PHASE II
ENVIRONMENTAL SITE ASSESSMENT

Exploratory Test Pit Investigation

Conducted on

Nathan's Waste & Paper Stock Company, Inc.
Erie Terrace
Amsterdam, New York

Prepared for

Nathan's Waste & Paper Stock Company, Inc.
Amsterdam, New York

Prepared by

Empire Soils Investigations, Inc.
Ballston Spa, New York

Job No. ATA-93-135
July 19, 1993

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Exploratory Test Pit Investigation

Nathan's Waste & Paper Stock Company, Inc.
Erie Terrace
Amsterdam, New York

1.0 INTRODUCTION

Empire Soils Investigations, Inc. (Empire Soils) was authorized by Mr. Henry Lessick of Nathan's Waste and Paper Stock Co., Inc., Amsterdam, New York to perform a Phase II Environmental Site Assessment of Nathan's Waste and Paper Stock Company facility located in Amsterdam, New York.

As presented in Empire Soils proposal to Nathan's Waste and Paper Stock Company dated June 10, 1993, the following investigation was proposed.

- In order to evaluate subsurface conditions at the site, Empire Soils purposes advancing seven (7) test pits within the site, plus one test pit within the area of the former gasoline tank location, for a total of eight (8) test pits. One (1) sample from the test pit within the area of the former gasoline tank will be analyzed in the laboratory for quantitative documentation purposes. In addition, one composite soil sample will be taken from four (4) test pits within the northern section of the site. Moreover, one (1) composite soil sample will be taken from four (4) test pits located within the southern section of the site, for a total of two (2) composite soil samples. The soil sample from the former gasoline tank pit will be analyzed by EPA Method 8021 per the NYSDEC Petroleum Contaminated Soil Guidance Policy. The two (2) composite samples will be analyzed by the Toxicity Characteristic Leachate Procedure (TCLP) with the resulting extract to be analyzed for 8 RCRA metals; arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Upon recovery, each soil sample will be screened (head space analysis) in the field with a photo-ionization detector (PID) for the presence of volatile organic compounds.

2.0 BACKGROUND

Based on the results of Empire Soils' Phase I Environmental Site Assessment dated June 7, 1993 of Nathan's facility, the site at one time contained at least one underground gasoline storage tank utilized by a prior tenant (lumber company). Empire Soils recommended a subsurface investigation of the former tank pit as well as test pit investigations throughout the site.

3.0 METHOD OF INVESTIGATION

On June 17 1993, Empire Soils equipment and personnel were on site to perform the subsurface investigation. For this purpose, 7 test pits were excavated on-site from approximately 3.5 feet to 6 feet below existing grade. Test pit No. 1 (TP-1) was completed within the western half of the site, as was TP-2 and TP-3. Test pit No. 4, TP-5 and TP-6 were excavated in the eastern half of the site. Test pit No. 7 was completed at or near the reported location of a former gasoline underground storage tank (UST) pit. Please refer to Appendix A, Drawing No. 1 for the location of the test pits.

Each test pit was screened for the presence of volatile organic compounds with a H-Nu Systems Model PI 101 photoionization detector (PID). This instrument will detect if present, the relative aggregate concentration of many volatile organic compounds (VOC's) common to petroleum grade fuels in the parts per million (ppm) range. Moreover, a composite soil sample from TP-1 through TP-6 was collected for field ("head space") analysis. In addition, a composite soil sample from TP-1, TP-2 and TP-3 was collected for laboratory analysis, as was a composite soil sample from TP-4, TP-5 and TP-6. A grab soil sample from TP-7 was also collected for laboratory analysis.

At the time each sample was recovered, the on-site Environmental Scientist jarred the soil samples in precleaned laboratory grade containers for on-site "head space" analysis of the soil samples.

All samples obtained for laboratory analysis were shipped to Huntington Analytical Services (HAS). HAS is a wholly owned subsidiary of Empire Soils and is a NYSDEC and NYSDOH approved environmental laboratory.

4.0 FINDINGS OF INVESTIGATION

4.1 Subsurface Conditions

Surficial deposits on the property investigated, as revealed through the test pits completed for this study, consist of brown fine to medium sand and gravel with pebbles and cobbles, ash and fragments of brick and shale observed in all the test pits. In addition, TP-4 contained fragments of wood and scrap metal. Test pit No. 7 contain what is believed to be a former concrete foundation. Groundwater was not encountered in any of the test pits.

