[redacted]

ecco INC.
The
Environmental
Consulting
Company

Environmental Investigation

at

Trinidad Park
201 Kensington Avenue
Buffalo, New York

Prepared for:

Buffalo Urban Renewal Agency

Prepared by:

ECCO, Inc.

June, 1993

Brisbane Bldg.
Suite 515
Buffalo, New York 1420[illegible]
(716) 852-3[illegible]

TABLE OF CONTENTS

Introduction

Approximately one year ago, the City of Buffalo learned of a problem of tar oozing to the asphalt surface of the tennis courts in Trinidad Park. Trinidad Park is located on Trinidad Place near Kensington Avenue, three blocks east of Main Street. The tar had accumulated in several areas within the courts but was primarily located between the east fence and the eastern end of the courts. Three test pits were dug by the City to investigate the source of this tar, however, no definitive source was determined. In May 1993, the City of Buffalo hired ECCO, Inc., to continue this investigation.

Scope of Work

The scope of work for which ECCO was hired to perform was:

- Determining the nature and extent of subsurface tar in the tennis court area;
- Sample and analyze the tar and underlying soils to determine an appropriate method for remediation of contaminated materials;
- Estimating the volume of contaminated material requiring remediation; and
- Prepare specifications and cost estimates of remediation.

In preparation of the field activity, ECCO conducted a background search of the property and performed site reconnaisance.

The location of Trinidad Park is presented in Figure 1. A site map is illustrated in Figure 2.

Background Search

ECCO reviewed tax maps at the Buffalo Tax Assessor's office to determine if surrounding properties could have been a source for the on-site tar or other environmental problems. Based on tax map information, the property east of the site is owned by Conrail and D.R. Case Development, Inc. Kensington Avenue is north of the park, and land north of Kensington Avenue is owned by Niagara Mohawk. The land west of the park is residential properties. South of the park is an old ice storage facility. No evidence was found to indicate that these properties are potential sources of environmental contamination at Trinidad Park.

ECCO also examined Sanborn Fire Insurance Maps for the years 1953 and 1963. The 1953 map indicated that the park had previously been owned by Buffalo Asphalt and Construction, Inc. Information on the 1953 map indicates that this company had an asphalt tank directly beneath the tennis court area. Figure 3 presents an enlargement of the 1953 Sanborn Map with approximate locations of the tennis courts and former basketball courts. Test pits, asphalt removal locations and sampling locations are also illustrated on Figure 3.

Historical Test Pits - 1992

Approximately one year ago, three test pits had been dug at the east end of the tennis courts, in an area of surface tar on the asphalt. Two test pits paralleled the east fence and are adjacent to one another but are separated by a concrete building foundation. The other test pit was perpendicular to the fence. Both test pits west of the building foundation wall were partially filled with water. Exhumed soil and asphalt had been piled north and south of the test pit perpendicular to the fence. The three test pits had been dug by the City of Buffalo in a preliminary assessment of the site.

Field Work

On-site excavation and sampling were performed on May 10, 1993. A JCB Turbo 1400B backhoe was used for excavation.

Field activities on May 10, 1993, proceeded in the following manner:

- A strip of asphalt was removed at the eastern end of the previous excavation to determine if the tar extended beyond the excavation. No subsurface tar material was found in the underlying soil.

- Asphalt was excavated adjacent to the eastern fence from an area with a one-inch thickness of surface tar. No tar was found beneath the gravel base of the asphalt.

- The existing north-south trench along the east fence of the tennis court was excavated deeper to determine if subsurface tar was present at depth in the underlying soil. This area corresponded to the location of one of the underground asphalt tanks found on the 1953 Sanborn Map. No tar or asphalt materials were present below the surface. The following lithology was observed in this trench:

Thickness	Material
1 inch	Black tar substance
4 - 5 inches	Asphalt topping and gravel base
6 inches	Medium to coarse, grayish brown sand and rock fragments
2 feet	Fine, black sand, with some fine gravel
> 4 feet	Light brown silty clay

- Asphalt with surface tar, located immediately north of the previous test pits, was excavated with the backhoe.

- The asphalt surface and gravel base was removed at six locations around the test pits to determine if there were any areas where tar was found beneath the gravel base. No tar was observed beneath the gravel.

- A three-foot deep test pit was dug outside of the fence in a grassy area adjacent to the southeast corner of the tennis courts. No tar or asphalt were observed. Exhumed soil was therefore backfilled into the test pit. This test pit had the following soil characteristics:

Thickness	Material
4 inches	Grass and topsoil
8 inches	Sand, clay and gravel fill
1.5 feet	Fine, black sand
> 0.5 feet	Light brown silty clay

All visually contaminated excavated soils were placed on preexisting piles of excavated soil, which were located north and south of the east-west test pit. Plastic sheeting was placed on top of the preexisting piles prior to placement of newly exhumed materials. Although separation of soil and asphalt materials was initially planned for the newly exhumed materials, this was not possible due to access restrictions for the backhoe created by the existing soil piles and the trenches. All excavated materials were covered with plastic sheeting after completion of excavation and sampling. Plastic sheeting was secured by placing cobbles from the excavation around the edges and on top of the sheeting.

There were two important observations made during the excavation and exploration activities for the tar material:

1) The thickness of the asphalt topping the gravel base and the amount of tar on the gravel were found to vary throughout the tennis court

area. This tar is believed to have been used as a penetrating oil which improved adherence of the asphalt topping to the gravel base during the paving of the courts. There appeared to be a correlation between the amount of tar in the gravel base and the areas where tar had seeped to the asphalt surface.

2) The physical consistency of the asphalt material appears to change with temperature. In the morning, when excavation was started, excavated asphalt with no surface tar was removed in solid chunks; the temperature was between 65 and 70°F. Later in the day the temperature rose to 85°F. Pieces of asphalt which had previously had no free tar, began to have tar ooze from the edges. The tar material appeared to have been mobilized by the increase in temperature.

Sampling Program

All samples were collected with stainless steel spoons. The tar sample was obtained from a single location and placed directly into sample jars. Each of the two subsurface soil samples was also collected from a discrete location, however, these samples were homogenized in an aluminum pan prior to placement into the sample bottles. After the completion of sampling, samples were chilled to 4°C and delivered to the laboratory. All standard protocol for sampling, preservation and chain-of-custody were followed.

One sample of the black tar (Sample 1), one sample of the grayish brown sand (Sample 3), and one sample of the fine black sand (Sample 4) were collected for laboratory analysis. Sample 1 was obtained from the west end of the east-west test pit and Samples 3 and 4 were collected from the north-south test pit, along the east tennis court fence. The tar sample was analyzed for TCLP organics and inorganics, cyanide, PCBs and RCRA characteristics. The two soil samples were analyzed for TCL organics, TAL inorganics and RCRA characteristics.

The possibility of a second tar sample (Sample 2) was anticipated prior to sampling. Labels with "Sample 2" were affixed to a set of jars that were not used. It was not necessary to collect Sample 2 since the tar appeared to be homogeneous throughout the site.

Analytical Results

Tar Sample

The tar sample (Sample 1) was analyzed for full TCLP parameters, PCBs and RCRA characteristics for the purpose of determining the method of disposal for this material. The results of the full TCLP analysis of Sample 1, collected on the north side of the east-west trench, yielded no detectable levels of organics or inorganics. PCB concentrations and reactivity parameters were also below detection limits. The sample pH was measured at 8.66 and ignitability was greater than 100°C.

