



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 056



ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

Founded 1972

March 16, 2001

Mr Jerry Girardea
Innovative Waste Management
P.O. Box 50397
Summerville, SC 29485-0397

Ref: Analytical Testing
ETC Order # 0102795
Project Description Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, instrumentation maintenance and calibration were performed in accordance with guidelines established by the USEPA.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads 'Chet Scheibel'.

Chet Scheibel
Laboratory Project Manager

rt
Attachment

INNOVWASTE

Certifications

Tennessee #TN02027
Arkansas #40730
Kentucky #90047
North Carolina #415
South Carolina #84002002

Mississippi
Oklahoma #9311
Virginia #00106
Washington #C248
US Army Corps of Engineers

Environmental Testing & Consulting, Inc.
Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

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ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750
ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Innovative Waste Management**
Site ID **Dunn Field**

ETC Order #0102795

<u>ETC Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
010279501	DF/24-B/1058/SDC/001	SOIL	7.3.3	Reactive Cyanide
010279501	DF/24-B/1058/SDC/001	SOIL	1010	Ignitability/Flashpoint
010279501	DF/24-B/1058/SDC/001	SOIL	9045C	pH - Corrosivity
010279501	DF/24-B/1058/SDC/001	SOIL	7.3.4	Reactive Sulfide
010279501	DF/24-B/1058/SDC/001	SOIL	1311	TCLP Extraction
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Silver - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Arsenic - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Arsenic
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Barium - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Cadmium - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Chromium - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	7470A	Mercury - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Lead - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	6010B	Selenium - TCLP
010279501	DF/24-B/1058/SDC/001	SOIL	8270C	TCLP Semivolatiles
010279501	DF/24-B/1058/SDC/001	SOIL	8151A	TCLP Herbicides
010279501	DF/24-B/1058/SDC/001	SOIL	8081A	TCLP Pesticides
010279501	DF/24-B/1058/SDC/001	SOIL	1311	TCLP Extraction Organics
010279501	DF/24-B/1058/SDC/001	SOIL	1311	TCLP Extraction ZHE
010279501	DF/24-B/1058/SDC/001	SOIL	8260B	TCLP Volatile Organics
010279502	DF/24-B/1058/SDC/002	SOIL	7.3.3	Reactive Cyanide
010279502	DF/24-B/1058/SDC/002	SOIL	1010	Ignitability/Flashpoint
010279502	DF/24-B/1058/SDC/002	SOIL	9045C	pH - Corrosivity
010279502	DF/24-B/1058/SDC/002	SOIL	7.3.4	Reactive Sulfide
010279502	DF/24-B/1058/SDC/002	SOIL	1311	TCLP Extraction
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Silver - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Arsenic - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Arsenic
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Barium - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Cadmium - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Chromium - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	7470A	Mercury - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Lead - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	6010B	Selenium - TCLP
010279502	DF/24-B/1058/SDC/002	SOIL	8270C	TCLP Semivolatiles
010279502	DF/24-B/1058/SDC/002	SOIL	8151A	TCLP Herbicides
010279502	DF/24-B/1058/SDC/002	SOIL	8081A	TCLP Pesticides
010279502	DF/24-B/1058/SDC/002	SOIL	1311	TCLP Extraction Organics
010279502	DF/24-B/1058/SDC/002	SOIL	1311	TCLP Extraction ZHE
010279502	DF/24-B/1058/SDC/002	SOIL	8260B	TCLP Volatile Organics
010279503	DF/24-B/1058/SDC/003	SOIL	7.3.3	Reactive Cyanide
010279503	DF/24-B/1058/SDC/003	SOIL	1010	Ignitability/Flashpoint
010279503	DF/24-B/1058/SDC/003	SOIL	9045C	pH - Corrosivity
010279503	DF/24-B/1058/SDC/003	SOIL	7.3.4	Reactive Sulfide
010279503	DF/24-B/1058/SDC/003	SOIL	1311	TCLP Extraction
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Silver - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Arsenic - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Arsenic
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Barium - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Cadmium - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Chromium - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	7470A	Mercury - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Lead - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	6010B	Selenium - TCLP
010279503	DF/24-B/1058/SDC/003	SOIL	8270C	TCLP Semivolatiles

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Innovative Waste Management**
 Site ID **Dunn Field**

ETC Order #0102795

ETC Sample ID	Field ID	Matrix	Method	Method Description
010279503	DF/24-B/1058/SDC/003	SOIL	8151A	TCLP Herbicides
010279503	DF/24-B/1058/SDC/003	SOIL	8081A	TCLP Pesticides
010279503	DF/24-B/1058/SDC/003	SOIL	1311	TCLP Extraction Organics
010279503	DF/24-B/1058/SDC/003	SOIL	1311	TCLP Extraction ZHE
010279503	DF/24-B/1058/SDC/003	SOIL	8260B	TCLP Volatile Organics
010279504	DF/24-B/1058/SDC/004	SOIL	7.3.3	Reactive Cyanide
010279504	DF/24-B/1058/SDC/004	SOIL	1010	Ignitability/Flashpoint
010279504	DF/24-B/1058/SDC/004	SOIL	9045C	pH - Corrosivity
010279504	DF/24-B/1058/SDC/004	SOIL	7.3.4	Reactive Sulfide
010279504	DF/24-B/1058/SDC/004	SOIL	1311	TCLP Extraction
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Silver - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Arsenic - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Arsenic
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Barium - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Cadmium - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Chromium - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	7470A	Mercury - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Lead - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	6010B	Selenium - TCLP
010279504	DF/24-B/1058/SDC/004	SOIL	8270C	TCLP Semivolatiles
010279504	DF/24-B/1058/SDC/004	SOIL	8151A	TCLP Herbicides
010279504	DF/24-B/1058/SDC/004	SOIL	8081A	TCLP Pesticides
010279504	DF/24-B/1058/SDC/004	SOIL	1311	TCLP Extraction Organics
010279504	DF/24-B/1058/SDC/004	SOIL	1311	TCLP Extraction ZHE
010279504	DF/24-B/1058/SDC/004	SOIL	8260B	TCLP Volatile Organics
010279505	DF/24-B/1058/SDC/005	SOIL	7.3.3	Reactive Cyanide
010279505	DF/24-B/1058/SDC/005	SOIL	1010	Ignitability/Flashpoint
010279505	DF/24-B/1058/SDC/005	SOIL	9045C	pH - Corrosivity
010279505	DF/24-B/1058/SDC/005	SOIL	7.3.4	Reactive Sulfide
010279505	DF/24-B/1058/SDC/005	SOIL	1311	TCLP Extraction
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Silver - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Arsenic - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Arsenic
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Barium - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Cadmium - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Chromium - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	7470A	Mercury - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Lead - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	6010B	Selenium - TCLP
010279505	DF/24-B/1058/SDC/005	SOIL	8270C	TCLP Semivolatiles
010279505	DF/24-B/1058/SDC/005	SOIL	8151A	TCLP Herbicides
010279505	DF/24-B/1058/SDC/005	SOIL	8081A	TCLP Pesticides
010279505	DF/24-B/1058/SDC/005	SOIL	1311	TCLP Extraction Organics
010279505	DF/24-B/1058/SDC/005	SOIL	1311	TCLP Extraction ZHE
010279505	DF/24-B/1058/SDC/005	SOIL	8260B	TCLP Volatile Organics

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody



ETC Work Order : 0102795

Company Name	WXB	Phone # (901) 745-4999	Fax Results
		Fax # (901) 745-4280	RUSH

Analysis Requested
(Note special detection limits or methods)

Project/Site <i>Dunn Field</i>	FID # :	100
	PO # :	
Project #	Matrix	

Project Manager/Contact	S'm Dunkle			
1 Wastewater	4 Sludge			
2 Aqueous	5 Oil/Solvent			
3 Soil/Sediment	6 Other			

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Type
			Matrix	Grab/Comp	

DF/24-8/1058/SD4/001	27 Feb 01	10/15	Soil	Comp
DF/24-8/1058/SD4/002	27 Feb 01	10/21	Soil	Comp

DF/24-B/1058/SDC/003	29 Feb 01	1627	Soil	Comp
DF/24-B/1058/SDC/004	27 Feb 01	1032	Soil	Comp

DF/2458/1258/SD/2005	27 Feb 01	1045	Sc 1	Camp

[illegible]

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)
<i>[Signature]</i>	28 Feb 08	1859	

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)

DATE	TIME	RECEIVED BY AND SIGNATURE
		JOHN

Distribution : Original and Yellow accompany samples to the laboratory. Pink copy for Field Crew.
 Original copy returned with results. Yellow copy for ETC lab files.

[illegible]

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 2/28/01
Date/Time Checked In 2/28/01-09:59
Carrier/Bill# Hand-Delivered

LIMS# 0102-795
Project Dunn Field
By Rebekah Barger

1. Custody Seals?/Location-	No
2. Samples are non-radioactive?	Yes
3. Chain of Custody in plastic?	Yes
4. Temperature at receipt (ok = 4 ± 2 °C) <40C	OK
5. Ice & Packing-bags, ice, bubble wrap	Yes
6. Chain of Custody filled out properly?	Yes
7. All containers in separate bags?	No
8. Sample containers intact?	Yes
9. Label(s) complete and in good condition?	Yes
10. Label(s) agree with Chain of Custody?	Yes
11. Correct containers used?	Yes
12. Sufficient sample?	Yes
13. VOA vials bubble-free (H ₂ O) or no head space (soil)?	Yes
14. Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

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Environmental Testing & Consulting, Inc.

Sample Reports

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656 689

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-01**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/001**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/02/01	GD	1010	IG030211
pH - Corrosivity	7.4	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

C)
Data Validator

ND - Not Detected

000008

656 690

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-02**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/002**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/02/01	GD	1010	IG030211
pH - Corrosivity	7.4	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211


Data Validator

ND - Not Detected

000009

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 691

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-03**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/003**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	> 96	oC		03/02/01	GD	1010	IG030211
pH - Corrosivity	7.4	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000010

656 692

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-04**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/004**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/02/01	GD	1010	IG030211
pH - Corrosivity	7.3	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000011

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-05**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/005**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/02/01	GD	1010	IG030211
pH - Corrosivity	6.2	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000012

656 634

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-01**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/001**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47				03/01/01	NR	3051
Arsenic	7.96	mg/Kg	0.500	03/05/01	03/01/01	SH	6010B

65
Data Validator

ND - Not Detected

000013

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 695

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

Date Arrived **02/28/01**

ETC Order Number **0102795**

ETC Lab ID : **0102795-02**

Matrix : **SOIL**

Field ID : **DF/24-B/1058/SDC/002**

Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47						
Arsenic	10.9	mg/Kg	0.500	03/05/01	03/01/01 03/01/01	NR SH	3051 6010B

Data Validator

ND - Not Detected

000014

656 696

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-03**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/003**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47						
Arsenic	12.5	mg/Kg	0.500	03/05/01	03/01/01	NR SH	3051 6010B

CS
Data Validator

ND - Not Detected

000015

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-04**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/004**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47						
Arsenic	10.9	mg/Kg	0.500	03/05/01	03/01/01 03/01/01	NR SH	3051 6010B

CJ
Data Validator

ND - Not Detected

000016

656 698

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-05**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/005**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47				03/01/01	NR	3051
Arsenic	7.21	mg/Kg	0.500	03/05/01	03/01/01	SH	6010B

Data Validator

ND - Not Detected

000017

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 699

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

Date Arrived **02/28/01**
ETC Order Number **0102795**

ETC Lab ID : **0102795-01**
Field ID : **DF/24-B/1058/SDC/001**

Matrix : **SOIL**
Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				02/28/01	TL	1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR	3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Barium - TCLP	1.34	mg/L	0.025	03/06/01	03/02/01	SH	6010B
Cadmium - TCLP	0.017	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B

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Data Validator

ND - Not Detected

000018

656 700

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-02**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/002**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				02/28/01	TL 1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR 3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Barium - TCLP	1.38	mg/L	0.025	03/06/01	03/02/01	SH 6010B
Cadmium - TCLP	0.081	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF 7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B

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Data Validator

ND - Not Detected

000019

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 701

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

Date Arrived **02/28/01**
ETC Order Number **0102795**

ETC Lab ID : **0102795-03**
Field ID : **DF/24-B/1058/SDC/003**

Matrix : **SOIL**
Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				02/28/01	TL	1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR	3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Barium - TCLP	0.912	mg/L	0.025	03/06/01	03/02/01	SH	6010B
Cadmium - TCLP	0.157	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF	7470A
Lead - TCLP	0.119	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B

CS
Data Validator

ND - Not Detected

000020

656 702

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**
ETC Order Number **0102795**ETC Lab ID : **0102795-04**
Field ID : **DF/24-B/1058/SDC/004**Matrix : **SOIL**
Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				02/28/01	TL 1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR 3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Barium - TCLP	0.792	mg/L	0.025	03/06/01	03/02/01	SH 6010B
Cadmium - TCLP	0.133	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF 7470A
Lead - TCLP	0.636	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B

C)
Data Validator

ND - Not Detected

000021

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID : **0102795-05**Field ID : **DF/24-B/1058/SDC/005**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				02/28/01	TL	1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR	3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Barium - TCLP	1.03	mg/L	0.025	03/06/01	03/02/01	SH	6010B
Cadmium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B

Data Validator

ND - Not Detected

000022

656 704

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**
 ETC Order Number **0102795**

ETC Lab ID **0102795-01**
 Field ID : **DF/24-B/1058/SDC/001**

Matrix : **SOIL**
 Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				02/28/01	TL 1311
TCLP Volatile Organics				03/06/01	LS	8260B 5030B
QC Batch	V203061					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	97		74	123		
S2 - Toluene-d8	105		86	112		
S3 - 4-Bromofluorobenzene	111		81	115		
S4 - 1,2-Dichloroethane-d4	106		80	120		

Data Validator C

ND - Not Detected

Q - Recovery Outside QC Limits

000023

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-02**Field ID : **DF/24-B/1058/SDC/002**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				02/28/01	TL 1311
TCLP Volatile Organics				03/06/01	LS	8260B 5030B
QC Batch	V203061					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	91		74 123			
S2 - Toluene-d8	107		86 112			
S3 - 4-Bromofluorobenzene	110		81 115			
S4 - 1,2-Dichloroethane-d4	103		80 120			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000024

656 706

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**
BTC Order Number **0102795**BTC Lab ID **0102795-03**
Field ID : **DF/24-B/1058/SDC/003**Matrix : **SOIL**
Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				TL	1311
TCLP Volatile Organics				03/06/01	LS	8260B 5030B
QC Batch	V203061					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	89		74	123		
S2 - Toluene-d8	105		86	112		
S3 - 4-Bromofluorobenzene	110		81	115		
S4 - 1,2-Dichloroethane-d4	102		80	120		

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000025

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-04**Field ID : **DF/24-B/1058/SDC/004**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				02/28/01	TL 1311
TCLP Volatile Organics				03/06/01	LS	8260B 5030B
QC Batch	V203061					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	94		74 123			
S2 - Toluene-d8	105		86 112			
S3 - 4-Bromofluorobenzene	110		81 115			
S4 - 1,2-Dichloroethane-d4	102		80 120			

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000026

656 708

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-05**Field ID : **DF/24-B/1058/SDC/005**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				02/28/01	TL 1311
TCLP Volatile Organics				03/06/01	LS	8260B 5030B
QC Batch	V203061					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	91		74	123		
S2 - Toluene-d8	106		86	112		
S3 - 4-Bromofluorobenzene	109		81	115		
S4 - 1,2-Dichloroethane-d4	101		80	120		

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000027

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-01**Field ID : **DF/24-B/1058/SDC/001**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/08/01	PF	8270C
QC Batch	P06074					3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	82		29	110		
S2 - 2-Fluorobiphenyl	68		38	107		
S3 - 4-Terphenyl-d14	108		33	122		
S4 - Phenol-d6	23		7	58		
S5 - 2,4,6-Tribromophenol	44		16	138		
S6 - 2-Fluorophenol	34		8	88		

CJ
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000028

656 710

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**
ETC Order Number **0102795**

ETC Lab ID **0102795-02**
Field ID : **DF/24-B/1058/SDC/002**

Matrix : **SOIL**
Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Semivolatiles				03/08/01	03/02/01	PF 8270C 3510C
QC Batch	P06074					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	81		29	110		
S2 - 2-Fluorobiphenyl	67		38	107		
S3 - 4-Terphenyl-d14	89		33	122		
S4 - Phenol-d6	24		7	58		
S5 - 2,4,6-Tribromophenol	42		16	138		
S6 - 2-Fluorophenol	34		8	88		

CJ

Data Validator ND - Not Detected

Q - Recovery Outside QC Limits

000029

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

PID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-03**Field ID : **DF/24-B/1058/SDC/003**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Semivolatiles				03/08/01	PF 8270C	3510C
QC Batch	P06074				03/02/01	
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	81		29	110		
S2 - 2-Fluorobiphenyl	70		38	107		
S3 - 4-Terphenyl-d14	104		33	122		
S4 - Phenol-d6	23		7	58		
S5 - 2,4,6-Tribromophenol	42		16	138		
S6 - 2-Fluorophenol	33		8	88		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000030

656 712

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-04**Field ID : **DF/24-B/1058/SDC/004**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Semivolatiles				03/08/01	PF	8270C
QC Batch	P06074				03/02/01	3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	76		29	110		
S2 - 2-Fluorobiphenyl	64		38	107		
S3 - 4-Terphenyl-d14	113		33	122		
S4 - Phenol-d6	22		7	58		
S5 - 2,4,6-Tribromophenol	43		16	138		
S6 - 2-Fluorophenol	31		8	88		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000031

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-05**Field ID : **DF/24-B/1058/SDC/005**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/08/01	PF	8270C
QC Batch	P06074					3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	79		29	110		
S2 - 2-Fluorobiphenyl	67		38	107		
S3 - 4-Terphenyl-d14	101		33	122		
S4 - Phenol-d6	23		7	58		
S5 - 2,4,6-Tribromophenol	43		16	138		
S6 - 2-Fluorophenol	32		8	88		

C J
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000032

656 714

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-01**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/001**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08021				03/01/01	3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	76		34			115
S2 - Tetrachloro-m-xylene	68		31			96

(S

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000033

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-02**Field ID : **DF/24-B/1058/SDC/002**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08021					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	74		34	115		
S2 - Tetrachloro-m-xylene	58		31	96		

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000034

656 716

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-03**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/003**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08021				03/01/01	3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	69		34			115
S2 - Tetrachloro-m-xylene	63		31			96

Data Validator C S

ND - Not Detected

Q - Recovery Outside QC Limits

000035

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 717

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-04**Field ID : **DF/24-B/1058/SDC/004**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08021					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	72		34	115		
S2 - Tetrachloro-m-xylene	58		31	96		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000036

656 718

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**
ETC Order Number **0102795**ETC Lab ID **0102795-05**
Field ID : **DF/24-B/1058/SDC/005**Matrix : **SOIL**
Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08021					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	74		34	115		
S2 - Tetrachloro-m-xylene	66		31	96		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000037

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 719

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**
ETC Order Number **0102795**

ETC Lab ID **0102795-01**
Field ID : **DF/24-B/1058/SDC/001**

Matrix : **SOIL**
Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/05/01	RG	8151A
QC Batch	P11087					
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	73		20 150			

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000038

656 720

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-02**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/002**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Herbicides				03/05/01	03/02/01	RG 8151A
QC Batch	P11087					
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	79		20 150			

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000039

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 721

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-03**Field ID : **DF/24-B/1058/SDC/003**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Herbicides				03/05/01	03/02/01	RG 8151A
QC Batch	P11087					
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	78		20 150			

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000040

656 722

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-04**Matrix : **SOIL**Field ID : **DF/24-B/1058/SDC/004**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Herbicides				03/05/01	03/02/01	RG 8151A
QC Batch	P11087					
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	75		20 150			

Data Validator C S

ND - Not Detected

Q - Recovery Outside QC Limits

000041

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 723

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102795**ETC Lab ID **0102795-05**Field ID : **DF/24-B/1058/SDC/005**Matrix : **SOIL**Sample Date : **02/27/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				02/28/01	TL 1311
TCLP Herbicides				03/05/01	03/02/01	RG 8151A
QC Batch	P11087					
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
Sl - 2,4,5-T	70		20 150			

Data Validator CS ND - Not Detected

Q - Recovery Outside QC Limits

000042

656 724

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Inorganics**

000043

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
INORGANICS – SOIL

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

HOLDING TIMES

Sample Analysis All samples analyzed within Method Specified Holding Times.

METHOD

Preparation/Analysis: 7.3.3
1010
9045C
7.3.4

QUALITY CONTROL

QC Batch
RC030211
IG030211
PH030200
RS030211

Method Blank

No Target Analytes detected above Detection Limit.

Laboratory Control Sample

Spike Recovery All analytes within QC limits

Duplicates

RPD All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required No dilutions required.

CS
Project Manager

656 726

METHOD BLANK
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Reactive Cyanide	RC0302111 BLK	RC030211	ND	0.125	mg/Kg	3/2/01	7.3.3
Reactive Sulfide	RS0302111 BLK	RS030211	ND	25	mg/Kg	3/2/01	7.3.4

NA - Not Applicable per Method
ND - Not DetectedReviewed by: CSINORG BLANK 0102-795.iqc
000045

LABORATORY CONTROL SAMPLE
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Spike Added	Found	Units	% Rec #	QC Limits	
Reactive Cyanide	RC0302111 LCS	RC030211	1000	309	mg/Kg	31	0	48
Reactive Sulfide	RS0302111 LCS	RS030211	285	220	mg/Kg	77	14	128
Ignitability	IG0302111 LCS	IG030211	27	26	deg C	96	96	104

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CSINORG LCS 0102-795.iqc
000046

656 728

DUPLICATE
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.		QC Batch	SAMPLE Result	DUP Result	Units	% RPD #	QC Limits		Method
Ignitability	0102-795-05	DUP	IG030211	>96	>96	deg C	0	0	20	1010

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CS

INORG DUP 0102-795.iqc

000047

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Metals (ICP/GFAA/CV)**

656 730

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS – SOIL

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

HOLDING TIMES

QC Batch(s) for this order ICP Metals V13-SO-47
Sample Preparation/Analysis All samples digested/ analyzed within holding time.

