' TO S. FACE OF BRIDGE

" " " " " "

JAMES STORE (SE CORNER CLOSEST TO BANK)

" " " " " "

BOTH ST. ON E/S CREEK

BOTH ST. " " " "

& 4' TO N. FACE OF BRIDGE

& 69' TO " " " "

3' N. OF HSE # 1250 (BECK) ON W/S RD.

CULVERT UNDER CANYON DR.

(WHITE/GREEN) & 19' E. OF E. CANYON DR.

" " " "

STAKE

- C7(W) 2' S. OF N/S HSE # 1216 (BRICK)
- C7(E) 11' S OF S/S HSE # 1175 ON CREEK
- C8(W) 5' S. OF Φ BOLLER AVE. Φ
- C8(E) " " " " "
- C9(W) 142' N. OF Φ JACOB PL. Φ
- C9(E) " " " " "
- C10(W) 58' S. OF " " " Φ
- C10(E) 58' " " " "
- C11(W) 48' S. OF Φ PEAR AVE BRIDGE
- C11(E) " " " " "
- C12(W) 8' N. OF N/S HSE # 1036 (GRAY) Φ
- C12(E) 2' N. OF N/S HSE # 1026 (BLACK)
 Φ 3' S HSE S. OF PEAR ON E/S

- ON W/S CAYUGA Φ 31' E. OF Φ RD.
- SIDE (E/S CREEK) (LIGHT TAN) HSE.
- 28' E. OF Φ CAYUGA DR.
- 20' E. OF Φ CAYUGA DR.
- 24' E. OF Φ CAYUGA DR.
- Φ 23' E. OF Φ CAYUGA DR.
- 19' E. OF Φ CAYUGA DR.
- Φ BROW SIDING ON CREEK SIDE CREEK

STAKE

C13(W) 34' S. OF TEL. POLE W/CAUTION

C13(E) 18' S. " " "

C14(W) 83' N. OF ♀ MILITARY RD. @ T.O.B.

C14(E) ON N/S HSE # 960 (GRAY HSE 4)

C15(W) 47' S. OF S/S HSE # 932 CAYUGA

C15(E) 9' S. OF N/S HSE # 924 (WHITE HSE

C16(W) 89' N. OF ♀ LINDBERGH AVE.

C16(E) 37' N. " " "

C17(W) 36' S. OF ♀ LINDBERGH AVE.

OUTFALL

C17(E) 35.5' S. " " "

C18(W) 111' S. OF ♀ LINDBERGH AVE.

C18(E) 163' S. OF " " "

LIGHTS ON E/S RD. ♀ 17' E. OF ♀ CAYUGA DR.

" " " "

♀ 27' E. OF ♀ CAYUGA DR

RED ROOF) ON CREEKSIDE

DR. (BRICK W/RED ROOF) ♀ 22' E. OF ♀ RD

W/BLACK TRIM) ON CREEKSIDE

♀ 19' E. OF ♀ CAYUGA DR (26' WIDE)

♀ 17.5' E. OF ♀ CAYUGA DR

♀ 18.5' E. OF ♀ CAYUGA DR.

STAKE

C19(E) 93' N. OF Φ PERSHING ST

C19(W) 135' N. OF Φ PERSHING ST.

C20(E) 10' N. OF Φ PERSHING ST.

OUTFALL
C20(W) 10' N. OF Φ PERSHING ST. $\&$

C21(E) 108' S. OF Φ PERSHING ST. $\&$

C21(W) 65' S. OF Φ PERSHING ST. $\&$

C22(W) 10' S. OF $\frac{3}{4}$ S CHURCH ON CAYUGA $\&$

C22(E) 47' " " " "

C23(E) 25' S. OF Φ MUNSON AVE.

C23(W) (N. OF Φ MUNSON AVE. $\&$ 23' E.

C24(W) ON N/S LAFAYETTE BAPTIST CHURCH $\&$

OUTFALL

C24(E) 1' N. OF N/S HSE# 700 (BLACK) ON PASADENA

$\&$ 25' E. OF Φ CAYUGA DR.

24' E. OF Φ CAYUGA DR.

OPPOSITE $\&$ WALK TO CHURCH

32' E. OF Φ CAYUGA DR.

34' E. OF Φ CAYUGA DR.

OF Φ CAYUGA.

23' E. OF Φ CAYUGA

ON PASADENA

STAKE

- C25(W) 3' N. OF ^{S/S} HSE #636 (RED/WHITE)
(MAIN HSE)
- C25(E) 5' S. " " "
- C26(E) 150' N. OF ♀ MILITARY RD.
- C26(W) 62' N. OF ♀ MILITARY RD.
- C27(E) 45' S. OF ♀ MILITARY RD.
- OUTFALL
- C27(W) 64' S. OF ♀ MILITARY RD.
- C28(E) 50' S. OF ♀ MILITARY RD.
- C28(W) 138' S. OF ♀ MILITARY RD. &
- C29(W) 6.5' S. OF GREEN HSE # 515 ON
- C29(E) 9' N. OF S/S GRAY HSE ON E/S OF
- C30(W) 29' S. OF FENCE LINE ON E/S
- C30(E) 1' N OF " " "

♀ 21.5' E. OF ♀ CAYUGA

37.5' E. OF ♀ MILITARY

9' N. OF S/S BARBER SHOP ON BFLD. AVE. #535

BFLD. AVE.

CREEK (135 GRAY HSE. N. OF WARDEN PICKET FENCE

CREEK (N. OF EXPRESSWAY) FENCE LINE EXTENDS TO TRAIL ON W/S

" " "

" " "

STAKE

C31(E) 132' N. OF BFLO. AVE (YELLOW LINE)

C31(N) 147' N. OF BFLO. AVE. (" ")

C32(E) 68' S. OF BFLO. AVE. (" ")

C32(W) 53' S. OF BFLO. AVE. (" ")

C33(E) 77' N. OF B BRIDGE - LEADING

C33(W) 21' S. OF " " - " "

C34(W) BEHIND HSE # 731 BFLO. AVE. UNDER

C34(E) BEHIND HSE # 8732 (BROWN) HAS "A
POINT ST. (BUILT IN

C35(W) 2' N. OF 5/5 "RED LIFT CRANE" AT

C35(E) 2' S. OF N/S "RED LIFT CRANE"

C36(W) 9' N. OF 5/5 HSE # 71

C36(E) 15' N. OF N/S HSE # 8701 ON

@ 5/3 2ND PILLAR N. OF BFLO. AVE.

