

INTERNATIONAL
TECHNOLOGY
CORPORATION

TELECOPY REQUEST

TELECOPY NUMBER: 212-264-7611 or 6192
TO: Caroline Kwan
USEPA Region II
FROM: Belinda Price
IT Corporation
DATE: 10/25/94
NUMBER OF PAGES 21 (INCLUDING COVER SHEET)
REMARKS: Re: groundwater sample analyses
for O'Henry landry, Tuke St Thomas

All NAVS called 10/26 3 copies -
all data and not
valuated - so in-c
not in-c

IT CORPORATION
312 DIRECTORS DRIVE
KNOXVILLE, TN 37923
(615) 690-3211

DISCARD WHEN SENT

PLEASE RETURN

IF ALL PAGES ARE NOT RECEIVED, PLEASE ASK FOR EXTENSION 2221 AT
THE ABOVE NUMBER. THANK YOU.

IT KNOXVILLE FAX NO. 615/690-3626 AND 615/690-4652



Project Name/No. ¹ St. Thomas/409440.002 Samples Shipment Date ⁷ 5-28-93
Sample Team Members ² DKK Lab Destination ⁸ IT - Middlebrook
Profit Center No. ³ 3521 Lab Contact ⁹ John Dain
Project Manager ⁴ B. Price Project Contact/Phone ¹² B. Price (615) 690-3211
Purchase Order No. ⁶ — Carrier/Waybill No. ¹³ Hand Delivered
Required Report Date ¹¹ Normal

Bill to: ⁵ IT Corp
312 Directors Drive
Knoxville, TN 37925
Report to: ¹⁰ B. Price
IT Corp
312 Directors Drive
Knoxville, TN 37925

ONE CONTAINER PER LINE

Sample Number ¹⁴	Sample Description/Type ¹⁵	Date/Time Collected ¹⁶	Container Type ¹⁷	Sample Volume ¹⁸	Pre-servative ¹⁹	Requested Testing Program ²⁰	Condition on Receipt ²¹	Disposal Record No. ²²
MW-01	Groundwater	5-25-93 1500	VDA	2040ml	HCL	CLP-Volatiles w/ Package Data	hang 3°C	
MW-02		5-25-93 1515		3040ml	HCL	CLP-Volatiles w/ Package Data		
MW-03		5-25-93 1530		3040ml	HCL	CLP-Volatiles w/ Package Data		
MW-04		5-25-93 1545		2040ml	HCL	CLP-Volatiles w/ Package Data		
Trip Blank		—		2040ml	HCL	CLP-Volatiles w/ Package Data		
PW-1		5-25-93 1600		2040ml	HCL	601-602		

FOR LAB
USE ONLY

FOR LAB
USE ONLY

Special Instructions: ²³ Run no trip blank or have data package for PW-1.

Possible Hazard Identification: ²⁴

Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: ²⁵

Return to Client ☐ Disposal by Lab ☒ Archive ☐ (m)

Turnaround Time Required: ²⁶

Normal ☒ Rush ☐

QC Level: ²⁷

I ☒ II ☐ III ☐ Project Specific (specify) Lowest

1. Relinquished by ²⁸ David Kesch

Date: 5-28-93
Time: 8:40

1. Received by ²⁸ Kenny A. Plummer ITASKN

Date: 5-28-93
Time: 08:40

2. Relinquished by
(Signature/Affiliation)

Date:
Time:

2. Received by
(Signature/Affiliation)

Date:
Time:

3. Relinquished by
(Signature/Affiliation)

Date:
Time:

3. Received by
(Signature/Affiliation)

Date:
Time:

Comments: ²⁹

ITEK 54182

EPA SAMPLE hd.1

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

TRIPBLANK

Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1Matrix: (soil/water) WATERLab Sample ID: XX4805Sample wt/vol: 5.0 (g/mL) MLLab File ID: XX4805Level: (low/med) LOWDate Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93GC Column: DB-624 ID: 0.530 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

OUT 004 0229

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE 1d.0

TRIPBLANK

b Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 54182

SAS No.: _____

SDG No.: MW1Matrix: (soil/water) WATERLab Sample ID: XX4805Sample wt/vol: 5.0 (g/mL) MLLab File ID: XX4805Level: (low/med) LOWDate Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93GC Column: DB-624 ID: 0.530 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	8	BJ
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethane	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5-----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6-----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

212 264 7611: #18/21
92
EPA SAMPLE NO.