METHOD

Preparation: SW-846 3051
Analysis: SW-846 6010B

CALIBRATION

Initial Calibration All criteria met.
Continuing Calibration All criteria met.

SAMPLE ANALYSIS

Instrumentation Thermo Jarrell Ash Enviro-I ICP
Dilutions Required No dilutions required.
% Solids Adjustment Sample results were adjusted for % solids.

QUALITY CONTROL

0102-795.MQCBLANK

Method Blank

V13-SO-47BLK ICP Metals

No analytes detected in the Method Blank.

0102-795.MQCLCS

Laboratory Control Sample(s)

V13-SO-47LCS ICP Metals

All acceptance criteria met.

0102-795.MQCMSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0102-795-01	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/001	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification. '

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.
Post Digestion Spike Recovery must be +/-25% of expected value for ICP.


Project Manager

000049

FORM 3A
SOLID METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals

V13-SO-47 BLK

QC Batch

V13-SO-47

Date Sample Prepared

3/1/01 ICP/GFAA Metals

Metals	Concentration mg/Kg	Detection Limit mg/Kg	Date Analyzed	Method
Arsenic	ND	5.00	3/5/01	6010B

ND - Not Detected

Reviewed by CS

0102-795.mqc BLANK

000050

FORM 7
SOLID LABORATORY CONTROL SAMPLE
METALS

Laboratory Control ID	ICP/GFAA Metals	<u>V13-SO-47</u>	LCS	QC Batch <u>V13-SO-47</u>
Date Prepared	ICP/GFAA Metals	3/1/01		

Metals	Spike Added mg/Kg	Found mg/Kg	% R	#	QC Limits
Arsenic	8.00	8.02	100	80	120

Reviewed by CS

0102-795.mqc LCS
000051

FORM 6
SOLID MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals 0102-795-01 QC Batch V13-SO-47

Date Sample Prepared 3/1/01 ICP/GFAA Metals

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MS Conc mg/Kg	RPD < 20% #	MS % Rec #	QC Limits	
Arsenic	7.55	7.96	14.7	1	89	75	125

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MSD Conc mg/Kg		MSD % Rec #	QC Limits	
Arsenic	7.55	7.96	14.9		92	75	125

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0102-795.mqc MSMSD
000052

656 734

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V24-AQ-83
	Mercury	V8-AQ-03

TCLP Extraction All soils extracted within 180 days.
(28 days for Mercury)

Sample Preparation All TCLP leachates prepared and analyzed within 180 days.
(28 days for Mercury)

CALIBRATION

Initial Calibration	All criteria met.
Continuing Calibration	All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer

Dilutions Required No dilutions required.

QUALITY CONTROL

0102-795.MQ1BLANK

Method Blank

V24-AQ-83BLK	ICP Metals
V8-AQ-03BLK	Mercury

No analytes detected in the Method Blank

0102-795.MQ1LCS

Laboratory Control Sample(s)

V24-AQ-83LCS	ICP Metals
V8-AQ-03LCS	Mercury

All criteria met.

0102-795.MQ1Sample MS

Matrix Spike - ICP Metals

0102-839-04

DF/24-B/1059/SDC/009	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike - Hg

0102-839-04

DF/24-B/1059/SDC/009	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

000053

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field
ETC Order # 0102-795

QUALITY CONTROL

0102-795.MQ1MSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0102-795-05	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/005	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup - Hg

0102-795-05	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/005	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.
Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

CS
Project Manager

656 736

FORM 3A
TCLP/SPLP METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals
Laboratory ID MercuryV24-AQ-83 BLK
V8-AQ-03 BLKQC Batch
V24-AQ-83
V8-AQ-03

Date Sample Prepared

3/2/01
3/5/01ICP/GFAA Metals
Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0.010	3/6/01	6010B
Arsenic	ND	0.100	3/6/01	6010B
Barium	ND	0.025	3/6/01	6010B
Cadmium	ND	0.010	3/6/01	6010B
Chromium	ND	0.010	3/6/01	6010B
Lead	ND	0.100	3/6/01	6010B
Selenium	ND	0.100	3/6/01	6010B
Mercury	ND	0.001	3/8/01	7470A

ND - Not Detected

Reviewed by CS

0102-795.mq1 BLANK

000055

FORM 7
TCLP/SPLP LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory Control ID	ICP/GFAA Metals	<u>V24-AQ-83</u> LCS	QC Batch
	Mercury	<u>V8-AQ-03</u> LCS	<u>V24-AQ-83</u>
			<u>V8-AQ-03</u>
Date Prepared	ICP/GFAA Metals	<u>3/2/01</u>	
	Mercury	<u>3/5/01</u>	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0.250	0.265	106		80	120
Arsenic	0.100	0.104	104		80	120
Barium	2.50	2.76	110		80	120
Cadmium	0.020	0.022	110		80	120
Chromium	0.500	0.537	107		80	120
Lead	0.100	0.109	109		80	120
Selenium	0.100	0.106	106		80	120
Mercury	0.0050	0.0046	92		85	115

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by ES

0102-795.mq1 LCS

000056

656 738

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

	QC Batch	
Laboratory ID MS ICP/GFAA Metals	0102-795-05	V24-AQ-83
Laboratory ID MS Mercury	0102-795-05	V8-AQ-03
Date Sample Prepared	3/2/01	ICP/GFAA Metals
	3/5/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD < 20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0.271	1	108	50	150
Arsenic	1.25	ND	1.36	1	109	50	150
Barium	2.50	1.03	3.60	2	103	50	150
Cadmium	0.250	ND	0.265	2	106	50	150
Chromium	0.500	ND	0.520	1	104	50	150
Lead	1.25	ND	1.36	1	109	50	150
Selenium	1.25	ND	1.45	1	116	50	150
Mercury	0.0050	ND	0.0052	0	104	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0102-795.mq1 MSMSD

000057

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0102-795-05	QC Batch V24-AQ-83
Laboratory ID MS Mercury	0102-795-05	V8-AQ-03
Date Sample Prepared	3/2/01	ICP/GFAA Metals
	3/5/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec	#	QC Limits
Silver	0.250	ND	0.269		108	50	150
Arsenic	1.25	ND	1.34		107	50	150
Barium	2.50	1.03	3.53		100	50	150
Cadmium	0.250	ND	0.260		104	50	150
Chromium	0.500	ND	0.516		103	50	150
Lead	1.25	ND	1.34		107	50	150
Selenium	1.25	ND	1.44		115	50	150
Mercury	0.0050	ND	0.0052		104	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0102-795.mq1 MSMSD

000058

656 740

FORM 6
SAMPLE MATRIX SPIKE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0102-839-04	QC Batch V24-AQ-83
Laboratory ID MS Mercury	0102-839-04	V8-AQ-03
Date Sample Prepared	3/2/01	ICP/GFAA Metals
	3/5/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L		MS % Rec	QC Limits	
						#	
Silver	0.250	ND	0.280		112	50	150
Arsenic	1.25	ND	1.37		110	50	150
Barium	2.50	1.71	4.31		104	50	150
Cadmium	0.250	0.012	0.271		104	50	150
Chromium	0.500	ND	0.516		103	50	150
Lead	1.25	ND	1.36		109	50	150
Selenium	1.25	ND	1.49		119	50	150
Mercury	0.0050	ND	0.0052		104	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by < >

0102-795 mq1 Sample MS

000059

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Volatiles**

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Analysis All VOC extracts analyzed within 14 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8260B

QUALITY CONTROL

QC Batch Form 4 Summary
V203061 V2030611LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits, except as listed below.

Surrogate Toluene-d8 was flagged for high recovery in samples 0102-795-05 MS/MSD (DF/24-B/1058/SDC/005). The high recoveries do not affect the recovery data.

Method Blank FORM 4

V2030611LB

Target Analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3

V2030611LCS

All acceptance criteria met, except as listed below.

1,4-Dichlorobenzene was flagged for high recovery in the LCS. This analyte was not detected in the associated project samples. There is no effect on the data.

Matrix Spike / Matrix Spike Dup FORM 3

Batch V203061

0102-795-05

RPD

All analytes within QC limits, except as listed below.

DF/24-B/1058/SDC/005 Spike Recovery

All analytes within QC limits.

RPDs for 1,1-Dichloroethene and Vinyl Chloride were flagged for high recoveries due to variances in the MS/MSD.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

BFB Daily 12-Hour Tune

All criteria met. FORM 5

Initial Calibration

All criteria met. FORM 6

Calibration Verification

All criteria met. FORM 7 Responses >30% are non-target analytes.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

CALIBRATION

Volatile Internal Standard Area and RT FORM 8

Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD

Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

CS

Project Manager

FORM 2
WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	V2030611LCS	109	106	110	92	0
02	V2030611LB	102	102	102	104	0
03	0102-795-1T	106	97	105	111	0
04	0102-795-2T	103	91	107	110	0
05	0102-795-3T	102	89	105	110	0
06	0102-795-4T	102	94	105	110	0
07	0102-795-5T	101	91	106	109	0
08	0102-795-5TM	108	94	121*	100	1
09	0102-795-5TM	103	97	113*	94	1
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QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (80-120)
 SMC2 (DFM) = Dibromofluoromethane (74-123)
 SMC3 (TOL) = Toluene-d8 (86-112)
 OTHER (BFB) = Bromofluorobenzene (81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V2030611LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: 0302003T

Lab Prep Batch: V203061

Date Analyzed: 03/06/01

Time Analyzed: 1454

GC Column:

ID: 2 (mm)

Heated Purge: (Y/N) Y

Instrument ID: VOC2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V2030611LCS	V203061	0201002TLCS	1339
02	0102-795-1T	V203061	0801008	1725
03	0102-795-2T	V203061	0901009	1756
04	0102-795-3T	V203061	1001010	1826
05	0102-795-4T	V203061	1101011	1857
06	0102-795-5T	V203061	1201012	1927
07	0102-795-5TM	V203061	1901019	2301
08	0102-795-5TM	V203061	2001020	2331
09				
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COMMENTS:

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V2030611LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix: (soil/water) WATER

Lab Prep Batch: V203061

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0302003T

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 03/06/01

GC Column: ID: 2.00 (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

71-43-2-----	Benzene	1.00	U
78-93-3-----	2-Butanone	20.00	U
56-23-5-----	Carbon Tetrachloride	1.00	U
108-90-7-----	Chlorobenzene	1.00	U
67-66-3-----	Chloroform	1.00	U
106-46-7-----	1,4-Dichlorobenzene	1.00	U
107-06-2-----	1,2-Dichloroethane	1.00	U
75-35-4-----	1,1-Dichloroethene	1.00	U
127-18-4-----	Tetrachloroethene	1.00	U
79-01-6-----	Trichloroethene	1.00	U
75-01-4-----	Vinyl Chloride	1.00	U

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: V203061

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: V2030611LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0		93.62	94	72-124
2-Butanone	100.0		109.1	109	55-151
Carbon Tetrachloride	100.0		122.6	123	64-123
Chlorobenzene	100.0		88.79	89	77-112
Chloroform	100.0		101.4	101	70-115
1,4-Dichlorobenzene	100.0		124.8	125*	78-116
1,2-Dichloroethane	100.0		112.2	112	62-124
1,1-Dichloroethene	100.0		87.87	88	69-121
Tetrachloroethene	100.0		109.5	110	77-115
Trichloroethene	100.0		101.2	101	75-113
Vinyl Chloride	100.0		94.75	95	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 1 out of 11 outside limits

COMMENTS:

FORM III VOA-GCMS

000066

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC.

Lab Prep Batch: V203061

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: 0102-795-5T

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	86.83	87	72-124
2-Butanone	100.0	0.000	101.2	101	55-151
Carbon Tetrachloride	100.0	0.000	120.5	120	64-123
Chlorobenzene	100.0	0.000	86.80	87	77-112
Chloroform	100.0	0.000	93.76	94	70-115
1,4-Dichlorobenzene	100.0	0.000	116.4	116	78-116
1,2-Dichloroethane	100.0	0.000	115.6	116	62-124
1,1-Dichloroethene	100.0	0.000	73.21	73	69-121
Tetrachloroethene	100.0	0.000	113.8	114	77-115
Trichloroethene	100.0	0.000	107.2	107	75-113
Vinyl Chloride	100.0	0.000	85.14	85	65-134

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Benzene	100.0	81.71	82	6	20	72-124
2-Butanone	100.0	95.32	95	6	20	55-151
Carbon Tetrachloride	100.0	110.3	110	9	20	64-123
Chlorobenzene	100.0	86.30	86	1	20	77-112
Chloroform	100.0	90.75	91	3	20	70-115
1,4-Dichlorobenzene	100.0	112.0	112	4	20	78-116
1,2-Dichloroethane	100.0	107.0	107	8	20	62-124
1,1-Dichloroethene	100.0	89.73	90	21*	20	69-121
Tetrachloroethene	100.0	97.40	97	16	20	77-115
Trichloroethene	100.0	101.4	101	6	20	75-113
Vinyl Chloride	100.0	111.4	111	26*	20	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 2 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS:

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Semi-Volatiles**

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

HOLDING TIMES

TCLP Extraction	All samples extracted within 14 days.
Sample Extraction	All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis	All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311/3510C
Analysis: SW-846 8270C

QUALITY CONTROL

QC Batch Form 4 Summary
P06074 P06074LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P06074LB

Target Analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3
P06074LCS/LCSD

All acceptance criteria met, except as listed below.

One non-target analyte was flagged for low recovery in the LCSD.

RPDs for Pyridine and three non-target analytes were flagged for high recovery due to variances in the MS/MSD recoveries.

Matrix Spike / Matrix Spike Dup FORM 3

Batch P06074

0102-795-01	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/001	Spike Recovery	All analytes within QC limits.

Recoveries for 2-Methylphenol, 3&4-Methylphenol, 2,4,5-Trichlorophenol, and 2,4,6-Trichlorophenol were flagged for low recovery in the MS/MSD. Analytes were not detected in the associated project samples.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7 Responses >30% do not affect the data.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

CALIBRATION

Semi-Volatile Internal Standard Area and RT FORM 8

Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD

Dilutions Required No dilutions required.

OTHER

Sample 0102-795-01MSD was analyzed 8 minutes outside the 12-hour tune time. There is no effect on the recovery data.

CS

Project Manager

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P06074LB	69	65	113	19	49	29			0
02	P06074LCS	76	74	122	22	62	33			0
03	P06074LCSD	76	73	108	22	60	32			0
04	0102-795-1	82	68	108	23	44	34			0
05	0102-795-2	81	67	89	24	42	34			0
06	0102-795-3	81	70	104	23	42	33			0
07	0102-795-4	76	64	113	22	43	31			0
08	0102-795-5	79	67	101	23	43	32			0
09	0102-795-1MS	86	72	96	23	47	34			0
10	0102-795-1MS	77	65	109	21	46	29			0
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QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (29-110)
 S2 (FBP) = 2-Fluorobiphenyl (38-107)
 S3 (TPH) = Terphenyl-d14 (33-122)
 S4 (PHL) = Phenol-d6 (7- 58)
 S5 (TBP) = 2,4,6-Tribromophenol (16-138)
 S6 (2FP) = 2-Fluorophenol (8- 88)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

FORM 4
BNA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P06074LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: 1701017

Lab Prep Batch: P06074

Instrument ID: BNA2

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/03/01

Level: (low/med) LOW

Time Analyzed: 1732

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P06074LCS	1805	1801018	03/03/01
02	P06074LCSD	1837	1901019	03/03/01
03	0102-795-1	1851	0901010	03/08/01
04	0102-795-2	1924	1001011	03/08/01
05	0102-795-3	1957	1101012	03/08/01
06	0102-795-4	2031	1201013	03/08/01
07	0102-795-5	2104	1301014	03/08/01
08	0102-795-1MS	0129	2101022	03/09/01
09	0102-795-1MS	0202	2201023	03/09/01
10				
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COMMENTS:

656 754

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06074LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix: (soil/water) WATER

Lab Prep Batch: P06074

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 1701017

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 1 (mL)

Date Analyzed: 03/03/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

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

106-46-7-----	1,4-Dichlorobenzene	5.00	U
121-14-2-----	2,4-Dinitrotoluene	5.00	U
118-74-1-----	Hexachlorobenzene	5.00	U
87-68-3-----	Hexachlorobutadiene	5.00	U
67-72-1-----	Hexachloroethane	5.00	U
95-48-7-----	2-Methylphenol	5.00	U
108-39-4-----	3&4-Methylphenol	5.00	U
98-95-3-----	Nitrobenzene	5.00	U
87-86-5-----	Pentachlorophenol	10.00	U
110-86-1-----	Pyridine	5.00	U
95-95-4-----	2,4,5-Trichlorophenol	5.00	U
88-06-2-----	2,4,6-Trichlorophenol	5.00	U

FORM I BNA-GCMS

000073

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06074

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P06074LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Acenaphthene	50.00		45.71	91	38-117
Acenaphthylene	50.00		43.50	87	37-114
Acetophenone	50.00		40.20	80	32-108
Aniline	50.00		41.85	84	16-133
Anthracene	50.00		47.13	94	34-128
Benzidine	50.00		27.81	56	22-176
Benz(a)Anthracene	50.00		47.96	96	36-127
Benzo(b)fluoranthene	50.00		42.46	85	36-131
Benzo(k)fluoranthene	50.00		42.50	85	32-132
Benzo(ghi)perylene	50.00		47.56	95	26-123
Benzo(a)pyrene	50.00		43.65	87	34-131
Benzoic acid	50.00		14.68	29	11- 58
Benzyl alcohol	50.00		40.08	80	20-109
Bis(2-chloroethoxy)meth	50.00		41.34	83	20-126
Bis(2-chloroethyl)ether	50.00		43.08	86	16-122
Bis(2-chloroisopropyl)e	50.00		46.43	93	28-108
Bis(2-ethylhexyl)phthal	50.00		54.93	110	21-162
4-Bromophenyl phenyl et	50.00		47.86	96	31-124
Butyl benzyl phthalate	50.00		59.60	119	33-142
Carbazole	50.00		30.62	61	20-147
4-Chloroaniline	50.00		41.99	84	24-127
Chlorobenzilate	50.00		51.68	103	35-118
4-Chloro-3-methylphenol	50.00		43.68	87	35-117
2-Chloronaphthalene	50.00		50.87	102	29-137
2-Chlorophenol	50.00		39.90	80	27-102
4-Chlorophenyl phenyl e	50.00		46.37	93	39-110
Chrysene	50.00		48.67	97	30-124
Dibenz(a,h)anthracene	50.00		47.47	95	27-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06074

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P06074LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Dibenzofuran	50.00		46.00	92	40-108
Di-n-butyl phthalate	50.00		51.63	103	19-158
1,2-Dichlorobenzene	50.00		39.68	79	26-100
1,3-Dichlorobenzene	50.00		39.53	79	21-102
1,4-Dichlorobenzene	50.00		40.28	80	24- 99
3,3'-Dichlorobenzidine	50.00		47.33	95	6-192
2,4-Dichlorophenol	50.00		40.02	80	32-110
2,6-Dichlorophenol	50.00		40.06	80	31-112
Diethyl phthalate	50.00		50.83	102	36-130
3,3-Dimethylbenzidine	50.00		20.38	41	6-192
2,4-Dimethyphenol	50.00		34.58	69	34-105
Dimethyl phthalate	50.00		47.72	95	34-123
4,6-Dinitro-2-methylphe	50.00		45.76	92	27-128
2,4-Dinitrophenol	50.00		37.30	75	10-132
2,4-Dinitrotoluene	50.00		45.46	91	24-147
2,6-Dinitrotoluene	50.00		52.28	104	36-125
N-NitrsdiphylAm/Dipheny	100.0		93.96	94	35-116
Di-n-octyl phthalate	50.00		47.21	94	29-136
Ethyl methanesulfonate	50.00		44.36	89	20-121
Fluoranthene	50.00		32.02	64	28-127
Fluorene	50.00		47.12	94	41-116
Hexachlorobenzene	50.00		47.01	94	18-136
Hexachlorobutadiene	50.00		38.92	78	22-109
Hexachlorocyclopentadie	50.00		28.17	56	10-102
Hexachloroethane	50.00		36.22	72	16-107
Indeno(1,2,3-cd)pyrene	50.00		47.61	95	22-126
Isophorone	50.00		39.54	79	31-116
Methyl methanesulfonate	50.00		22.77	46	15- 82

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06074

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P06074LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2-Methylnaphthalene	50.00		40.06	80	34-108
2-Methylphenol	50.00		38.67	77	22- 97
3&4-Methylphenol	50.00		35.52	71	21- 96
Naphthalene	50.00		39.43	79	33-108
2-Nitroaniline	50.00		49.48	99	32-127
3-Nitroaniline	50.00		52.11	104	28-142
4-Nitroaniline	50.00		35.41	71	23-139
Nitrobenzene	50.00		39.31	79	27-117
2-Nitrophenol	50.00		39.65	79	25-114
4-Nitrophenol	50.00		11.22	22	1- 76
N-Nitrosodibutylamine	50.00		45.84	92	31-126
N-Nitrosodiethylamine	50.00		33.76	68	28-107
N-Nitrosodimethylamine	50.00		28.31	57	14- 84
N-Nitrosodi-n-propylami	50.00		50.16	100	29-114
Pentachloronitrobenzene	50.00		49.44	99	34-135
Pentachlorophenol	50.00		31.99	64	17-142
Phenacetin	50.00		47.81	96	29-141
Phenanthrene	50.00		47.07	94	40-120
Phenol	50.00		18.52	37	11- 55
Pyrene	50.00		59.29	118	20-154
Pyridine	50.00		20.74	41	10- 71
1,2,4,5-Tetrachlorobenz	50.00		43.08	86	28-110
2,3,4,6-Tetrachlorophen	50.00		48.26	96	28-118
1,2,4-Trichlorobenzene	50.00		37.63	75	23-106
2,4,5-Trichlorophenol	50.00		45.78	92	26-118
2,4,6-Trichlorophenol	50.00		42.88	86	26-115
1,2-Dphnylhydrzine/Azob	50.00		47.19	94	45-135