Each of the seven test pits was screened during the excavation, using a photoionization detector, for the presence of volatile organic compounds. Positive readings were not detected above the sensitivity range of the instrument, this being approximately 1 to 2 parts per million in all the test pits, excluding TP-7. Positive readings of 10 to 20 ppm were detected in TP-7 from approximately 2 to 4 feet below existing grade.

According to the PID, a "head space" reading of <1 ppm was recorded for each composite soil sample from TP-1 through TP-6.

All of the field screening PID readings are presented in the table below.

PID Screening Results (ppm)

Test Pit No. 1		Test Pit No. 2		Test Pit No. 3	
Depth	Result	Depth	Result	Depth	Result
General screening at 0.0' to 4.5'	<1	General screening 0.0' to 3.5'	<1	General screening at 0.0' to 4.5'	<1
Jarred Head Space	<1	Jarred Head Space	<1	Jarred Head Space	<1
Test Pit No. 4		Test Pit No. 5		Test Pit No. 6	
Depth	Result	Depth	Result	Depth	Result
General screening at 0.0' to 3.5'	<1	General screening at 0.0' to 3.5'	<1	General screening at 0.0' to 4.5"	<1
Jarred Head Space	<1	Jarred Head Space	<1	Jarred Head Space	<1
Test Pit No. 7		--		--	--
Depth	Result	--		--	--
General screening at 0.0 to 6.0'	10-20	--		--	--

4.2 Analytical Results For Soil

Soil samples were collected on June 17, 1993 and analyzed by HAS on June 23, 1993. Presented below is a summary of the analytical results for each group of compounds included in the analyses. The full set of soil analytical results are presented in Appendix A.

Metals Analysis, 8 RCRA - TCLP

One composite soil sample from TP-1, TP-2 and TP-3 and one composite soil sample from TP-4, TP-5 and TP-6 was analyzed in the laboratory for eight RCRA metals; arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

Based on the laboratory result from the composite sample from TP-1, TP-2 and TP-3, none of the metals analyzed were detected in the soil sample, above the limits of their represented laboratory detection, these being 0.0002 mg/l to 0.1 mg/l with the exception of barium, cadmium, chromium and selenium.

Based on the laboratory result from the composite sample from TP-4, TP-5 and TP-6, none of the metals analyzed were detected in the soil sample, above the limits of their represented laboratory detection, these being 0.0002 mg/l to 0.1 mg/l with the exception of chromium.

EPA Method 8021, NYSDEC Spill Technology and Remediation Series (STARS) List

One grab soil samples from the bottom of TP-7, approximately 6 feet below existing grade was analyzed in the laboratory.

Based on the laboratory result none of the analytes included in this methodology were detected above the limits of laboratory detection, these being 0.50 ug/l to 1.0 ug/l.

5.0 ANALYTICAL SUMMARY

Each of the seven test pits was screened in the field with a photoionization detector for the presence of volatile organic compounds. Positive readings were not detected above the sensitivity range of the instrument, this being approximately 1 to 2 parts per million in all the test pits, excluding TP-7. A positive reading of 10 to 20 ppm was detected in TP-7.

Based upon the eight RCRA metals results for the soil samples obtained from TP-1 through TP-6, barium was detected at a level of 0.79 mg/l; cadmium at 0.007 mg/l, chromium at 0.019 mg/l and 0.04 mg/l and selenium at 0.26 mg/l. However, the metals detected did not exceed their respective EPA limits, this being 100 mg/l for barium, 1.0 mg/l for cadmium, 5.0 mg/l for chromium and 1.0 mg/l for selenium.

Based upon the DEC STARS List included in the analytical methodology described for TP-7, none of the analytes were detected in the soil sample above their respective limits of detection.

6.0 DISCUSSION

The positive field measurements obtained for the use of the PID suggest that there may be volatile organics present in the soils within the area of TP-7. As this portion of the site has been reported to have at one time contained an underground gasoline storage tank, it is reasonable to suspect that the former tank and/or its associated piping are in part or wholly responsible for this finding. However, based on the laboratory results of the soils obtained from the test pit, none of the analytes included in this methodology were detected above there limit of laboratory detection.