@ 5/3 2ND " " " " " "

TO POINT AVE

" " AVE.

BOAT GARAGE

POOL (CENTER OF HSE)

MARINA - ENGINE CENTER

AT MARINA "ENGINE CENTER"

GREEN/WHITE

POINT AVE

STAKE

C 37(W) AT END OF S. 87TH ST. BY RIVER

C 37(E) AT END OF BANK BY RIVER

* C 36(E) TO C 37(E) IS 190' APART
DUE TO BANK ENDING

(16)

7' N. OF N/EDGE PYMT @ END OF ST. WALL

& 7' N. OF CONC. BANK AT RIVER

& AT ENGRAVING IN WALL "LWINN 1960"

(17)

ADDITIONAL TIES TO STAKES
ON BERGHOLTZ CREEK

HTD
JIM

3-13-86
CLOUDY 32°

STAKE

B6 (S) 89' E. OF E 93RD ST.

B6 (W) 87' E. " " "

B7 (S) 110' W. " " "

B7 (W) 91' W. " " "

B8 (W) 128' TO E 92RD & CAYUGA

B9 (W) 44' W. OF E 92RD ST.

B13 (S) 1' W OF E 89TH ST

B14 (W) 17' W. ALONG CORNER TO E 87TH ST

B13 (W) 3' W. OF E 89TH ST.

B12 (W) 49' W. OF E 90TH ST.

APPENDIX C

LABORATORY ANALYTICAL RESULTS

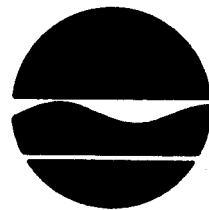
MALCOLM
PIRNIE

According to the chain-of-custody record, the analytical results labelled "C31-C" should be "C34-C". Correspondence from NYSDEC on July 9, 1986 indicates bottle number 860300 (C31-C) was broken during shipping to NYSDOH. The bottle number 860315 reported on the NYSDOH Results of Examination form for "C31-C" corresponds to sample "C34-C" on the chain-of-custody record. Adjustments have been made as necessary for this report.

SUMMARY OF ANALYTICAL RESULTS

<u>SAMPLE DESIGNATION</u>	<u>DIOXIN CONCENTRATION (ng/g)</u>	<u>SAMPLE DESIGNATION</u>	<u>DIOXIN CONCENTRATION (ng/g)</u>
C1-C	<0.19		
C2-C	<0.17		
C3-C	<0.16	BL1-C	<0.01
C4-C	<0.20	BL3-C	0.02
C5-C	0.18	B2-C	0.26
C6-C	0.38	B4-C	0.35
C7-C	0.20	B6-C	0.65
C8-C	0.14	B8-C	0.61
C9-C	0.52	B10-C	0.73
C10-C	0.19	B12-C	0.32
C11-C	0.09	B14-C	0.42
C12-C	0.10	B16-C	0.40
C13-C	<0.12		
C14-C	<0.09	MH-1	61
C15-C	0.10	MH-2	402
C16-C	0.78	MH-3	622
C17-C	1.09	MH-5	67
C18-C	0.36		
C19-C	0.18	RUNOFF:	
C20-C	1.28	9/11/86	<1.39 ng/l
C21-C	0.99	9/15/86	<0.49 ng/l
C22-C	0.35		
C23-C	0.16		
C24-C	0.26	OB1-C	<0.08
C25-C	0.45	OB2-C	<0.13
C26-C	<0.14	OB3-C	<0.11
C27-C	<0.18	OB2-S6	0.43
C28-C	<0.14	OB1-S5	<0.27
C29-C	<0.13		
C30-C	0.52		
C32-C	<0.10		
C33-C	0.29		
C34-C	0.24		
C35-C	0.33		
C36-C	0.16		
C37-C	0.26		

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-



Henry G. Williams
Commissioner

October 30, 1986

Mr. Paul Werthman
Malcolm Pirnie, Inc.
3619 Packard Road
Niagara Falls, NY 14303

Dear Mr. Werthman:

Re: Amendment to Contract No. D00303,
Love Canal Additional Creek Sampling
and Sanitary Sewer Inspection

Enclosed are copies of the New York State Department of Health's report of the laboratory examination for the samples collected under the subject project.

It appears from these reports that the Oak Island bore samples were not analyzed. When these results are received, they will be forwarded to you. These are provided to you for inclusion in the final engineering report for this project which will be prepared by Malcolm Pirnie.

I will call you to schedule the submission of the final engineering report.

Very truly yours,

Guy T. Bobersky, P.E.
Senior Sanitary Engineer
Remedial Section A
Bureau of Western Remedial Action
Division of Solid and Hazardous Waste

GTB/kw
Enclosure
cc: D. Garbarini

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62825 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: FRONTIER AVE. MANHOLE SEDIMENT SAMPLES MH#1, 860198
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 610: SEDIMENT
TIME OF SAMPLING: 86/05/22 : TO 86/05/22 : DATE PRINTED: 86/10/14

ANALYSIS	DIOX-LC	DIOXIN - SOIL/SEDIMENT	RESULT
	PARAMETER		
	T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN		61. NANOGM/G
	T01108 PERCENT DRY SOLIDS		62.67 PERCENT
	**** END OF REPORT ****		

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RESULTS OF EXAMINATION

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SAMPLE ID: 62826 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: FRONTIER AVE. , MANHOLE SEDIEMTN SAMPLES MH#2, 86Q193
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 610: SEDIMENT
TIME OF SAMPLING: 86/05/22 : TO 86/05/22 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55335 2,3,7,8-TETRACHLORODIBENZODIOXIN	402. NANODGM/G
T01106 PERCENT DRY SOLIDS	34.80 PERCENT

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SAMPLE ID: 62827 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: FRONTIER AVE. MANHOLE SEDIMENT SAMPLES, M#3, 860201
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 610: SEDIMENT
TIME OF SAMPLING: 86/05/22 : TO 86/05/22 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
155333 2,3,7,8-TETRACHLORODIBENZODIOXIN	622. NANOGM/G
101108 PERCENT DRY SOLIDS	37.70 PERCENT

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PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62828 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE LONGITUDE: Z DIRECTION:
LOCATION LOVE CANAL CREEKS STUDY
DESCRIPTION: FRONTIER AV., MANHOLE SEDIMENT SAMPLES, MH#5, 860195
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 610: SEDIMENT
TIME OF SAMPLING: 86/05/22 : TO 86/05/22 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
755333 2,3,7,8-TETRACHLORODIBENZODIOXIN	57. NANOGM/G
101109 PERCENT DRY SOLIDS	56.89 PERCENT