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06074

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P06074LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	50.00	44.03	88	3	20	38-117
Acenaphthylene	50.00	42.41	85	2	20	37-114
Acetophenone	50.00	40.20	80	0	20	32-108
Aniline	50.00	36.39	73	14	20	16-133
Anthracene	50.00	45.00	90	4	20	34-128
Benzidine	50.00	5.09	10*	139*	20	22-176
Benz(a)Anthracene	50.00	46.22	92	4	20	36-127
Benzo(b)fluoranthene	50.00	43.34	87	2	20	36-131
Benzo(k)fluoranthene	50.00	40.30	81	5	20	32-132
Benzo(ghi)perylene	50.00	45.67	91	4	20	26-123
Benzo(a)pyrene	50.00	42.10	84	4	20	34-131
Benzoic acid	50.00	18.87	38	27*	20	11- 58
Benzyl alcohol	50.00	38.60	77	4	20	20-109
Bis(2-chloroethoxy)meth	50.00	40.22	80	4	20	20-126
Bis(2-chloroethyl)ether	50.00	43.83	88	2	20	16-122
Bis(2-chloroisopropyl)e	50.00	45.55	91	2	20	28-108
Bis(2-ethylhexyl)phthal	50.00	54.78	110	0	20	21-162
4-Bromophenyl phenyl et	50.00	45.72	91	5	20	31-124
Butyl benzyl phthalate	50.00	56.61	113	5	20	33-142
Carbazole	50.00	29.85	60	2	20	20-147
4-Chloroaniline	50.00	38.75	78	7	20	24-127
Chlorobenzilate	50.00	46.73	93	10	20	35-118
4-Chloro-3-methylphenol	50.00	42.75	86	1	20	35-117
2-Chloronaphthalene	50.00	48.84	98	4	20	29-137
2-Chlorophenol	50.00	39.96	80	0	20	27-102
4-Chlorophenyl phenyl e	50.00	46.29	92	1	20	39-110
Chrysene	50.00	47.56	95	2	20	30-124
Dibenz(a,h)anthracene	50.00	47.48	95	0	20	27-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06074

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P06074LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Dibenzofuran	50.00	45.23	90	2	20	40-108
Di-n-butyl phthalate	50.00	48.73	97	6	20	19-158
1,2-Dichlorobenzene	50.00	39.41	79	0	20	26-100
1,3-Dichlorobenzene	50.00	38.81	78	1	20	21-102
1,4-Dichlorobenzene	50.00	39.48	79	1	20	24- 99
3,3'-Dichlorobenzidine	50.00	45.42	91	4	20	6-192
2,4-Dichlorophenol	50.00	40.23	80	0	20	32-110
2,6-Dichlorophenol	50.00	39.48	79	1	20	31-112
Diethyl phthalate	50.00	49.43	99	3	20	36-130
3,3-Dimethylbenzidine	50.00	6.85	14	98*	20	6-192
2,4-Dimethyphenol	50.00	36.18	72	4	20	34-105
Dimethyl phthalate	50.00	46.90	94	1	20	34-123
4,6-Dinitro-2-methylphe	50.00	45.70	91	1	20	27-128
2,4-Dinitrophenol	50.00	38.58	77	3	20	10-132
2,4-Dinitrotoluene	50.00	44.39	89	2	20	24-147
2,6-Dinitrotoluene	50.00	51.91	104	0	20	36-125
N-NitrsdiphyAm/Dipheny	100.0	89.29	89	5	20	35-116
Di-n-octyl phthalate	50.00	46.86	94	0	20	29-136
Ethyl methanesulfonate	50.00	43.44	87	2	20	20-121
Fluoranthene	50.00	31.43	63	2	20	28-127
Fluorene	50.00	46.60	93	1	20	41-116
Hexachlorobenzene	50.00	45.06	90	4	20	18-136
Hexachlorobutadiene	50.00	38.42	77	1	20	22-109
Hexachlorocyclopentadie	50.00	27.76	56	0	20	10-102
Hexachloroethane	50.00	36.09	72	0	20	16-107
Indeno (1,2,3-cd) pyrene	50.00	46.83	94	1	20	22-126
Isophorone	50.00	38.72	77	2	20	31-116
Methyl methanesulfonate	50.00	22.91	46	0	20	15- 82

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06074

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P06074LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2-Methylnaphthalene	50.00	39.05	78	2	20	34-108
2-Methylphenol	50.00	38.44	77	0	20	22- 97
3&4-Methylphenol	50.00	34.88	70	1	20	21- 96
Naphthalene	50.00	39.01	78	1	20	33-108
2-Nitroaniline	50.00	49.60	99	0	20	32-127
3-Nitroaniline	50.00	50.03	100	4	20	28-142
4-Nitroaniline	50.00	34.90	70	1	20	23-139
Nitrobenzene	50.00	39.34	79	0	20	27-117
2-Nitrophenol	50.00	39.50	79	0	20	25-114
4-Nitrophenol	50.00	11.29	22	0	20	1- 76
N-Nitrosodibutylamine	50.00	44.79	90	2	20	31-126
N-Nitrosodiethylamine	50.00	33.65	67	1	20	28-107
N-Nitrosodimethylamine	50.00	26.57	53	7	20	14- 84
N-Nitrosodi-n-propylami	50.00	47.39	95	5	20	29-114
Pentachloronitrobenzene	50.00	47.28	94	5	20	34-135
Pentachlorophenol	50.00	32.55	65	2	20	17-142
Phenacetin	50.00	45.64	91	5	20	29-141
Phenanthrene	50.00	44.82	90	4	20	40-120
Phenol	50.00	18.15	36	3	20	11- 55
Pyrene	50.00	53.47	107	10	20	20-154
Pyridine	50.00	14.66	29	34*	20	10- 71
1,2,4,5-Tetrachlorobenz	50.00	40.86	82	5	20	28-110
2,3,4,6-Tetrachlorophen	50.00	48.11	96	0	20	28-118
1,2,4-Trichlorobenzene	50.00	36.96	74	1	20	23-106
2,4,5-Trichlorophenol	50.00	45.99	92	0	20	26-118
2,4,6-Trichlorophenol	50.00	42.16	84	2	20	26-115
1,2-Dphnylhydrzine/Azob	50.00	45.12	90	4	20	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 4 out of 83 outside limits

Spike Recovery: 1 out of 166 outside limits

COMMENTS:

FORM 3
WATER BNA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC.

Lab Prep Batch: P06074

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: 0102-795-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	400.0	0.000	296.0	74	31- 97
2,4-Dinitrotoluene	400.0	0.000	490.3	122	34-130
Hexachlorobenzene	400.0	0.000	366.9	92	65-133
Hexachlorobutadiene	400.0	0.000	305.5	76	50-112
Hexachloroethane	400.0	0.000	286.2	72	37-100
2-Methylphenol	1600	0.000	306.6	19*	40-117
3&4-Methylphenol	1600	0.000	566.4	35*	46- 99
Nitrobenzene	400.0	1.25	378.1	94	57-120
Pentachlorophenol	1600	0.000	439.7	27	22-171
Pyridine	400.0	0.000	216.5	54	10- 82
2,4,5-Trichlorophenol	1600	0.000	339.8	21*	31-147
2,4,6-Trichlorophenol	1600	0.000	344.2	22*	30-163

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,4-Dichlorobenzene	400.0	269.4	67	10	20	31- 97
2,4-Dinitrotoluene	400.0	458.1	114	7	20	34-130
Hexachlorobenzene	400.0	361.6	90	2	20	65-133
Hexachlorobutadiene	400.0	275.0	69	10	20	50-112
Hexachloroethane	400.0	249.0	62	15	20	37-100
2-Methylphenol	1600	286.5	18*	5	20	40-117
3&4-Methylphenol	1600	535.6	33*	6	20	46- 99
Nitrobenzene	400.0	336.3	84	11	20	57-120
Pentachlorophenol	1600	387.0	24	12	20	22-171
Pyridine	400.0	219.8	55	2	20	10- 82
2,4,5-Trichlorophenol	1600	320.1	20*	5	20	31-147
2,4,6-Trichlorophenol	1600	321.2	20*	10	20	30-163

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 8 out of 24 outside limits

COMMENTS:

656 762

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Pesticides**

000081

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Extraction All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8081A

QUALITY CONTROL

QC Batch Form 4 Summary
P08021 P08021LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P08021LB
P08021LB2

Target analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3
P08021LCS

All acceptance criteria met.

Matrix Spike/Matrix Spike Dup FORM 3
Batch P08021

0102-795-05	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/005	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration All criteria met. FORM 6
Calibration Verification All criteria met. FORM 7, Responses >15% listed below.

Calibration Verification (CV): Date 03/08/01 Time: 0506

<u>Analyte</u>	<u>%Diff(15% Max)</u>	<u>Response</u>
Endrin	-29.0	Low

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

CALIBRATION

Samples affected by this CV include P08021LB, P08021LB2, P08021LCS, 0102-795-05MS/MSD. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in the method blanks. LCS and MS/MSD recoveries for this analyte were within control limits. There is no effect on the data. Average response of all analytes was less than 15% and CV considered acceptable per SW-846.

Calibration Verification (CV): Date 03/08/01 Time: 0506

<u>Analyte</u>	<u>%Diff(15% Max)</u>	<u>Response</u>
Endrin	-29.0	Low

Samples affected by this CV include 0102-795-01 through 0102-795-05. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in the associated project samples. There is no effect on the data. Average response of all analytes was less than 15% and CV considered acceptable per SW-846.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

15

Project Manager

FORM 2
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

	CLIENT SAMPLE NO.	S1 (DCB) #	S2 (TCX) #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P08021LB	67	54							0
02	P08021LB2	76	59							0
03	P08021LCS	77	63							0
04	0102-795-5MS	76	63							0
05	0102-795-5MS	70	67							0
06	0102-795-1	76	68							0
07	0102-795-2	74	58							0
08	0102-795-3	69	63							0
09	0102-795-4	72	58							0
10	0102-795-5	74	66							0
11										
12										
13										
14										
15										
16										
17										
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26										
27										
28										
29										
30										

QC LIMITS

S1 (DCB) = Decachlorobiphenyl (34-115)
S2 (TCX) = Tetrachloro-m-xylene (31- 96)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

656 766

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P08021LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: P303071B-20R

Lab Prep Batch: P08021

Instrument ID: PEST3B

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/08/01

Level: (low/med) LOW

Time Analyzed: 0003

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P08021LCS	0154	P303071B-24R	03/08/01
02	0102-795-5MS	0249	P303071B-26R	03/08/01
03	0102-795-5MS	0316	P303071B-27R	03/08/01
04	0102-795-1	0809	P303081A-36R	03/09/01
05	0102-795-2	0837	P303081A-37R	03/09/01
06	0102-795-3	0904	P303081A-38R	03/09/01
07	0102-795-4	0932	P303081A-39R	03/09/01
08	0102-795-5	1000	P303081A-40R	03/09/01
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P08021LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: P303071B-22R

Lab Prep Batch: P08021

Instrument ID: PEST3B

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/08/01

Level: (low/med) LOW

Time Analyzed: 0058

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P08021LCS	0154	P303071B-24R	03/08/01
02	0102-795-5MS	0249	P303071B-26R	03/08/01
03	0102-795-5MS	0316	P303071B-27R	03/08/01
04	0102-795-1	0809	P303081A-36R	03/09/01
05	0102-795-2	0837	P303081A-37R	03/09/01
06	0102-795-3	0904	P303081A-38R	03/09/01
07	0102-795-4	0932	P303081A-39R	03/09/01
08	0102-795-5	1000	P303081A-40R	03/09/01
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

656 768

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P08021LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix: (soil/water) WATER

Lab Prep Batch: P08021

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: P303071B-20R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 10 (mL)

Date Analyzed: 03/08/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

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

309-00-2-----	Aldrin	0.0400	U
319-84-6-----	alpha-BHC	0.0400	U
959-98-8-----	Endosulfan I	0.0400	U
319-85-7-----	beta-BHC	0.0400	U
319-86-8-----	delta-BHC	0.0400	U
58-89-9-----	gamma-BHC (Lindane)	0.0400	U
5103-71-9-----	alpha-chlordane	0.0400	U
5103-74-2-----	gamma-chlordane	0.0400	U
57-74-9-----	Chlordane	0.250	U
2921-88-2-----	Chlorpyrifos	0.0400	U
72-54-8-----	4,4'-DDD	0.0400	U
72-55-9-----	4,4'-DDE	0.0400	U
50-29-3-----	4,4'-DDT	0.0400	U
60-57-1-----	Dieldrin	0.0400	U
33213-65-9-----	Endosulfan II	0.0400	U
1031-07-8-----	Endosulfan sulfate	0.0400	U
72-20-8-----	Endrin	0.0400	U
7421-93-4-----	Endrin aldehyde	0.0400	U
53494-70-5-----	Endrin ketone	0.0400	U
76-44-8-----	Heptachlor	0.0400	U
1024-57-3-----	Heptachlor epoxide	0.0400	U
72-43-5-----	Methoxychlor	0.0400	U
8001-35-2-----	Toxaphene	2.50	U

FORM I PESTICIDE

000087

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P08021LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix: (soil/water) WATER

Lab Prep Batch: P08021

Sample wt/vol: 250.0 (g/mL) ML

Lab File ID: P303071B-22R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 10 (mL)

Date Analyzed: 03/08/01

Injection Volume: 1.0 (uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: _____

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

309-00-2-----Aldrin	1.60	U
319-84-6-----alpha-BHC	1.60	U
959-98-8-----Endosulfan I	1.60	U
319-85-7-----beta-BHC	1.60	U
319-86-8-----delta-BHC	1.60	U
58-89-9-----gamma-BHC (Lindane)	1.60	U
5103-71-9-----alpha-chlordane	1.60	U
5103-74-2-----gamma-chlordane	1.60	U
57-74-9-----Chlordane	10.00	U
2921-88-2-----Chlorpyrifos	1.60	U
72-54-8-----4,4'-DDD	1.60	U
72-55-9-----4,4'-DDE	1.60	U
50-29-3-----4,4'-DDT	1.60	U
60-57-1-----Dieldrin	1.60	U
33213-65-9-----Endosulfan II	1.60	U
1031-07-8-----Endosulfan sulfate	1.60	U
72-20-8-----Endrin	1.60	U
7421-93-4-----Endrin aldehyde	1.60	U
53494-70-5-----Endrin ketone	1.60	U
76-44-8-----Heptachlor	1.60	U
1024-57-3-----Heptachlor epoxide	1.60	U
72-43-5-----Methoxychlor	1.60	U
8001-35-2-----Toxaphene	100.0	U

FORM I PESTICIDE

000088

656 770

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P08021

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P08021LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	1.00		0.758	76	41-102
Endrin	1.00		0.786	79	45-117
Heptachlor	1.00		0.810	81	43-114
Methoxychlor	1.00		0.918	92	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limitsRPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 4 outside limitsCOMMENTS: _____

FORM III PESTICIDE

000089

FORM 3
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC.

Lab Prep Batch: P08021

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: 0102-795-5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	4.00		3.35	84	41-102
Endrin	4.00		3.11	78	45-117
Heptachlor	4.00		3.52	88	43-114
Methoxychlor	4.00		3.90	98	39-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
=====	=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	4.00	3.18	80	5	20	41-102
Endrin	4.00	2.86	72	8	20	45-117
Heptachlor	4.00	3.34	84	5	20	43-114
Methoxychlor	4.00	3.36	84	15	20	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 4 outside limits
Spike Recovery: 0 out of 8 outside limits

COMMENTS:

656 772

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Herbicides**

000091

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
HERBICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

HOLDING TIMES

TCLP Extraction	All samples extracted within 14 days.
Sample Extraction	All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis	All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8151A

QUALITY CONTROL

<u>QC Batch</u>	<u>Form 4 Summary</u>
P11087	P11087LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P11087LB
P11087LB2

Target analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3
P11087LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P11087

0102-795-01	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/001	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

656 774

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
HERBICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-795

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

CS

Project Manager

000093

FORM 2
WATER HERBICIDE SURROGATE RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

	EPA GC SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P11087LB	59								0
02	P11087LB2	74								0
03	P11087LCS	86								0
04	0102-795-1MS	94								0
05	0102-795-1MS	88								0
06	0102-795-1	73								0
07	0102-795-2	79								0
08	0102-795-3	78								0
09	0102-795-4	75								0
10	0102-795-5	70								0
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

S1 = 2,4,5-T

QC LIMITS
(20-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

FORM 4
HERBICIDE METHOD BLANK SUMMARY

EPA GC SAMPLE NO.

P11087LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: H203051B-11R

Lab Prep Batch: P11087

Instrument ID: PEST2B

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/05/01

Level: (low/med) LOW

Time Analyzed: 1811

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P11087LCS	1901	H203051B-13R	03/05/01
02	0102-795-1MS	1926	H203051B-14R	03/05/01
03	0102-795-1MS	1951	H203051B-15R	03/05/01
04	0102-795-1	2106	H203051B-18R	03/05/01
05	0102-795-2	2131	H203051B-19R	03/05/01
06	0102-795-3	2156	H203051B-20R	03/05/01
07	0102-795-4	2222	H203051B-21R	03/05/01
08	0102-795-5	2247	H203051B-22R	03/05/01
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

656 777

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

EPA GC SAMPLE NO.

Lab Name: ETC, INC.

Contract:

P11087LB

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix: (soil/water) WATER

Lab Prep Batch: P11087

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: H203051B-11R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/05/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N' pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
94-75-7-----	2,4-D	0.0500	U
93-72-1-----	Silvex	0.00500	U

FORM I HERBICIDE

000096

FORM 4
HERBICIDE METHOD BLANK SUMMARY

EPA GC SAMPLE NO.

P11087LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: H203051B-12R

Lab Prep Batch: P11087

Instrument ID: PEST2B

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/05/01

Level: (low/med) LOW

Time Analyzed: 1836

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P11087LCS	1901	H203051B-13R	03/05/01
02	0102-795-1MS	1926	H203051B-14R	03/05/01
03	0102-795-1MS	1951	H203051B-15R	03/05/01
04	0102-795-1	2106	H203051B-18R	03/05/01
05	0102-795-2	2131	H203051B-19R	03/05/01
06	0102-795-3	2156	H203051B-20R	03/05/01
07	0102-795-4	2222	H203051B-21R	03/05/01
08	0102-795-5	2247	H203051B-22R	03/05/01
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

EPA GC SAMPLE NO.

P11087LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix: (soil/water) WATER

Lab Prep Batch: P11087

Sample wt/vol: 250.0 (g/mL) ML

Lab File ID: H203051B-12R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/05/01

Injection Volume: 1.0 (uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/L	Q
94-75-7-----	2,4-D	1.00	U
93-72-1-----	Silvex	0.100	U

FORM 1 HERBICIDE

000098

656 780

FORM 3
WATER HERBICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P11087

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: P11087LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2,4-D	5.00		4.65	93	20-150
Silvex	5.00		3.66	73	20-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III HERBICIDE

000099

FORM 3
WATER HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC.

Lab Prep Batch: P11087

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Matrix Spike - Sample No.: 0102-795-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2,4-D	20.00	0.000	19.87	99	20-150
Silvex	20.00	0.000	15.73	79	20-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
=====	=====	=====	=====	=====	=====	=====
2,4-D	20.00	18.90	94	5	20	20-150
Silvex	20.00	15.56	78	1	20	20-150

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 0 out of 2 outside limits
 Spike Recovery: 0 out of 4 outside limits

COMMENTS:

FORM III HERBICIDE

656 782

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
Inorganics**

000101

Environmental Testing and Consulting, Inc.
Ignitability

Batch: IG030211Analyst: gDate: 3/2/01Time: 0900Page 1 of 1

ETC Sample ID	Result 1 oC	Result 2 oC	Average Result oC	QC Data	Observations
p-Xylene Std ¹	26		26		
0102-795-01	>96		>96		
02	>96		>96		
03	>96		>96		
04	>96		>96		
05	>96		>96		
0102-795-05 Duplicate	>96		>96		

1: p-Xylene Standard Ignition Point = 27oC

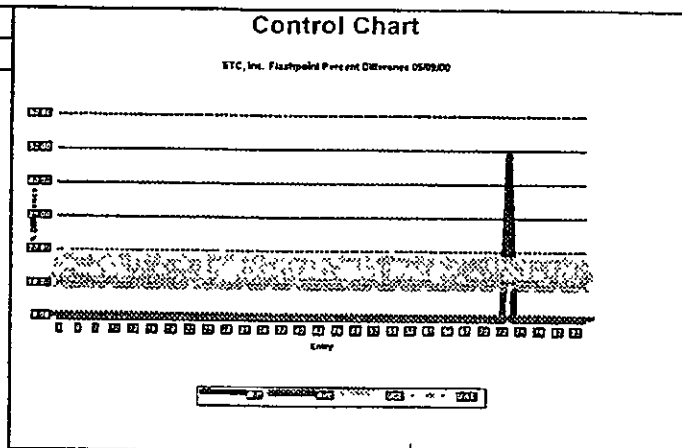
Acceptance Range = +/- 1oC.

