button @

715157



econgy and environment engineering, p.c.

**International Specialists in the Environment** 

Buffalo Corporate Center 368 Pleasant View Dr. Lancaster, New York 14086

Phone: 716-684-8060 Fax: 716-684-0844

## **Transmittal Form**

WE ARE SENDING TO: Name: Mr. Dave Chiusano

Company: New York State DEC, Div. Of Env. Remediation, 12th Floor

Ad	dress: 625 Broadway, Albany, New York 12233-7010
Attached	☐ Under Separate Cover
Prints Project Information	Copy of Approvals - Cost Estimate Samples -
Shop Drawings Photos	Change Orders X Other (explain) - Analytical Results

Copies	Date "	No.	Description
1	1/16/04	1	Mr. C's - October 2003 Laboratory Results - Influent / Effluent waters.
1	1/16/04	2	Mr. C's - November 2003 Laboratory Results - Influent / Effluent waters.
1	1/16/04	3	Mr. C's - December 2003 Laboratory Results - Influent / Effluent waters.

### WE ARE TRANSMITTING as checked below:

For Approval		Copies for Approval
XAs RequestedFor Review and Comment.	Returned from Loan	Copies for Distribution
For Review and Comment.	Other (explain)	Corrected Prints

**REMARKS:**. Dave,

I have attached the laboratory results for your attachment to the monthly O&M reports for Mr. C's. In the future E&E will include both water and air results in the monthly O&M report. We will also summarize the results in a table showing the efficiencies of the cleanup operations of each environmental matrix.

ecology and environment engineering, p.c.

**COPY TO:** CTF 000699.NY.06.05

G. Sutton - NYSDEC - Region 9 - w/attachment

D. Miller/A. Murphy - E&E Buffalo - w/attachment

R. Becken - O&M Enterprises - Buffalo - w/attachment

# Ecology and Environmentanc.

**Analytical Services Center** 

4493 Walden Avenue

Cut:

Lab

Lancaster, New 14086

4086

E and E Buffalo Office
Client Sample AS INFLUENT
0310322
Alt. Client ID:

 Project:
 Mr. C's Dry Cleaners
 Collection 10/29/2003 12:30:00 % Moist:

 Lab ID: 0310322-01A
 Sample
 DL
 Matrix Water
 Test 1\_ASP\_4.2\_VOA\_W

Lab ID: 0310322-01A Sample DL Matrix Water Test 1\_ASP\_4.2\_VOA\_V
VOLATILE ORGANIC COMPOUNDS BY METHOD OLM04.2 Method: OLM04.2\_VOA Prep Method:

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst
1,1,1-Trichloroethane	ND	100	μg/L	10	11/3/2003 12:48:00	PM ROBERT_031103C	DWW
1,1,2,2-Tetrachloroethane	ND	100	μg/L	10			
1,1,2-Trichloro-1,2,2-trifluoroetha	ND	100	$\mu$ g/L	10			
ne							
1,1,2-Trichloroethane	ND	100	$\mu$ g/L	10			
1,1-Dichloroethane	ND	100	$\mu$ g/L	10			
1,1-Dichloroethene	ND	100	$\mu$ g/L	10			
1,2,4-Trichlorobenzene	ND	100	μg/L	10			í
1,2-Dibromo-3-chloropropane	ND	100	μg/L	10		21	nout
1,2-Dibromoethane	ND	100	µg/L	10			
1,2-Dichlorobenzene	ND	100	μg/L	10			****
1,2-Dichloroethane	ND	100	μg/L	10		Wenner of the state of the	1
1,2-Dichloropropane	ND	100	μg/L	10		- KEL UNREL	
1,3-Dichlorobenzene	ND	100	μg/L	10		Street Street Street	
1,4-Dichlorobenzene	ND	100	μg/L	10			
2-Butanone	ND	100	μg/L	10			
2-Hexanone	ND	100	μg/L	10			
4-Methyl-2-pentanone	ND	100	μg/L	10			
Acetone	ND	100	μg/L	10			
Benzene	ND	100	μg/L	10 10			
Bromodichloromethane	ND	100	μg/L	10			
r oform	ND ND	100 100	μg/L μg/L	10			
omethane	ND	100	μg/L μg/L	10			
Carbon disulfide	ND	100	μg/L μg/L	10			
Carbon tetrachloride	ND	100	μg/L μg/L	10			
Chlorobenzene Chloroethane	ND	100	μg/L μg/L	10			
Chloroform	ND	100	μg/L	10			
Chloromethane	ND	100	μg/L	10			
cis-1,2-Dichloroethene	ND	100	μg/L	10			
cis-1,3-Dichloropropene	ND	100	μg/L	10			
Cyclohexane	ND	100	μg/L	10			
Dibromochloromethane	ND	100	μg/L	10			
Dichlorodifluoromethane	ND	100	μg/L	10			
Ethylbenzene	ND	100	μg/L	10			
Isopropylbenzene	ND	100	μg/L	10			
Methyl acetate	ND	100-	μg/L	10			
Methyl tert-butyl ether	ND	100	μg/L	10			
Methylcyclohexane	ND	100	$\mu$ g/L	10			
Methylene chloride	ND	100	$\mu$ g/L	10			
Definitions:							
Recovery outside OC limits	B - Analyte (	ound in Method blank			D - Diluted due to n	maxifix or extended target compounds	