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FINAL REPORT

SAMPLE ID: 64780 SAMPLE RECEIVED: 86/09/12/ CHARGE: 60.00
 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 LATITUDE: LONGITUDE: Z DIRECTION:
 LOCATION: LOVE CANAL CREEKS STUDY
 DESCRIPTION: 93RD ST SCHOOL SWALE RUNOFF 860013
 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 TEST PATTERN: DIOXW: TETRACHLORODIBENZODIOXINS AND/OR FURANS IN WATER
 SAMPLE TYPE: 200: PRECIPITATION, RAIN WATER
 TIME OF SAMPLING: 86/09/11 10:30 TO 86/09/11 10:30 DATE PRINTED: 86/10/14

ANALYSIS: DIOXW TETRACHLORODIBENZODIOXINS AND/OR FURANS IN WATER

PARAMETER	RESULT
T91000 CLEAN-UP FOR TCDD/TCDF ANALYSIS	DONE
T55335 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	< 1.39 NANOGRAM/L
**** END OF REPORT ****	

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1 SAMPLE ID: 64822 SAMPLE RECEIVED: 86/09/167 CHARGE: 60.00
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY
 7 DESCRIPTION: 93RD ST SCHOOL SWALE RUNOFF 860023
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXW: TETRACHLORODIBENZODIOXINS AND/OR FURANS IN WATER
 10 SAMPLE TYPE: 200: PRECIPITATION, RAIN WATER
 11 TIME OF SAMPLING: 86/09/15 15: TO 86/09/15 15: DATE PRINTED: 86/10/14

12 ANALYSTS: DIOXW TETRACHLORODIBENZODIOXINS AND/OR FURANS IN WATER

13	PARAMETER	RESULT
14	91000 CLEAN-UP FOR TCDD/TCDF ANALYSIS	DONE
15	155335 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	< 0.49 NANOGM/L
16	**** END OF REPORT ****	

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62836 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
DESCRIPTION: C1-C 860234
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
TS5333 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.19 NANOGM/G
TO1108 PERCENT DRY SOLIDS	65.90 PERCENT

**** END OF REPORT ****

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62837 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24. 50
 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 LATITUDE: LONGITUDE: Z DIRECTION:
 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 DESCRIPTION: C2-C B60235
 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 SAMPLE TYPE: 600: SOIL, SAND
 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
155333 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.17 NANOGM/G
101109 PERCENT DRY SOLIDS	64.53 PERCENT

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FINAL REPORT

1	SAMPLE ID: 62838	SAMPLE RECEIVED: 86/06/20/	CHARGE: 24.50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LCCREEK2	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.	COUNTY: NIAGARA	
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE		
7	DESCRIPTION: C3-C 860236		
8	REPORTING LAB: TOX. LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 600: SOIL, SAND		
11	TIME OF SAMPLING: 86/05/30 : TO 86/06/09 :	DATE PRINTED: 86/10/14	
12			
13	ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT		
14			
15	PARAMETER	RESULT	
16	T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.15 NANOGM/G	
17	T01108 PERCENT DRY SOLIDS	58.96 PERCENT	
18	**** END OF REPORT ****		
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1 SAMPLE ID: 62839 SAMPLE RECEIVED: 86/05/20/ CHARGE: 24.50
 2 PROGRAM: 2010 LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C4-C 860237
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

13 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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 15 PARAMETER RESULT
 16 T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN < 0.20 NANOGRAM/G
 17 T01108 PERCENT DRY SOLIDS 53.25 PERCENT
 18 ***** END OF REPORT *****

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1	SAMPLE ID:	62840	SAMPLE RECEIVED:	86/06/207	CHARGE:	24.50
2	PROGRAM:	2010:LOVE CANAL CREEKS CONTRACT				
3	SOURCE ID:	LCCREEK2	DRAINAGE BASIN:	01	GAZETTEER CODE:	3102
4	POLITICAL SUBDIVISION:	NIAGARA FALLS C.		COUNTY:	NIAGARA	
5	LATITUDE:	LONGITUDE:		Z DIRECTION:		
6	LOCATION:	LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE				
7	DESCRIPTION:	C5-C 860238				
8	REPORTING LAB:	TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY				
9	TEST PATTERN:	DIOXIN-LC:DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES				
10	SAMPLE TYPE:	600:SOIL, SAND				
11	TIME OF SAMPLING:	86/05/30	:	TO 86/06/09	:	DATE PRINTED: 86/10/14

12	ANALYSIS:	DIOX-LC	DIOXIN - SOIL/BEDIMENT
13		PARAMETER	RESULT
14		T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.18 NANOGRAM/G
15		T01108 PERCENT DRY SOLIDS	50.90 PERCENT
16		**** END OF REPORT ****	

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1	SAMPLE ID: 62841	SAMPLE RECEIVED: 86/06/207	CHARGE: 24.50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LCCREEK2	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE		
7	DESCRIPTION: C6-C	860239	
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 600: SOIL, SAND		
11	TIME OF SAMPLING: 86/05/30	TO 86/06/09	DATE PRINTED: 86/10/14
12	ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT		
13	PARAMETER RESULT		
14	755333	2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.38 NANOGRAM/G
15	701108	PERCENT DRY SOLIDS	52.48 PERCENT
16	**** END OF REPORT ****		
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1 SAMPLE ID: 62842 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C7-C 860240
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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 15 PARAMETER RESULT
 16 T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN 0.20 NANOGM/G
 17 REVISION DATE 86/10/09, ABOVE RESULT VALUE CHANGED, WAS: < 0.05
 18 T01108 PERCENT DRY SOLIDS 71.38 PERCENT
 19 ***** END OF REPORT *****

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SAMPLE ID: 62843 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
DESCRIPTION: CB-C 860277
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC; DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : , DATE PRINTED: 86/09/25

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.14 NANOGM/G
T01108 PERCENT DRY SOLIDS	61.23 PERCENT

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FINAL REPORT

SAMPLE ID: 62845 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
DESCRIPTION: C10-C 860279
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/09/25

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.19 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	56.76 PERCENT

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SAMPLE ID: 62844 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 LATITUDE: LONGITUDE: Z DIRECTION:
 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 DESCRIPTION: C9-C 860278
 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 SAMPLE TYPE: 600: SOIL, SAND
 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/09/25

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.52 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	56.72 PERCENT

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1 SAMPLE ID: 62846 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C11-C 860280
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