Subsurface Soil Samples

Two subsurface soil samples were analyzed for total concentrations of TCL organics and TAL inorganics to determine if levels of these parameters were within NYSDEC guidelines. These parameters and RCRA characteristics were also used to determine the method of disposal for excavated soil. No PCBs, volatile organics, pesticides or cyanide were detected in soil Samples 3 and 4. Reactivity parameters were also below detection limits, and ignitability was greater than 100°C. The pH of Samples 3 and 4 was measured at 7.98 and 8.08, respectively. The following semi-volatile compounds were found in Sample 4: phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(k)fluoranthene and benzo(a)pyrene. Chrysene, detected at a concentration of 1,000 parts per billion (ppb) was the only semi-volatile compound above the guidance value of the NYSDEC Soil Cleanup Objectives to Protect Ground Water Quality. The NYSDEC guidance value for chrysene is 400 ppb. No semi-volatile compounds were found in Sample 3.

Inorganics detected in Samples 3 and 4 include: aluminum, arsenic, barium, calcium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, vanadium and zinc.

The following metals in Samples 3 and 4 were detected at concentrations above guidelines for both NYSDEC Soil Cleanup Goals and the range of soil background levels in the Eastern United States.

Metal	Sample 3 concentration (ppm)	Sample 4 concentration (ppm)	NYSDEC Soil Cleanup Goal (ppm)	Background (ppm)
Calcium	80,100		SB	130 - 35,000
Copper	50.9	94.9	25 or SB	1 - 50
Lead	212	345	30 or SB	4 - 61
Magnesium	8420	7420	SB	100 - 5,000
Mercury		0.295	0.1	0.001 - 0.2
Zinc	239	76.3	20 or SB	9 - 50

Note: SB = Site Background

All analytical results are presented in Appendix A.

Excavated Soil Volume Calculations

An estimate of the volume of excavated soil contained within the southern pile (Pile A) and the northern pile (Pile B) was calculated from measured dimensions of both piles. Pile A has a height of 5 feet and a base of 14 feet x 17 feet. Pile B has a height of 4.5 feet and a base of 20 feet x 22 feet. Using these dimensions, an estimated range of soil volume was calculated for each soil pile. The high volume estimate was calculated using the volume formula for a pyramid:

$$V = \text{Base} \times \text{Height} \times 1/3$$

The low volume estimate was calculated using the volume formula for a cone:

$$V = .2618 \times (\text{Diameter})^2 \times \text{Height}$$

The diameter for the cone was obtained by averaging the two sides of the base.

Using these estimates the volume range of Pile A is 11.6 cubic yards to 14.7 cubic yards and the volume range for Pile B is 19.2 cubic yards to 24.4 cubic yards. These values yield a range of the total excavated soil volume from 30.8 cubic yards to 39.1 cubic yards.

Conclusions

Although there is historical evidence of an underground asphalt tank beneath the east end of the tennis courts, no data were found to indicate that this historic tank was the source of tar on the asphalt surface.

Furthermore, no evidence was found to indicate that this tank is still present at the site. No subsurface tar was detected in the soil beneath the asphalt topping and gravel base.

The source of black tar on the tennis court surface is believed to be from the asphalt materials themselves. Tar is commonly applied to gravel bases to promote bonding to asphalt toppings. There also appears to be a correlation between areas with a heavy layer of tar on the gravel base and areas where the tar has oozed to the surface. In addition, tar was observed to ooze out of excavated asphalt material after being exposed to hot outdoor temperatures.

It is quite possible that more of the black tar will ooze to the asphalt surface in future periods of hot weather. Heat appears to mobilize the tar. The most likely areas for this to occur are where the asphalt topping is cracked. Several small areas of solidified surface tar were observed throughout the tennis court area during the field program.

Although subsurface soil Samples 3 and 4 collectively contained concentrations of chrysene, calcium, copper, lead, magnesium, mercury and zinc found to be above the NYSDEC Soil Cleanup Goals and the Eastern United States soil background levels, these levels are not believed to cause a health threat at the park. Park patrons will have no exposure to these soils. Furthermore, ground water is not used as a source of potable water in the area. The soil guidelines established by the NYSDEC are not legislative mandates, and are primarily used for establishing soil cleanup levels at sites requiring hazardous waste cleanup.

Recommendations

Based on the field exploration; the analytical results from Samples 1, 3 and 4, field observations and the background information search, ECCO makes the following recommendations:

- Remove all excavated materials and dispose of this material at a sanitary landfill.
- Backfill trenches with clean fill.

While not required, the City may want to consider removing the remaining asphalt topping and gravel base from the tennis court area which will prevent the potential for further oozing of tar through the asphalt surface.

Remedial Specifications

Since the tar and contaminated soil are non-hazardous and, therefore, candidates for a sanitary landfill, a simplistic remedial specification is in order. Furthermore, during the field investigation, ECCO excavated and stockpiled all contaminated materials which require remediation. Therefore, the only remaining tasks are:

Acquire landfill approval, load and haul the material, and disposal.

1. Contaminated soil must be approved for acceptance by a permitted landfill prior to removal from site.

2. Load contaminated material onto a vehicle permitted by the NYSDEC to haul industrial waste.

3. Haul the material to a permitted landfill.

4. Site renovation at City discretion.

Remedial Cost Estimate

A. Loading anticipated to be performed by City. Cost = N/A
Haul and disposal of tar and contaminated soil = $80/ton
Conversion factor: 1 cubic yard = 1.5 tons

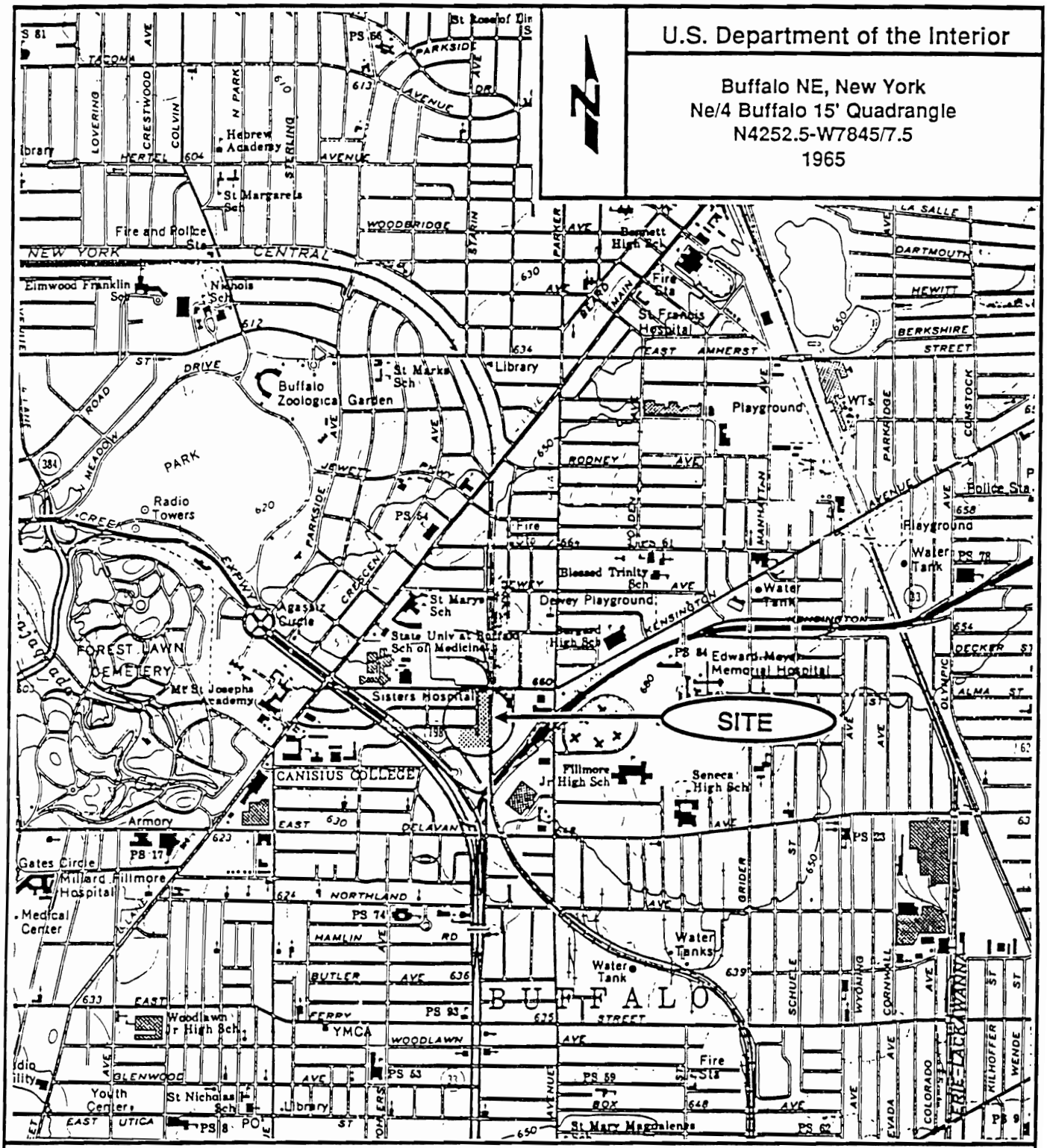
The volume of contaminated material is estimated to be 30.8 - 39.1 cubic yards
The conversion is: 46 - 59 tons, which equates to ±2-3 tractor trailer loads