\* - Recovery outside QC limits

DF - Dilution Factor

H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

**Laboratory Results** 

**NYS ELAP ID#:** 

Phone

10486

(716)

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

## **Ecology and Environme** Inc.

**Analytical Services Center** 

0310322

4493 Walden Avenue

Lancaster, New

"ent:

Project:

New 14086

E and E Buffalo Office

Mr. C's Dry Cleaners

Client Sample AS INFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00 %

00 % Moist:

10486

(716)

**Laboratory Results** 

NYS ELAP ID#:

Phone

Lab ID: 0310322-01A

Sample

DL Matrix Water

Method: OLM04.2\_VOA

Prep Method:

Test 1\_ASP\_4.2\_VOA\_W

**VOLATILE ORGANIC COMPOUNDS BY METHOD OLM04.2** 

Analyte Result Q Limit Units DF Date Run Batch Analyst  $\mu$ g/L ND 100 10 Styrene Tetrachloroethene 1570 100  $\mu$ g/L 10  $\mu \bar{g}/L$ ND 100 10 Toluene trans-1,2-Dichloroethene ND 10 100  $\mu$ g/L  $\mu$ g/L trans-1,3-Dichloropropene ND 100 10 Trichloroethene ND 100 μg/L 10  $\mu$ g/L 10 Trichlorofluoromethane ND 100 Vinyl chloride ND 100  $\mu$ g/L 10  $\mu$ g/L Xylenes, Total ND 100 10 Surr:1,2-Dichloroethane-d4 102 76 - 114 %REC 10 11/3/2003 12:48:00 PM ROBERT\_031103C DWW Surr:4-Bromofluorobenzene 86 - 115 %REC 10 96 Surr:Toluene-d8 101 88 - 110 %REC 10

#### Definitions:

\* - Recovery outside QC limits

DF - Dilution Factor

H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

R - RPD outside recovery limits

Printed: Wednesday, November 26, 2003 9:07:35 AM

# Ecology and Environment Inc.

**Analytical Services Center** 

4493 Walden Avenue

Joncaster, New

E and E Buffalo Office

Lab 0310322

Lab ID: 0310322-01A

ent:

Project:

Mr. C's Dry Cleaners

NYS ELAP ID#:

Test 1\_ASP\_4.2\_VOA\_W

Phone

**Laboratory Results** 

10486 (716)

Client Sample AS INFLUENT

Alt. Client ID:

**Collection** 10/29/2003 12:30:00

% Moist:

**VOLATILE ORGANIC COMPOUNDS BY METHOD OLM04.2** 

Sample

SAMP

Method: OLM04.2\_VOA Prep Method:

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst
1,1,1-Trichloroethane	ND	10.0	μg/L	1	11/3/2003 10:45:0	AM ROBERT_031103C	DWW
1,1,2,2-Tetrachloroethane	ND	10.0	$\mu$ g/L	1			
1,1,2-Trichloro-1,2,2-trifluoroetha	ND	10.0	$\mu g/L$	1			
ne							
1,1,2-Trichloroethane	ND	10.0	$\mu$ g/L	1			
1,1-Dichloroethane	ND	10.0	$\mu g/L$	1			
1,1-Dichloroethene	ND	10.0	$\mu$ g/L	1			
1,2,4-Trichlorobenzene	ND	10.0	$\mu$ g/L	1			
1,2-Dibromo-3-chloropropane	ND	10.0	$\mu$ g/L	1			
1,2-Dibromoethane	ND	10.0	$\mu$ g/L	1			
1,2-Dichlorobenzene	ND	10.0	$\mu$ g/L	1			
1,2-Dichloroethane	ND	10.0	$\mu$ g/L	1			
1,2-Dichloropropane	ND	10.0	$\mu$ g/L	1			
1,3-Dichlorobenzene	ND	10.0	$\mu$ g/L	1			
1,4-Dichlorobenzene	ND	10.0	$\mu$ g/L	1			
2-Butanone	ND	10.0	μg/L	1			
2-Hexanone	ND	10.0	μg/L	1			
4-Methyl-2-pentanone	ND	10.0	μg/L	1			
Acetone	ND	10.0	μg/L	1			
Benzene	ND	10.0	μg/L	1			
Bromodichloromethane	ND	10.0	μg/L	1			
oform	ND	10.0	μg/L	1		•	
nomethane	ND	10.0	μg/L	1			
Carbon disulfide	ND	10.0	μg/L	1			
Carbon tetrachloride	ND	10.0	μg/L	. ]			
Chlorobenzene	ND	10.0	μg/L	1			
Chloroethane	ND	10.0	μg/L	1			
Chloroform	ND	10.0	μg/L	1		•	
Chloromethane	ND	10.0	μg/L	1			
cis-1,2-Dichloroethene	ND	10.0	μg/L	. 1			
cis-1,3-Dichloropropene	ND	10.0	μg/L	. 1			
Cyclohexane	ND	10.0	μg/L	]			
Dibromochloromethane	ND	10.0	μg/L	1			
Dichlorodifluoromethane	ND	10.0	μg/L	1			
Ethylbenzene	ND	10.0	μg/L	1			
Isopropylbenzene	ND	10.0	μg/L	1			
Methyl acetate	ND 62.3	10.0 10.0	μg/L	1			
Methyl tert-butyl ether	62.3 ND	10.0	μg/L	1			
Methylogo oblorido	ND ND	10.0	μg/L μg/L	1			
Methylene chloride	MD	10.0	μy,∟	'			

Matrix Water

#### Definitions:

- - Recovery outside QC limits
- DF Dilution Factor
- H Value Exceeds Maximum Contaminant Level
- N Single Column Analysis
- NP Petroleum Pattern is not present

- B Analyte found in Method blank
- DNI Did not Ignite
- J Estimated value NC - Not Calculated
- P Post Spike Recovery outside limits

- D Diluted due to maxtrix or extended target compounds
- E Result exceeds Highest Calibration Standard
- M Matrix Spike Recovery outside limits
- ND Not Detected at the Reporting Limit
- R RPD outside recovery limits

### **Ecology and Environme\_ Inc.**

**Analytical Services Center** 

4493 Walden Avenue

Lancaster, New

ent:

14086

NYS ELAP ID#:

10486

Phone

**Laboratory Results** 

(716)

Client Sample AS INFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00 % Moist:

0310322 Project:

Mr. C's Dry Cleaners

E and E Buffalo Office

Lab ID: 0310322-01A Sample Matrix Water

SAMP

Test 1\_ASP\_4.2\_VOA\_W

**VOLATILE ORGANIC COMPOUNDS BY METHOD OLM04.2** 

Method: OLM04.2\_VOA

Prep Method:

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Styrene Tetrachloroethene Toluene trans-1,2-Dichloroethene trans-1,3-Dichloropropene Trichloroethene Trichlorofluoromethane Vinyl chloride Xylenes, Total	ND 1290 ND ND ND 52.8 ND ND	E	10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	1 1 1 1 1 1			
Surr:1,2-Dichloroethane-d4 Surr:4-Bromofluorobenzene Surr:Toluene-d8	102 95 102		76 - 114 86 - 115 88 - 110	%REC %REC %REC	1 1 1 1	1/3/2003 10:45:00 AM ROB	BERT_031103C	DWW

### Definitions:

\* - Recovery outside QC limits

DF - Dilution Factor H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

R - RPD outside recovery limits

Printed: Wednesday, November 26, 2003 9:07:38 AM

### Ecology and Environmentanc.

**Analytical Services Center** 

4493 Walden Avenue

Lancaster, New

**Laboratory Results** 

**NYS ELAP ID#:** 

10486

Phone

(716)

E and E Buffalo Office

0310322

Mr. C's Dry Cleaners

Client Sample AS INFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00

% Moist:

Lab ID: 0310322-01B

Sample

SAMP

Matrix Water

Test 1\_ILM04.1\_CN\_W

**TOTAL CYANIDE BY ILM04.1** 

Method: ILM04.1\_CN

Prep Method: ILM04.1\_CN

Result Q Limit DF Date Run Batch Analyte Units Analyst

 $\mu$ g/L

Cyanide

nt:

Project:

Lab

ND

10

1 11/7/2003 3:00:09 PM LACHAT\_CN\_031107B

LMW

Definitions:

Recovery outside QC limits

- Dilution Factor

H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits ND - Not Detected at the Reporting Limit