13 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
 15 PARAMETER RESULT
 16 T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN 0.09 NANOGRAM/G
 17 REVISION DATE 86/10/09, ABOVE RESULT VALUE CHANGED, WAS: 0.08
 18 T01108 PERCENT DRY SOLIDS 53.50 PERCENT

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SAMPLE ID: 62847 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 LATITUDE: LONGITUDE: Z DIRECTION:
 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 DESCRIPTION: C12-C 860281
 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 SAMPLE TYPE: 600: SOIL, SAND
 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/09/25

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.10 NANOGM/G
T01108 PERCENT DRY SOLIDS	65.06 PERCENT

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SAMPLE ID: 62849 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
DESCRIPTION: C14-C 860283
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
PARAMETER RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN < 0.09 NANOGRAM/G
T01108 PERCENT DRY SOLIDS 57.49 PERCENT
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 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C13-C 860282
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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 15 PARAMETER RESULT
 16 T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN < 0.12 NANOGRAM/G
 17 T01108 PERCENT DRY SOLIDS 46.35 PERCENT
 18 ***** END OF REPORT *****

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1	SAMPLE ID:	62850	SAMPLE RECEIVED:	86/06/207	CHARGE:	24.50
2	PROGRAM:	2010: LOVE CANAL CREEKS CONTRACT				
3	SOURCE ID:	LCCREEK2	DRAINAGE BASIN:	01	GAZETTEER CODE:	3102
4	POLITICAL SUBDIVISION:	NIAGARA FALLS C.		COUNTY:	NIAGARA	
5	LATITUDE:		LONGITUDE:		Z DIRECTION:	
6	LOCATION:	LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE				
7	DESCRIPTION:	C15-C	860284			
8	REPORTING LAB:	TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY				
9	TEST PATTERN:	DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES				
10	SAMPLE TYPE:	600: SOIL, SAND				
11	TIME OF SAMPLING:	86/05/30	TO	86/06/09	DATE PRINTED:	86/10/14

12	ANALYSIS:	DIOX-LC DIOXIN - SOIL/SEDIMENT				
13						
14						
15						
16	PARAMETER					RESULT
17	T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN					0.10 NANOGRAM/G
18	T01108 PERCENT DRY SOLIDS					60.27 PERCENT
19		**** END OF REPORT ****				

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SAMPLE ID: 62851 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
DESCRIPTION: C16-C 860285
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.78 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	45.05 PERCENT

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1 SAMPLE ID: 62853 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C18-C 860287
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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 16 PARAMETER RESULT
 17 T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN 0.36 NANODGM/G
 18 T01108 PERCENT DRY SOLIDS 50.32 PERCENT
 19 ***** END OF REPORT *****

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1 SAMPLE ID: 62852 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C17-C 860285
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14
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13 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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 15 PARAMETER RESULT
 16 155333 2,3,7,8-TETRACHLORODIBENZODIOXIN 1.09 NANOGRAM/G
 17 101108 PERCENT DRY SOLIDS 59.87 PERCENT
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 19 ***** END OF REPORT *****
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PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62854 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50

PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT

SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102

POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA

LATITUDE LONGITUDE: Z DIRECTION:

LOCATION LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE

DESCRIPTION: C19-C 860288

REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY

TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES

SAMPLE TYPE: 600: SOIL, SAND

TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER

RESULT

PARAMETER	RESULT
T55333 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.18 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	48.07 PERCENT

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1 SAMPLE ID: 62855 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C20-C 860289
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

13	14	15	16	17	18	19	20
PARAMETER							RESULT
155333	2, 3, 7, 8-TETRACHLORODIBENZODIOXIN						1.28 NANOGM/G
T01108	PERCENT DRY SOLIDS						54.59 PERCENT
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SAMPLE ID: 62856 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
DESCRIPTION: C21-C 860290
REPORTING LAB: TDX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2, 3, 7, 8-TETRACHLORODIBENZODDIOXIN	0.99 NANOGM/G
T01109 PERCENT DRY SOLIDS	44.59 PERCENT
**** END OF REPORT ****	

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1	SAMPLE ID:	62857	SAMPLE RECEIVED:	86/06/20/	CHARGE:	24.50	1	
2	PROGRAM:	2010: LOVE CANAL CREEKS CONTRACT					2	
3	SOURCE ID:	LGCREEK2	DRAINAGE BASIN:	01	GAZETTEER CODE:	3102	3	
4	POLITICAL SUBDIVISION:	NIAGARA FALLS C.		COUNTY:	NIAGARA		4	
5	LATITUDE:	LONGITUDE:		Z DIRECTION:			5	
6	LOCATION:	LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE					6	
7	DESCRIPTION:	C22-C	860291				7	
8	REPORTING LAB:	TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY					8	
9	TEST PATTERN:	DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES					9	
10	SAMPLE TYPE:	600: SOIL, SAND					10	
11	TIME OF SAMPLING:	86/05/30	:	TO 86/06/09	:	DATE PRINTED:	86/10/14	11
12								12
13	ANALYSIS:	DIOX-LC DIOXIN - SOIL/SEDIMENT					13	
14								14
15		PARAMETER		RESULT				15
16		T55333	2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.35	NANOGRAM/G			16
17		T01108	PERCENT DRY SOLIDS	52.09	PERCENT			17
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1	SAMPLE ID: 62858	SAMPLE RECEIVED: 86/06/207	CHARGE: 24.50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LCCREEK2	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE		
7	DESCRIPTION: C23-C 860292		
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 600: SOIL, SAND		
11	TIME OF SAMPLING: 86/05/30	TO 86/06/09	DATE PRINTED: 86/10/14
12	ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT		
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15	PARAMETER	RESULT	
16	T55333 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.16 NANOGRAM/G	
17	T01108 PERCENT DRY SOLIDS	44.74 PERCENT	
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1 SAMPLE ID: 62859 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE LONGITUDE: Z DIRECTION:
 6 LOCATION LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C24-C 860293
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/05/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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PARAMETER	RESULT
755333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.26 NANOGRAM/G
701102 PERCENT DRY SOLIDS	57.60 PERCENT

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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62861 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
DESCRIPTION: C26-C 860295
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.14 NANOGM/G
T01108 PERCENT DRY SOLIDS	47.35 PERCENT

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RESULTS OF EXAMINATION

FINAL REPORT

1 SAMPLE ID: 62860 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
5 LATITUDE: LONGITUDE: Z DIRECTION:
6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
7 DESCRIPTION: C25-C 860294
8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
10 SAMPLE TYPE: 600: SOIL, SAND
11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.45 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	45.35 PERCENT