Estimated fee for haul and disposal is $3,700 - $4,800.

B. A cost estimate for removing the entire court area has not been developed since this is not required. A volume calculation is presented herein.
The court dimensions are: 100' x 120'
If the top 0.5 foot is removed from the entire court, then 222 cubic yards (333 tons) will be generated.

C. As an option to disposal, the City may want to consider recycling/reusing the asphalt.

Figures



U.S. Department of the Interior

Buffalo NE, New York
Ne/4 Buffalo 15' Quadrangle
N4252.5-W7845/7.5
1965

Trinidad Park
201 Kensington Avenue
Buffalo, New York

ecco INC.
THE ENVIRONMENTAL CONSULTING COMPANY

Figure 1
Site Location Map
Scale: 1" = 2000'

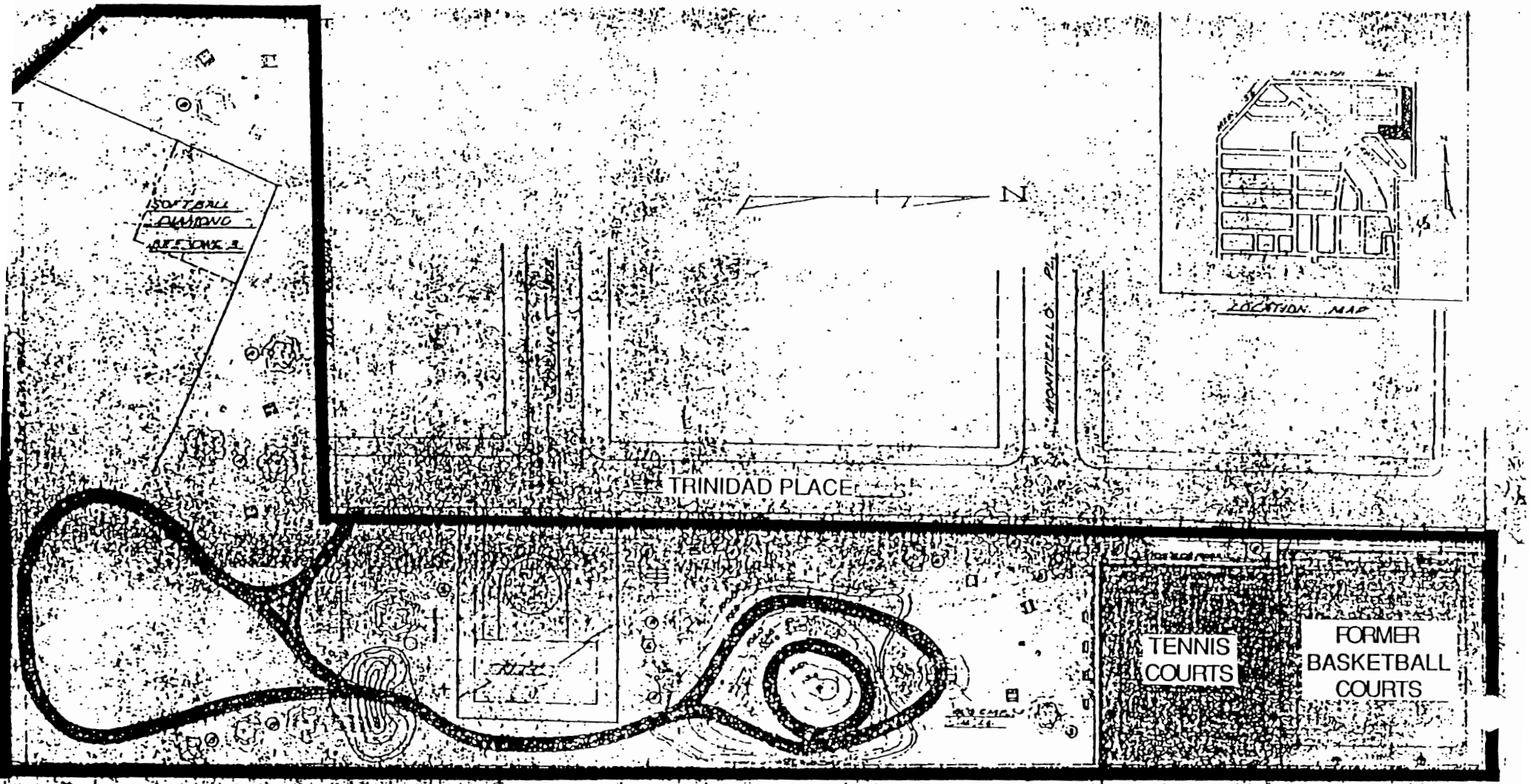
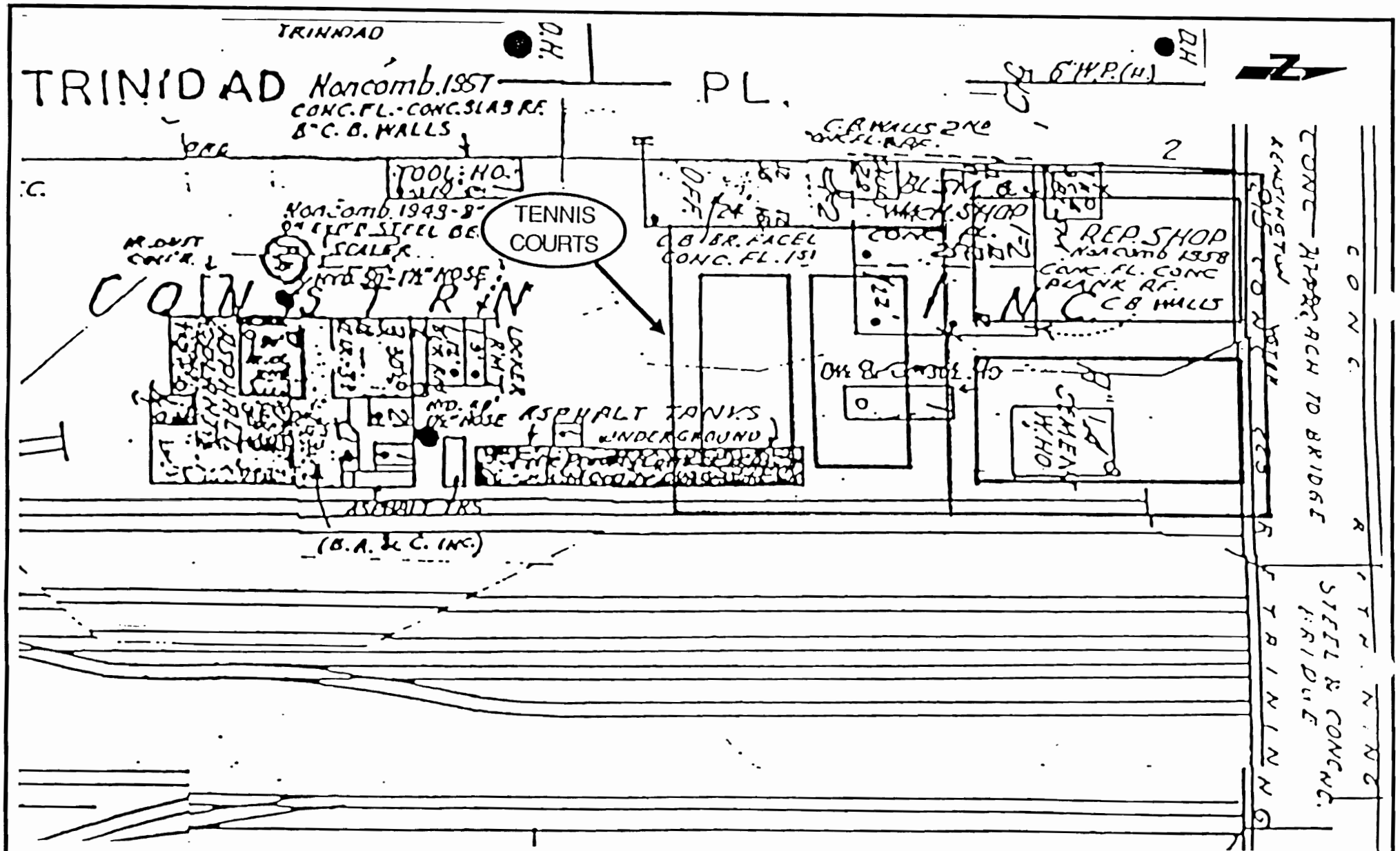