### Ecology and Environme, Inc.

**Analytical Services Center** 

4493 Walden Avenue

Lancaster, New

'ient:

Project:

áb

14086

10486

Phone

**Laboratory Results** 

NYS ELAP ID#:

(716)

E and E Buffalo Office Client Sample AS INFLUENT 0310322

SAMP

Alt. Client ID:

Collection 10/29/2003 12:30:00

% Moist:

Lab ID: 0310322-01C Sample

Mr. C's Dry Cleaners

HARDNESS, TOTAL BY METHOD EPA 130.2

Method: EPA130.2

Test 1\_130.2\_HARD\_W **Prep Method:** 

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst

Matrix Water

Hardness (As CaCO3)

876

1.00

mg/L

11/4/2003

WC\_HARDNESS\_031104A

LMH

Definitions:

. Recovery outside QC limits

- - - Dilution Factor

/alue Exceeds Maximum Contaminant Level

Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated P - Post Spike Recovery outside limits D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

# Ecology and Environment\_nc.

**Analytical Services Center** 

0310322

4493 Walden Avenue

Lancaster, New

14086

NYS ELAP ID#:

**Laboratory Results** 

10486

Phone

(716)

Client Sample AS INFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00

% Moist:

Lab ID: 0310322-01C

Project:

Sample

SAMP Matrix Water

Test 1\_ILM04.1\_TAL\_W

ICP METALS ANALYSIS BY METHOD ILM04.1

E and E Buffalo Office

Mr. C's Dry Cleaners

Method: ILM04.1\_MET

Prep Method: ILM04.1\_MET

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Aluminum	ND		200	$\mu$ g/L	1	11/7/2003 2:18:05 PM	OPTIMA3300_031107B	JLS
Calcium	170000		5000	$\mu$ g/L	1			
Cobalt	ND		50.0	$\mu$ g/L	1			
Copper	ND		25.0	$\mu$ g/L	1			
Iron	368		100	$\mu g/L$	1			
Lead	4.68		3.00	$\mu$ g/L	1			
Magnesium	28100		5000	$\mu$ g/L	1			
Manganese	321		15.0	$\mu g/L$	1			
Nickel	ND		40.0	$\mu$ g/L	1			
Potassium	8640		5000	$\mu$ g/L	1			
Silver	ND		10.0	$\mu g/L$	1			
Sodium	299000		5000	$\mu$ g/L	1			
Vanadium	ND		50.0	$\mu$ g/L	1			
Zinc	ND		20.0	$\mu$ g/L	1			

### Definitions:

• - Recovery outside QC limits

DF - Dilution Factor

H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated P - Post Spike Recovery outside limits D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

# Ecology and Environmen\_Inc.

**Analytical Services Center** 

4493 Walden Avenue

14086 Lancaster, New

E and E Buffalo Office

0310322

\_nt:

Analyte

**Project:** Mr. C's Dry Cleaners

Lab ID: 0310322-01C

**MERCURY ANALYSIS BY METHOD ILM04.1** 

Sample **SAMP** 

Result Q

Client Sample AS INFLUENT

Alt. Client ID:

Date

Method: ILM04.1\_HG

DF

Collection 10/29/2003 12:30:00

% Moist:

10486

(716)

**Analyst** 

**Laboratory Results** 

NYS ELAP ID#:

Phone

Run Batch

Test 1\_ILM04.1\_HG\_W

Prep Method: ILM04.1\_HG

ND 0.200 Mercury  $\mu$ g/L 1 11/7/2003 12:35:36 PM LEEMAN\_031107C REB

Limit

Matrix Water

Units

### Definitions:

\* - Recovery outside QC limits Dilution Factor

√alue Exceeds Maximum Contaminant Level N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank DNI - Did not Ignite J - Estimated value NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds E - Result exceeds Highest Calibration Standard M - Matrix Spike Recovery outside limits ND - Not Detected at the Reporting Limit R - RPD outside recovery limits

# Ecology and Environmentinc.

E and E Buffalo Office

Mr. C's Dry Cleaners

**Analytical Services Center** 

4493 Walden Avenue

ent:

Project:

Lab

Joncaster, New

0310322

**Laboratory Results** 

NYS ELAP ID#:

10486

Phone

(716)

Client Sample AS INFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00

% Moist:

Lab ID: 0310322-01D

Sample

SAMP

Matrix Water

Test 1\_150.1\_PH\_W

PH BY METHOD EPA 150.1

Method: EPA150.1

Prep Method:

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst
рН	7.5	0.10	S.U.	1	10/29/2003 5:00:00 P	M DENVER_PH_031029A	RLG