If any samples ignite at >90oC then acceptable range = +/- 0.5oC

Standards Verification
p-Xylene SRN. 1B-S-15

QC Limits	
UCL:	15
UWL:	9.79
AVE:	0.45

Notes:



Data Validation

Analyst: g 3/2/01Supervisor: g 3/2/01

QAO: _____

Environmental Testing and Consulting, Inc
Reactivity

Pg# _____

RC030211
RS030211

Analyst Date Time	ETC Sample ID	Samp Size	S- Abs	CNR Abs	S- ppm	CNR ppm	Observations
TL	Sulfide LCS	10.41	21.0/15.5	—	220	—	77 %Rec
3-2-01	Cyanide LCS	10.41	—	0.427	—	309	31 %Rec
	BLANK	100.41	11.0/11.0	0.000	<25	<0.125	
	INNOV WASTE 0102-795-01	10.3	11.0/11.0	—	<25	—	
	01	10.4	—	0.000	—	<0.125	
	02	10.4	11.0/10.8	—	<25	—	
	02	10.2	—	0.000	—	<0.125	
	03	10.2	11.0/10.8	—	<25	—	
	03	10.3	—	0.000	—	<0.125	
	04	10.0	11.0/11.0	—	<25	—	
	04	10.2	—	0.000	—	<0.125	
	05	10.1	11.0/10.9	—	<25	—	
	05	10.4	—	0.000	—	<0.125	

S- LCS Concentration: 285 mg/LS- LCS SRN: W-5-90-2CN- LCS Concentration: 1000 mg/LCN- LCS SRN: W-5-77-23

Reac CN % REC

UCL: 48

LCL: 0

Reac S- % REC

UCL: 128

LCL: 14

Method Detection Limit = 0.125 mg/L Reactive Cyanide
 Method Detection Limit = 25 mg/L Reactive Sulfide

NOTES: _____

Analyst (Date/Sign): TL 3/2/01Supervisor (Date/Sign): gbc 3/2/01

QAO: _____

SLOP\reac.wks

CN⁺

1/17/01

VEL CO
578 nm gD

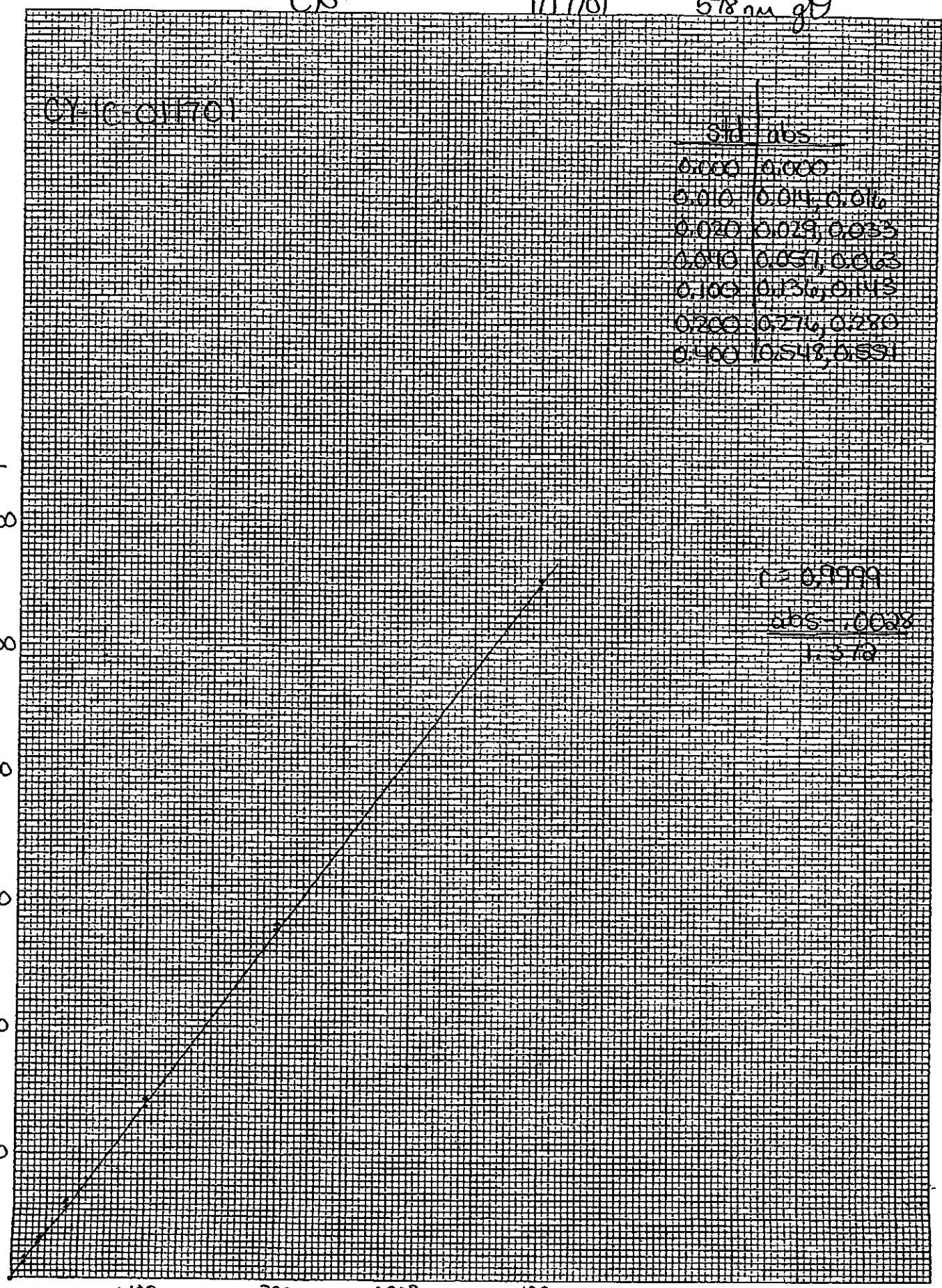
CY-16-011701

Std	abs
0.000	0.000
0.010	0.014, 0.016
0.020	0.029, 0.033
0.040	0.057, 0.063
0.100	0.136, 0.143
0.200	0.276, 0.280
0.400	0.543, 0.551

40 152V
ABS

1.5 mm cuvette or ESSEX CO MADE IN U.S.A.

r = 0.9999
abs = 1.0028
1.578



mg/L

000104

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
Metals (ICP/GFAA/CV)**

Analyst : SH
Supervisor: JF

- 8580

- Initial Calibration Blank (STD1-Blank)
- Initial Calibration Standard 1 (C1) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 2 (C2) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 3 (C3) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 4 (C4) 3 Exposures at less than 3% RSD
- Standardization Report

- ## Failures

a. Initial Calibration Standard 1 (C1)	_____	✓	_____
b. Initial Calibration Standard 2 (C2)	_____	✓	_____
c. Initial Calibration Standard 3 (C3)	_____	✓	_____
d. Initial Calibration Standard 4 (C4)	_____	✓	_____

e	Initial Calibration Blank (ICB) – All elements below MDL/MQL	✓	
f	Initial Calibration Verification (ICV1) – (5%) <u>ALL OK AT ± 10%</u>	✓	<u>Ba, Fe, Pb, Zn</u>
g	Low Level Check (LLC1) – (20%)	✓	<u>AT 50</u>
h	Low Level Check (LLC2) – (20%)	—	
i	Interelement Correction Standard – Initial (ICSAB) – (20%)	✓	
j	Interelement Correction Standard – Final (ICSAB) – (20%)	✓	

Applicable ETC Order Nos. for this sequence:

V24-AQ-71				
760				
V13-50-460				
47				
0102-670				
671				
542				
719				
722				
776				
606-60				
795				
839				

656 788

AutoSampler Report Table: PLASMA1

03/06/01 03:13:31 PM

page 1

Table Name: PLASMA1 Autosampler Type: TYPE TJA
 Sample Positions: 42/192 QC Positions: 19/19 # Sets: 1
 Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	19	10
2	Sample (16mm)	Samples	0	1
3	Sample (16mm)	Samples	0	1
4	Sample (16mm)	Samples	0	1
5	Sample (16mm)	Samples	42	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No		ICPT	150	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor

No Samples Prepared.

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...19			Not Used)			

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	V24-AQ-71 S.B.	1	-NA-	Sample
2	1	2	V24-AQ-76 S.B.	1	-NA-	Sample
3	1	3	V13-SO-46 S.B.	1	-NA-	Sample
4	1	4	V13-SO-47 S.B.	1	-NA-	Sample
5	1	5	V24-AQ-71 LC.	1	-NA-	Sample
6	1	6	V24-AQ-76 LC.	1	-NA-	Sample
7	1	7	V13-SO-46 LC.	1	-NA-	Sample
8	1	8	V13-SO-47 LC.	1	-NA-	Sample
9	1	9	0102-670-11	1	-NA-	Sample
10	1	10	0102-670-12	1	-NA-	Sample
11	1	11	CCB1	1	-NA-	Sample
12	1	12	CCV1	1	-NA-	Sample
13	2	1	0102-670-12 MS	1	-NA-	Sample
14	2	2	0102-670-12 MSD	1	-NA-	Sample
15	2	3	0102-670-13	1	-NA-	Sample
16	2	4	0102-670-14	1	-NA-	Sample
17	2	5	0102-670-15	1	-NA-	Sample
18	2	6	0102-671-01	1	-NA-	Sample
19	2	7	0102-671-02	1	-NA-	Sample
20	2	8	0102-671-03	1	-NA-	Sample
21	2	9	0102-671-04	1	-NA-	Sample

000107

AutoSampler Report Table: PLASMA1

03/06/01 03:13:31 PM

page 2

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0102-671-05	1	-NA-	Sample
23	2	11	CCB2	1	-NA-	Sample
24	2	12	CCV2	1	-NA-	Sample
25	3	1	0102-671-06	1	-NA-	Sample
26	3	2	0102-671-07	1	-NA-	Sample
27	3	3	0102-671-08	1	-NA-	Sample
28	3	4	0102-671-09	1	-NA-	Sample
29	3	5	0102-671-10	1	-NA-	Sample
30	3	6	0102-542-01	1	-NA-	Sample
31	3	7	0102-542-03	1	-NA-	Sample
32	3	8	0102-542-04	1	-NA-	Sample
33	3	9	0102-542-05	1	-NA-	Sample
34	3	10	0102-719-18	1	-NA-	Sample
35	3	11	CCB3	1	-NA-	Sample
36	3	12	CCV3	1	-NA-	Sample
37	4	1	0102-719-18 MS	1	-NA-	Sample
38	4	2	0102-719-18 MSD	1	-NA-	Sample
39	4	3	0102-719-19	1	-NA-	Sample
40	4	4	0102-722-20	1	-NA-	Sample
41	4	5	0102-722-21	1	-NA-	Sample
42	4	6	0102-722-22	1	-NA-	Sample
43	4	7	0102-722-23	1	-NA-	Sample
44	4	8	0102-722-24	1	-NA-	Sample
45	4	9	0102-722-25	1	-NA-	Sample
46	4	10	0102-776-01	1	-NA-	Sample
47	4	11	CCB4	1	-NA-	Sample
48	4	12	CCV4	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	0102-776-02	1	-NA-	Sample
2	1	2	0102-776-03	1	-NA-	Sample
3	1	3	0102-776-04	1	-NA-	Sample
4	1	4	0102-776-05	1	-NA-	Sample
5	1	5	0102-776-06	1	-NA-	Sample
6	1	6	0102-670-01	1	-NA-	Sample
7	1	7	0102-670-02	1	-NA-	Sample
8	1	8	0102-670-03	1	-NA-	Sample
9	1	9	0102-670-04	1	-NA-	Sample
10	1	10	0102-670-05	1	-NA-	Sample
11	1	11	CCB5	1	-NA-	Sample
12	1	12	CCV5	1	-NA-	Sample
13	2	1	0102-670-06	1	-NA-	Sample
14	2	2	0102-670-07	1	-NA-	Sample
15	2	3	0102-670-08	1	-NA-	Sample
16	2	4	0102-670-09	1	-NA-	Sample
17	2	5	0102-670-10	1	-NA-	Sample
18	2	6	0102-670-10 MS	1	-NA-	Sample
19	2	7	0102-670-10 MSD	1	-NA-	Sample
20	2	8	0102-666-01	1	-NA-	Sample
21	2	9	0102-666-02	1	-NA-	Sample

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AutoSampler Report Table: PLASMA1

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Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0102-666-03	1	-NA-	Sample
23	2	11	CCB6	1	-NA-	Sample
24	2	12	CCV6	1	-NA-	Sample
25	3	1	0102-666-04	1	-NA-	Sample
26	3	2	0102-666-06	1	-NA-	Sample
27	3	3	0102-795-01	1	-NA-	Sample
28	3	4	0102-795-01 MS	1	-NA-	Sample
29	3	5	0102-795-01 MSD	1	-NA-	Sample
30	3	6	0102-795-02	1	-NA-	Sample
31	3	7	0102-795-03	1	-NA-	Sample
32	3	8	0102-795-04	1	-NA-	Sample
33	3	9	0102-795-05	1	-NA-	Sample
34	3	10	0102-839-01	1	-NA-	Sample
35	3	11	CCB7	1	-NA-	Sample
36	3	12	CCV7	1	-NA-	Sample
37	4	1	0102-839-02	1	-NA-	Sample
38	4	2	0102-839-03	1	-NA-	Sample
39	4	3	0102-839-04	1	-NA-	Sample
40	4	4	0102-839-05	1	-NA-	Sample
41	4	5	0102-839-06	1	-NA-	Sample
42	4	6	CCB8	1	-NA-	Sample
43	4	7	CCV8	1	-NA-	Sample
44	4	8	ICSA	1	-NA-	Sample
45	4	9	ICSAB	1	-NA-	Sample
46	4	10	(empty)	1	-NA-	-NA-
47	4	11	(empty)	1	-NA-	-NA-
48	4	12	(empty)	1	-NA-	-NA-

Rack #4

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	(empty)	1	-NA-	-NA-
2	1	2	(empty)	1	-NA-	-NA-
3	1	3	(empty)	1	-NA-	-NA-
4	1	4	(empty)	1	-NA-	-NA-
5	1	5	(empty)	1	-NA-	-NA-
6	1	6	(empty)	1	-NA-	-NA-
7	1	7	(empty)	1	-NA-	-NA-
8	1	8	(empty)	1	-NA-	-NA-
9	1	9	(empty)	1	-NA-	-NA-
10	1	10	(empty)	1	-NA-	-NA-
11	1	11	(empty)	1	-NA-	-NA-
12	1	12	(empty)	1	-NA-	-NA-
13	2	1	(empty)	1	-NA-	-NA-
14	2	2	(empty)	1	-NA-	-NA-
15	2	3	(empty)	1	-NA-	-NA-
16	2	4	(empty)	1	-NA-	-NA-
17	2	5	(empty)	1	-NA-	-NA-
18	2	6	(empty)	1	-NA-	-NA-
19	2	7	(empty)	1	-NA-	-NA-
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-

000109

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/05/01 1305 Instrument ICPT

Initial Calibration Source C1 M5-30-21 C2 M5-33-11 C3 M5-33-03 C4 M5-18-04

Continuing Calibration Source ICV/CCV M5-29-18

Analyte	Initial Calibration Verification				Continuing CCV1				Continuing CCV6				Continuing CCV7			
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag		Found	%Diff(1)	Flag	
Arsenic	500	508	2	<5	500	508	2	<5	527	5	<10		520	4	<5	

Analyte	Continuing CCV8				Found				Flag			
	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found	%Diff(1)
Arsenic	500	521	4	<5								

(1) Percent difference from true value. ICP Method 6010B - 10% ICP Method 200.7 - 5%

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc Date/Time of Sequence 03/05/01 1305 Instrument ICPT

Analyte	Initial Calibration Blank ug/L	Continuing Calibration Blank ug/L						
		CCB1	CCB6	CCB7	CCB8			
Arsenic	ND	ND	ND	ND	ND			

FORM 4
INTERFERENCE CHECK SAMPLE
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/05/01 1305 Instrument ICPT

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	AB	Sol AB	%REC	Sol AB	%REC
Aluminum	250000	251000	100	256000	102
Arsenic	200	212	106	220	110
Calcium	250000	247000	99	252000	101
Iron	100000	99300	99	105000	105
Magnesium	250000	259000	104	266000	106

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	A	Sol A	%REC	Sol A	%REC
Aluminum	250000	254000	102	256000	102
Arsenic	0	ND	0	ND	0
Calcium	250000	256000	102	258000	103
Iron	100000	98100	98	103000	103
Magnesium	250000	258000	103	263000	105

ENVIRONMENTAL TESTING & CONSULTING, INC **ICP Metals Sequence Check List**

Sequence ID : 30601 System ID : ICP/ICPT Date/Time: 3-6-01 1554Analyst : SK
Supervisor: JF

1. Instrument Profile Intensity Check 8720
2. Initial Calibration
- Initial Calibration Blank (STD1-Blank)
 - Initial Calibration Standard 1 (C1) 3 Exposures at less than 3% RSD
 - Initial Calibration Standard 2 (C2) 3 Exposures at less than 3% RSD
 - Initial Calibration Standard 3 (C3) 3 Exposures at less than 3% RSD
 - Initial Calibration Standard 4 (C4) 3 Exposures at less than 3% RSD
 - Standardization Report
3. Initial Calibration Readback (+/- 5% Difference Check Table)
- | | | Failures |
|--|---|----------|
| a. Initial Calibration Standard 1 (C1) _____ | ✓ | _____ |
| b. Initial Calibration Standard 2 (C2) _____ | ✓ | _____ |
| c. Initial Calibration Standard 3 (C3) _____ | ✓ | _____ |
| d. Initial Calibration Standard 4 (C4) _____ | ✓ | _____ |
4. Initial Calibration Verification
- Initial Calibration Blank (ICB) - All elements below MDL/MQL _____ ✓
 - Initial Calibration Verification (ICV1) - (5%) BOTH OK AT ± 10% ✓ Na, B
 - Low Level Check (LLC1) - (20%) _____ ✓ Na
 - Low Level Check (LLC2) - (20%) _____ ✓
 - Interelement Correction Standard - Initial (ICSAB) - (20%) _____ ✓
 - Interelement Correction Standard - Final (ICSAB) - (20%) _____ ✓

Comments

Applicable ETC Order Nos. for this sequence:

<u>V24-AQ-83</u>				
<u>V13-50-42</u>				
<u>0102-795</u>				
<u>799</u>				
<u>839</u>				
<u>810</u>				
<u>0103-047</u>				
<u>0102-719</u>				

AutoSampler Report Table: PLASMA1 03/07/01 09:52:11 AM

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Table Name: PLASMA1 Autosampler Type: TYPE TJA
 Sample Positions: 42/192 QC Positions: 19/19 # Sets: 1
 Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	19	10
2	Sample (16mm)	Samples	0	1
3	Sample (16mm)	Samples	0	1
4	Sample (16mm)	Samples	0	1
5	Sample (16mm)	Samples	42	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No		ICPT	150	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor
No Samples Prepared.				

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...19 Not Used)						

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	V24-AQ-83 SB.	1	-NA-	Sample
2	1	2	V13-SO-48 S.B.	1	-NA-	Sample
3	1	3	2-28-01 BLANK F1	1	-NA-	Sample
4	1	4	3-01-01 BLANK F1	1	-NA-	Sample
5	1	5	V24-AQ-83 LC.	1	-NA-	Sample
6	1	6	V13-SO-48 LC.	1	-NA-	Sample
7	1	7	0102-795-01	1	-NA-	Sample
8	1	8	0102-795-02	1	-NA-	Sample
9	1	9	0102-795-03	1	-NA-	Sample
10	1	10	0102-795-04	1	-NA-	Sample
11	1	11	CCB1	1	-NA-	Sample
12	1	12	CCV1	1	-NA-	Sample
13	2	1	0102-795-05	1	-NA-	Sample
14	2	2	0102-795-05 MS	1	-NA-	Sample
15	2	3	0102-795-05 MSD	1	-NA-	Sample
16	2	4	0102-799-01	1	-NA-	Sample
17	2	5	0102-799-01 MS	1	-NA-	Sample
18	2	6	0102-839-01	1	-NA-	Sample
19	2	7	0102-839-02	1	-NA-	Sample
20	2	8	0102-839-03	1	-NA-	Sample
21	2	9	0102-839-04	1	-NA-	Sample

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AutoSampler Report Table: PLASMA1

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Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0102-839-04 MS	1	-NA-	Sample
23	2	11	CCB2	1	-NA-	Sample
24	2	12	CCV2	1	-NA-	Sample
25	3	1	0102-839-05	1	-NA-	Sample
26	3	2	0102-839-06	1	-NA-	Sample
27	3	3	0102-810-01	1	-NA-	Sample
28	3	4	0102-810-01 MS	1	-NA-	Sample
29	3	5	0102-810-01 MSD	1	-NA-	Sample
30	3	6	0102-810-02	1	-NA-	Sample
31	3	7	0102-810-03	1	-NA-	Sample
32	3	8	0102-810-04	1	-NA-	Sample
33	3	9	0102-810-05	1	-NA-	Sample
34	3	10	0102-810-06	1	-NA-	Sample
35	3	11	CCB3	1	-NA-	Sample
36	3	12	CCV3	1	-NA-	Sample
37	4	1	0103-047-11	1	-NA-	Sample
38	4	2	0102-719-01	1	-NA-	Sample
39	4	3	0102-719-01 MS	1	-NA-	Sample
40	4	4	0102-719-01 MSD	1	-NA-	Sample
41	4	5	0102-719-02	1	-NA-	Sample
42	4	6	0102-719-03	1	-NA-	Sample
43	4	7	0102-719-04	1	-NA-	Sample
44	4	8	0102-719-05	1	-NA-	Sample
45	4	9	0102-719-06	1	-NA-	Sample
46	4	10	0102-719-07	1	-NA-	Sample
47	4	11	CCB4	1	-NA-	Sample
48	4	12	CCV4	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	0102-719-08	1	-NA-	Sample
2	1	2	0102-719-09	1	-NA-	Sample
3	1	3	0102-719-10	1	-NA-	Sample
4	1	4	0102-719-11	1	-NA-	Sample
5	1	5	0102-719-12	1	-NA-	Sample
6	1	6	0102-719-13	1	-NA-	Sample
7	1	7	0102-719-14	1	-NA-	Sample
8	1	8	0102-719-15	1	-NA-	Sample
9	1	9	0102-719-16	1	-NA-	Sample
10	1	10	0102-719-17	1	-NA-	Sample
11	1	11	CCB5	1	-NA-	Sample
12	1	12	CCV5	1	-NA-	Sample
13	2	1	ICSA	1	-NA-	Sample
14	2	2	ICSAB	1	-NA-	Sample
15	2	3	(empty)	1	-NA-	-NA-
16	2	4	(empty)	1	-NA-	-NA-
17	2	5	(empty)	1	-NA-	-NA-
18	2	6	(empty)	1	-NA-	-NA-
19	2	7	(empty)	1	-NA-	-NA-
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-