FIGURE 2 — SITE MAP

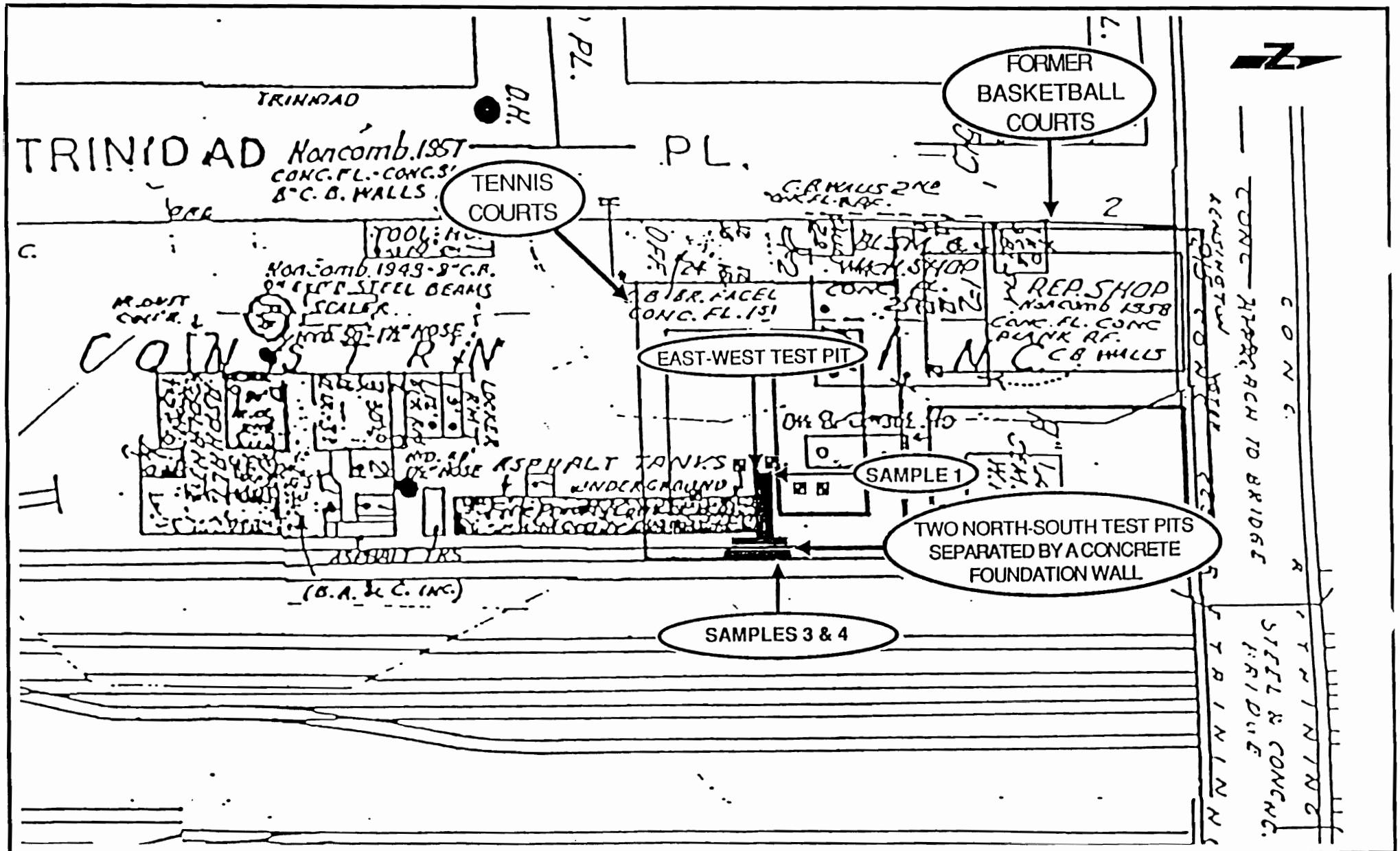
APPROVED:

FRANK A SEDITA, III/DC

RICHARD C. MILLER
COMMISSIONER URBAN RENEWAL



ecco INC. THE ENVIRONMENTAL CONSULTING COMPANY	Study Area Map
Figure 3 / Scale 1 inch = 50 feet	Trinidad Park



KEY

■ Location of asphalt removal point to define limit of mobile tar beneath court

ecco INC.
THE ENVIRONMENTAL CONSULTING COMPANY

Figure 4

Scale 1 inch = 50 feet

Sampling and Excavation Location Map

Trinidad Park

Appendix A

General Testing Corporation

A Full Service Environmental Laboratory

JUNE 2 1993

Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Re: Trinidad Park

Dear Mr. Mark Hemann

Enclosed are the results of the analysis requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION

Janice Jaeger
Customer Service Representative

Enc.

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-3760 • (716) 454-1245
85 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 488-5242 • Fax: (201) 488-6386
435 Lawrence Bell Drive • Amherst, NY 14221 • Tele: (716) 634-0454 • Fax: (716) 634-9019

General Testing Corporation

Effective 10/1/91

GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. For further explanation see case narrative / cover letter.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range and reanalysis could not be performed.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

N - Spiked sample recovery not within control limits. (Flag the entire batch - Inorganic analytes only)

* - Duplicate analysis not within control limits. (Flag the entire batch - Inorganic analysis only)

- Also used to qualify Organics QC data outside limits. (Only used on the QC summary sheets)

M - Duplication injection precision not met (GFA only).