13 ***** END OF REPORT *****

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RESULTS OF EXAMINATION

FINAL REPORT

1 SAMPLE ID: 62862 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 2 PROGRAM: 2010 LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C27-C 860296
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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 15 PARAMETER RESULT
 16 T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN < 0.18 NANOSM/G
 17 T01108 PERCENT DRY SOLIDS 72.19 PERCENT
 18 ***** END OF REPORT *****

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1 SAMPLE ID: 62863 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C28-C 860297
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

13	PARAMETER	RESULT
16	T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.14 NANOGRAM/G
17	T01108 PERCENT DRY SOLIDS	66.97 PERCENT

18 ***** END OF REPORT *****

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PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62864	SAMPLE RECEIVED: 86/06/20/	CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
SOURCE ID: LCCREEK2	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
LATITUDE:	LONGITUDE:	Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE		

DESCRIPTION: C29-C 860298
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/BEDIMENT	
PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.13 NANOGM/G
T01108 PERCENT DRY SOLIDS	61.36 PERCENT
**** END OF REPORT ****	

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1 SAMPLE ID: 62865 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C30-C 860299
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER

RESULT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.52 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	46.51 PERCENT

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1 SAMPLE ID: 62869 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C31-C 860315
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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PARAMETER	RESULT
755333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.24 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	53.99 PERCENT

**** END OF REPORT ****

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RESULTS OF EXAMINATION

FINAL REPORT

1 SAMPLE ID: 62867 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C32-C 860313
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

13 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

15	PARAMETER	RESULT
16	T55303 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.10 NANOGRAM/G
17	T01108 PERCENT DRY SOLIDS	64.50 PERCENT

18 ***** END OF REPORT *****

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1 SAMPLE ID: 62870 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C35-C 860316
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.33 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	57.21 PERCENT
**** END OF REPORT ****	

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SAMPLE ID: 62868 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 LATITUDE LONGITUDE: Z DIRECTION:
 LOCATION LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 DESCRIPTION: C33-C 860314
 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 SAMPLE TYPE: 600: SOIL, SAND
 TIME OF SAMPLING: 86/05/30 : TO 86/06/09 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.29 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	51.63 PERCENT

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RESULTS OF EXAMINATION

FINAL REPORT

1	SAMPLE ID: 62871	SAMPLE RECEIVED: 86/06/207	CHARGE: 24.50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LGCREEK2	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.	COUNTY: NIAGARA	
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE		
7	DESCRIPTION: C36-C 860317		
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 600: SOIL, SAND		
11	TIME OF SAMPLING: 86/05/30	TO 86/06/09	DATE PRINTED: 86/10/14
12			
13	ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT		
14			
15	PARAMETER	RESULT	
16	T55333 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.16 NANOGRAM/G	
17	T01108 PERCENT DRY SOLIDS	51.68 PERCENT	
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1 SAMPLE ID: 62872 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LCCREEK2 DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY - CAYUGA CREEK BED COMPOSITE
 7 DESCRIPTION: C37-C 860318
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 600: SOIL, SAND
 11 TIME OF SAMPLING: 86/05/30 : TO 86/05/09 : DATE PRINTED: 86/10/14

13 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

14	15	16	17	18	19	20	21	22	23	24
	PARAMETER			RESULT						
	155303 2,3,7,8-TETRACHLORODIBENZODIOXIN			0.26 NANOGRAM/G						
	101109 PERCENT DRY SOLIDS			54.77 PERCENT						
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1	SAMPLE ID: 62823	SAMPLE RECEIVED: 86/06/207	CHARGE: 24.50	1
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT			2
3	SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102	3
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA	4
5	LATITUDE:	LONGITUDE:	Z DIRECTION:	5
6	LOCATION: LOVE CANAL CREEKS STUDY			6
7	DESCRIPTION: BLACK CREEK BANK COMPOSITE BL1-C 860205			7
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY			8
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES			9
10	SAMPLE TYPE: 600: SOIL, SAND			10
11	TIME OF SAMPLING: 86/05/23	TO 86/05/28	DATE PRINTED: 86/10/14	11
12				12
13	ANALYSIS: DIOX-LC	DIOXIN - SOIL/SEDIMENT		13
14				14
15	PARAMETER		RESULT	15
16	T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN		< 0.01 NANOGRAM/G	16
17	REVISION DATE 86/10/09, ABOVE RESULT VALUE CHANGED, WAS:		< 0.05	17
18	T01108 PERCENT DRY SOLIDS		71.99 PERCENT	18
19	**** END OF REPORT ****			19
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SAMPLE ID: 62824 SAMPLE RECEIVED: 86/06/207 CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LG-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: BLACK CREEK BANK COMPOSITE, BL3-C 860206
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/23 : TO 86/05/28 : DATE PRINTED: 86/10/14
ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.02 NANOGM/G
REVISION DATE 86/10/09, ABOVE RESULT VALUE CHANGED, WAS:	< 0.05
T01108 PERCENT DRY SOLIDS	71.96 PERCENT

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SAMPLE ID: 62829 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: BERGHOLTZ CREEK BANK COMPOSITE, B2-C, 860207
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/28 : TO 86/05/28 : DATE PRINTED: 86/09/25

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.26 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	70.64 PERCENT

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1	SAMPLE ID: 62830	SAMPLE RECEIVED: 86/06/20/	CHARGE: 24.50	1
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT			2
3	SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102	3
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA	4
5	LATITUDE:	LONGITUDE:	Z DIRECTION:	5
6	LOCATION: LOVE CANAL CREEKS STUDY			6
7	DESCRIPTION: BERGHOLTZ CREEK BANK COMPOSITE, B4-C, 860208			7
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY			8
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES			9
10	SAMPLE TYPE: 600: SOIL, SAND			10
11	TIME OF SAMPLING: 86/05/28	TO 86/05/28	DATE PRINTED: 86/10/14	11
12				12
13	ANALYSIS: DIOX-LC	DIOXIN - SOIL/SEDIMENT		13
14				14
15	PARAMETER		RESULT	15
16	T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN		0.35 NANOGM/G	16
17	REVISION DATE 86/10/09, ABOVE RESULT VALUE CHANGED, WAS:		0.33	17
18	T01108 PERCENT DRY SOLIDS		69.53 PERCENT	18
19	*** END OF REPORT ***			19
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SAMPLE ID: 62831 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: BERGHOLTZ CREEK BANK COMPOSITE, B6-C, 860209
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/28 : TO 86/05/28 : DATE PRINTED: 86/09/25