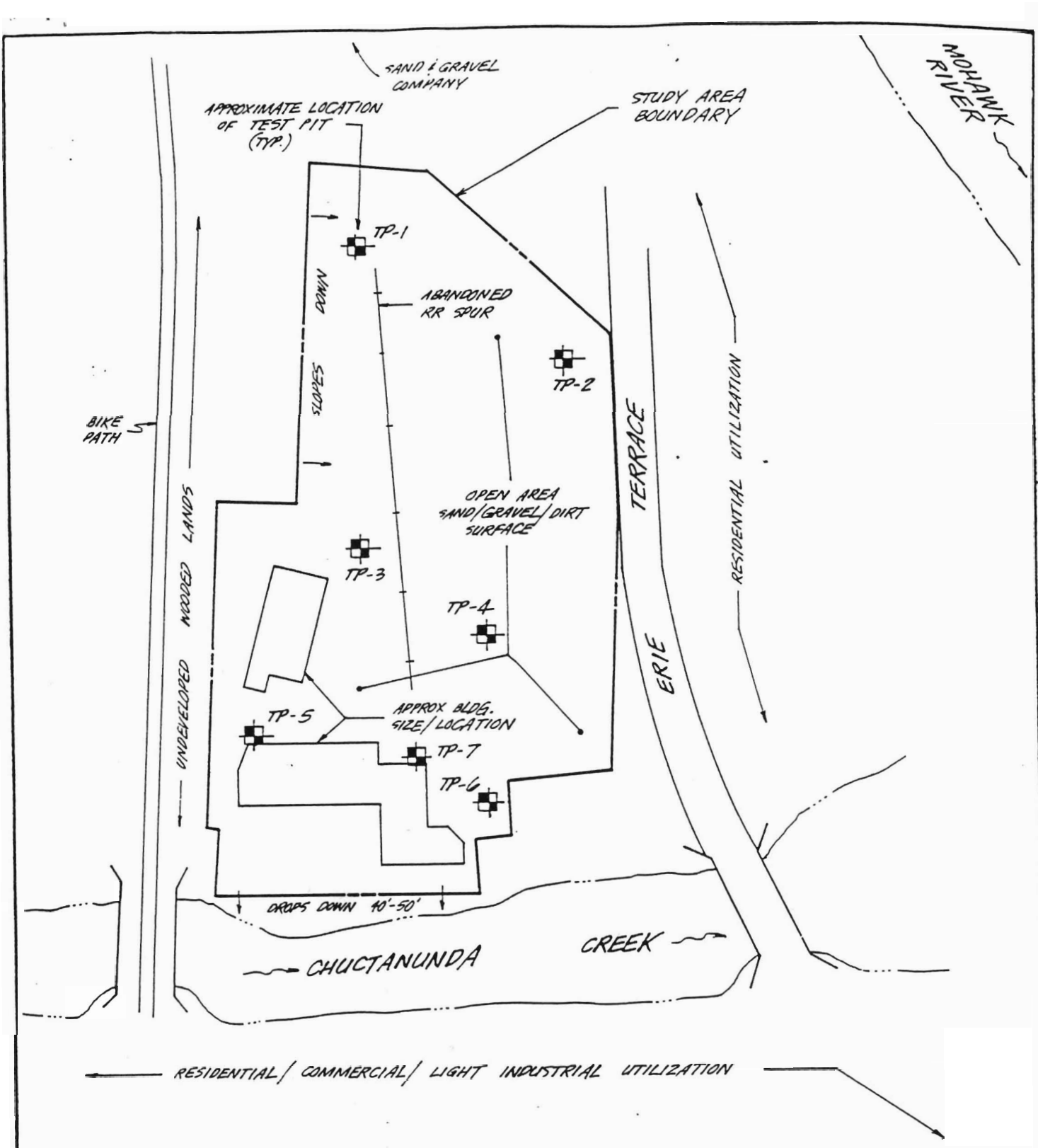
Based on the PID field screening results which tend to detect the presence of volatile organic compounds (even though such was not confirmed through the laboratory analytical procedure) this incident make constitute a release reportable to the NYSDEC under the spill guidelines of that agency.

This investigation was limited in design and completed to determine if the site has been impacted from an environmental standpoint. As such, the findings brought forth through the investigation should be viewed as overall and may or may not represent a worst case scenario.

7.0 CLOSURE

This report presents the findings and conclusions of a Phase II Environmental Site Assessment performed at Nathan's Waste and Paper Stock Company. The information presented herein is based upon investigations completed to date by Empire Soils, including test pits and the analytical laboratory results of soil samples from the test pits. The opinion of the environmental conditions existing within the project site represents the conditions believed to exist at the time of our investigation. No other warranties, expressed or implied are made.