S - Reported value determined by Method of Standard Additions. (MSA)

X - As specified in the case narrative.

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

ANALYTICAL RESULTS - ug/g Wet Wt.

Sample:	-001						
Location:	N SIDE OF E-W TRENCH						
Date Collected:	05/10/93						
Time Collected:	15:35						
pH	8.66						
Ignitability °C	>100						
Reactivity							
Total Available Cyanide	0.333 U						
Total Available Sulfide	5.00 U						

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

ANALYTICAL RESULTS - mg/l

Sample:	-001						
Location:	N SIDE OF E-W TRENCH						
Date Collected:	05/10/93						
Time Collected:	15:35						
TCLP Metals							
Arsenic	0.500 U						
Barium	1.00 U						
Cadmium	0.100 U						
Chromium	0.100 U						
Lead	0.100 U						
Mercury	0.0020 U						
Selenium	0.500 U						
Silver	0.100 U						

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.
NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

***TCLP Toxicity Characteristic Leaching Procedure.
Federal Register, Part 261, Vol. 55, No. 126,
June 29, 1990.

Data reported is biased on the above regulation.

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCLP VOLATILES BY EPA METHOD 8240*** ANALYTICAL RESULTS - ug/l

Sample:	-001						
Location:	N SIDE OF E-W TRENCH						
Date Collected:	05/10/93						
Time Collected:	15:35						
Date Analyzed:	05/22/93						
Dilution:	10						
Benzene	50 U						
Carbon Tetrachloride	50 U						
Chlorobenzene	50 U						
Chloroform	50 U						
1,2-Dichloroethane	50 U						
1,1-Dichloroethene	50 U						
Methyl Ethyl Ketone	100 U						
Tetrachloroethene	50 U						
Trichloroethene	50 U						
Vinyl Chloride	50 U						
SURROGATE STANDARD RECOVERIES							
1,2-Dichloroethane-d4	83						
(Acceptance Limits: 76-114%)							
Toluene d8	103						
(Acceptance Limits: 88-110%)							
Bromofluorobenzene	97						
(Acceptance Limits: 86-115%)							

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.
NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

***TCLP Toxicity Characteristic Leaching Procedure.
Federal Register, Part 261, Vol. 55, No. 126,
June 29, 1990.
Data reported is biased on the above regulation.

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCLP ACID EXTRACTABLES BY EPA METHOD 8270*** ANALYTICAL RESULTS - ug/l

Sample:	-001						
Location:	N SIDE OF E-W TRENCH						
Date Collected:	05/10/93						
Time Collected:	15:35						
Date Extracted:	05/19/93						
Date Analyzed:	05/27/93						
Dilution:							
m+p-cresol	100 U						
o-cresol	100 U						
Pentachlorophenol	200 U						
2,4,5-Trichlorophenol	100 U						
2,4,6-Trichlorophenol	100 U						
Surrogate Standard Recoveries:							
2-Fluorophenol	46						
(Acceptance Limits: 21-100%)							
Phenol-d6	35						
(Acceptance Limits: 10-94%)							
2,4,6-TriBromophenol	86						
(Acceptance Limits: 10-123%)							

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.
NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

***TCLP Toxicity Characteristic Leaching Procedure.
Federal Register, Part 261, Vol. 55, No. 126,
June 29, 1990.

Data reported is biased on the above regulation.

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Sample(s) Reference

Trinidad Park

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Received : 05/11/93 P.O. #:

TCLP BASE NEUTRALS BY EPA METHOD 8270*** ANALYTICAL RESULTS - ug/l

Sample:	-001						
Location:	N SIDE OF E-W TRENC						
Date Collected:	05/10/93						
Time Collected:	15:35						
Date Extracted:	05/19/93						
Date Analyzed:	05/27/93						
Dilution:							
1,4 Dichlorobenzene	50 U						
2,4-Dinitrotoluene	50 U						
Hexachlorobenzene	50 U						
Hexachloroethane	50 U						
Nitrobenzene	50 U						
Pyridine	100 U						
Hexachloro-1,3-butadiene	50 U						
Surrogate Standard Recovery:							
Nitrobenzene-d5	75						
(Acceptance Limits: 35-114%)							
2-Fluorobiphenyl	68						
(Acceptance Limits: 43-116%)							
Terphenyl-d14	90						
(Acceptance Limits: 33-141%)							

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.
NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

***TCLP Toxicity Characteristic Leaching Procedure.
Federal Register, Part 261, Vol. 55, No. 126,
June 29, 1990.

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General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCLP PESTICIDES BY GC METHOD 8080 *** ANALYTICAL RESULTS - ug/l

Sample:	-001						
Location:	N SIDE OF E-W TRENCH						
Date Collected:	05/10/93						
Time Collected:	15:35						
Date Extracted:	05/19/93						
Date Analyzed:	05/27/93						
Dilution:	10						
Chlordane	20 U						
Endrin	5.0 U						
Heptachlor	5.0 U						
Heptachlor epoxide	5.0 U						
gamma-BHC (Lindane)	5.0 U						
Methoxychlor	20 U						
Toxaphene	100 U						
Surrogate Standard Recovery							
Dibutylchlorendate (Acceptance Limits: 24-154)	112						
Tetrachloro-meta-xylene (Acceptance Limits: 60-150)	105						

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.
NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801
NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

***TCLP Toxicity Characteristic Leaching Procedure.
Federal Register, Part 261, Vol. 55, No. 126,
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A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference:

Trinidad Park

Received : 05/11/93 P.O. #:

TCLP HERBICIDES ANALYSIS BY GC METHOD 8150 *** ANALYTICAL RESULTS - ug/l

Sample:	-001						
Location:	N SIDE OF E-W TRENCH						
Date Collected:	05/10/93						
Time Collected:	15:35						
Date Extracted:	05/19/93						
Date Analyzed:	05/25/93						
Dilution:	100						
2,4-D	50 U						
2,4,5-TP (Silvex)	50 U						
SURROGATE STANDARD RECOVERIES							
% Recovery							
2,4-DB	97						
(Acceptance Limits 18-152)							

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.
NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

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LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference:

Trinidad Park

Received : 05/11/93

P.O. #:

ANALYTICAL UNITS - ug/g Dry Wt.