### Definitions:

Recovery outside QC limits

- Dilution Factor

H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to nuxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits ND - Not Detected at the Reporting Limit

### **Ecology and Environme\_Inc.**

**Analytical Services Center** 

4493 Walden Avenue

Lancaster, New 14086

> E and E Buffalo Office 0310322

Mr. C's Dry Cleaners Project:

Result O

Collection 10/29/2003 12:30:00

Client Sample AS INFLUENT

Alt. Client ID:

Lab ID: 0310322-01D Matrix Water Sample SAMP Test 1\_160.1\_TDS\_W

Limit

TOTAL DISSOLVED SOLIDS (TDS) BY METHOD EPA 160.1 Method: EPA160.1

DF Date Run Batch

**Laboratory Results** 

NYS ELAP ID#:

Phone

Prep Method:

10486

(716)

Analyst

% Moist:

Total Dissolved Solids (Residue, 10/30/2003 SARTORIUS\_TDS\_031030 LMH 1500 10 mg/L

Units

Filterable)

Analyte

ent:

### Definitions:

\* - Recovery outside QC limits Dilution Factor Jalue Exceeds Maximum Contaminant Level N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank DNI - Did not Ignite J - Estimated value NC - Not Calculated P - Post Spike Recovery outside limits D - Diluted due to maxtrix or extended target compounds E - Result exceeds Highest Calibration Standard M - Matrix Spike Recovery outside limits ND - Not Detected at the Reporting Limit R - RPD outside recovery limits

# Ecology and Environment, inc.

**Analytical Services Center** 

4493 Walden Avenue

ent: Lab

Project:

Joncaster, New

NYS ELAP ID#:

10486

Phone

**Laboratory Results** 

(716)

E and E Buffalo Office

0310322 Mr. C's Dry Cleaners Client Sample AS INFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00

% Moist:

Lab ID: 0310322-01D

Sample

SAMP

Matrix Water

Test 1\_160.2\_TSS\_W

TOTAL SUSPENDED SOLIDS, NON-FILTERABLE RESIDUE

Method: EPA160.2

**Prep Method:** 

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst
Total Suspended Solids (Residue, Non-Filterable)	25	4.0	mg/L	1	10/30/2003	SARTORIUS_TSS_031030	LMH

### Definitions:

Recovery outside QC limits

🕶 - Dilution Factor H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

### Ecology and Environme\_ Inc.

**Analytical Services Center** 

4493 Walden Avenue

14086 Lancaster, New

0310322

Lab ID: 0310322-01D

Analyte

E and E Buffalo Office

Mr. C's Dry Cleaners **Project:** 

Sample **TURBIDITY (NEPHELOMETRIC) BY METHOD 180.1** 

SAMP Matrix Water

Limit

Result O

Client Sample AS INFLUENT

Alt. Client ID:

Date

Method: EPA180.1

Collection 10/29/2003 12:30:00 % Moist:

Test 1\_180.1\_TURB\_W

**Laboratory Results** 

NYS ELAP ID#:

Phone

10486

(716)

**Analyst** 

Prep Method: DF Run Batch

Turbidity 40.0 0.500 NTU LMW 10/30/2003 WC\_031030C

Units

**Definitions:** 

\* - Recovery outside QC limits

7 - Dilution Factor

Value Exceeds Maximum Contaminant Level

T- Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank DNI - Did not Ignite

J - Estimated value NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

# Ecology and Environment nc.

**Analytical Services Center** 

4493 Walden Avenue

t:

Lab

Lancaster, New 14086

E and E Buffalo Office

0310322

**Project:** Mr. C's Dry Cleaners

Client Sample AS EFFLUENT

Alt. Client ID:

**Collection** 10/29/2003 12:30:00 % **Moist:** 

**Laboratory Results** 

NYS ELAP ID#:

Phone

10486

(716)

Lab ID: 0310322-02A Sample SAMP Matrix Water Test 1\_ASP\_4.2\_VOA\_W

**VOLATILE ORGANIC COMPOUNDS BY METHOD OLM04.2** 

Method: OLIMO4.2 VOA Frep Metho	Method:	OLM04.2_VOA	Prep Method
---------------------------------	---------	-------------	-------------