000115

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/06/01 1554 Instrument ICPT

Initial Calibration Source C1 M5-30-21 C2 M5-33-11 C3 M5-33-03 C4 M5-18-04

Continuing Calibration Source ICV/CCV M5-34-01

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV2			Continuing CCV3		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Flag
Silver	100	103	3	<5	100	99	1	<5	99	1	<5	<5
Arsenic	500	500	0	<5	500	485	3	<5	489	2	<5	<5
Barium	1000	1050	5	<10	1000	1020	2	<5	1030	3	<5	<5
Cadmium	100	102	2	<5	100	99.8	0	<5	98.9	1	<5	<5
Chromium	200	203	2	<5	200	198	1	<5	198	1	<5	<5
Lead	500	518	4	<5	500	505	1	<5	502	0	<5	<5
Selenium	500	500	0	<5	500	486	3	<5	489	2	<5	<5

000116

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FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name: Environmental Testing and Consulting, Inc. Date/Time of Sequence: 03/06/01 1554 Instrument: ICPT

Analyte	Initial Calibration Blank ug/L	CCB1	CCB2	CCB3	Continuing Calibration Blank ug/L				
Silver	ND	ND	ND	ND					
Arsenic	ND	ND	ND	ND					
Barium	ND	ND	ND	ND					
Cadmium	ND	ND	ND	ND					
Chromium	ND	ND	ND	ND					
Lead	ND	ND	ND	ND					
Selenium	ND	ND	ND	ND					

000117

FORM 4
INTERFERENCE CHECK SAMPLE
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/06/01 1554 Instrument ICPT

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	AB	AB	%REC	AB	%REC
Silver	200	214	107	218	109
Aluminum	250000	247000	99	250000	100
Arsenic	200	212	106	214	107
Barium	500	527	105	540	108
Calcium	250000	243000	97	245000	98
Cadmium	200	198	99	202	101
Chromium	200	187	94	192	96
Iron	100000	96800	97	98000	98
Magnesium	250000	254000	102	258000	103
Lead	200	205	103	209	105
Selenium	200	209	105	216	108

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	A	A	%REC	A	%REC
Silver	0	ND	0	ND	0
Aluminum	250000	248000	99	255000	102
Arsenic	0	ND	0	ND	0
Barium	0	ND	0	ND	0
Calcium	250000	251000	100	254000	102
Cadmium	0	ND	0	ND	0
Chromium	0	ND	0	ND	0
Iron	100000	95300	95	97200	97
Magnesium	250000	252000	101	259000	104
Lead	0	ND	0	ND	0
Selenium	0	ND	0	ND	0

ENVIRONMENTAL TESTING & CONSULTING, INC **Mercury Sequence Check List**

Sequence ID : _____

Date/Time: 3/8/01 1532Analyst : JESupervisor: JA

Instrument ID: CETAC M-6000A

1. General Maintenance Check

Action Taken

- a. Lamp Warm-up ☒
- b. Pump Winding ☒
- c. Check GLS ☒
- d. Nafion Dryer ☒

2. Sequence Check List

Initial Calibration

- a. Initial Calibration Blank (STD1-Blank)
- b. Initial Calibration Standard 1 0.20 ug/L
- c. Initial Calibration Standard 2 1.0 ug/L
- d. Initial Calibration Standard 3 2.0 ug/L
- e. Initial Calibration Standard 4 5.0 ug/L
- f. Initial Calibration Standard 5 10.0 ug/L

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3. Regression coefficient (minimum = 0.995)

☒

☒

4. Initial Calibration Blank (ICB) – All elements below MQL
Water = 0.20 ug/L Soil = 0.02 mg/Kg5. Initial Calibration Verification (ICV) – 2nd Source SRN: M-5-33-15
Concentration 5.0 ug/L +/- 10%Found: 5.01 %Difference: 0

6. Continuing Calibration Blank (CCB) – All elements below MQL indicate by √

Metal	CCB1	CCB2	CCB3	CCB4	CCB5	CCB6	CCB7	CCB8	CCB9	CCB10	CCB11	CCB12	CCB13	CCB14	CCB15
Hg	☒	☒	☒												

7. Continuing Calibration Verification (CCV) – Range: EPA 90-110% SW-846 80-120%

All elements within QC limits indicate by √ (Concentration same as ICV) SRN: M-5-33-15

Metal	CCV1	CCV2	CCV3	CCV4	CCV5	CCV6	CCV7	CCV8	CCV9	CCV10	CCV11	CCV12	CCV13	CCV14	CCV15
Hg	☒	☒	☒												

Applicable ETC Order Nos. for this sequence:

0102795

0102839

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
MERCURY

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/08/01 1532 Instrument M6000

Initial Calibration Source C1 M5-33-14

Continuing Calibration Source ICV/CCV M5-33-15

Analyte	Initial Calibration Verification				Continuing CCV1				Continuing CCV2				Continuing CCV3			
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag		
Mercury	5.00	5.01	0.2	<5	5.00	5.60	12.0	<20	5.60	12.0	<20	5.58	11.6	<20		

000120

656 801

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc
Date/Time of Sequence 03/08/01 1532 Instrument M6000

Analyte	MDL ug/L	Initial Cal Blank (ICB) ug/L	CCB1	CCB2	CCB3	Continuing Calibration Blank ug/L									
Mercury	0.06	ND	ND	ND	ND										

000121

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Volatiles**

ENVIRONMENTAL TESTING & CONSULTING, INC.
GC/MS VOC Method 8260B Sequence Check List (SW-846)

Sequence ID V203061
 Date 3-7-01

Matrix: H₂O

Analyst JS

Applicable ETC Order Nos. for this sequence:

0102-749-1, 2 0102-790-1 0103-008-1-5
0102-795-1-5 0102-799-1

Validated

1. BFB Daily 12-Hour Tune Meets Criteria. No analyses begins until criteria are met. (SOP) ☒
2. Initial Calibration Verification Criteria - Method: V203041.8260M
 - a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
 - b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ☒
 - c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ☒
 - d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 ☒

3. Calibration Verification - Each 12-Hour Shift

- a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
- b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ☒
- c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ☒
- d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ ☒

CDBM 2-NEVE 1,2-DB-3-CPP
HCBP Indomethacin Pentachloroethane
 e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ☒
 f. Internal Standards - Areas within $(-50\% \text{ to } +100\%)$ from Mid-Point ICAL STD ☒

4. Method Blanks included in this sequence:

Analyze daily or for each analytical batch (20 samples):
 List compounds identified in Method Blank w/concentration.
 Flag final result "B-Detected in Blank"

Heck C BDL
TCLD BUC 0228-1

5. Matrix Spike/Matrix Spike Duplicates included in this sequence:

Analyze daily or for each matrix (ms/msd per 20 samples of same matrix)
 List MS/MSD(s) performed with any failures:

0102-795-5Tms, msd
 * Jan 7/11 RPD exceed limits

6. Laboratory Control Samples included in this sequence:

Must contain all Target Analytes.

7. Surrogate Recoveries within QC Limits

8. All positive compounds within calibration range

Narrative/Notes:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

656 805

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: 0101001

BFB Injection Date: 03/06/01

Instrument ID: VOC2

BFB Injection Time: 1318

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.8
75	30.0 - 60.0% of mass 95	58.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	69.7
175	5.0 - 9.0% of mass 174	4.2 (6.1)1
176	95.0 - 101.0% of mass 174	66.7 (95.6)1
177	5.0 - 9.0% of mass 176	4.9 (7.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V2030611LCS		0201002TLCS	03/06/01	1339
02	DCS100		0201002	03/06/01	1339
03	V2030611LB		0302003T	03/06/01	1454
04	0102-795-1T		0801008	03/06/01	1725
05	0102-795-2T		0901009	03/06/01	1756
06	0102-795-3T		1001010	03/06/01	1826
07	0102-795-4T		1101011	03/06/01	1857
08	0102-795-5T		1201012	03/06/01	1927
09	0102-795-5TM		1901019	03/06/01	2301
10	0102-795-5TM		2001020	03/06/01	2331
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

656 806

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: VOC2

Calibration Date: 03/06/01 Time: 1339

Lab File ID: 0201002

Init. Calib. Date(s): 03/04/01 03/05/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1430 1024

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Acetone	102.1	100.0	AVRG	2.1	30.0
Acetonitrile	959.7	1000	AVRG	4.0	30.0
Acrolein	117.3	100.0	AVRG	17.3	30.0
Acrylonitrile	95.58	100.0	AVRG	4.4	30.0
Allyl chloride	95.53	100.0	AVRG	4.5	30.0
Benzene	93.62	100.0	AVRG	6.4	30.0
Bromobenzene	91.64	100.0	AVRG	8.4	30.0
Bromochloromethane	93.48	100.0	AVRG	6.5	30.0
Bromodichloromethane	118.8	100.0	AVRG	18.8	30.0
Bromoform	104.8	100.0	AVRG	4.8	30.0
2-Butanone	109.1	100.0	AVRG	9.1	30.0
Bromomethane	82.06	100.0	AVRG	17.9	30.0
n-Butylbenzene	121.4	100.0	AVRG	21.4	30.0
sec-Butylbenzene	74.54	100.0	AVRG	25.5	30.0
tert-Butylbenzene	91.25	100.0	AVRG	8.8	30.0
Carbon Disulfide	91.50	100.0	AVRG	8.5	30.0
Carbon Tetrachloride	123.6	100.0	AVRG	23.6	30.0
Chlorobenzene	88.79	100.0	AVRG	11.2	30.0
Chlorodibromomethane	133.5	100.0	AVRG	33.5	30.0
Chloroethane	94.12	100.0	AVRG	5.9	30.0
2-Chloroethyl vinyl ether	139.0	100.0	AVRG	39.0	30.0
Chloroform	101.4	100.0	AVRG	1.4	20.0
Chloromethane	92.41	100.0	AVRG	7.6	30.0
Chloroprene	103.6	100.0	AVRG	3.6	30.0
2-Chlorotoluene	94.52	100.0	AVRG	5.5	30.0
4-Chlorotoluene	106.4	100.0	AVRG	6.4	30.0
1,2-Dibromo-3-chloropropane	136.3	100.0	AVRG	36.3	30.0
1,2-Dibromoethane	121.7	100.0	AVRG	21.7	30.0
Dibromomethane	115.3	100.0	AVRG	15.3	30.0
1,2-Dichlorobenzene	109.0	100.0	AVRG	9.0	30.0
1,3-Dichlorobenzene	107.6	100.0	AVRG	7.6	30.0
1,4-Dichlorobenzene	124.8	100.0	AVRG	24.8	30.0
trans-1,4-Dichloro-2-butene	111.0	100.0	AVRG	11.0	30.0
Dichlorodifluoromethane	105.4	100.0	AVRG	5.4	30.0
1,1-Dichloroethane	94.47	100.0	AVRG	5.5	30.0
1,2-Dichloroethane	112.2	100.0	AVRG	12.2	30.0
1,1-Dichloroethene	87.87	100.0	AVRG	12.1	20.0

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FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: VOC2

Calibration Date: 03/06/01 Time: 1339

Lab File ID: 0201002

Init. Calib. Date(s): 03/04/01 03/05/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1430 1024

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
cis-1,2-Dichloroethene	96.84	100.0	AVRG	3.2	30.0
trans-1,2-Dichloroethene	88.26	100.0	AVRG	11.7	30.0
1,2-Dichloropropane	101.2	100.0	AVRG	1.2	20.0
1,3-Dichloropropane	119.1	100.0	AVRG	19.1	30.0
2,2-Dichloropropane	122.0	100.0	AVRG	22.0	30.0
1,1-Dichloropropene	104.5	100.0	AVRG	4.5	30.0
cis-1,3-Dichloropropene	127.8	100.0	AVRG	27.8	30.0
trans-1,3-Dichloropropene	117.5	100.0	AVRG	17.5	30.0
Di isopropyl ether	97.84	100.0	AVRG	2.2	30.0
1,4-Dioxane	2091	2000	AVRG	4.6	30.0
Ethyl Acetate	95.70	100.0	AVRG	4.3	30.0
Ethylbenzene	94.58	100.0	AVRG	5.4	20.0
Ethyl methacrylate	229.0	200.0	AVRG	14.5	30.0
Furan	158.7	153.0	AVRG	3.7	30.0
Hexachlorobutadiene	143.4	100.0	AVRG	43.4	30.0
Hexane	109.1	117.0	AVRG	6.8	30.0
2-Hexanone	122.2	100.0	AVRG	22.2	30.0
Iodomethane	66.99	100.0	LINR	33.0	30.0
Isobutyl Alcohol	1849	2000	AVRG	7.6	30.0
Isopropylbenzene	96.03	100.0	AVRG	4.0	30.0
4-Isopropyltoluene	98.97	100.0	AVRG	1.0	30.0
Methacrylonitrile	1014	1000	AVRG	1.4	30.0
Methylene Chloride	88.59	100.0	LINR	11.4	30.0
Methyl methacrylate	211.0	200.0	AVRG	5.5	30.0
4-Methyl-2-Pentanone	114.2	100.0	AVRG	14.2	30.0
Methyl-tertbutyl-Ether	99.54	100.0	AVRG	0.4	30.0
Naphthalene	104.2	100.0	AVRG	4.2	30.0
Pentachloroethane	131.7	100.0	AVRG	31.7	30.0
Propionitrile	961.4	1000	AVRG	3.9	30.0
n-Propyl Acetate	159.0	151.0	AVRG	5.3	30.0
n-Propylbenzene	95.16	100.0	AVRG	4.8	30.0
Styrene	91.81	100.0	AVRG	8.2	30.0
1,1,1,2-Tetrachloroethane	101.9	100.0	AVRG	1.9	30.0
1,1,2,2-Tetrachloroethane	113.3	100.0	AVRG	13.3	30.0
Tetrachloroethene	117.0	100.0	AVRG	17.0	30.0
Tetrahydrofuran	79.10	91.50	AVRG	13.6	30.0
1,2,3-Trichlorobenzene	121.6	100.0	AVRG	21.6	30.0

656 808

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: VOC2

Calibration Date: 03/06/01 Time: 1339

Lab File ID: 0201002

Init. Calib. Date(s): 03/04/01 03/05/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1430 1024

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Toluene	113.2	100.0	AVRG	13.2	20.0
1,1,1-Trichloroethane	111.4	100.0	AVRG	11.4	30.0
1,1,2-Trichloroethane	116.0	100.0	AVRG	16.0	30.0
1,1,2-trichloro-1,2,2-triflu	94.52	100.0	AVRG	5.5	30.0
Trichloroethene	108.1	100.0	AVRG	8.1	30.0
Trichlorofluoromethane	94.30	100.0	AVRG	5.7	30.0
1,2,3-Trichloropropane	106.5	100.0	AVRG	6.5	30.0
1,2,4-Trichlorobenzene	124.7	100.0	AVRG	24.7	30.0
1,2,4-Trimethylbenzene	96.22	100.0	AVRG	3.8	30.0
1,3,5-Trimethylbenzene	92.60	100.0	AVRG	7.4	30.0
Vinyl Acetate	103.7	100.0	AVRG	3.7	30.0
Vinyl Chloride	94.75	100.0	AVRG	5.2	20.0
Xylene-m-p	178.8	200.0	AVRG	10.6	30.0
Xylene-o	94.04	100.0	AVRG	6.0	30.0
cis-1,4-Dichloro-2-butene	103.2	100.0	AVRG	3.2	30.0
=====	=====	=====	=====	=====	=====
1,2-Dichloroethane-d4	45.83	42.20	AVRG	8.6	30.0
Dibromofluoromethane	41.98	39.60	AVRG	6.0	30.0
Toluene-d8	50.68	43.00	AVRG	17.9	30.0
Bromofluorobenzene	45.58	49.30	AVRG	7.5	30.0

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID (Standard): 0201002

Date Analyzed: 03/06/01

Instrument ID: VOC2

Time Analyzed: 1339

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	62667	8.13	539929	8.88	698485	11.63
UPPER LIMIT	125334	8.63	1079858	9.38	1396970	12.13
LOWER LIMIT	31334	7.63	269965	8.38	349243	11.13
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V2030611LB	63746	8.14	510338	8.88	456650	11.64
02 0102-795-1T	51987	8.15	409933	8.89	375162	11.66
03 0102-795-2T	55650	8.15	413646	8.89	385548	11.65
04 0102-795-3T	54582	8.15	415850	8.89	376775	11.65
05 0102-795-4T	55526	8.15	406249	8.89	375981	11.65
06 0102-795-5T	53202	8.15	390377	8.89	361731	11.65
07 0102-795-5TM	50562	8.16	414186	8.90	568419	11.65
08 0102-795-5TM	67948	8.16	528740	8.90	630703	11.65
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Pentafluorobenzene
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID (Standard): 0201002

Date Analyzed: 03/06/01

Instrument ID: VOC2

Time Analyzed: 1339

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS4 (DCB)					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	307615	13.92				
UPPER LIMIT	615230	14.42				
LOWER LIMIT	153808	13.42				
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V2030611LB	217508	13.93				
02 0102-795-1T	190115	13.95				
03 0102-795-2T	191970	13.94				
04 0102-795-3T	194367	13.94				
05 0102-795-4T	188381	13.95				
06 0102-795-5T	177997	13.95				
07 0102-795-5TM	281216	13.94				
08 0102-795-5TM	296262	13.94				
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

For Savage 3-6-01
ML 3/6/01

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
End Cal Date : 05-MAR-2001 10:24
Quant Method : ISTD
Target Version : 4.00
Integrator : HP RTE
Method file : \\ETCBDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
Cal Date : 06-Mar-2001 09:28 lisa

QC REVIEWED

Calibration File Names:

- Level 1: \\ETCBDC\DD\chem\voc2.i\V203041.B\0301007.D
- Level 2: \\ETCBDC\DD\chem\voc2.i\V203041.B\0401008.D
- Level 3: \\ETCBDC\DD\chem\voc2.i\V203041.B\0501010.D
- Level 4: \\ETCBDC\DD\chem\voc2.i\V203041.B\0601011.D
- Level 5: \\ETCBDC\DD\chem\voc2.i\V203041.B\0701012.D
- Level 6: \\ETCBDC\DD\chem\voc2.i\V203041.B\0801013.D
- Level 7: \\ETCBDC\DD\chem\voc2.i\V203041.B\0901014.D
- Level 8: \\ETCBDC\DD\chem\voc2.i\V203041.B\1001015.D
- Level 9: \\ETCBDC\DD\chem\voc2.i\V203041.B\1101003.D
- Level 10: \\ETCBDC\DD\chem\voc2.i\V203041.B\1201004.D

Compound	0.500000		1.0000		5.0000		20.0000		50.0000		100.0000		Curve	b	Coefficients		m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12			m1			
1 Dichlorodifluoromethane	0.89500	1.23787	1.32512	0.98784	1.16956	1.12008												
	0.95459	1.06663	1.32358	0.98425									AVRG			1.10645		13.96120

Report Date : 06-Mar-2001 09:34

Page 2

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RSR or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
2 Chloromethane	120.0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
2 Chloromethane	++++	3.46726	3.38252	2.80928	3.03489	2.46561	AVRG			2.82780		14.71082
3 Vinyl Chloride	2.66527	2.39774	2.43935	2.21611	2.50611	2.23977	AVRG			2.29452		8.97180
4 Bromomethane	1.83247	1.74521	1.52871	1.38033	1.97601	2.07093	AVRG			1.85178		12.54094
5 Chloroethane	1.43427	1.41779	1.46829	1.43991	1.59961	1.52641	AVRG			1.51434		5.18766
6 Trichlorofluoromethane	3.41161	2.78153	2.95849	2.74516	2.77897	2.76007	AVRG			2.86073		7.35344

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	RSD or R^2
7 Acetone	++++ 0.92081	++++ 0.99754	++++ 1.15333	1.18216 0.99123	1.00684	1.18140	AVRG		1.06190		10.11144
8 Furan	++++ 5.92802	5.62205 6.16925	6.09562 6.68224	6.07176 6.49209	6.16241	6.42787	AVRG		6.18348		5.13014
9 1,1-Dichloroethene	3.18634 2.29634	2.36415 2.52129	2.35295 2.44746	2.35801 2.47700	2.33645	2.38887	AVRG		2.47289		10.51293
10 Acrylonitrile	++++ 0.67367	++++ 0.74558	0.71087 0.85132	0.67020 0.75033	0.72931	0.74669	AVRG		0.73475		7.73141
11 Iodomethane	3083 1195064	4160 1386266	23128 1253704	95621 1645157	286118	801318	LINE	0.06146	2.96701		0.99722

Report Date : 06-Mar-2001 09:34

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
12 Methylene Chloride	45532	56170	68334	158375	374304	815691	LINR	-0.06150	2	97107		0.99711
	1125681	1444964	1342239	1733868								
13 1,1,2-trichloro-1,2,2-trifluoroethane	3.41161	2.78115	2.95750	2.74527	2.78147	2.75179	AVRG		2.85494			7.41856
	2.65004	2.77026	2.86761	2.83268								
14 Acetonitrile	++++	0.31900	0.24151	0.23499	0.22324	0.24770	AVRG		0.24476			12.61034
	0.21401	0.23554	0.25919	0.22765								
15 Allyl chloride	6.26953	5.69704	4.92476	5.10861	5.06012	5.05069	AVRG		5.10155			10.02934
	4.60625	4.80342	4.83931	4.65578								
16 Carbon Disulfide	8.80738	7.77122	7.60671	7.54016	7.99906	7.83968	AVRG		8.00372			4.92443
	7.71564	8.31353	8.33273	8.11109								