Location:		-002 N SIDE OF E-W TRENCH
Date Collected:		05/10/93
Time Collected:	PQL	15:35
Solids, %		91.3
Cyanide, Total	0.010	1.09 U

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.
NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01824 Date: JUNE 2 1993

Client:
Mr. Mark Hemann
Ecco, Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

ANALYSIS * BY EPA METHOD 8080 ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:		-002
Location:		N SIDE OF E-W TRENCH
Date Collected:		05/10/93
Time Collected:	PQL	15:35
Date Extracted:		05/19/93
Date Analyzed:		05/19/93
Dilution:		10
PCB 1016	20	5000 U
PCB 1221	20	5000 U
PCB 1232	20	5000 U
PCB 1242	20	5000 U
PCB 1248	20	5000 U
PCB 1254	20	5000 U
PCB 1260	20	5000 U
Surrogate Standard Recovery		
Tetrachloro-meta-xylene		102
(Acceptance Limits: 60-150%)		

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

Laboratory Director

GENERAL TESTING CORPORATION/CHAIN-OF-CUSTODY RECORD

710 Exchange Street, Rochester, NY 14608 | 85 Trinity Place, Hackensack, NJ 07601 | 435 Lawrence Bell Drive, Amherst, NY 14221-7077

GTC Job No. R93/1824

Client Project No. —

Sample Origination & Shipping Information

Collection Site

Address _____ Street _____ City _____ State _____ Zip

Collector _____ Print _____ Signature

Bottles Prepared by GTC — Rec'd by

Bottles Shipped to Client via Client — Seal/Shipping #

Samples Shipped via Client — Seal/Shipping #

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign	1. Sign	/ / :
for	for	
2. Sign	2. Sign	/ / :
for	for	
3. Sign	3. Sign	/ / :
for	for	

Sample(s) Received in Laboratory by _____ 5/11/93 @ 12 45

	Client I.D.# / Lab#	Sample Location / Date/Time	★	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y	Sample Prep Preserved N	Sample Prep Filtered Y	Sample Prep Filtered N	Bottle Set(s) (see below)
1	1 R93/1824-001	5/11/93 5:35		TCLP, CN, PCB, RCRA					4
2				TCLP, CN, PCB, RCRA					
3	3	5/11/93 5:45		TCLP/TAL, RCRA					
4	4 R93/1824-002	5/11/93 3:55		TCLP/TAL, RCRA					
5		/ / :							

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. ~~Plastic~~ Glass	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each				2							

Additional Analytes _____

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

★ Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), (X), (

JUN. 0 4 1993

General Testing Corporation

A Full Service Environmental Laboratory

JUNE 3 1993

Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Re: Trinidad Park

Dear Mr. Mark Hemann

Enclosed are the results of the analysis requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION

Janice Jaeger
Customer Service Representative

Enc.

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-3760 • (716) 454 1245
85 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 488 5242 • Fax (201) 488 6386
435 Lawrence Bell Drive • Amherst, NY 14221 • Tele (716) 634 0454 • Fax (716) 634 9019

General Testing Corporation

COMPANY: ECCO Inc.
Triidad Park
JOB #: R93/01821

INORGANIC ANALYSIS

Ecco soil samples were analyzed for the Target Analyte List of metals and Total Cyanide using EPA approved SW-846 methods.

No analytical or QC problems were encountered.

VOLATILE ORGANICS

Ecco soil samples were analyzed for Target Compound List (TCL) volatiles by method 8240 from SW-846.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples except the surrogate standard Toluene-d8 in samples R93/01821-001 and -002. These samples were reanalyzed and again the same surrogate was outside limits for recovery. Matrix interferences are suspected. The surrogate standard recoveries have been flagged with an "*".

All QC data associated with this analysis was acceptable.

All laboratory blanks were free of any contamination.

All samples were analyzed within the required holding time.

SEMIVOLATILE ORGANICS

Ecco soil samples were analyzed for TCL semivolatile organics using method 8270 from SW-846.

All the initial and continuing calibration criteria were met for this method.

All surrogate standard recoveries were within QC acceptance limits.

Sample R93/01821-001 was analyzed at a 1/5 dilution due to matrix interferences from hydrocarbons and the reported detection limit changed accordingly.

General Testing Corporation

Ecco R93/01821

PESTICIDE/PCB ANALYSIS

Ecco soil samples were analyzed for TCL Pesticides/PCBs by method 8080 from SW-846.

All initial and continuing calibration criteria were met.

All matrix spike, matrix spike duplicate, and reference check recoveries and precision data were acceptable.

All surrogate standard recoveries were within advisory QC limits except for the recovery of Tetrachloro-m-xylene on sample R93/01821-002 which was flagged with an "*". However, the recovery for the second surrogate standard, Dibutylchlorendate, was acceptable therefore the data was used.

Both samples were cleaned up using Alumina and Sulfur cleanups to try to eliminate matrix interferences however a 1/10 dilution was still neccessary which subsequently changed the detection limits reported.

No other analytical or QC problems were encountered with these analyses.

General Testing Corporation

Effective 10/1/91

GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. For further explanation see case narrative / cover letter.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range and reanalysis could not be performed.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

N - Spiked sample recovery not within control limits. (Flag the entire batch - Inorganic analytes only)

* - Duplicate analysis not within control limits. (Flag the entire batch - Inorganic analysis only)

- Also used to qualify Organics QC data outside limits. (Only used on the QC summary sheets)

M - Duplication injection precision not met (GFA only).

S - Reported value determined by Method of Standard Additions. (MSA)

X - As specified in the case narrative.

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01821 Date: JUNE 3 1993

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

ANALYTICAL RESULTS - ug/g Dry Wt.

Sample:		-001		-002			
Location:		N-S TRENCH E SIDE #3		N-S TRENCH E SIDE #4			
Date Collected:	PQL	05/10/93		05/10/93			
Time Collected:		15:45		15:55			
Cyanide, Total		1.10	U	1.09	U		
Solids, %		91.3		89.8			
Aluminum	10.0	6740		3560			
Antimony	5.00	5.48	U	5.57	U		
Arsenic	0.500	9.98		8.51			
Barium	0.500	90.3		47.0			
Beryllium	0.500	0.553		0.557	U		
Cadmium	1.00	1.46		1.11	U		
Calcium	50.0	80100		34300			
Chromium	1.00	18.1		6.92			
Cobalt	5.00	6.77		5.57	U		
Copper	1.00	50.9		94.9			
Iron	5.00	15400		11900			
Lead	5.00	212		345			
Magnesium	50.0	8420		7420			
Manganese	0.500	285		206			
Mercury	0.100	0.164		0.295			
Nickel	4.00	15.3		12.4			
Potassium	50.0	853		311			
Selenium	0.500	0.548	U	0.557	U		
Silver	1.00	1.58		1.11	U		
Sodium	50.0	107		77.6			
Thallium	5.00	5.48	U	5.57	U		
Vanadium	2.50	20.6		19.5			
Zinc	1.00	239		76.3			

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01821 Date: JUNE 3 1993

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCL VOLATILES BY EPA METHOD 8240* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:		-001	-002
Location:		N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4
Date Collected:		05/10/93	05/10/93
Time Collected:	PQL	15:45	15:55
Date Analyzed:		05/18/93	05/18/93
Dilution:		1	1
Chloromethane	5.0	5.5 U	5.6 U
Bromomethane	5.0	5.5 U	5.6 U
Vinyl Chloride	5.0	5.5 U	5.6 U
Chloroethane	5.0	5.5 U	5.6 U
Methylene Chloride	5.0	5.5 U	5.6 U
Acetone	10	11 U	11 U
Carbon Disulfide	10	11 U	11 U
1,1-Dichloroethene	5.0	5.5 U	5.6 U
1,1-Dichloroethane	5.0	5.5 U	5.6 U
trans-1,2-Dichloroethene	5.0	5.5 U	5.6 U
cis-1,2-Dichloroethene	5.0	5.5 U	5.6 U
Chloroform	5.0	5.5 U	5.6 U
2-Butanone (MEK)	10	11 U	11 U
1,2-Dichloroethane	5.0	5.5 U	5.6 U
1,1,1-Trichloroethane	5.0	5.5 U	5.6 U
Carbon Tetrachloride	5.0	5.5 U	5.6 U
Bromodichloromethane	5.0	5.5 U	5.6 U
1,2-Dichloropropane	5.0	5.5 U	5.6 U
1,3-Dichloropropene-Trans	5.0	5.5 U	5.6 U
Trichloroethene	5.0	5.5 U	5.6 U
Dibromochloromethane	5.0	5.5 U	5.6 U
1,1,2-Trichloroethane	5.0	5.5 U	5.6 U
Benzene	5.0	5.5 U	5.6 U
1,3-Dichloropropene(Cis)	5.0	5.5 U	5.6 U
Bromoform	5.0	5.5 U	5.6 U
4-Methyl-2-pentanone(MIBK)	10	11 U	11 U
2-Hexanone	10	11 U	11 U
Tetrachloroethene	5.0	5.5 U	5.6 U
1,1,2,2-Tetrachloroethane	5.0	5.5 U	5.6 U
Toluene	5.0	5.5 U	5.6 U
Chlorobenzene	5.0	5.5 U	5.6 U