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.65 NANOGM/G
T01108 PERCENT DRY SOLIDS	69.01 PERCENT

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SAMPLE ID: 62832 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24. 50
 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 POLITICAL SUBDIVISION: NIAGARA FALLS T. COUNTY: NIAGARA
 LATITUDE LONGITUDE: Z DIRECTION:
 LOCATION: LOVE CANAL CREEKS STUDY
 DESCRIPTION: BERGHOLTZ CREEK BANK COMPOSITE, BB-C, 860210
 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 SAMPLE TYPE: 600: SOIL, SAND
 TIME OF SAMPLING: 86/05/28 : TO 86/05/28 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
85285 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.51 NANODGM7G
801105 PERCENT DRY SOLIDS	65.23 PERCENT

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SAMPLE ID: 62834 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: BERGHOLTZ CREEK BANK COMPOSITE, B12-C 860212
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/28 : TO 86/05/28 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.32 NANOGM/G
T01108 PERCENT DRY SOLIDS	69.24 PERCENT

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SAMPLE ID: 62833 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 LATITUDE LONGITUDE: Z DIRECTION:
 LOCATION: LOVE CANAL CREEKS STUDY
 DESCRIPTION: BERGHOLTZ CREEK BANK COMPOSITE, B10-C, 860211
 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 SAMPLE TYPE: 600: SOIL, SAND
 TIME OF SAMPLING: 86/05/28 : TO 86/05/28 : DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
155333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.73 NANOGM/G
101108 PERCENT DRY SOLIDS	64.45 PERCENT

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1	SAMPLE ID:	63150	SAMPLE RECEIVED:	86/06/20/	CHARGE:	24.50
2	PROGRAM:	2010: LOVE CANAL CREEKS CONTRACT				
3	SOURCE ID:	LC-CREEK	DRAINAGE BASIN:	01	GAZETTEER CODE:	3102
4	POLITICAL SUBDIVISION:	NIAGARA FALLS E.			COUNTY:	NIAGARA
5	LATITUDE:	LONGITUDE:				
6	LOCATION:	LOVE CANAL CREEKS STUDY				
7	DESCRIPTION:	BERGHOLTZ CREEK BANK COMPOSITE, B14-C, 860213				
8	REPORTING LAB:	TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY				
9	TEST PATTERN:	DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES				
10	SAMPLE TYPE:	600: SOIL, SAND				
11	TIME OF SAMPLING:	86/05/28	:	TO 86/05/28	:	DATE PRINTED: 86/10/14
12						
13	ANALYSIS:	DIOX-LC DIOXIN - SOIL/SEDIMENT				
14						
15		PARAMETER		RESULT		
16		155333 2,3,7,8-TETRACHLORODIBENZODIOXIN		0.42 NANOGRAM/G		
17		101108 PERCENT DRY SOLIDS		62.03 PERCENT		
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PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 62835 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: BERGHOLTZ CREEK BANK COMPOSITE, B16-C, 860214
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 600: SOIL, SAND
TIME OF SAMPLING: 86/05/28 : TO 86/05/28 : DATE PRINTED: 86/09/25

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55333 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.40 NANOGRAM/G
T01108 PERCENT DRY SOLIDS	59.34 PERCENT

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SAMPLE ID: 64623 SAMPLE RECEIVED: 86/09/02/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: GC LAB BLANK SILICA GEL
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 298: INTERNAL LABORATORY BLANK
TIME OF SAMPLING: 86/09/02 DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
PARAMETER RESULT
T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN < 0.18 NANOGRAM/G
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PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

1 SAMPLE ID: 64622	SAMPLE RECEIVED: 86/09/02/	CHARGE: 24.50
2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3 SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4 POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
5 LATITUDE:	LONGITUDE:	Z DIRECTION:
6 LOCATION: LOVE CANAL CREEKS STUDY		
7 DESCRIPTION: GC HOAGS CORNERS SOIL SPIKE		
8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10 SAMPLE TYPE: 296: LABORATORY SPIKE - INTERNAL QUALITY CONTROL		
11 TIME OF SAMPLING: 86/09/02		DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC	DIOXIN - SOIL/SEDIMENT
PARAMETER	RESULT
753393 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.10 NANOGRAM/G
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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 84621 SAMPLE RECEIVED: 86/09/02/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: GC REPLICATE OF 82860
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 295: DUPLICATE -- INTERNAL QUALITY CONTROL
TIME OF SAMPLING: 86/09/02 DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	0.42 NANDESM/G
TOTAL PERCENT DRY SOLIDS	50.03 PERCENT

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1	SAMPLE ID:	64574	SAMPLE RECEIVED:	86/09/02/	CHARGE:	24.50	1
2	PROGRAM:	2010: LOVE CANAL CREEKS CONTRACT					2
3	SOURCE ID:	LC-CREEK	DRAINAGE BASIN:	01	GAZETTEER CODE:	3102	3
4	POLITICAL SUBDIVISION:	NIAGARA FALLS C.			COUNTY:	NIAGARA	4
5	LATITUDE:		LONGITUDE:		Z DIRECTION:		5
6	LOCATION:	LOVE CANAL CREEKS STUDY					6
7	DESCRIPTION:	QC REPLICATE OF 62839					7
8	REPORTING LAB:	TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY					8
9	TEST PATTERN:	DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES					9
10	SAMPLE TYPE:	295: DUPLICATE - INTERNAL QUALITY CONTROL					10
11	TIME OF SAMPLING:	86/09/02			DATE PRINTED:	86/10/14	11
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13	ANALYSIS:	DIOX-LC	DIOXIN - SOIL/SEDIMENT				13
14							14
15		PARAMETER			RESULT		15
16		T55333 2,3,7,8-TETRACHLORODIBENZODIOXIN			< 0.13 NANOGRAM/G		16
17		T01108 PERCENT DRY SOLIDS			56.34 PERCENT		17
18		**** END OF REPORT ****					18
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RESULTS OF EXAMINATION

FINAL REPORT

SAMPLE ID: 64572 SAMPLE RECEIVED: 86/09/02/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: G C LAB BLANK HOAGS CRS SOIL
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 298: INTERNAL LABORATORY BLANK
TIME OF SAMPLING: 86/09/02 DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
T55335 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.15 NANOGRAM/G
**** END OF REPORT ****	