MW4DL

Name: ITAS-KNOXVILLE Contract: _____
Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1
Matrix: (soil/water) WATER Lab Sample ID: XX4809
Sample wt/vol: 5.0 (g/mL) ML Lab File ID: XX4809DL
Level: (low/med) LOW Date Received: 05/28/93
% Moisture: not dec. _____ Date Analyzed: 06/03/93
GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 2.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUJ 004 0231

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **91**

MW4DL

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: XX4809

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: XX4809DL

Level: (low/med) LOW Date Received: 05/28/93

% Moisture: not dec. _____ Date Analyzed: 06/03/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	20	U
74-83-9	Bromomethane	20	U
75-01-4	Vinyl Chloride	20	U
75-00-3	Chloroethane	20	U
75-09-2	Methylene Chloride	6	J
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	20	U
75-35-4	1,1-Dichloroethene	20	U
75-34-3	1,1-Dichloroethane	20	U
540-59-0	1,2-Dichloroethene (total)	25	
67-66-3	Chloroform	20	U
107-06-2	1,2-Dichloroethane	20	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	20	U
56-23-5	Carbon Tetrachloride	20	U
75-27-4	Bromodichloromethane	20	U
78-87-5	1,2-Dichloropropane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
79-01-6	Trichloroethene	23	
124-48-1	Dibromochloromethane	20	U
79-00-5	1,1,2-Trichloroethane	20	U
71-43-2	Benzene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
75-25-2	Bromoform	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	210	
79-34-5	1,1,2,2-Tetrachloroethane	20	U
108-88-3	Toluene	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
100-42-5	Styrene	20	U
1330-20-7	Xylene (total)	20	U

74

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: ITAS-KNOXVILLE Contract: _____

MW4

Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER

Lab Sample ID: XX4809

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: XX4809

Level: (low/med) LOW

Date Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 0233

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **73**

MW4

Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 54182

SAS No.: _____

SDG No.: MW1Matrix: (soil/water) WATERLab Sample ID: XX4809Sample wt/vol: 5.0 (g/mL) MLLab File ID: XX4809Level: (low/med) LOWDate Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93GC Column: DB-624 ID: 0.530 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3-----Chloromethane	10	U
74-83-9-----Bromomethane	10	U
75-01-4-----Vinyl Chloride	10	U
75-00-3-----Chloroethane	10	U
75-09-2-----Methylene Chloride	2	BJ
67-64-1-----Acetone	10	U
75-15-0-----Carbon Disulfide	10	U
75-35-4-----1,1-Dichloroethene	10	U
75-34-3-----1,1-Dichloroethane	10	U
540-59-0-----1,2-Dichloroethene (total)	25	
67-66-3-----Chloroform	10	U
107-06-2-----1,2-Dichloroethane	10	U
78-93-3-----2-Butanone	10	U
71-55-6-----1,1,1-Trichloroethane	10	U
56-23-5-----Carbon Tetrachloride	10	U
75-27-4-----Bromodichloromethane	10	U
78-87-5-----1,2-Dichloropropane	10	U
10061-01-5-----cis-1,3-Dichloropropene	10	U
79-01-6-----Trichloroethene	26	
124-48-1-----Dibromochloromethane	10	U
79-00-5-----1,1,2-Trichloroethane	10	U
71-43-2-----Benzene	10	U
10061-02-6-----trans-1,3-Dichloropropene	10	U
75-25-2-----Bromoform	10	U
108-10-1-----4-Methyl-2-Pentanone	10	U
591-78-6-----2-Hexanone	10	U
127-18-4-----Tetrachloroethene	240	E
79-34-5-----1,1,2,2-Tetrachloroethane	10	U
108-88-3-----Toluene	10	U
108-90-7-----Chlorobenzene	10	U
100-41-4-----Ethylbenzene	10	U
100-42-5-----Styrene	10	U
1330-20-7-----Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. **56**Job Name: ITAS-KNOXVILLE Contract: _____