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01821 Date: JUNE 3 1993

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCL VOLATILES BY EPA METHOD 8240* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:		-001	-002
Location:		N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4
Date Collected:		05/10/93	05/10/93
Time Collected:	PQL	15:45	15:55
Date Analyzed:		05/18/93	05/18/93
Dilution:		1	1
Ethylbenzene	5.0	5.5 U	5.6 U
Styrene	5.0	5.5 U	5.6 U
Total Xylene (o,m,p)	5.0	5.5 U	5.6 U
Surrogate Standard Recoveries			
1,2-Dichloroethane-d4	70-121	112	113
Toluene d8	81-117	132*	135*
4-Bromofluorobenzene	74-121	73	72

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01821 Date: JUNE 3 1993

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCL ACID EXTRACTABLES BY EPA METHOD 8270* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:		-001	-002
Location:		N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4
Date Collected:		05/10/93	05/10/93
Time Collected:	PQL	15:45	15:55
Date Extracted:		05/12/93	05/12/93
Date Analyzed:		5/24/93	5/24/93
Dilution:		5	1
Phenol	670	6300 U	740 U
2-Chlorophenol	670	6300 U	740 U
2-Nitrophenol	670	6300 U	740 U
2,4-Dimethylphenol	670	6300 U	740 U
2,4-Dichlorophenol	670	6300 U	740 U
4-Chloro-3-methylphenol	670	6300 U	740 U
2,4,6-Trichlorophenol	670	6300 U	740 U
2,4-Dinitrophenol	1300	13000 U	1500 U
4-Nitrophenol	1300	13000 U	1500 U
2-Methyl-4,6-dinitrophenol	1300	13000 U	1500 U
Pentachlorophenol	1300	13000 U	1500 U
2-Methylphenol	670	6300 U	740 U
4-Methylphenol	670	6300 U	740 U
2,4,5-Trichlorophenol	670	6300 U	740 U
SURROGATE STANDARD RECOVERIES			
2-Fluorophenol	25-121%	94	74
Phenol-d6	24-113%	110	90
2,4,6-TriBromophenol	19-122%	120	112

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01821 Date: JUNE 3 1993

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCL BASE NEUTRALS BY EPA METHOD 8270* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:		-001	-002					
Location:		N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4					
Date Collected:		05/10/93	05/10/93					
Time Collected:	PQL	15:45	15:55					
Date Extracted:		05/12/93	05/12/93					
Date Analyzed:		5/24/93	5/24/93					
Dilution:		5	1					
N-Nitrosodimethylamine	330	3100 U	370 U					
Bis(2-chloroethyl) ether	330	3100 U	370 U					
1,3 Dichlorobenzene	330	3100 U	370 U					
1,4 Dichlorobenzene	330	3100 U	370 U					
1,2 Dichlorobenzene	330	3100 U	370 U					
2,2'oxybis(1-Chloropropane)	330	3100 U	370 U					
N-Nitroso-Di-n-propylamine	330	3100 U	370 U					
Hexachloroethane	330	3100 U	370 U					
Nitrobenzene	330	3100 U	370 U					
Isophorone	330	3100 U	370 U					
bis(-2-chloroethoxy)methane	330	3100 U	370 U					
1,2,4-Trichlorobenzene	330	3100 U	370 U					
Naphthalene	330	3100 U	370 U					
Hexachlorobutadiene	330	3100 U	370 U					
Hexachlorocyclopentadiene	330	3100 U	370 U					
2-Chloronaphthalene	330	3100 U	370 U					
Dimethyl phthalate	330	3100 U	370 U					
Acenaphthylene	330	3100 U	370 U					
Acenaphthene	330	3100 U	370 U					
2,4-Dinitrotoluene	330	3100 U	370 U					
2,6-Dinitrotoluene	330	3100 U	370 U					
Diethyl phthalate	330	3100 U	370 U					
4-Chlorophenyl-phenyl-ether	330	3100 U	370 U					
Fluorene	330	3100 U	370 U					
1,2-Diphenylhydrazine	330	3100 U	370 U					
N-Nitrosodiphenylamine	330	3100 U	370 U					
4-Bromophenyl-phenylether	330	3100 U	370 U					
Hexachlorobenzene	330	3100 U	370 U					
Phenanthrene	330	3100 U	510					
Anthracene	330	3100 U	370 U					
Di-n-butyl phthalate	330	3100 U	370 U					
Benzidine	3300	31000 U	3700 U					
Fluoranthene	330	3100 U	1500					
Pyrene	330	3100 U	1500					

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job Number: R93/01821 Date: JUNE 3 1993

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

TCL BASE NEUTRALS BY EPA METHOD 8270* ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:		-001	-002					
Location:		N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4					
Date Collected:		05/10/93	05/10/93					
Time Collected:	PQL	15:45	15:55					
Date Extracted:		05/12/93	05/12/93					
Date Analyzed:		5/24/93	5/24/93					
Dilution:		5	1					
Butyl benzyl phthalate	330	3100 U	370 U					
3,3'-Dichlorobenzidine	330	3100 U	370 U					
Benzo(a)anthracene	330	3100 U	870					
Bis(2-ethylhexyl)phthalate	330	3100 U	370 U					
Chrysene	330	3100 U	1000					
Di-n-octyl phthalate	330	3100 U	370 U					
Benzo(b)Fluoranthene	330	3100 U	1900					
Benzo(k)fluoranthene	330	3100 U	550					
Benzo(a)pyrene	330	3100 U	950					
Indeno(1,2,3-cd)pyrene	330	3100 U	370 U					
Dibenzo(a,h)anthracene	330	3100 U	370 U					
Benzo(g,h,i)perylene	330	3100 U	370 U					
4-Chloroaniline	330	3100 U	370 U					
2-Methyl Naphthalene	330	3100 U	370 U					
2-Nitroaniline	330	3100 U	370 U					
3-Nitroaniline	330	3100 U	370 U					
Dibenzofuran	330	3100 U	370 U					
4-Nitroaniline	330	3100 U	370 U					
Carbazole	330	3100 U	370 U					
SURROGATE STANDARD RECOVERIES								
Nitrobenzene-d5	23-120%	98	84					
2-Fluorobiphenyl	30-115%	105	94					
Terphenyl-d14	18-137%	130	108					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

Laboratory Director

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01821 Date: JUNE 3 1993

Sample(s) Reference

Trinidad Park

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Received : 05/11/93

TCL * BY GC METHOD 8080 ANALYTICAL RESULTS - ug/kg Dry Wt.