APPENDIX A



EMPIRE SOILS INVESTIGATIONS INC

SITE PLAN

PHASE II ENVIRONMENTAL SITE ASSESSMENT
NATHAN'S WASTE & PAPER STOCK CO. INC.
ERIE TERRACE, AMSTERDAM, NEW YORK

DR BY JH	SCALE 1" = 100'	PROJ NO ATA-93-135
CK'D BY	DATE 7/93	DRWG NO 2

BASE MAP: MONTGOMERY COUNTY REAL PROPERTY TAX SERVICE AGENCY

ENVIRONMENTAL ANALYTICAL REPORT

REPORT NUMBER: 93-0908

PREPARED FOR:

EMPIRE SOILS INVESTIGATIONS, INC.
P.O. BOX 2199
BALLSTON SPA, NEW YORK 12020

RE: ATA-93; NATHAN'S - PHASE II

PREPARED BY:

HUNTINGDON ANALYTICAL SERVICES
DIVISION OF EMPIRE SOILS INVESTIGATIONS, INC.
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TELEPHONE: 716/735-3400; FAX: 716/735-3653

JULY 20, 1993

Huntingdon
Analytical Laboratory

HUNTINGDON ANALYTICAL SERVICES
ELAP #10833
ENVIRONMENTAL REPORT

REPORT NUMBER: 93-0908

STATEMENT OF WORK PERFORMED

I HEREBY DECLARE THAT THE WORK WAS PERFORMED UNDER MY SUPERVISION ACCORDING TO THE PROCEDURES OUTLINED BY THE FOLLOWING REFERENCES AND THAT THIS REPORT PROVIDES A CORRECT AND FAITHFUL RECORD OF THE RESULTS OBTAINED.

- 40 CFR PART 136, "GUIDELINES ESTABLISHING TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS UNDER THE CLEAN WATER ACT", OCTOBER 26, 1984 (FEDERAL REGISTER) U. S. ENVIRONMENTAL PROTECTION AGENCY.

- U.S. ENVIRONMENTAL PROTECTION AGENCY, "TEST METHODS OF EVALUATING SOLID WASTE - PHYSICAL/CHEMICAL METHODS", OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, SW-846, 2ND EDITION AND 3RD EDITION.

THIS REPORT CONTAINS ANALYTICAL DATA BASED ON OUR EXAMINATION OF THE SAMPLE(S) PRESENTED TO US. THIS REPORT CONTAINS (EXCEPT WHERE EXPLICITLY STATED) A COMPLETE ACCOUNT OF THE ANALYSES REQUESTED TO BE PERFORMED ON THE SAMPLE(S). INFORMATION WHICH WAS NOT REQUESTED TO BE REPORTED IS NOT INCLUDED.

ANDREW P. CLIFTON JULY 20, 1993
ENVIRONMENTAL LABORATORY DIRECTOR

REPORT CODE LEGEND:

<DL	= LESS THAN DETECTION LIMIT
ND	= NOT DETECTED
NA	= NOT APPLICABLE
INP	= INFORMATION NOT PROVIDED
MB	= METHOD BLANK

Huntingdon
Analytical Laboratory

HUNTINGDON ANALYTICAL SERVICES

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: NATHAN'S PHASE II #1
HAS Sample #93-0908-01
Date Sampled: 6/17/93

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	RESULT mg/L
ARSENIC	6010	5.0 mg/L	7/09/93	<0.05
BARIUM	6010	100 mg/L	7/09/93	0.79
CADMIUM	6010	1.0 mg/L	7/09/93	0.007
CHROMIUM	6010	5.0 mg/L	7/09/93	0.019
LEAD	6010	5.0 mg/L	7/09/93	<0.04
MERCURY	7470	.2 mg/L	7/08/93	<0.0002
SELENIUM	6010	1.0 mg/L	7/09/93	0.26
SILVER	6010	5.0 mg/L	7/09/93	<0.01

HUNTINGDON ANALYTICAL SERVICES

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: NATHAN'S PHASE II #2
HAS Sample #93-0908-02
Date Sampled: 6/17/93

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	RESULT mg/L
ARSENIC	6010	5.0 mg/L	7/09/93	<0.05
BARIUM	6010	100 mg/L	7/09/93	<0.10
CADMIUM	6010	1.0 mg/L	7/09/93	<0.01
CHROMIUM	6010	5.0 mg/L	7/09/93	0.04
LEAD	6010	5.0 mg/L	7/09/93	<0.04
MERCURY	7470	.2 mg/L	7/08/93	<0.0002
SELENIUM	6010	1.0 mg/L	7/09/93	<0.10
SILVER	6010	5.0 mg/L	7/09/93	<0.01