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	MSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
17 trans-1,2-Dichloroethene	3.23792	3.02439	2.83948	2.86077	2.81224	2.85082					
	2.71989	3.02802	2.84573	2.89377			AVRG		2.91130		5.06277
18 Methyl-tertButyl-Ether	10.28943	7.73338	7.62920	8.65901	8.38730	8.89052					
	8.23486	9.18528	10.01279	9.39089			AVRG		8.84127		10.11369
19 Propionitrile	++++	0.28514	0.26411	0.28422	0.27309	0.28359					
	0.25661	0.28992	0.31337	0.27422			AVRG		0.28048		5.84124
20 Chloroprene	5.92974	5.76075	6.32052	6.29764	6.14173	6.05675					
	5.58412	6.16367	6.36039	6.22842			AVRG		6.08437		4.19892
21 1,1-Dichloroethane	5.98435	4.49895	5.05499	5.46137	5.27920	5.45990					
	5.10076	5.56581	5.65186	5.58514			AVRG		5.36423		7.60114

Report Date : 06-Mar-2001 09:34

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RRSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 5						
120.0000	150.0000	170.0000	200.0000									
Level 7	Level 8	Level 9	Level 10									
22 Vinyl Acetate	++++	++++	6.34948	5.37592	5.37583	5.57999						
	5.10299	5.67667	5.19590	4.69583			AVRG			5.41920		8.91639
23 2-Butanone	++++	++++	0.34460	0.33390	0.33122	0.33036						
	0.28123	0.31588	0.35649	0.30270			AVRG			0.32455		7.38126
24 Acrolein	++++	++++	++++	0.20890	0.20029	0.22870						
	0.24245	0.28504	++++	++++			AVRG			0.23308		14.33791
25 Hexane	++++	++++	3.96354	3.79553	3.84710	3.37925						
	3.32589	3.45209	3.39276	3.24191			AVRG			3.54976		7.73828
26 Di isopropyl ether	++++	10.32842	9.72727	10.67859	10.06704	10.21365						
	9.36786	10.36617	10.66020	10.19811			AVRG			10.17848		4.13124

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
27 Methacrylonitrile	2.02110 1.49398	1.73819 1.66224	1.63195 1.80153	1.73006 3.58308	1.68060	1.69621	AVRG		1.70389		8.25789
28 cis-1,2-Dichloroethene	2.91102 3.08032	3.37305 3.41840	3.04522 3.33150	3.26358 3.27105	3.09035	3.28424	AVRG		3.20687		5.13931
29 Ethyl Acetate	++++ 2.56053	++++ 2.70616	2.84130 3.05290	2.69414 ++++	2.60112	2.80280	AVRG		2.75128		6.04507
30 Bromochloromethane	0.94126 1.38656	1.35756 1.51218	1.33782 1.48593	1.49824 1.43587	1.36022	1.48883	AVRG		1.38045		12.14187
31 Chloroform	7.96320 6.43870	6.76077 7.22516	6.67159 7.68715	7.12451 7.46608	6.73920	6.96827	AVRG		7.10446		6.83693

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000		1.0000		5.0000		20.0000		50.0000		100.0000		Curve	b	Coefficients		RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	m1	m2									
32 Isobutyl Alcohol	++++	++++	0.14217	0.13814	0.13154	0.14188							AVRG		0.13516		7.26338
	0.11678	0.14043	++++	++++													
33 2,2-Dichloropropane	++++	5.77233	5.64982	5.81642	5.63859	5.65631											
	5.18635	5.61501	5.55922	5.38076									AVRG		5.58609		3.48393
35 Tetrahydrofuran	++++	++++	1.29311	1.61352	1.41408	1.47643											
	1.29639	1.44641	1.53424	1.34440									AVRG		1.42732		7.99189
38 1,2-Dichloroethane	5.29641	5.28970	5.40565	5.60093	5.45793	5.67584											
	5.06040	5.39103	6.16110	++++									AVRG		5.48211		5.68392
39 1,1,1-Trichloroethane	6.77240	6.08277	6.39637	7.01100	6.87934	6.89046											
	6.20923	6.79440	7.41267	7.00004									AVRG		6.74487		5.99418

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCADC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 Lisa

Compound	0.500000		1.0000		5.0000		20.0000		50.0000		100.0000		Coefficients		m2		RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	b	m1	m2		
40 1,1-Dichloropropene	5.10755	4.09894	4.60929	5.04764	4.82698	4.82592	4.47268	4.90526	4.93042	4.77370	4.82592	4.82592	AVRG	4.75984			6.28309
41 Carbon Tetrachloride	5.32523	5.05803	5.62924	6.19300	6.03343	5.98615	5.34563	5.88279	6.59983	6.16681	5.98615	5.98615	AVRG	5.82201			8.16025
42 Benzene	13.69877	12.14082	12.48848	13.18633	12.81451	12.99901	11.91274	13.33458	13.38625	12.92934	12.99901	12.99901	AVRG	12.88908			4.39075
44 1,4-Dioxane	0.00288	0.00328	0.00349	0.00308	0.00328	0.00347	0.00331	0.00331	0.00315	0.00328	0.00347	0.00347	AVRG	0.00324			6.23589
45 Dibromomethane	0.22872	0.25253	0.24915	0.27864	0.26635	0.26754	0.23522	0.25383	0.27560	0.25912	0.26754	0.26754	AVRG	0.25667			6.33772

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	1RS2 or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
46 1,2-Dichloropropane	0.34941	0.36285	0.36672	0.41498	0.39980	0.40316	AVRG		0.37969		5.85646
	0.35100	0.38454	0.38544	0.37899							
47 Trichloroethene	0.79464	0.70596	0.65225	0.69035	0.68689	0.68122	AVRG		0.68283		7.22417
	0.59744	0.66192	0.68559	0.67203							
48 n-Propyl Acetate	++++	0.70432	0.64743	0.68518	0.65747	0.67432	AVRG		0.65164		7.21217
	0.56145	0.62404	0.70152	0.60898							
49 Bromodichloromethane	0.69202	0.58836	0.62159	0.67539	0.65748	0.67390	AVRG		0.65237		6.43293
	0.58422	0.64613	0.70529	0.67938							
50 Ethyl methacrylate	++++	0.26794	0.25458	0.26316	0.25984	0.26909	AVRG		0.25843		5.35734
	0.22943	0.25650	0.27696	0.24833							

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Quant Method : ISTD
 Target Version : 4.00
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 Method file : \\ETCDDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 Lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
51 Methyl methacrylate	0.27418 0.21597	0.24306 0.24009	0.23103 0.25591	0.24385 0.23134	0.24720	0.25593	AVRG		0.24386		6.60614
52 2-Chloroethyl vinyl ether	++++ 0.11862	++++ 0.13347	0.10605 0.14169	0.12592 0.13499	0.13410	0.14077	AVRG		0.12945		9.34251
53 4-Methyl-2-Pentanone	++++ 0.34206	++++ 0.37816	0.41197 0.44302	0.39545 0.37919	0.39755	0.41713	AVRG		0.39557		7.65836
54 trans-1,3-Dichloropropene	0.61933 0.58100	0.55042 0.63797	0.65119 0.63879	0.66451 0.61823	0.65174	0.66662	AVRG		0.62798		5.94399
55 cis-1,3-Dichloropropene	0.61701 0.54700	0.52279 0.60103	0.58096 0.61341	0.63176 0.57873	0.62083	0.63238	AVRG		0.59459		6.20602

Environmental Testing and Consulting, Inc.

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 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 Lisa

Compound	0	500.0000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RSR	or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6								
56 1,1,2-Trichloroethane	0.24954	0.26546	0.25669	0.29103	0.27825	0.29480		AVRG			0.27449		6.60102	
	0.25145	0.27671	0.30013	0.28082										
58 Toluene	1.05949	0.85416	0.95087	1.04863	1.03032	1.01142		AVRG			0.98596		6.61487	
	0.90313	1.00991	1.00296	0.98870										
59 1,3-Dichloropropane	0.56918	0.55771	0.56770	0.63236	0.63021	0.62899		AVRG			0.59497		6.13766	
	0.53719	0.59067	0.64025	0.59538										
60 2-Hexanone	++++	++++	0.32810	0.29521	0.29500	0.30557		AVRG			0.29402		8.97649	
	0.25346	0.27676	0.32719	0.27088										
61 Chlorodibromomethane	0.37607	0.38637	0.42703	0.46874	0.47525	0.48392		AVRG			0.44601		9.63718	
	0.41441	0.45196	0.50265	0.47376										

Environmental Testing and Consulting, Inc.

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 Method file : \\ETC\BDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	RSR or R ²
62 1,2-Dibromoethane	0.32050 0.32183	0.33569 0.35047	0.34739 0.38653	0.36901 0.35147	0.36488	0.37290	AVRG		0.35207		6.19154
63 Tetrachloroethene	++++ 0.37128	0.31740 0.40084	0.36463 0.52437	0.41792 ++++	0.41397	0.40551	AVRG		0.40199		14.83107
64 1,1,1,2-Tetrachloroethane	0.43228 0.41665	0.40763 0.45066	0.45403 0.41897	0.45997 0.48218	0.46277	0.40277	AVRG		0.43879		6.11183
66 Chlorobenzene	1.25536 1.02758	1.06546 1.13220	1.12419 0.96661	1.11368 1.13084	1.10575	0.95932	AVRG		1.08810		8.07816
67 Ethylbenzene	2.44533 1.93893	2.03328 2.12359	2.11582 1.85634	2.06453 2.15671	2.08517	1.79103	AVRG		2.06107		8.78150

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\203052.B\203041.8260.m
 Cal Date : 06-Mar-2001 09:28 Lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	trSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1		or R^2
68 Xylene-mp	0.89226	0.75125	0.75883	0.74556	0.73750	0.62230	AVRG		0.72661		10.66453
	0.67820	0.73808	0.62130	0.72078							
69 cis-1,4-Dichloro-2-butene	0.55345	0.48482	0.50679	0.52063	0.53079	0.47249	AVRG		0.49998		5.58753
	0.46507	0.49686	0.47959	0.48932							
70 Bromoform	0.25933	0.31425	0.31246	0.33559	0.32899	0.29884	AVRG		0.31605		8.04142
	0.30259	0.32754	0.32968	0.35131							
71 Styrene	1.58523	1.26475	1.26571	1.29900	1.30580	1.11803	AVRG		1.27711		10.02752
	1.19946	1.28306	1.14054	1.30956							
72 Xylene-o	0.76711	0.69717	0.71452	0.72877	0.71532	0.60914	AVRG		0.59022		7.31909
	0.65276	0.70199	0.61260	0.70286							

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Quant Method : ISTD
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 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\v203052.B\v203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	±RSD or R ²
73 1,1,2,2-Tetrachloroethane	0.95577 0.73847	0.84790 0.84578	0.81365 0.81781	0.83180 0.80832	0.82710	0.84067	AVRG		0.83273		6.41760
74 1,2,3-Trichloropropane	0.39993 0.46659	0.48482 0.49826	0.50679 0.47845	0.52063 0.48753	0.53079	0.47249	AVRG		0.48463		7.47096
75 trans-1,4-Dichloro-2-butene	0.14944 0.14179	0.11883 0.15218	0.14662 0.13027	0.15491 0.13600	0.15637	0.14250	AVRG		0.14289		8.26893
76 Isopropylbenzene	2.55250 1.92728	1.99055 2.07986	2.05244 1.83287	2.08960 2.09301	2.06555	1.78446	AVRG		2.04681		10.21212
78 Bromobenzene	0.66334 0.45633	0.47415 0.49549	0.52069 0.45823	0.50184 0.51137	0.49588	0.44327	AVRG		0.50206		12.38076

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	SRSD or R ²
79 n-Propylbenzene	3.26005 2.37997	2.55931 2.53233	2.52360 2.18801	2.56870 2.46440	2.52113	2.19569	AVRG		2.51932		11.75886
80 2-Chlorotoluene	1.90587 1.48523	1.78980 1.62970	1.61327 1.44801	1.67455 1.57847	1.61257	1.50365	AVRG		1.62411		8.62406
81 4-Chlorotoluene	2.10904 1.48523	1.78015 1.47018	1.61327 1.56627	1.51792 1.72717	1.61257	1.35855	AVRG		1.62404		12.95689
82 1,3,5-Trimethylbenzene	0.88623 0.68219	0.66437 0.72230	0.76142 0.62203	0.76327 0.68878	0.74907	0.63796	AVRG		0.71782		10.76966
83 Pentachloroethane	0.50709 0.42896	0.46664 0.50100	0.44978 +++++	0.48273 +++++	0.48723	0.49304	AVRG		0.47706		5.62048

Environmental Testing and Consulting, Inc.

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	±RSD or R ²
84 tert-Butylbenzene	1.80939 1.33317	1.43668 1.40444	1.48611 1.45455	1.44625 1.41526	1.46603	1.26103	AVRG		1.45129		9.84034
85 1,2,4-Trimethylbenzene	2.14373 1.61667	1.81676 1.72890	1.77205 1.54836	1.78086 1.68894	1.77109	1.51056	AVRG		1.73779		10.14648
86 sec-Butylbenzene	2.73391 2.20195	2.33574 2.29406	2.36734 2.05326	2.36774 2.23684	2.35452	2.06893	AVRG		2.30143		8.31448
87 1,3-Dichlorobenzene	2.40606 1.66606	1.94875 1.94568	1.68122 1.76793	1.91772 1.80277	1.83867	1.75524	AVRG		1.87301		11.36478
88 4-Isopropyltoluene	2.06153 1.62688	1.62413 1.69201	1.81050 1.45340	1.80401 1.57980	1.79463	1.55361	AVRG		1.70005		10.19849

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Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
90 1,4-Dichlorobenzene	++++	2.12774	2.02638	1.70961	1.63697	1.96857	AVRG			1.84937		9.36371
	1.66606	1.94487	1.76712	1.79702								
91 n-Butylbenzene	4.22787	3.42098	3.46622	3.58187	3.47538	3.44191	AVRG			3.42722		10.36284
	3.19067	3.51085	2.98451	2.97198								
92 1,2-Dichlorobenzene	1.85844	1.71022	1.63908	1.63211	1.63282	1.65039	AVRG			1.64450		5.90913
	1.48759	1.67718	1.58781	1.56940								
93 1,2-Dibromo-3-chloropropane	++++	0.14065	0.17489	0.17487	0.17832	0.17644	AVRG			0.16827		8.88080
	0.15018	0.16532	0.18881	0.16495								
94 1,2,4-Trichlorobenzene	1.40835	1.17507	1.06325	1.18468	1.19766	1.23909	AVRG			1.18370		8.68671
	1.12611	1.25981	1.11067	1.07233								

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Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	RSD or R ²
95 Naphthalene	2.73032 2.03664	2.18048 2.31450	2.00056 2.36419	2.08690 2.19170	2.20636	2.25458	AVRG		2.23663		9.31454
96 Hexachlorobutadiene	0.75187 0.73725	0.59723 0.80058	0.70569 0.72072	0.76937 0.70358	0.78369	0.80876	AVRG		0.73788		8.39463
97 1,2,3-Trichlorobenzene	1.18569 1.04478	0.97478 1.16763	1.02937 1.07679	1.10778 1.04941	1.11657	1.16474	AVRG		1.09175		6.30015
34 Dibromofluoromethane	4.81448 3.15299	3.77684 3.48035	3.53723 3.62712	3.49513 3.72261	3.24288	3.65452	AVRG		3.65042		12.44067
37 1,2-Dichloroethane-d4	6.36684 4.03493	5.12962 4.37590	4.96825 5.00603	4.95769 4.78807	4.41657	4.82468	AVRG		4.88686		12.75509

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Environmental Testing and Consulting, Inc.

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSR
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1		or R^2
120.0000	150.0000	170.0000	200.0000								
Level 7	Level 8	Level 9	Level 10								
§ 57 Toluene-d8	++++	1.57476	1.43669	1.41453	1.32629	1.39714	AVRG		1.38381		6.93772
	1.22250	1.33089	1.34247	1.40106							
§ 77 Bromofluorobenzene	++++	++++	0.73442	0.66542	0.60995	0.60364	AVRG		0.60994		10 82124
	0.54321	0.58427	0.52767	0.61091							

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Semi-Volatiles**

ENVIRONMENTAL TESTING & CONSULTING, INC

GC/MS BNA Sequence Check List (SW-846)

Sequence ID

B1030801.b

System ID

BNA1

Date

3/8/01

Analyst

pf

Applicable ETC Order Nos. for this sequence:

0102-7230102-7990102-7950102-7180102-839

Validated

1. DFTPP Daily 12-Hour Tune Meets Criteria. No analysis begins until criteria are met. (SOP) ✓2. Degradation/Peak Tailing Check (may be combined with DFTPP Tune): ✓a. DDT to DDE/DDD $\leq 20\%$ Benzdine/PCP - Normal Response with no visible peak tailing. ✓2. Initial Calibration Verification Criteria - Method: B1030701.ma. SPCC - Mean RF ≥ 0.050 ✓b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ✓c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ✓d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 ✓

3. Calibration Verification - Each 12-Hour Shift

a. SPCC - RF ≥ 0.050 ✓b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ✓c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ✓d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ ✓e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ✓
f. Internal Standards - Areas within (-50% to +100%) from Mid-Point ICAL STD ✓

3. Method Blanks included in this sequence:

Analyze for each analytical batch (20 samples): ✓

List compounds identified in Method Blank w/concentration.

Flag final result "B-Detected in Blank"

P060761B

4. Matrix Spike/Matrix Spike Duplicates included in this sequence:

Analyze for each analytical batch (20 samples) . List MS/MSD(s) performed with any failures: ✓0102-795-1ms/msd0102-839-4ms/msd

5. Laboratory Control Samples included in this sequence:

Must contain all Target Analytes.

P060761CS6. Surrogate Recoveries within QC Limits ✓7. All positive compounds within calibration range ✓Narrative/Notes: 0102-795-01msd analyzed and 12h Tune

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: 0101001

DFTPP Injection Date: 03/08/01

Instrument ID: BNA1

DFTPP Injection Time: 1354

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.1
68	Less than 2.0% of mass 69	0.1 (0.2)1
69	Mass 69 relative abundance	48.1
70	Less than 2.0% of mass 69	0.3 (0.7)1
127	40.0 - 60.0% of mass 198	55.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	25.4
365	Greater than 1.0% of mass 198	4.13
441	Present, but less than mass 443	14.3
442	Greater than 40.0% of mass 198	88.7
443	17.0 - 23.0% of mass 442	16.7 (18.8)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WS 50NG		0202003	03/08/01	1453
02	0102-795-1		0901010	03/08/01	1851
03	0102-795-2		1001011	03/08/01	1924
04	0102-795-3		1101012	03/08/01	1957
05	0102-795-4		1201013	03/08/01	2031
06	0102-795-5		1301014	03/08/01	2104
07	0102-795-1MS		2101022	03/09/01	0129
08	0102-795-1MS		2201023	03/09/01	0202
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.12		PASS
68	Less than 2% of mass 69	0.11	(0.23)	PASS
69	Mass 69 relative abundance	48.09		PASS
70	Less than 2% of mass 69	0.33	(0.68)	PASS
127	40 - 60% of mass 198	55.03		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.71		PASS
275	10 - 30% of mass 198	25.43		PASS
365	Greater than 1% of mass 198	4.13		PASS
441	Present, but less than mass 443	14.26	(85.38)	PASS
442	Greater than 40% of mass 198	88.72		PASS
443	17 - 23% of mass 442	16.70	(18.82)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1716049	5.000	PASS
Benzidine	1.0108959	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	418718			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	0	0.0	15.0	PASS
4,4-DDD + DDE	0	0.0	15.0	PASS

Tuning Sample, //ETCBDC/DD/chem/bnal.i/b1030801.b/0101001.D/0101001.D, *** PASSED **

FORM 7
BNA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: BNA1

Calibration Date: 03/08/01 Time: 1453

Lab File ID: 0202003

Init. Calib. Date(s): 03/07/01 03/07/01

Init. Calib. Times: 0855 1407

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	49.98	50.00	AVRG	0.0	20.0
2,4-Dinitrotoluene	41.44	50.00	AVRG	17.1	30.0
Hexachlorobenzene	50.35	50.00	AVRG	0.7	30.0
Hexachlorobutadiene	49.34	50.00	AVRG	1.3	20.0
Hexachloroethane	49.27	50.00	AVRG	1.5	30.0
2-Methylphenol	52.35	50.00	AVRG	4.7	30.0
3&4-Methylphenol	52.74	50.00	AVRG	5.5	30.0
Nitrobenzene	49.98	50.00	AVRG	0.0	30.0
Pentachlorophenol	48.72	50.00	AVRG	2.6	20.0
Pyridine	54.19	50.00	AVRG	8.4	30.0
2,4,5-Trichlorophenol	49.58	50.00	AVRG	0.8	30.0
2,4,6-Trichlorophenol	51.87	50.00	AVRG	3.7	20.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	46.01	50.00	AVRG	8.0	30.0
2-Fluorobiphenyl	50.88	50.00	AVRG	1.8	30.0
Terphenyl-d14	41.41	50.00	LINR	17.2	30.0
Phenol-d6	52.82	50.00	AVRG	5.6	30.0
2,4,6-Tribromophenol	41.57	50.00	LINR	16.9	30.0
2-Fluorophenol	49.74	50.00	AVRG	0.5	30.0

FORM VII BNA-GCMS

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID (Standard): 0202003

Date Analyzed: 03/08/01

Instrument ID: BNA1

Time Analyzed: 1453

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	800362	5.53	2945960	6.82	1128295	9.38
UPPER LIMIT	1600724	6.03	5891920	7.32	2256590	9.88
LOWER LIMIT	400181	5.03	1472980	6.32	564148	8.88
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 0102-795-1	986427	5.53	3685650	6.81	1710780	9.37
02 0102-795-2	893137	5.53	3388039	6.81	1642911	9.37
03 0102-795-3	958895	5.52	3572962	6.81	1683213	9.37
04 0102-795-4	953625	5.53	3585034	6.81	1739648	9.37
05 0102-795-5	871704	5.52	3276931	6.81	1606791	9.37
06 0102-795-1MS	942076	5.53	3446447	6.81	1482343	9.37
07 0102-795-1MS	965999	5.53	3673169	6.81	1636741	9.37
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID (Standard): 0202003

Date Analyzed: 03/08/01

Instrument ID: BNA1

Time Analyzed: 1453

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	967936	12.11	345838	17.37	228818	20.21
UPPER LIMIT	1935872	12.61	691676	17.87	457636	20.71
LOWER LIMIT	483968	11.61	172919	16.87	114409	19.71
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 0102-795-1	1574618	12.10	274723	17.37	169090	20.20
02 0102-795-2	1703102	12.10	443821	17.37	292748	20.20
03 0102-795-3	1628066	12.10	307863	17.37	191672	20.21
04 0102-795-4	1690877	12.10	266447	17.36	155460	20.20
05 0102-795-5	1705316	12.10	338485	17.37	211603	20.20
06 0102-795-1MS	1567171	12.10	407708	17.36	257978	20.20
07 0102-795-1MS	1545276	12.10	243748	17.36	144347	20.20
08						
09						
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20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

656 838

FORM 6
BNA-GCMS INITIAL CALIBRATION DATA

3/9/01 pf
ml 3/9/01

Lab Name: ETC, INC.