Sample:		-001	-002					
Location:		N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4					
Date Collected:		05/10/93	05/10/93					
Time Collected:	PQL	15:45	15:55					
Date Extracted:		05/12/93	05/12/93					
Date Analyzed:		05/24/93	05/24/93					
Dilution:		10	10					
alpha-BHC	1.7	18 U	19 U					
beta-BHC	1.7	18 U	19 U					
gamma-BHC (Lindane)	1.7	18 U	19 U					
Heptachlor	1.7	18 U	19 U					
delta-BHC	1.7	18 U	19 U					
Aldrin	1.7	18 U	19 U					
Heptachlor epoxide	1.7	18 U	19 U					
alpha-Endosulfan	1.7	18 U	19 U					
4,4'-DDE	1.7	18 U	19 U					
Dieldrin	1.7	18 U	19 U					
Endrin	1.7	18 U	19 U					
4,4'-TDE (DDD)	1.7	18 U	19 U					
beta-Endosulfan	3.3	37 U	37 U					
4,4'-DDT	3.3	37 U	37 U					
Endrin Aldehyde	3.3	37 U	37 U					
Endosulfan Sulfate	3.3	37 U	37 U					
Methoxychlor	6.7	73 U	74 U					
Endrin Ketone	3.3	37 U	37 U					
Chlordane	6.7	73 U	74 U					
Toxaphene	33	370 U	370 U					
PCB 1016	17	180 U	190 U					
PCB 1221	17	180 U	190 U					
PCB 1232	17	180 U	190 U					
PCB 1242	17	180 U	190 U					
PCB 1248	17	180 U	190 U					
PCB 1254	17	180 U	190 U					
PCB 1260	17	180 U	190 U					

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145 NY ID# in Hackensack: 10801

NJ ID# in Rochester: 73331 NJ ID# in Hackensack: 02317

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/01821 Date: JUNE 3 1993

Client:
Mr. Mark Hemann
ECCO Inc.
403 Main St.
Buffalo, NY 14203

Sample(s) Reference:

Trinidad Park

Received : 05/11/93 P.O. #:

ANALYSIS * BY GC METHOD 8080 — ANALYTICAL RESULTS - %

Sample:		-001	-002
Location:		N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4
Date Collected:		05/10/93	05/10/93
Time Collected:	LIMITS	15:45	15:55
SURROGATE STANDARD RECOVERY			
% Recovery			
Dibutylchlorendate	24-150%	107	32
Tetrachloro-meta-xylene	60-150%	93	57 *

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

Laboratory Director

Erie-0

GENERAL TESTING CORPORATION/CHAIN-OF-CUSTODY RECORD

710 Exchange Street, Rochester, NY 14608 | 85 Trinity Place, Hackensack, NJ 07601 | 435 Lawrence Bell Drive, Amherst, NY 14221-7077

GTC Job No. 1821
Client Project No. —

Sample Origination & Shipping Information

Collection Site: Trinidad Park
Address: Trinidad Place (Street) Buffalo (City) NY (State) (Zip)
Collector: Mark Heinemann (Print) Mark R. Heinemann (Signature)

Bottles Prepared by: GTC
Bottles Shipped to Client via: Client
Samples Shipped via: Client

Rec'd by
Seal/Shipping #
Seal/Shipping #

Sample(s) Relinquished by:	Received by:	Date/Time
1. Sign Mark R. Heinemann	1. Sign K Wong	5/10/93
for	for GTC	4:30 pm
2. Sign K Wong	2. Sign Click Courier	5/10/93
for GTC	for	10:00 AM
3. Sign	3. Sign	/ /
for	for	

Sample(s) Received in Laboratory by 5/11/93 @ 12:45

	Client I.D.# / Lab#	Sample Location / Date/Time	★	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y	Sample Prep Preserved N	Sample Prep Filtered Y	Sample Prep Filtered N	Bottle Set(s) (see below)
1	1	N side of E-W trench (soil) 5/10/93 3:35		TCLP, CN, PCB, RCRA					
2				TCLP, CN, PCB, RCRA					
3	3 B93 1821 001	E side of N-S trench 5/10/93 3:45		TCL/TAL, RCRA					2, 4
4	4 B93 1821 002	E side of N-S trench 5/10/93 3:55		TCL/TAL, RCRA					↓
5		/ /							

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. GL Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.		
# of each		1		1							

Additional Analytes _____

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

★ Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I), (X),

General Testing Corporation

A Full Service Environmental Laboratory

JUNE 8 1993

Mr. Mark Herman
Ecco, Inc.
403 Main St. Ste. 515
Buffalo, NY 14203

Re: Trinidad Park

Dear Mr. Mark Herman

Enclosed are the results of the analysis requested. The Analytical Data was provided to you on 06/08/93 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION

Janice Jaeger

Janice Jaeger
Customer Service Representative

Enc.

710 Exchange Street • Rochester, NY 14608 • Tele. (716) 454-3760 • (716) 454-1245
85 Trinity Place • Hackensack, NJ 07601 • Tele. (201) 488-5242 • Fax (201) 488-6386
435 Lawrence Bell Drive • Amherst, NY 14221 • Tele (716) 634-0454 • Fax (716) 634 9019

General Testing Corporation

Effective 10/1/91

GTC LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. For further explanation see case narrative / cover letter.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range and reanalysis could not be performed.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

N - Spiked sample recovery not within control limits. (Flag the entire batch - Inorganic analytes only)

* - Duplicate analysis not within control limits. (Flag the entire batch - Inorganic analysis only)

- Also used to qualify Organics QC data outside limits. (Only used on the QC summary sheets)

M - Duplication injection precision not met (GFA only).

S - Reported value determined by Method of Standard Additions. (MSA)

X - As specified in the case narrative.

General Testing Corporation

A Full Service Environmental Laboratory

LABORATORY REPORT

Job No: R93/02206 Date: JUNE 8 1993

Client:
Mr. Mark Herman
Ecco, Inc.
403 Main St. Ste. 515
Buffalo, NY 14203

Sample(s) Reference

Trinidad Park

Received : 05/11/93 P.O. #:

ANALYTICAL RESULTS - ug/g Wet Wt.

Sample:	-001	-002
Location:	N-S TRENCH E SIDE #3	N-S TRENCH E SIDE #4
Date Collected:	05/10/93	05/10/93
Time Collected:	15:45	15:55
pH	7.98	8.08
Ignitability °C	>100	>100
Reactivity		
Total Available Cyanide	0.333 U	0.333 U
Total Available Sulfide	5.00 U	5.00 U

Unless otherwise noted, analytical methodology has been obtained from references as cited in 40 CFR, parts #136 & #261.

NY ID# in Rochester: 10145
NJ ID# in Rochester: 73331
NJ ID# in Hackensack: 02317
NY ID# in Hackensack: 10801

Laboratory Director

Ecos

GENERAL TES .NG CORPORATION/CHAIN-OF- STODY RECORD

710 Exchange Street, Rochester, NY 14608 | 85 Trinity Place, Hackensack, NJ 07601 | 435 Lawrence Bell Drive, Amherst, NY 14221-7077

GTC Job No. 1921

Client Project No. _____

Sample Origination & Shipping Information

Collection Site Trinidad Park

Address Trinidad Place (Street) Buffalo (City) NY (State) _____ (Zip)

Collector Mark Heinen (Print) Mark R. Heinen (Signature)

Bottles Prepared by GTC — Rec'd by _____

Bottles Shipped to Client via Client — Seal/Shipping =

Samples Shipped via _____ — Seal/Shipping =

Sample(s) Relinquished by:		Received by:		Date/Time
1. Sign	Mark R. Heinen	1. Sign	K Wong	5/10/93
for		for	GTC	4:50pm
2. Sign	K Wong	2. Sign	Rick Cowles	5/10/93
for	GTC	for		10:00 AM
3. Sign		3. Sign		
for		for		

Sample(s) Received in Laboratory by _____ 5/11/93 12:45

	Client I.D.# / Lab#	Sample Location / Date/Time	★	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Y	Sample Prep Preserved N	Sample Prep Filtered Y	Sample Prep Filtered N	Bottle Set(s) (see below)
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Additional Analytes _____

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