HUNTINGDON ANALYTICAL SERVICES

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: METHOD BLANK (SOLUTION #1)
HAS Sample #93-0908-MB
Date Sampled: NA

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	RESULT mg/L
ARSENIC	6010	5.0 mg/L	7/09/93	<0.05
BARIUM	6010	100 mg/L	7/09/93	<0.10
CADMIUM	6010	1.0 mg/L	7/09/93	<0.01
CHROMIUM	6010	5.0 mg/L	7/09/93	<0.01
LEAD	6010	5.0 mg/L	7/09/93	<0.04
MERCURY	7470	.2 mg/L	7/08/93	<0.0002
SELENIUM	6010	1.0 mg/L	7/09/93	<0.10
SILVER	6010	5.0 mg/L	7/09/93	<0.01

HUNTINGDON ANALYTICAL SERVICES

METALS ANALYSIS-TCLP DATA SHEET

Sample ID: METHOD BLANK (SOLUTION #2)
HAS Sample #93-0908-MB
Date Sampled: NA

ANALYTE	EPA METHOD	EPA LIMITS	DATE ANALYZED	RESULT mg/L
ARSENIC	6010	5.0 mg/L	7/09/93	<0.05
BARIUM	6010	100 mg/L	7/09/93	<0.10
CADMIUM	6010	1.0 mg/L	7/09/93	<0.01
CHROMIUM	6010	5.0 mg/L	7/09/93	<0.01
LEAD	6010	5.0 mg/L	7/09/93	<0.04
MERCURY	7470	.2 mg/L	7/08/93	<0.0002
SELENIUM	6010	1.0 mg/L	7/09/93	<0.10
SILVER	6010	5.0 mg/L	7/09/93	<0.01

HUNTINGDON ANALYTICAL SERVICES

METHOD 8021
New York State DEC STARS List

SAMPLE IDENTIFICATION :	3	METHOD BLANK
HAS SAMPLE #930908	03	–

ANALYTE	RESULT	RESULT ug/kg	MDL ug/kg
BENZENE	<0.50	<0.50	0.50
TOLUENE	<0.50	<0.50	0.50
ETHYL BENZENE	<0.50	<0.50	0.50
M/P-XYLENES	<1.0	<1.0	1.0
O-XYLENE	<0.50	<0.50	0.50
STYRENE	<0.50	<0.50	0.50
ISOPROPYLBENZENE	<0.50	<0.50	0.50
n-PROPYL BENZENE	<0.50	<0.50	0.50
1,3,5-TRIMETHYLBENZENE	<0.50	<0.50	0.50
1,2,4-TRIMETHYLBENZENE	<0.50	<0.50	0.50
sec-BUTYLBENZENE	<0.50	<0.50	0.50
4-ISOPROPYLTOLUENE	<0.50	<0.50	0.50
n-BUTYL BENZENE	<0.50	<0.50	0.50
NAPHTHALENE	<1.0	<1.0	1.0
DATE EXTRACTED:	6-23-93	6-23-93	
DATE ANALYZED:	6-23-93	6-23-93	

HUNTINGDON ANALYTICAL SERVICES - CHAIN-OF-CUSTODY RECORD AND ANALYTICAL REQUEST FORM

PAGE OF

Client Name: EMPIRE SOILS INVESTIGATIONS

Address: PO BOX 2199 BALLSTON SPA, NEW YORK 12020

Client Contact: Andy Tobias

Phone: 899-7491

HAS Quote #

P.O. #

Project No.: ATA-93-

Project/Site Name: Nathan's Phase II

Samplers Signature:

HAS Ref. No. 93-0908

Sample I.D.	Date	Time	Comp/Grab	Sample Location	HAS Seq. #	MATRIX	No. of Cont.	Container Size & Type: 125ml glass soil	Analysis Requested/Remarks
1	6/17/93	1015	C	TP's 1, 2, 3	01	SOIL	1	1	TCLP(8) RCRA Metals
2	6/17/93	1215	C	TP's 4, 5, 6	02	SOIL	1	1	TCLP(8) RCRA Metals
3	6/17/93	1300	G	TP-7	03	SOIL	1	1	EPA Method 8021

Relinquished by:	Date/Time:	Received by:	Relinquished by:	Date/Time:	Received by:
	6/17/93 1506				
Relinquished by:	Date/Time:	Received by:	Relinquished by:	Date/Time:	Received by:
Relinquished by:	Date/Time:	Received for Lab by:	Date/Time: 6/18/93 200	Remarks:	

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