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1	SAMPLE ID: 64573	SAMPLE RECEIVED: 86/09/02/	CHARGE: 24.50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY		
7	DESCRIPTION: GC LAB SPIKE HDGS CR5 SOIL		
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 296: LABORATORY SPIKE - INTERNAL QUALITY CONTROL		
11	TIME OF SAMPLING: 86/09/02	DATE PRINTED: 86/10/14	
12	ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT		
13			
14			
15	PARAMETER	RESULT	
16	155333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.96 NANOGRAM/G	
17	**** END OF REPORT ****		
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1	SAMPLE ID: 64554	SAMPLE RECEIVED: 86/08/297	CHARGE: 24. 50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY		
7	DESCRIPTION: GC LAB BLANK SILICA GEL		
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 298: INTERNAL LABORATORY BLANK		
11	TIME OF SAMPLING: 86/08/		DATE PRINTED: 86/10/14
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13	ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT		
14			
15	PARAMETER		RESULT
16	T55333 2, 3, 7, 8-TETACHLORODIBENZODIOXIN		< 0.16 NANOGRAM/G
17			**** END OF REPORT ****
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1 SAMPLE ID: 64553 SAMPLE RECEIVED: 86/08/29/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY
 7 DESCRIPTION: QC HDAGS CORNERS SOIL SPIKE
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 296: LABORATORY SPIKE - INTERNAL QUALITY CONTROL
 11 TIME OF SAMPLING: 86/08/ DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
155333 2,3,7,8-TETRACHLORODIBENZODIOXIN	< 0.23 NANOGM/G
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FINAL REPORT

SAMPLE ID: 64549 SAMPLE RECEIVED: 86/08/29/ CHARGE: 24.50
PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: LOVE CANAL CREEKS STUDY
DESCRIPTION: GC REPLICATE OF #62844
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
SAMPLE TYPE: 295: DUPLICATE - INTERNAL QUALITY CONTROL
TIME OF SAMPLING: 86/08/ DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
155303 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.50 NANOGRAM/G
101106 PERCENT DRY SOLIDS	56.72 PERCENT

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RESULTS OF EXAMINATION

FINAL REPORT

1 SAMPLE ID: 64550 SAMPLE RECEIVED: 86/08/29/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY
 7 DESCRIPTION: GC HOAGS CORNERS SOIL SPIKE
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 296: LABORATORY SPIKE - INTERNAL QUALITY CONTROL
 11 TIME OF SAMPLING: 86/08/ DATE PRINTED: 86/10/14

13 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
 14
 15 PARAMETER RESULT
 16 155323 2,3,7,8-TETRACHLORODIBENZODIOXIN 1.00 NANOGM/G
 17 ***** END OF REPORT *****

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RESULTS OF EXAMINATION

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1 SAMPLE ID: 64552 SAMPLE RECEIVED: 86/08/29/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY
 7 DESCRIPTION: QC REPLICATE OF #62830
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 295: DUPLICATE - INTERNAL QUALITY CONTROL
 11 TIME OF SAMPLING: 86/08/ : DATE PRINTED: 86/10/14

12 ANALYSTS: DIOX-LC DIOXIN - SOIL/SEDIMENT

PARAMETER	RESULT
15 155333 2,3,7,8-TETRACHLORODIBENZODIOXIN	0.30 NANOGM/G
16 101108 PERCENT DRY SOLIDS	70.85 PERCENT

17 ***** END OF REPORT *****

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1	SAMPLE ID: 64551	SAMPLE RECEIVED: 86/08/29/	CHARGE: 24.50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY		
7	DESCRIPTION: QUALITY CONTROL LAB BLANK HDAGS CRS		
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 298: INTERNAL LABORATORY BLANK		
11	TIME OF SAMPLING: 86/08/		DATE PRINTED: 86/10/14
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13	ANALYSIS: DIOX-LC	DIOXIN - SOIL/SEDIMENT	
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15	PARAMETER		RESULT
16	T55333 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN		< 0.02 NANOGRAM/G
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PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

1	SAMPLE ID: 63160	SAMPLE RECEIVED: 86/06/20/	CHARGE: 10.00
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.	COUNTY: NIAGARA	
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY		
7	DESCRIPTION: COMPOSITE-5 HEXANE RINSE#63137-63140 + 63152		
8	REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY		
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 170: RINSES, WASHINGS		
11	TIME OF SAMPLING: / /		DATE PRINTED: 86/10/14

ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

PARAMETER	RESULT
T55335 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	< 0.34 NANOGRAM/L
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52	DIV. SOLID WASTES RM. 209	
53	NY STATE DEP'T. ENVIRON. CONSERV.	SUBMITTED BY: BOBERSKY
54	50 WOLF RD	
55	ALBANY, NY 12233	

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NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1

RESULTS OF EXAMINATION

FINAL REPORT

1	SAMPLE ID: 63154	SAMPLE RECEIVED: 86/06/20/	CHARGE: 24.50
2	PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT		
3	SOURCE ID: LC-CREEK	DRAINAGE BASIN: 01	GAZETTEER CODE: 3102
4	POLITICAL SUBDIVISION: NIAGARA FALLS C.		COUNTY: NIAGARA
5	LATITUDE:	LONGITUDE:	Z DIRECTION:
6	LOCATION: LOVE CANAL CREEKS STUDY		
7	DESCRIPTION: TRIP BLK. MALCOLM PIRNIE LABELED BOTTLE SOIL/DRY MATERIAL		
8	REPORTING LAB:	TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY	
9	TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES		
10	SAMPLE TYPE: 297: FIELD BLANK / TRIP BLANK		
11	TIME OF SAMPLING: / / :	DATE PRINTED: 86/10/14	
12	ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT		
13	PARAMETER RESULT		
14	T55333 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN < 0.26 NANOGRAM/G		
15	**** END OF REPORT ****		
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51	GUY BOBERSKY		
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53	NY STATE DEP'T. ENVIRON. CONSERV.		SUBMITTED BY: BOBERSKY
54	50 WOLF RD		
55	ALBANY, NY 12233		
56			
57			