Analyte	Result	Q Limit	Units	DF	Date	Run Batch	Analyst
1,1,1-Trichloroethane	ND	10.0	μg/L	1	11/3/2003 12:17:00	PM ROBERT_031103C	DWW
1,1,2,2-Tetrachloroethane	ND	10.0	μg/L	1		•	
1,1,2-Trichloro-1,2,2-trifluoroetha	ND	10.0	μg/L	1			
ne			, 5				
1,1,2-Trichloroethane	ND	10.0	μg/L	1			
1.1-Dichloroethane	ND	10.0	μg/L	1			
1,1-Dichloroethene	ND	10.0	μg/L	1			
1,2,4-Trichlorobenzene	ND	10.0	μg/L	1			
1,2-Dibromo-3-chloropropane	ND	10.0	μg/L	1			
1,2-Dibromoethane	ND	10.0	μg/L	1			
1,2-Dichlorobenzene	ND	10.0	μg/L	1			
1.2-Dichloroethane	ND	10.0	μg/L	1			
1,2-Dichloropropane	ND	10.0	μg/L	1			
1,3-Dichlorobenzene	ND	10.0	μg/L	1			
1,4-Dichlorobenzene	ND	10.0	μg/L	1			
2-Butanone	ND	10.0	μg/L	1			
2-Hexanone	ND	10.0	μg/L	1			
4-Methyl-2-pentanone	ND	10.0	μg/L	1			
Acetone	ND	10.0	μg/L	1			
Benzene	ND	10.0	μg/L	1			
Bromodichloromethane	ND	10.0	μg/L	1			
rofom	ND	10.0	μg/L	1			
omethane	ND	10.0	μg/L	1			
Carbon disulfide	ND	10.0	μg/L	1			
Carbon tetrachloride	ND	10.0	μg/L	1			
Chlorobenzene	ND	10.0	μg/L	1			
Chloroethane	ND	10.0	μg/L	1			
Chloroform	ND	10.0	μg/L	1			
Chloromethane	ND	10.0	μg/L	1			
cis-1,2-Dichloroethene	ND	10.0	μg/L	1			
cis-1,3-Dichloropropene	ND	10.0	μg/L	1			
Cyclohexane	ND	10.0	μg/L	1			
Dibromochloromethane	ND	10.0	μg/L	1			
Dichlorodifluoromethane	ND	10.0	μg/L	1			
Ethylbenzene	ND	10.0	μg/L	1			
Isopropylbenzene	ND	10.0	μg/L	1			
Methyl acetate	ND	10.0	μg/L	1			
Methyl tert-butyl ether	ND	10.0	μg/L	1			
Methylcyclohexane	ND	10.0	μg/L	1			
Methylene chloride	ND	10.0	μg/L	1			
Definitions:							
- Recovery outside QC limits	В	- Analyte found in Method blank			D - Diluted due to	maxtrix or extended target compounds	
DF - Dilution Factor		NI - Did not Ignite				Highest Calibration Standard	
H - Value Exceeds Maximum Contaminant Level		Estimated value			•	Recovery outside limits	
N - Single Column Analysis		C - Not Calculated				d at the Reporting Limit	
NP - Petroleum Pattern is not present	P	- Post Spike Recovery outside lim	ICS		R - RPD outside re	ecovery limits	

### **Ecology and Environme** Inc.

**Analytical Services Center** 

4493 Walden Avenue

Lab ID: 0310322-02A

~"ent:

Project:

Lancaster, New 14086

E and E Buffalo Office

0310322

Mr. C's Dry Cleaners

Sample

SAMP Matrix Water **Laboratory Results** 

NYS ELAP ID#:

10486

Phone

(716)

Client Sample AS EFFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00 % Moist:

Test 1\_ASP\_4.2\_VOA\_W

**VOLATILE ORGANIC COMPOUNDS BY METHOD OLM04.2** 

Method: OLM04.2\_VOA

Prep Method:

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst
Styrene Tetrachloroethene Toluene trans-1,2-Dichloroethene trans-1,3-Dichloropropene Trichloroethene Trichlorofluoromethane Vinyl chloride	ND ND ND ND ND ND ND	10.0 10.0 10.0 10.0 10.0 10.0 10.0	µg/L µg/L µg/L µg/L µg/L µg/L µg/L	1 1 1 1 1 1, 1			
Xylenes, Total Surr:1,2-Dichloroethane-d4 Surr:4-Bromofluorobenzene Surr:Toluene-d8	ND 103 96 101	10.0 76 - 114 86 - 115 88 - 110	μg/L %REC %REC %REC	1 1 1	11/3/2003 12:17:00 PM ROB	BERT_031103C	DWW

#### Definitions:

\* - Recovery outside QC limits

DF - Dilution Factor

H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

R - RPD outside recovery limits

Printed: Wednesday, November 26, 2003 9:07:46 AM

# Ecology and Environment nc.

Analytical Services Center

4493 Walden Avenue

t:

Project:

Lab

Lancaster, New 14086

Mr. C's Dry Cleaners

**NYS ELAP ID#:** Phone

**Laboratory Results** 

(716)

10486

Client Sample AS EFFLUENT E and E Buffalo Office

Alt. Client ID: 0310322

Collection 10/29/2003 12:30:00 % Moist:

Test 1\_ILM04.1\_CN\_W Lab ID: 0310322-02B Sample SAMP Matrix Water

**TOTAL CYANIDE BY ILM04.1** Method: ILM04.1\_CN Prep Method: ILM04.1\_CN

DF Run Batch · Limit Units Date Analyst Analyte Result Q 1 11/7/2003 3:03:00 PM LACHAT\_CN\_031107B Cyanide ND 10  $\mu$ g/L LMW

### Definitions:

Recovery outside QC limits - Dilution Factor

1 - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits ND - Not Detected at the Reporting Limit

## Ecology and Environmer Inc.

**Analytical Services Center** 

4493 Walden Avenue

Lancaster, New

ant:

Project:

Analyte

14086

E and E Buffalo Office

0310322

Mr. C's Dry Cleaners

Lab ID: 0310322-02C Sample

SAMP

Matrix Water

**NYS ELAP ID#:** 

**Laboratory Results** 

10486 (716)

Phone

Client Sample AS EFFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00

Test 1\_130.2\_HARD\_W Method: EPA130.2

HARDNESS, TOTAL BY METHOD EPA 130.2

Result Q

Limit

Units

DF

Date

Prep Method:

Analyst

Hardness (As CaCO3)

881

1.00

mg/L

11/4/2003

WC\_HARDNESS\_031104A

Run Batch

LMH

Definitions:

\* - Recovery outside QC limits

DE - Dilution Factor 'alue Exceeds Maximum Contaminant Level Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

# Ecology and Environmentanc.

**Analytical Services Center** 

0310322

4493 Walden Avenue

14086 Lancaster, New

**NYS ELAP ID#:** 

**Laboratory Results** 

10486

Phone

(716)

Client Sample AS EFFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00

% Moist:

Lab ID: 0310322-02C

Sample

SAMP

Matrix Water

Test 1\_ILM04.1\_HG\_W

**MERCURY ANALYSIS BY METHOD ILM04.1** 

Mr. C's Dry Cleaners

E and E Buffalo Office

Method: ILM04.1\_HG

Prep Method: ILM04.1\_HG

Run Batch Result O Limit Units DF Date Analyst Analyte

Mercury

ut:

Project:

Lab

ND

0.200

 $\mu$ g/L

1 11/7/2003 12:40:16 PM LEEMAN\_031107C

REB

Definitions:

Recovery outside QC limits

- Dilution Factor

5 - Value Exceeds Maximum Contuminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits ND - Not Detected at the Reporting Limit

### **Ecology and Environme\_Inc.**

**Analytical Services Center** 

4493 Walden Avenue

14086 Lancaster, New

= ent: E and E Buffalo Office

Lab ID: 0310322-02C

0310322

ICP METALS ANALYSIS BY METHOD ILM04.1

**Project:** Mr. C's Dry Cleaners

Sample

SAMP

Matrix Water

**Client Sample AS EFFLUENT** 

Alt. Client ID:

Collection 10/29/2003 12:30:00

% Moist:

**Laboratory Results** 

**NYS ELAP ID#:** 

Phone

10486

(716)

Test 1\_ILM04.1\_TAL\_W

Prep Method: ILM04.1\_MET Method: ILM04.1\_MET

Analyte	Result	Q Limit	Units	DF	Date	Run Batch	Analyst
Aluminum	ND	200	μg/L	1	11/7/2003 2:57:33 PM	OPTIMA3300_031107B	JLS
Calcium	160000	5000	$\mu$ g/L	1			
Cobalt	ND	50.0	μg/L	1			
Copper	ND	25.0	$\mu$ g/L	1			
Iron	344	100	$\mu$ g/L	1			
Lead	3.73	3.00	$\mu$ g/L	1			
Magnesium	26300	5000		1			
Manganese	301	15.0	$\mu$ g/L	1			
Nickel	, ND	40.0		1			
Potassium	8110	5000		1			
Silver	ND	10.0		1			
Sodium	280000	5000		1			
Vanadium	ND	50.0	μg/L	1			
Zinc	, ND	20.0	$\mu$ g/L	1			

#### Definitions:

\* - Recovery outside QC limits

DF - Dilution Factor

H - Value Exceeds Maximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated P - Post Spike Recovery outside limits D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

# Ecology and Environmenanc.

**Analytical Services Center** 

4493 Walden Avenue

14086 Lancaster, New

**NYS ELAP ID#:** 

10486

Phone

**Laboratory Results** 

(716)