Contract:

QC REVIEWED

Lab Code:

Case No.:

SAS No.:

SDG No.: B1030701

Instrument ID: BNA1

Calibration Date(s): 03/07/01 03/07/01

Column: DB-5MS

ID: 0.25 (mm)

Calibration Time(s): 0855

1407

LAB FILE ID:
RF20: 0601008

RF2: 0301005
RF50: 0201004

RF5: 0401006

RF10: 0501007

COMPOUND	RF2	RF5	RF10	RF20	RF50
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	1.581	1.537	1.590	1.612	1.538
2,4-Dinitrotoluene	0.084	0.082	0.085	0.103	0.099
Hexachlorobenzene	0.207	0.198	0.208	0.230	0.232
Hexachlorobutadiene	0.202	0.189	0.198	0.200	0.195
Hexachloroethane	0.180	0.189	0.183	0.194	0.191
2-Methylphenol	1.088	0.931	1.060	1.032	1.042
3&4-Methylphenol	1.190	1.024	1.200	1.202	1.187
Nitrobenzene		0.294	0.342	0.365	0.386
Pentachlorophenol		0.050	0.055	0.059	0.069
Pyridine	0.960	1.049	1.058	1.210	1.318
2,4,5-Trichlorophenol	0.301	0.291	0.334	0.339	0.354
2,4,6-Trichlorophenol	0.273	0.270	0.302	0.318	0.345
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	0.308	0.272	0.315	0.341	0.355
2-Fluorobiphenyl	1.367	1.329	1.448	1.506	1.528
Terphenyl-d14	3.437	1.494	1.364	1.549	1.199
Phenol-d6	1.502	1.416	1.563	1.561	1.512
2,4,6-Tribromophenol	0.064	0.064	0.080	0.088	0.101
2-Fluorophenol	1.233	1.264	1.282	1.313	1.246
=====	=====	=====	=====	=====	=====

FORM VI BNA-GCMS

000157

FORM 6
BNA-GCMS INITIAL CALIBRATION DATA

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: B1030701

Instrument ID: BNA1 Calibration Date(s): 03/07/01 03/07/01

Column: DB-5MS ID: 0.25 (mm) Calibration Time(s): 0855 1407

LAB FILE ID: RF80: 0701009 RF100: 0801010 RF120: 0901011
RF160: 1001012

COMPOUND	RF80	RF100	RF120	RF160
=====	=====	=====	=====	=====
1,4-Dichlorobenzene	1.446	1.430	1.481	
2,4-Dinitrotoluene	0.097	0.087	0.112	0.087
Hexachlorobenzene	0.225	0.232	0.240	0.256
Hexachlorobutadiene	0.185	0.187	0.199	0.189
Hexachloroethane	0.190	0.194	0.209	0.200
2-Methylphenol	0.978	0.969	0.997	0.942
3&4-Methylphenol	1.117	1.114	1.128	1.063
Nitrobenzene	0.368	0.374	0.395	0.372
Pentachlorophenol	0.063	0.056	0.074	
Pyridine	1.340	1.333	1.471	1.354
2,4,5-Trichlorophenol	0.359	0.349	0.388	0.374
2,4,6-Trichlorophenol	0.349	0.355	0.380	0.372
=====	=====	=====	=====	=====
Nitrobenzene-d5	0.350	0.369	0.385	0.367
2-Fluorobiphenyl	1.512	1.597	1.660	1.551
Terphenyl-d14	1.005	1.089	0.987	
Phenol-d6	1.428	1.458	1.513	1.397
2,4,6-Tribromophenol	0.097	0.104	0.109	0.113
2-Fluorophenol	1.220	1.224	1.315	1.186

656 840

FORM 6
BNA-GCMS INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: B1030701

Instrument ID: BNA1

Calibration Date(s): 03/07/01 03/07/01

Column: DB-5MS

ID: 0.25 (mm)

Calibration Time(s): 0855

1407

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
1,4-Dichlorobenzene	AVRG		1.52690986	4.4
2,4-Dinitrotoluene	AVRG		9.309e-002	11.1
Hexachlorobenzene	AVRG		0.22555139	8.0
Hexachlorobutadiene	AVRG		0.19382395	3.2
Hexachloroethane	AVRG		0.19221207	4.6
2-Methylphenol	AVRG		1.00417801	5.4
3&4-Methylphenol	AVRG		1.13604851	5.6
Nitrobenzene	AVRG		0.36201860	8.7
Pentachlorophenol	AVRG		6.088e-002	13.7
Pyridine	AVRG		1.23257204	14.0
2,4,5-Trichlorophenol	AVRG		0.34309347	9.2
2,4,6-Trichlorophenol	AVRG		0.32923062	12.4
Nitrobenzene-d5	AVRG		0.34011913	10.5
2-Fluorobiphenyl	AVRG		1.49983888	7.0
Terphenyl-d14	LINR	-0.1481151	1.01815061	0.990
Phenol-d6	AVRG		1.48333137	4.1
2,4,6-Tribromophenol	LINR	0.10444931	8.86666237	0.996
2-Fluorophenol	AVRG		1.25365274	3.5

FORM VI BNA-GCMS

000159

ENVIRONMENTAL TESTING & CONSULTING, INC

GC/MS BNA Sequence Check List (SW-846)

Sequence ID B2030301.BSystem ID BNA 2Date 3/3/01Analyst MV

Applicable ETC Order Nos. for this sequence:

0102-6970103-005-11 Rmk

Validated

1. DFTPP Daily 12-Hour Tune Meets Criteria. No analysis begins until criteria are met. (SOP) /2. Degradation/Peak Tailing Check (may be combined with DFTPP Tune): /a. DDT to DDE/DDD $\leq 20\%$ Benzidine/PCP - Normal Response with no visible peak tailing. /2. Initial Calibration Verification Criteria - Method : B2030201.Ma. SPCC - Mean RF ≥ 0.050 /b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ /c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation /d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 /

3. Calibration Verification - Each 12-Hour Shift

a. SPCC - RF ≥ 0.050 /b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ /c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ /d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ /Terphenyl d14 @ 30.2e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD /f. Internal Standards - Areas within (-50% to +100%) from Mid-Point ICAL STD /

3. Method Blanks included in this sequence :

Analyze for each analytical batch (20 samples): /

List compounds identified in Method Blank w/concentration.

Flag final result "B-Detected in Blank"

P04499LB DINBHTYL @ 04.70g/kg JP06070LB AQHEDUS, PAN'S @ 0.5 (1STD?)P06074LB DINBHTYL @ 1.76 ug/L J

-----4. Matrix Spike/Matrix Spike Duplicates included in this sequence:-----

Analyze for each analytical batch (20 samples) . List MS/MSD(s) performed with any failures : /0102-697-14 MS/MSD /

5. Laboratory Control Samples included in this sequence :

Must contain all Target Analytes.

P06070LCS/LLSD 0/166P04499LCS 1/03P06074LCS/LLSD 1/1666. Surrogate Recoveries within QC Limits /7. All positive compounds within calibration range /

Narrative/Notes : _____

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID: 0101001

DFTPP Injection Date: 03/03/01

Instrument ID: BNA2

DFTPP Injection Time: 0902

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	46.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.1
70	Less than 2.0% of mass 69	0.0 (0.1)1
127	40.0 - 60.0% of mass 198	47.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	17.2
365	Greater than 1.0% of mass 198	1.52
441	Present, but less than mass 443	7.2
442	Greater than 40.0% of mass 198	50.5
443	17.0 - 23.0% of mass 442	9.9 (19.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WS 50.0 NG/U		0201002	03/03/01	0918
02	P06074LB		1701017	03/03/01	1732
03	P06074LCS		1801018	03/03/01	1805
04	P06074LCSD		1901019	03/03/01	1837
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion		Abundance Criteria	Base Peak	Other	Test
198		Base Peak, 100% relative abundance	100.00		PASS
51		30 - 60% of mass 198	46.93		PASS
68		Less than 2% of mass 69	0.00	(0.00)	PASS
69		Mass 69 relative abundance	63.08		PASS
70		Less than 2% of mass 69	0.04	(0.07)	PASS
127		40 - 60% of mass 198	46.97		PASS
197		0 - 1% of mass 198	0.00		PASS
199		5 - 9% of mass 198	6.73		PASS
275		10 - 30% of mass 198	17.17		PASS
365		Greater than 1% of mass 198	1.52		PASS
441		Present, but less than mass 443	7.24	(72.93)	PASS
442		Greater than 40% of mass 198	50.50		PASS
443		17 - 23% of mass 442	9.93	(19.66)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.2513369	5.000	PASS
Benzidine	0.7090239	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	362930			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	0	0.0	15.0	PASS
4,4-DDD + DDE	0	0.0	15.0	PASS

Tuning Sample, //ETCBDC/DD/chem/bna2.i/B2030301.B/0101001.D/0101001.D, *** PASSED **

656 844

FORM 7
BNA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: BNA2

Calibration Date: 03/03/01 Time: 0918

Lab File ID: 0201002

Init. Calib. Date(s): 03/02/01 03/02/01

Init. Calib. Times: 1120 1543

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	51.61	50.00	AVRG	3.2	20.0
2,4-Dinitrotoluene	52.90	50.00	2ORDR	5.8	30.0
Hexachlorobenzene	49.29	50.00	AVRG	1.4	30.0
Hexachlorobutadiene	51.88	50.00	AVRG	3.8	20.0
Hexachloroethane	50.52	50.00	AVRG	1.0	30.0
2-Methylphenol	48.96	50.00	AVRG	2.1	30.0
3&4-Methylphenol	50.17	50.00	AVRG	0.3	30.0
Nitrobenzene	50.44	50.00	AVRG	0.9	30.0
Pentachlorophenol	46.54	50.00	AVRG	6.9	20.0
Pyridine	49.80	50.00	LINR	0.4	30.0
2,4,5-Trichlorophenol	51.86	50.00	AVRG	3.7	30.0
2,4,6-Trichlorophenol	47.95	50.00	AVRG	4.1	20.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	49.08	50.00	AVRG	1.8	30.0
2-Fluorobiphenyl	46.76	50.00	AVRG	6.5	30.0
Terphenyl-d14	65.11	50.00	AVRG	30.2	30.0
Phenol-d6	50.37	50.00	AVRG	0.7	30.0
2,4,6-Tribromophenol	48.88	50.00	AVRG	2.2	30.0
2-Fluorophenol	50.13	50.00	AVRG	0.3	30.0

<-

FORM VII BNA-GCMS

000163

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID (Standard): 0201002

Date Analyzed: 03/03/01

Instrument ID: BNA2

Time Analyzed: 0918

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	465270	5.51	1737162	6.77	1121594	9.29
UPPER LIMIT	930540	6.01	3474324	7.27	2243188	9.79
LOWER LIMIT	232635	5.01	868581	6.27	560797	8.79
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06074LB	537869	5.52	1908947	6.77	1142991	9.28
02 P06074LCS	574079	5.52	2180241	6.77	1421599	9.30
03 P06074LCSD	601299	5.52	2238008	6.77	1450362	9.30
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Lab File ID (Standard): 0201002

Date Analyzed: 03/03/01

Instrument ID: BNA2

Time Analyzed: 0918

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	1947004	12.00	272763	17.19	96777	19.92
UPPER LIMIT	3894008	12.50	545526	17.69	193554	20.42
LOWER LIMIT	973502	11.50	136382	16.69	48389	19.42
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06074LB	1824330	11.99	238300	17.19	91126	19.92
02 P06074LCS	2179811	12.01	234317	17.19	98171	19.92
03 P06074LCSD	2281840	12.01	272871	17.20	121182	19.92
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

QC REVIEWED

MM 3/2/01

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PT 3/5/01

01-11-104-01

Report Date : 02-Mar-2001 16:23

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Calibration File Names:

Level 1: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0301003.D
 Level 2: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0401004.D
 Level 3: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0501005.D
 Level 4: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0601006.D
 Level 5: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0201002.D
 Level 6: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0701007.D
 Level 7: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0801008.D
 Level 8: \\ETCBDC\DD\chem\bna2.i\B2030201.B\0901009.D
 Level 9: \\ETCBDC\DD\chem\bna2.i\B2030201.B\1001010.D

Compound	2.0000		5.0000		10.0000		20.0000		50.0000		80.0000		Curve		Coefficients		tRSD or R ²
	Level 1	Level 2	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 5	Level 4	Level 5	Level 6	Level 6	Level 5	b	ml	
1 N-Nitrosodimethylamine	7480	36559	77781	181392	603148	813073											
	1113821	1305537	1716113												0.02924	0.79048	0.99831

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Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	RSR or R ²
2 Pyridine	19094 1843148	67154 2175972	147577 2881684	328194	1005112	1366460	LINR	0.01289	1.31413		0.99857
3 Methyl methanesulfonate	0.84943 0.88214	0.83227 0.95235	0.90049 0.92283	0.92962	0.91365	0.89194	AVRG		0.89719		4.27754
5 N-Nitrosodiethylamine	0.70998 0.71399	0.69306 0.76376	0.71113 0.75590	0.74268	0.74364	0.68347	AVRG		0.72418		3.90426
6 Ethyl methanesulfonate	1.08149 1.09963	1.10585 1.20891	1.11993 1.17807	1.10257	1.08984	1.08924	AVRG		1.11950		3.93585
8 Phenol <i>ccc</i>	1.73300 1.89975	1.77364 1.91917	1.78567 1.95351	1.84453	1.85971	1.76746	AVRG		1.83738		4.17774

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	4RSD or R^2
9 Aniline	1.96706 1.95290	1.94390 2.13666	1.92915 2.15000	2.00534	2.02910	1.98502	AVRG		2.01215		4.14023
10 Bis(2-chloroethyl)ether	1.45030 1.40727	1.40480 1.52650	1.43552 1.40877	1.48790	1.44600	1.38949	AVRG		1.43962		3.08448
11 2-Chlorophenol	1.38480 1.35498	1.37272 1.47151	1.36959 1.42790	1.41016	1.41691	1.37478	AVRG		1.39815		2.62953
12 1,3-Dichlorobenzene	1.48983 1.41756	1.43493 1.46160	1.46258 1.39962	1.52858	1.44424	1.41307	AVRG		1.45022		2.80819
14 1,4-Dichlorobenzene <i>ccc</i>	1.46265 1.39767	1.45145 1.45858	1.46855 1.39837	1.51555	1.45102	1.41736	AVRG		1.44680		2.59244

Report Date : 02-Mar-2001 16:23

Environmental Testing and Consulting, Inc.

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Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bn2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
15 Benzyl alcohol	0.82064 0.95380	0.90665 1.07248	0.89118 1.01073	0.89681	0.93994	0.92673	AVRG		0.93544		7.77714
16 1,3-Dichlorobenzene	1.44313 1.32184	1.37111 1.38658	1.40706 1.32920	1.42859	1.36978	1.32680	AVRG		1.37601		3.24560
17 2-Methylphenol	1.07926 1.11451	1.06970 1.24309	1.09324 1.20103	1.10674	1.11404	1.08771	AVRG		1.12326		5.24901
18 Bis(2-chloroisopropyl) ether	1.81011 1.60563	1.76546 1.72443	1.72741 1.65021	1.76988	1.69333	1.59954	AVRG		1.70511		4.34576
19 3,64-Methylphenol	1.29783 1.39599	1.32704 1.54584	1.32451 1.51943	1.37237	1.39851	1.37264	AVRG		1.39491		6.11928

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	RSR or R ²
20 Acetophenone	0.50801 0.48415	0.51193 0.51074	0.52110 0.48084	0.52022	0.50214	0.47408	AVRG		0.50147		3.49060
21 N-Nitrosodi-n-propylamine SPC	0.20540 0.19629	0.22270 0.20708	0.22872 0.18366	0.22493	0.21716	0.20821	AVRG		0.21046		6.92388
22 Hexachloroethane	0.19224 0.16479	0.17777 0.16695	0.19227 0.15328	0.19084	0.17855	0.17146	AVRG		0.17646		7.76186
24 Nitrobenzene	0.37608 0.34036	0.36087 0.35682	0.37142 0.33448	0.37133	0.35832	0.33816	AVRG		0.35643		4.35791
25 Isophorone	0.69202 0.66042	0.69538 0.69249	0.71510 0.64247	0.72494	0.73389	0.70105	AVRG		0.69531		4.19871

Report Date : 02-Mar-2001 16:23

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
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 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	n2	%RSD or R ²
26 2-Nitrophenol <i>CC</i>	0.20018 0.21924	0.19423 0.23270	0.21032 0.22668	0.21958	0.22411	0.21466	AVRG		0.21574		5.76987
27 2,4-Dimethylphenol	0.37484 0.35839	0.35982 0.38261	0.39013 0.36053	0.38192	0.36389	0.36004	AVRG		0.37024		3.29979
28 Bis(2-chloroethoxy)methane	0.45503 0.44408	0.45630 0.47501	0.47508 0.38377	0.46985	0.45184	0.43232	AVRG		0.44925		6.31852
29 Benzoic acid	10028 1809420	37692 2257230	80673 3154491	212062	790751	1222085	QUAD	0.08443	3.21293	-0.30768	0.99794
30 2,4-Dichlorophenol <i>CC</i>	0.29438 0.31360	0.29733 0.33876	0.31471 0.31588	0.32411	0.31304	0.31603	AVRG		0.31421		4.19079

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	RSD or R ²
31 1,2,4-Trichlorobenzene	100.0000 Level 7	120.0000 Level 8	160.0000 Level 9								
	0.35843	0.32853	0.35340	0.35383	0.32834	0.31837					
	0.31369	0.32706	0.30445				AVRG		0.33179		5.80112
33 Naphthalene	1.03117	1.03092	1.05696	1.05625	1.00293	0.97895					
	0.97485	1.02881	0.96922				AVRG		1.01445		3.36436
34 4-Chloroaniline	0.41872	0.40996	0.42408	0.43056	0.45333	0.41960					
	0.41754	0.45223	0.38243				AVRG		0.42316		5.08790
35 2,6-Dichlorophenol	0.29358	0.28960	0.30954	0.31645	0.30740	0.31207					
	0.31332	0.33600	0.31624				AVRG		0.31047		4.35531
36 Hexachlorobutadiene CCL	0.13700	0.13525	0.14233	0.14003	0.12700	0.12535					
	0.11973	0.12319	0.11157				AVRG		0.12905		7.95617

Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	SRSD or R ²
37 N-Nitrosodibutylamine	0.21462 0.22431	0.22642 0.22971	0.23138 0.21196	0.24497	0.25034	0.22330	AVRG		0.22856		5.51941
38 4-Chloro-3-methylphenol <i>cc</i>	0.29332 0.35032	0.29812 0.37345	0.31107 0.35448	0.32671	0.34236	0.34995	AVRG		0.33331		8.27309
39 2-Methylnaphthalene	0.65423 0.68046	0.66669 0.74388	0.68862 0.67469	0.69556	0.69110	0.68118	AVRG		0.68627		3.65677
40 Hexachlorocyclopentadiene <i>SPC</i>	0.25316 0.23830	0.26037 0.24687	0.26353 0.23334	0.26556	0.25466	0.23354	AVRG		0.24993		5.02065
41 1,2,4,5-Tetrachlorobenzene	0.41674 0.35528	0.38492 0.37544	0.40843 0.35114	0.40848	0.35426	0.33735	AVRG		0.37689		7.76525

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Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bn2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
42 2,4,6-Trichlorophenol <i>cc</i>	0.30024 0.34321	0.30481 0.37573	0.33521 0.37048	0.34008	0.31644	0.34354	AVRG		0.33664		7.80568
43 2,4,5-Trichlorophenol	0.31961 0.32199	0.33198 0.34077	0.34997 0.31390	0.36551	0.33292	0.32779	AVRG		0.33383		4.84519
45 2-Chloronaphthalene	1.16233 1.03672	1.11507 1.10033	1.13738 1.05536	1.13604	1.07723	1.03210	AVRG		1.09473		4.29484
46 2-Nitroaniline	0.27757 0.31530	0.27195 0.33328	0.30488 0.30627	0.33366	0.34361	0.33438	AVRG		0.31343		8.20227
47 Dimethyl phthalate	1.33333 1.22384	1.31363 1.22842	1.35050 1.18414	1.44235	1.36159	1.28289	AVRG		1.30230		6.22034

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Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
48 2,6-Dinitrotoluene	0.26491 0.31950	0.29822 0.31997	0.31252 0.30769	0.35420	0.34528	0.33776	AVRG		0.31778		8.47096
49 Acenaphthylenc	1.72858 1.56029	1.70956 1.73768	1.78040 1.56127	1.81401	1.71410	1.68287	AVRG		1.72097		3.00541
50 3-Nitroaniline	0.28572 0.32129	0.31666 0.32225	0.34397 0.29614	0.39381	0.36828	0.35772	AVRG		0.33398		10.46840
52 Acenaphthene	1.02389 0.98681	1.00152 1.02797	1.03948 1.00194	1.06101	1.01765	0.99889	AVRG		1.01769		2.28119
53 2,4-Dinitrophenol	763988 763988	13490 ++++	33302 ++++	109386	393243	609436	LINR	0.06155	0.22709		0.99259