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

1 SAMPLE ID: 63153 SAMPLE RECEIVED: 86/06/20/ CHARGE: 24.50
 2 PROGRAM: 2010: LOVE CANAL CREEKS CONTRACT
 3 SOURCE ID: LC-CREEK DRAINAGE BASIN: 01 GAZETTEER CODE: 3102
 4 POLITICAL SUBDIVISION: NIAGARA FALLS C. COUNTY: NIAGARA
 5 LATITUDE: LONGITUDE: Z DIRECTION:
 6 LOCATION: LOVE CANAL CREEKS STUDY
 7 DESCRIPTION: FIELD BLANK-MALCOLM PIRNIE LABELED BOTTLE SOIL/DRY MATTER
 8 REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
 9 TEST PATTERN: DIOXIN-LC: DIOXIN ANALYSIS - LOVE CANAL SOIL/SEDIMENT SAMPLES
 10 SAMPLE TYPE: 297: FIELD BLANK / TRIP BLANK
 11 TIME OF SAMPLING: / / : DATE PRINTED: 86/10/14

12 ANALYSIS: DIOX-LC DIOXIN - SOIL/SEDIMENT
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PARAMETER	RESULT
TS5335 2, 3, 7, 8-TETRACHLORODIBENZODIOXIN	< 0.20 NANOGRAM/G
**** END OF REPORT ****	

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New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-



Henry G. Williams
Commissioner

JAN 29 1987

Mr. Dave Scherdel
Malcolm Pirnie Inc.
PO Box 1938
Buffalo, New York 14219

Dear Mr. Scherdel:

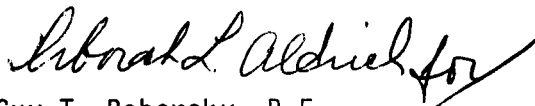
RE: Amendment to Contract No. D-000303, Love Canal
Additional Creek Sampling and Sanitary Sewer Inspection

Enclosed is a copy of the New York State Department of Health's report of the Laboratory examination for the samples collected at the former Oak Island area under the subject project.

These are provided to you for inclusion in the final engineering report for this project which you are preparing.

Any question call me at 518-457-4343.

Sincerely,



Guy T. Bobersky, P.E.
Senior Sanitary Engineer
Bureau of Western Remedial Action
Division of Solid and Hazardous Waste

Enclosure
cc: w/enclosure
D. Garbarini, USEPA, Region II

LOVE CANAL CAYUGA CREEK SAMPLES

266-30-9 AD-1

Results for 2,3,7,8-Tetrachlorodibenzo-p-dioxin

Sample #	type	bottle #	ng/gram	d.l. ng/gram	% Solids	Recovery (%) 13C-2378-TCDD
63239	sm	860421	ND	0.08	87.50	68
63240	sm	860424	ND	0.13	87.00	65
63241	sm	860430	ND	0.11	82.30	71
63243	sm	860426	0.43	0.07	73.30	54
63261	sm	860425	ND	0.27	100.00	62
66458	bk	-	ND	0.09	-	78

sm = sample bk = blank rp = replicate sp = spike
 rp = replicate
 hr = hexane rinse wb = water blank fb = field blank

APPENDIX D

OAK ISLAND SOIL BORING LOGS

MALCOLM
PIRNIE

MALCOLM FIRNIE INC.

BORING NUMBER: Boring # B1

PROJECT : Love Cnl., Bergholtz Crk. PROJECT NO. : 266-30-9104
 DATE : 6/25/86 LOCATION : Niagara Falls, N.Y.
 CONTRACTOR : EMPIRE SOILS INVEST. INSPECTOR : Gregory Burchette
 DRILL. METHOD: 3" HOLLOW SAMP. METHOD : 3" Split spoon
 STEM AUGER continuous

=====

SAMPLE		SOIL DESCRIPTION			
No.	Blows per 6" (ft.)	Depth	Density, color, SOIL, admixtures moisture, other notes, ORIGIN	Well Const	Remarks
S1	5	0-2	REC. 17", top 2" organic material, dense brown Clay and Sand with medium to fine gravel		Boring backfilled with bentonite and grout
	34				
	15				
	17				
S2	11	2-4	REC. 12", medium dense brown Sand and Clay with medium to fine gravel		
	12				
	15				
	12				
S3	6	4-6	REC. 7", medium dense brown Sand and Caly with medium to fine gravel		
	6				
	6				
	7				
S4	7	6-8	REC. 12", Same as 4-6'		
	11				
	12				
S5	5	8-10	REC. 20", medium dense black, gray Clay with little fine gravel		← Old Creek Bed
	5				
	7				
	9				

=====

MALCOLM PIRNIE INC.
 PROJECT :Love Cnl.,Bergholtz Crk.
 DATE :6/25/86
 CONTRACTOR :EMPIRE SOILS INVEST.
 DRILL. METHOD:3" HOLLOW
 STEM AUGER

BORING NUMBER:Boring # B2
 PROJECT NO. :266-30-9104
 LOCATION :Niagara Falls,N.Y.
 INSPECTOR :Gregory Burchette
 SAMP. METHOD :3" Split spoon
 continuous

SAMPLE		SOIL DESCRIPTION		
No.	Blows per 6"(ft.)	Depth	Density, color, SOIL, admixtures moisture, other notes, ORIGIN	Well Const Remarks
S1	7 11 11 26	0-2	REC.14",top 3" organic material, medium dense brown Clay and Sand with medium to fine gravel	Boring backfilled with bentonite and grout
S2	30 28 30 15	2-4	REC.12",dense brown Sand and Clay with medium to fine gravel	
S3	8 10 9 28	4-6	REC.22",medium dense brown Sand and Caly with medium to fine gravel	
S4	10 6 5 5	6-8	REC.12",Same as 4-6'	
S5	7 5 4 6	8-10	REC. 9",loose brown Sand and Clay with little fine gravel	
S6	7 4 3 2	10-12	REC. 24", loose black,gray Clay with little fine gravel	<-- Old Creek Be

MALCOLM PIRNIE INC.

PROJECT :Love Cnl.,Bergholtz Crk.
DATE :6/25/86
CONTRACTOR :EMPIRE SOILS INVEST.
DRILL. METHOD:3" HOLLOW
STEM AUGER

BORING NUMBER:Boring # B3
PROJECT NO. :266-30-9104
LOCATION :Niagara Falls,N.Y.
INSPECTOR :Gregory Burchette
SAMP. METHOD :3" Split spoon
continuous

SAMPLE		SOIL DESCRIPTION		
No.	Blows per 6"(ft.)	Depth	Density, color, SOIL, admixtures moisture, other notes, ORIGIN	Well Const Remarks
S1		0-2	No split spoon taken, fill contains large blocks of discarded concrete	Boring backfilled with bentonite and grout
S2		2-4	REC.3",loose brown Sand and Clay with large blocks of concrete	
S3	15 8 9 8	4-6	REC.23",medium dense gray black Clay with little fine gravel	<-- Old Creek Bed