E and E Buffalo Office

0310322

Mr. C's Dry Cleaners

Client Sample AS EFFLUENT

Alt. Client ID: Collection 10/29/2003 12:30:00

% Moist:

Lab ID: 0310322-02D

Lab

Project:

Sample

SAMP Matrix Water Test 1\_150.1\_PH\_W

PH BY METHOD EPA 150.1

Method: EPA150.1

Prep Method:

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst
рН	8.2	0.10	S.U.	1	10/29/2003 5:02:00 PM	DENVER_PH_031029A	RLG

### Definitions:

Recovery outside QC limits - Dilution Factor

Value Exceeds Muximum Contaminant Level

N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank DNI - Did not Ignite

J - Estimated value NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

## Ecology and Environmer Inc.

**Analytical Services Center** 

4493 Walden Avenue

Lancaster, New

`ent:

14086

E and E Buffalo Office 0310322

Project: Mr. C's Dry Cleaners

Lab ID: 0310322-02D Sample

SAMP Matrix Water Client Sample AS EFFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00

Test 1\_160.1\_TDS\_W

**Laboratory Results** 

**NYS ELAP ID#:** 

**Phone** 

TOTAL DISSOLVED SOLIDS (TDS) BY METHOD EPA 160.1

Method: EPA160.1

Prep Method:

Result Q Units DF Date Run Batch Analyst Analyte Limit

Total Dissolved Solids (Residue,

Filterable)

1500

10

mg/L

10/30/2003

SARTORIUS\_TDS\_031030

LMH

10486

(716)

% Moist:

Definitions:

\* - Recovery outside QC limits

-- Dilution Factor

alue Exceeds Maximum Contaminant Level

Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated P - Post Spike Recovery outside limits D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

# Ecology and Environmen\_nc.

**Analytical Services Center** 

4493 Walden Avenue

Lancaster, New

14086

NYS ELAP ID#:

**Laboratory Results** 

10486

Phone

(716)

Lab

Project:

E and E Buffalo Office

0310322

Mr. C's Dry Cleaners

Alt. Client ID: Collection 10/29/2003 12:30:00

Client Sample AS EFFLUENT

% Moist:

Lab ID: 0310322-02D

Sample

SAMP

Matrix Water

Test 1\_180.1\_TURB\_W

**TURBIDITY (NEPHELOMETRIC) BY METHOD 180.1** 

Method: EPA180.1

**Prep Method:** 

Analyte	Result Q	Limit	Units	DF	Date	Run Batch	Analyst
Turbidity	14.4	0.500	NTU	1	10/30/2003	WC 031030C	LMW

### Definitions:

\* Recovery outside QC limits Dilution Factor

Value Exceeds Maximum Contaminant Level N - Single Column Analysis

NP - Petroleum Pattern is not present

B - Analyte found in Method blank

DNI - Did not Ignite

J - Estimated value

NC - Not Calculated

P - Post Spike Recovery outside limits

D - Diluted due to maxtrix or extended target compounds

E - Result exceeds Highest Calibration Standard

M - Matrix Spike Recovery outside limits

ND - Not Detected at the Reporting Limit

### Ecology and Environme... Inc.

**Analytical Services Center** 

4493 Walden Avenue

Lab ID: 0310322-02D

Lancaster, New 14086

E and E Buffalo Office ent: 0310322

Mr. C's Dry Cleaners Project:

> Sample SAMP Matrix Water

Client Sample AS EFFLUENT

Alt. Client ID:

Collection 10/29/2003 12:30:00 % Moist:

Test 1\_160.2\_TSS\_W

TOTAL SUSPENDED SOLIDS, NON-FILTERABLE RESIDUE

Method: EPA160.2

Prep Method:

**Laboratory Results** 

**NYS ELAP ID#:** 

Phone

10486

(716)

Result O Limit Units DF Date Run Batch Analyst Analyte Total Suspended Solids (Residue, ND 4.0 mg/L 10/30/2003 SARTORIUS\_TSS\_031030 LMH Non-Filterable)

### Definitions:

\* - Recovery outside QC limits Dilution Factor /alue Exceeds Maximum Contaminant Level - Single Column Analysis NP - Petroleum Pattern is not present

B - Analyte found in Method blank DNI - Did not Ignite J - Estimated value NC - Not Calculated P - Post Spike Recovery outside limits D - Diluted due to maxtrix or extended target compounds E - Result exceeds Highest Calibration Standard M - Matrix Spike Recovery outside limits ND - Not Detected at the Reporting Limit