MW3

Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1Matrix: (soil/water) WATERLab Sample ID: XX4808Sample wt/vol: 5.0 (g/mL) MLLab File ID: XX4808Level: (low/med) LOWDate Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93GC Column: DB-624 ID: 0.530 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 0235

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **55**

MW3

Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER Lab Sample ID: XX4808

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: XX4808

Level: (low/med) LOW Date Received: 05/28/93

% Moisture: not dec. _____ Date Analyzed: 06/01/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO. COMPOUND Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	1	BJ
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (total)	7	J
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5-----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	3	J
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6-----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	6	J
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

212 204 7011 #12/21
EPA SAMPLE NO. **38**

MW2

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1

Matrix: (soil/water) WATER

Lab Sample ID: XX4807

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: XX4807

Level: (low/med) LOW

Date Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUE 004 0237

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **3.7**Lab Name: ITAS-KNOXVILLE

Contract: _____

MW2

Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1Matrix: (soil/water) WATERLab Sample ID: XX4807Sample wt/vol: 5.0 (g/mL) MLLab File ID: XX4807Level: (low/med) LOWDate Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93GC Column: DB-624 ID: 0.530 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	1	BJ
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (total)	20	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10-2	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5-----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	35	
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6-----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	200	
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Xylene (total)	10	U

2.6 hrs

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE #2.1

MW1

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 54182 SAS No.: _____ SDG No.: MW1Matrix: (soil/water) WATERLab Sample ID: XX4806Sample wt/vol: 5.0 (g/mL) MLLab File ID: XX4806Level: (low/med) LOWDate Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93GC Column: DB-624 ID: 0.530 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 0239



October 25, 1994

Ms. Caroline Kwan
Project Manager
New York/Caribbean Superfund Branch 2
United States Environmental Protection Agency
Region II
Jacob K. Javits Federal Building
New York, NY 10278-0012

Groundwater Samples From O'Henry Laundry, St. Thomas, US VI

Dear Ms. Kwan:

This letter is a follow-up to our phone conversation yesterday concerning groundwater data included in the Risk Assessment for the Tutu Wells site, St. Thomas, performed by CDM. From our conversation yesterday and from the fax you sent me indicating which samples are in the data package used by CDM, it appears that CDM only has one of the data packages.

Groundwater samples were collected from the four monitoring wells at the O'Henry Laundry on two occasions in 1993, March and May. There were a variety of associated QA samples collected with these samples as indicated in Table 1 (attached). Analytical data packages from both rounds of sampling were transmitted to you in August 1993 and again in February 1994. For you information, I have enclosed Form I's for the package that CDM seems to be missing (May 1993 sampling). If you need me to transmit the entire data package again, please let me know.

Sincerely,

Belinda Price

Belinda K. Price, R.P.G.
Project Manager

cc: N. D'Anna, Esq.

Regional Office

312 Directors Drive • Knoxville, Tennessee 37923 • 615-690-3211

KNSBIOCTNPRICE001

IT Corporation is a wholly owned subsidiary of International Technology Corporation

TU1 004 0240

Table 1

**Summary of Groundwater Samples
Collected by IT Corporation, 1993
O'Henry Laundry, Tutu, St. Thomas**

March 1993		
Samples (7 Water Samples)		
Sample #	Sample Description	Analysis
MW-01	Sample From MW-01	CLP VOCs
MW-02	Sample From MW-02	CLP VOCs
MW-03-OR	Sample From MW-03	CLP VOCs
MW-03-FD	Field Duplicate From MW-03	CLP VOCs
MW-04	Sample From MW-04	CLP VOCs
MW-03 MS/MSD	Matrix Spike/Matrix Spike Duplicate from MW-03	CLP VOCs
DRM01	Purge Water	601/602
May 1993		
Samples (6 Water Samples)		
Sample #	Sample Description	Analysis
MW-01	Sample From MW-01	CLP VOCs
MW-02	Sample From MW-02	CLP VOCs
MW-03	Sample From MW-03	CLP VOCs
MW-04	Sample From MW-04	CLP VOCs
Trip Blank	Trip Blank	CLP VOCs
PW-1	Purge Water	601/602



ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

IT Corporation
312 Directors Drive
Knoxville, TN 37923
Attn: Belinda Price

June 23, 1993

Job Number: ITEK 54182

P.O. Number: 490440.003

This is the Certificate of Analysis for the following samples:

Client Project ID: St. Thomas
Date Received by Lab: 05/28/93
Number of Samples: Six (6)
Sample Type: Water-five (5); Trip Blank-one (1)

I. Introduction

On 05/28/93, five (5) water samples and one (1) trip blank arrived at the ITAS-Knoxville, Tennessee, laboratory from IT Corporation, Knoxville, Tennessee, in support of the St. Thomas project. The list of analytical tests performed, as well as date of receipt and analysis, can be found in the attached report.

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical test. Each set of data will include sample identification information and the analytical results. Please note that the data are not blank corrected.

The samples were analyzed for Target Compound List (TCL) volatiles by gas chromatography/mass spectroscopy (GC/MS) in accordance with the EPA CLP 3/90 Statement of Work.

The samples were analyzed for halogenated and aromatic volatile organic compounds by gas chromatography based on EPA methods 601 and 602.

Reviewed and Approved:

Alyce R. Moore
Laboratory Manager

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories
American Association for Laboratory Accreditation

ITUT 004 0242

IT Corporation
June 23, 1993

IT ANALYTICAL SERVICES
5815 MIDDLEBROOK PIKE
KNOXVILLE, TN

Client Project ID: St. Thomas

Job Number: ITEK 54182

III. Quality Control

Routine laboratory level I QC was followed.

The volatiles analyses were performed by purge and trap with a J&W DB-624 megabore column on a Finnigan GC/MS/DS unit. The sample analyses went well. Elevated levels of tetrachloroethene in MW-4 required a two-fold dilution. There were no problems seen in final data review.

Data were reported with qualifiers as follows:

- U - Compound analyzed for but not detected; value given is quantitation limit.
- E - Compound exceeded calibration range.
- D - Compound analyzed at a secondary dilution factor.
- J - Compound detected but below quantitation limit; value estimated.
- S - Spiked compound.
- B - Compound found in method blank.
- A - Suspected aldol condensation product.
- Y - Indistinguishable isomer in tentatively identified compounds.
- N - Presumptive evidence of compound presence.

The samples were analyzed for halogenated and aromatic volatile organics by gas chromatography/photoionization and electrolytic conductivity (Hall) detection in series using an RTX 502.2 column on a Varian 3400 GC. No problems were encountered.

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HALOGENATED AND AROMATIC VOLATILE ORGANIC ANALYSIS

Results in µg/liter (ppb)

Sample Matrix: Water

Client Sample ID: PW-1
Lab Sample ID: XX4810

<u>Compound</u>	<u>Result</u>	<u>Compound</u>	<u>Result</u>
dichlorodifluoromethane	1.8 U	1,2-dichloropropane	0.4 U
chloromethane	0.8 U	bromodichloromethane	1.0 U
vinyl chloride	1.8 U	2-chloroethylvinyl ether	1.3 U
bromomethane	1.2 U	cis-1,3-dichloropropene	3.4 U
chloroethane	5.2 U	toluene	2.0 U
trichlorofluoromethane	2.0 U	trans-1,3-dichloropropene	3.4 U
1,1-dichloroethene	1.3 U	1,1,2-trichloroethane	0.2 U
methylene chloride	15 U	tetrachloroethene	49
trans-1,2-dichloroethene	1.0 U	dibromochloromethane	0.9 U
1,1-dichloroethane	0.7 U	chlorobenzene	2.0 U
cis-1,2-dichloroethene	15	ethyl benzene	2.0 U
trichloromethane (chloroform)	0.5 U	xylenes (total)	1.0 U
1,1,1-trichloroethane	0.3 U	bromoform	2.0 U
carbon tetrachloride	1.2 U	1,1,2,2-tetrachloroethane	0.3 U
benzene	2.0 U	1,3-dichlorobenzene	3.2 U
1,2-dichloroethane	0.3 U	1,4-dichlorobenzene	2.4 U
trichloroethene	8.8	1,2-dichlorobenzene	1.5 U

Analysis Date: 06/03/93

U - Compound was analyzed for but not detected. The number is the detection limit for the sample.

IT Corporation
June 23, 1993

IT ANALYTICAL SERVICES
5815 MIDDLEBROOK PIKE
KNOXVILLE, TN

Client Project ID: St. Thomas

Job Number: ITEK 54182

HALOGENATED AND AROMATIC VOLATILE ORGANIC ANALYSIS

Results in $\mu\text{g/liter}$ (ppb)

Sample Matrix: Water

Client Sample ID: Method Blank
Lab Sample ID: B3297

<u>Compound</u>	<u>Result</u>	<u>Compound</u>	<u>Result</u>
dichlorodifluoromethane	1.8 U	1,2-dichloropropane	0.4 U
chloromethane	0.8 U	bromodichloromethane	1.0 U
vinyl chloride	1.8 U	2-chloroethylvinyl ether	1.3 U
bromomethane	1.2 U	cis-1,3-dichloropropane	3.4 U
chloroethane	5.2 U	toluene	2.0 U
trichlorofluoromethane	2.0 U	trans-1,3-dichloropropene	3.4 U
1,1-dichloroethene	1.3 U	1,1,2-trichloroethane	0.2 U
methylene chloride	15 U	tetrachloroethene	0.3 U
trans-1,2-dichloroethene	1.0 U	dibromochloromethane	0.9 U
1,1-dichloroethane	0.7 U	chlorobenzene	2.0 U
cis-1,2-dichloroethene	1.0 U	ethyl benzene	2.0 U
trichloromethane (chloroform)	0.5 U	xylenes (total)	1.0 U
1,1,1-trichloroethane	0.3 U	bromoform	2.0 U
carbon tetrachloride	1.2 U	1,1,2,2-tetrachloroethane	0.3 U
benzene	2.0 U	1,3-dichlorobenzene	3.2 U
1,2-dichloroethane	0.3 U	1,4-dichlorobenzene	2.4 U
trichloroethene	1.2 U	1,2-dichlorobenzene	1.5 U

Analysis Date: 06/03/93

U - Compound was analyzed for but not detected. The number is the detection limit for the sample.

IT Corporation
June 23, 1993

IT ANALYTICAL SERVICES
5815 MIDDLEBROOK PIKE
KNOXVILLE, TN

Client Project ID: St. Thomas

Job Number: ITEK 54182

WATER SURROGATE PERCENT RECOVERY SUMMARY

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>BCM</u>	<u>VOLATILE</u>		
			<u>OCFB</u>	<u>FB</u>	<u>OFCB</u>
PW-1	XX4810	110	111	112	113
PW-1	XX4810 (D1:5)	82	78	-	-
Method Blank	B3297	99	93	117	117

QC LIMITS

BCM - bromochloromethane	(60-127%)
OCFB - ortho-chlorofluorobenzene	(65-126%)
FB - fluorobenzene	(64-126%)
OFCB - ortho fluoro chlorobenzene	(73-128%)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **20**

MW1

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 54182

SAS No.: _____

SDG No.: MW1Matrix: (soil/water) WATERLab Sample ID: XX4806Sample wt/vol: 5.0 (g/mL) MLLab File ID: XX4806Level: (low/med) LOWDate Received: 05/28/93

% Moisture: not dec. _____

Date Analyzed: 06/01/93GC Column: DB-624 ID: 0.530 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	1	BJ
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (total)	22	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5-----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	6	J
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6-----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	15	
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Xylene (total)	10	U