XRF = 0.185

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Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	RSR or R ²
54 4-Nitrophenol <i>SPL</i>	10747 906545	35009 ++++	69597 ++++	186217	533712	742206	QUAD	0.05822	2.02373	2.80977	0.99502
55 Dibenzofuran	1.61461 1.53123	1.55739 1.63651	1.62028 1.51949	1.68727	1.59121	1.58207	AVRG		1.59334		3.33582
56 2,4-Dinitrotoluene	1316302	1385190	1774831	272371	776653	1058409	QUAD	0.09498	1.05665	1.76674	0.99813
57 2,3,4,6-Tetrachlorophenol	0.19153 0.22946	0.21902 0.23209	0.23496 0.21598	0.26323	0.24844	0.25137	AVRG		0.23179		9.27632
58 Diethyl phthalate	1.28577 1.10538	1.26799 1.05581	1.34673 0.97198	1.40797	1.27366	1.20094	AVRG		1.21291		11.74739

* RF = 0.274

Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bn2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	\$RSD or R^2
59 Fluorene	1.34471 1.23973	1.30601 1.22832	1.34541 1.16282	1.41955	1.32290	1.29574	AVRG		1.29613		5.87492
60 4-Chlorophenyl phenyl ether	0.49163 0.45077	0.47461 0.45456	0.48378 0.44015	0.50493	0.47266	0.46368	AVRG		0.47075		4.40503
61 4-Nitroaniline	16770 ++++	47810 ++++	90211 ++++	230603	602533	792958	QUAD	0.03536	1.79093	2.36594	0.99903
62 4,6-Dinitro-2-methylphenol	++++ 0.12774	0.09390 0.13354	0.11673 0.12642	0.14082	0.13881	0.13264	AVRG		0.12633		11.98124
63 N-Nitrosodiphenylamine ccc	0.55165 0.66901	0.52755 0.74336	0.53936 0.74819	0.56314	0.60679	0.60534	AVRG		0.61715		13.71600

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	WRSD or R^2
64 1,2-Diphenylhydrazine/Azobenzene	0.75024 0.88354	0.74384 1.02961	0.72273 1.04191	0.73584	0.82579	0.81418	AVRG		0.83863		14.68757
66 Phenacetin	37780 1143405	99641 ++++	184172 ++++	446959	907311	1087727	QUAD	0.07189	0.70589	5.63130	0.99770
67 4-Bromophenyl phenyl ether	0.14933 0.18457	0.15498 0.20989	0.15705 0.20960	0.15786	0.17432	0.17275	AVRG		0.17448		13.10836
68 Hexachlorobenzene	0.16816 0.16824	0.16021 0.18537	0.16476 0.18011	0.16205	0.16644	0.16309	AVRG		0.16871		5.03396
69 Pentachlorophenol <i>cc</i>	0.08729 0.12543	0.10127 0.13207	0.11984 0.12520	0.13863	0.13066	0.13145	AVRG		0.12132		13.66697

Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	SRSD or R ²
70 Pentachloronitrobenzene	0.05566 0.05736	0.06468 0.05996	0.06572 0.05540	0.07078	0.06245	0.05872	AVRG		0.06119		8.42632
72 Phenanthrene	1.05331 0.98955	1.03870 1.04393	1.04402 0.99453	1.10273	1.02556	0.99821	AVRG		1.03228		3.45521
73 Anthracene	1.09110 0.95723	1.06587 1.00205	1.09435 0.94911	1.09403	1.01539	0.97159	AVRG		1.02675		5.90521
74 Carbazole	109556 3350681	264914 3279502	483789 3844563	1116982	2356699	2939905	QUAD	-0.03100	0.98456	0.25629	0.99844
75 Di-n-butyl phthalate	141185 4096670	343297 ++++	628467 ++++	1417011	3013747	3684363	QUAD	0.02547	0.48282	0.32894	0.99987

000179

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	RRSD or R ²
76 Fluoranthene <i>cc</i>	98871 ++++	234104 ++++	417851 ++++	883886	1606003	1909074	QUAD	0.04095	0.37919	1.81324	0.99865
77 Benzidine	0.93294 0.88762	0.99348 0.89155	1.07646 0.76206	1.17381	1.21250	0.92429	AVRG		0.98386		14.82303
78 Pyrene	101189 1871253	231622 1882491	418346 ++++	842740	1458897	1737363	LINR	0.02338	3.08609		0.99872
80 Chlorobenzilate	++++ 0.60507	0.46805 0.61903	0.51199 0.54484	0.62528	0.66774	0.61744	AVRG		0.58243		11.54445
81 3,3-Dimethylbenzidine	0.60891 0.50456	0.62665 0.52051	0.64282 0.46798	0.62596	0.60785	0.49961	AVRG		0.56721		11.92738

* RRSD = 26.9

Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2 0000	5.0000	10.0000	20.0000	50.0000	80 0000	Curve	b	Coefficients	m1	m2	%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
82 Butyl benzyl phthalate	0.93246	0.99480	1.05656	1.12604	1.12039	0.99350	AVRG			1.01200		7.45832
	0.96761	1.00379	0.91283									
83 Benz(a)Anthracene	1.13322	1.12022	1.17120	1.16919	1.15977	1.13406	AVRG			1.14941		2.42890
	1.12210	1.20292	1.13201									
85 3,3'-Dichlorobenzidine	0.26572	0.28534	0.32861	0.31994	0.33121	0.34277	AVRG			0.33204		11.88934
	0.34745	0.37868	0.38863									
86 Chrysene	0.98009	1.02116	1.01342	1.03106	1.01462	0.98617	AVRG			1.01098		2.41175
	0.98132	1.05250	1.01846									
87 Bis(2-ethylhexyl)phthalate	++++	1.15056	1.16305	1.28444	1.26238	1.18413	AVRG			1.19194		4.89664
	1.14379	1.22219	1.12497									

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
88 Di-n-octyl phthalate <i>cd</i>	100.0000 Level 7	120.0000 Level 8	160.0000 Level 9								
	3.02654	3.17965	3.92128	4.27071	3.76775	3.19469	AVRG		3.38221		14 28561
	3.01830	3.19846	2.86253								
89 Benzo(b)fluoranthene	1.93153	1.75186	1.89471	1.93065	1.75451	1.74282	AVRG		1.78757		6 37468
	1.60363	1.80371	1.67470								
90 Benzo(k)fluoranthene	2.01146	1.91927	2.01206	1.96681	1.78408	1.58038	AVRG		1.78647		10.94273
	1.61070	1.66267	1.53083								
91 Benzo(a)pyrene <i>ccc</i>	1.50112	1.46711	1.49042	1.56252	1.52994	1.48657	AVRG		1.51204		2.71217
	1.47474	1.58894	1.50696								
93 Indeno(1,2,3-cd)pyrene	10505	21464	38260	75303	200496	300362	QUAD	0 08716	0.77969	-0.01755	0.99766
	395167	448973	675226								

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	RSR or R ²
94 Dibenz(a,h)anthracene	9118 35250	19141 410847	35265 627261	68909	178692	273342	QUAD	0.08371	0.88098	-0.02798	0.99788
95 Benzo(ghi)perylene	10160 405621	20390 447001	38528 688680	73005	202669	309524	QUAD	0.09269	0.76022	-0.01563	0.99855
\$ 4 2-Fluorophenol	1.32766 1.36241	1.30485 1.43832	1.40561 1.39231	1.43447	1.36881	1.36829	AVRG		1.37808		3.25559
\$ 7 Phenol-d6	1.73335 1.74494	1.71731 1.89487	1.74411 1.83891	1.81772	1.78723	1.71246	AVRG		1.77677		3.51665
\$ 23 Nitrobenzene-d5	0.39026 0.34536	0.36945 0.35798	0.37508 0.33522	0.37757	0.36021	0.34134	AVRG		0.36138		5.08801

Report Date : 02-Mar-2001 16:23

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bn2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	w2	%RSD or R^2
	100.0000 Level 7	120.0000 Level 8	160.0000 Level 9								
\$ 44 2-Fluorobiphenyl	1.28959 1.16007	1.25244 1.21700	1.31850 1.13065	1.27605	1.11594	1.10211	AVRG		1.20693		6.77644
\$ 65 2,4,6-Tribromophenol	0.07660 0.10129	0.08287 0.11509	0.08812 0.11230	0.09597	0.09649	0.09949	AVRG		0.09647		13.10813
\$ 79 Terphenyl-d14	1.19427 1.60114	1.23262 1.62296	1.31196 1.37464	1.58906	1.67324	1.60657	AVRG		1.46739		12.77463

000184

Report Date : 02-Mar-2001 16:23

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2001 11:20
 End Cal Date : 02-MAR-2001 15:43
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\bna2.i\B2030201.B\B2030201.M
 Cal Date : 02-Mar-2001 16:20 target3

Curve	Formula	Units
-----	-----	-----
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rep/ml	Response
Quad	Amt = b + m1*Rep + m2*Rep^2	Response

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Pesticides**

ENVIRONMENTAL TESTING & CONSULTING, INC
GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: 13030711 System ID: 3 Date: 3/07/01 Analyst: KL

Column ID: Primary Confirmation Column Description: RTXCLP Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0102839

0102795

no confirmation needed

- Initial Calibration 03030701b.m
 RSD of analytes $\leq 20\%$ may use average RF.
 RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)
- Endrin/DDT Breakdown – Breakdown for each should not exceed 15%.
45
- Calibration Verification – Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
 %Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptachlor	Hept Epoxide	Methoxychlor	DCB	TMX	Average
<u>1A</u>	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	<u>29.0</u>	<u>20%</u>	/	/	/	/	/	/	<u>6.4</u>
<u>1B</u>	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2A																								
2B																								
3A																								
3B																								

- Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
 1 per 20 samples per matrix.

Method Blank				
<u>P0802</u>	<u>UB OK</u>			
<u>P080221</u>	<u>B OK</u>			
<u>P0802</u>	<u>UBZ OK</u>			
<u>P080222</u>	<u>UBZ OK</u>			

- Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD				
<u>P08021LCS</u>	<u>OK</u>			
<u>P08022LCS</u>	<u>OK</u>			

- Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0102795 - SMS, MSD OK

- Notes

0102739 - SMS, MSD

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST3B

Calibration Date: 03/08/01 Time: 0506

Lab File ID: P303071B-31R

Init. Calib. Date(s): 03/07/01 03/07/01

Init. Calib. Times: 1616 1928

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0206	0.0200	AVRG	3.0	15.0
alpha-BHC	0.0218	0.0200	2ORDR	9.0	15.0
Endosulfan I	0.0209	0.0200	AVRG	4.5	15.0
beta-BHC	0.0212	0.0200	AVRG	6.0	15.0
delta-BHC	0.0214	0.0200	2ORDR	7.0	15.0
gamma-BHC (Lindane)	0.0200	0.0200	AVRG	0.0	15.0
alpha-chlordane	0.0211	0.0200	AVRG	5.5	15.0
gamma-chlordane	0.0195	0.0200	AVRG	2.5	15.0
Chlorpyrifos	0.0170	0.0200	AVRG	15.0	15.0
4,4'-DDD	0.0201	0.0200	AVRG	0.5	15.0
4,4'-DDE	0.0199	0.0200	AVRG	0.5	15.0
4,4'-DDT	0.0200	0.0200	AVRG	0.0	15.0
Dieldrin	0.0213	0.0200	AVRG	6.5	15.0
Endosulfan II	0.0215	0.0200	AVRG	7.5	15.0
Endosulfan sulfate	0.0211	0.0200	AVRG	5.5	15.0
Endrin	0.0142	0.0200	AVRG	29.0	15.0
Endrin aldehyde	0.0241	0.0200	AVRG	20.5	15.0
Endrin ketone	0.0219	0.0200	AVRG	9.5	15.0
Heptachlor	0.0206	0.0200	AVRG	3.0	15.0
Heptachlor epoxide	0.0210	0.0200	AVRG	5.0	15.0
Methoxychlor	0.0194	0.0200	AVRG	3.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0206	0.0200	AVRG	3.0	15.0
Tetrachloro-m-xylene	0.0206	0.0200	AVRG	3.0	15.0

<-
<-

FORM VII PESTICIDE

656 870

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0102-795

Instrument ID: PEST3B Calibration Date(s): 03/07/01 03/07/01

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1616 2213

LAB FILE ID: RF0.0004: P303071B RF0.004: P303071B RF0.01: P303071B-1
RF0.02: P303071B RF0.03: P303071B

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		273250.00	201100.00	238650.00	244333.33
alpha-BHC		282000.00	215100.00	271000.00	282366.67
Endosulfan I		253750.00	188200.00	216950.00	217666.67
beta-BHC		183750.00	133100.00	148250.00	152333.33
delta-BHC		247250.00	191800.00	239550.00	243333.33
gamma-BHC (Lindane)		281000.00	212800.00	265350.00	267566.67
alpha-chlordane		276250.00	200900.00	236050.00	231200.00
gamma-chlordane		11613500	7774000.0	8232050.0	8144433.3
Chlordane			9485.000		
	(2)		14960.000		
	(3)		11905.000		
	(4)		24360.000		
	(5)		26060.000		
Chlorpyrifos		168750.00	129900.00	101650.00	123466.67
4,4'-DDD		5193250.0	4044500.0	4347750.0	4488233.3
4,4'-DDE		217750.00	160200.00	187850.00	190033.33
4,4'-DDT		6136750.0	4587200.0	5031350.0	4983333.3
Dieldrin		219500.00	163300.00	193800.00	192000.00
Endosulfan II		212250.00	158000.00	179050.00	178200.00
Endosulfan sulfate		195750.00	150000.00	166550.00	165566.67
Endrin		192500.00	142400.00	156550.00	157166.67
Endrin aldehyde		168000.00	123300.00	147500.00	138900.00
Endrin ketone		7948250.0	7011700.0	6299350.0	6384900.0
Heptachlor		308500.00	227100.00	270850.00	269166.67
Heptachlor epoxide		278500.00	204500.00	238050.00	236933.33
Methoxychlor		99000.000	81500.000	82650.000	82133.333
Toxaphene			4155.000		
	(2)		4492.000		
	(3)		3379.000		
	(4)		4483.000		
	(5)		4165.000		
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		193250.00	141300.00	147800.00	144666.67
Tetrachloro-m-xylene		254000.00	184000.00	210500.00	215766.67

FORM VI PESTICIDE

000189

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST3B

Calibration Date(s): 03/07/01 03/07/01

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1616 2213

LAB FILE ID: RF0.04: P303071B RF0.06: P303071B-0RF0.4: P303071B-10

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	213725.00	215550.00	304580.00
alpha-BHC	249550.00	264950.00	433512.50
Endosulfan I	185150.00	185066.67	226570.00
beta-BHC	131250.00	128033.33	150912.50
delta-BHC	215725.00	230316.67	359505.00
gamma-BHC (Lindane)	238875.00	248783.33	376757.50
alpha-chlordane	201775.00	199383.33	247472.50
gamma-chlordane	7048925.0	6916150.0	8606282.5
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	110925.00	117433.33	110155.00
4,4'-DDD	3964625.0	4007166.7	5248665.0
4,4'-DDE	168450.00	168166.67	234217.50
4,4'-DDT	4441275.0	4346716.7	5492102.5
Dieldrin	168550.00	165800.00	224732.50
Endosulfan II	158725.00	152250.00	178520.00
Endosulfan sulfate	144475.00	139200.00	156385.00
Endrin	129950.00	129433.33	161275.00
Endrin aldehyde	124200.00	120500.00	136127.50
Endrin ketone	5766100.0	5225333.3	6018052.5
Heptachlor	232225.00	235200.00	322282.50
Heptachlor epoxide	205625.00	205583.33	253975.00
Methoxychlor	77125.000	72483.333	74082.500
Toxaphene			
(2)			
(3)			
(4)			
(5)			
=====	=====	=====	=====
Decachlorobiphenyl	133175.00	120866.67	117535.00
Tetrachloro-m-xylene	186600.00	185983.33	236830.00

FORM VI PESTICIDE

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST3B

Calibration Date(s): 03/07/01 03/07/01

Column: RTX-CLP ID: 0.32 (mm)

Calibration Time(s): 1616 2213

COMPOUND	CURVE	A0	COEFFICIENTS		%RSD OR R^2
			A1	A2	
Aldrin	AVRG		241598.333		15.2
alpha-BHC	2ORDR	2.676e-005	3.904e-006	-9.21e-012	1.000
Endosulfan I	AVRG		210479.048		12.3
beta-BHC	AVRG		146804.167		13.0
delta-BHC	2ORDR	-1.27e-004	4.511e-006	-1.2e-011	1.000
gamma-BHC (Lindane)	AVRG		270161.786		19.2
alpha-chlordane	AVRG		227575.833		12.7
gamma-chlordane	AVRG		8333620.12		18.9
Chlordane	LINR	0.00000000	1.054e-004		1.000
(2)	LINR	0.00000000	6.684e-005		1.000
(3)	LINR	0.00000000	8.4e-005		1.000
(4)	LINR	0.00000000	4.105e-005		1.000
(5)	LINR	0.00000000	3.837e-005		1.000
Chlorpyrifos	AVRG		123182.857		18.0
4,4'-DDD	AVRG		4470598.57		12.2
4,4'-DDE	AVRG		189523.929		14.5
4,4'-DDT	AVRG		5002675.36		12.8
Dieldrin	AVRG		189668.929		13.4
Endosulfan II	AVRG		173856.429		11.7
Endosulfan sulfate	AVRG		159703.810		11.8
Endrin	AVRG		152753.571		14.3
Endrin aldehyde	AVRG		136932.500		12.3
Endrin ketone	AVRG		6379097.98		13.9
Heptachlor	AVRG		266474.881		14.2
Heptachlor epoxide	AVRG		231880.952		12.3
Methoxychlor	AVRG		81282.0238		10.8
Toxaphene	LINR	0.00000000	2.407e-004		1.000
(2)	LINR	0.00000000	2.226e-004		1.000
(3)	LINR	0.00000000	2.959e-004		1.000
(4)	LINR	0.00000000	2.231e-004		1.000
(5)	LINR	0.00000000	2.401e-004		1.000
Decachlorobiphenyl	AVRG		142656.190		17.6
Tetrachloro-m-xylene	AVRG		210525.714		13.0

FORM VI PESTICIDE

ENVIRONMENTAL TESTING & CONSULTING, INC
GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: P303081 System ID: 3 Date: 3/8/10 Analyst: LG

Column ID: Primary Confirmation Column Description: RTXCLP2 Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0102795 0102799
0103135 0102895

- Initial Calibration P3030801a.m
RSD of analytes $\leq 20\%$ may use average RF.
RSD of analytes $\geq 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)
- Endrin/DDT Breakdown – Breakdown for each should ~~not~~ exceed 15%.
- Calibration Verification – Beginning/Every 20th Sample 515 Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptachlor	Hept Epoxide	Methoxychlor	DCB	TMX	Average
1A <u>41</u>	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	<u>34.0</u>	<u>23.0</u>	/	/	/	/	/	/	<u>6.2</u>
1B																								
2A <u>47</u>	/	/	/	/	/	/	/	<u>18.5</u>	/	/	/	/	/	/	/	<u>2.0</u>	<u>65</u>	-	-	-	-	-	-	<u>6.0</u>
2B																								
3A																								
3B																								

- Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank				
<u>P08023 LB OK</u>				

- Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD				
<u>P08023 LCS</u>				

- Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103135-1ms, MSD % RPD out
methoxychlor

- Notes

\\SERVER\ETC_SOP\Organics\gcsvo\PestPCBHerbs\8081\GC Pesticides 8081A Check List 032900.doc

656 874

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST3A

Calibration Date: 03/09/01

Time: 1027

Lab File ID: P303081A-41R

Init. Calib. Date(s): 03/08/01

03/08/01

Init. Calib. Times: 1701

2015

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0205	0.0200	AVRG	2.5	15.0
alpha-BHC	0.0201	0.0200	AVRG	0.5	15.0
beta-BHC	0.0206	0.0200	AVRG	3.0	15.0
delta-BHC	0.0202	0.0200	AVRG	1.0	15.0
gamma-BHC (Lindane)	0.0203	0.0200	AVRG	1.5	15.0
alpha-chlordane	0.0205	0.0200	AVRG	2.5	15.0
gamma-chlordane	0.0204	0.0200	AVRG	2.0	15.0
Chlorpyrifos	0.0171	0.0200	LINR	14.5	15.0
4,4'-DDD	0.0208	0.0200	AVRG	4.0	15.0
4,4'-DDE	0.0209	0.0200	AVRG	4.5	15.0
4,4'-DDT	0.0194	0.0200	AVRG	3.0	15.0
Dieldrin	0.0210	0.0200	AVRG	5.0	15.0
Endosulfan I	0.0204	0.0200	AVRG	2.0	15.0
Endosulfan II	0.0207	0.0200	AVRG	3.5	15.0
Endosulfan sulfate	0.0206	0.0200	AVRG	3.0	15.0
Endrin	0.0132	0.0200	AVRG	34.0	15.0
Endrin aldehyde	0.0246	0.0200	AVRG	23.0	15.0
Endrin ketone	0.0227	0.0200	AVRG	13.5	15.0
Heptachlor	0.0202	0.0200	AVRG	1.0	15.0
Heptachlor epoxide	0.0204	0.0200	AVRG	2.0	15.0
Methoxychlor	0.0187	0.0200	AVRG	6.5	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0178	0.0200	AVRG	11.0	15.0
Tetrachloro-m-xylene	0.0198	0.0200	AVRG	1.0	15.0

<-
<-

FORM VII PESTICIDE

000193

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST3A

Calibration Date(s): 03/08/01 03/08/01

Column: RTX-CLP2 ID: 0.32 (mm)

Calibration Time(s): 1701 2300

LAB FILE ID: RF0.0004: P303081A RF0.004: P303081A-RF0.01: P303081A-1
RF0.02: P303081A-RF0.03: P303081A-0

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		16400000	13211700	14619000	14226100
alpha-BHC		545250.00	460000.00	532950.00	516133.33
beta-BHC		270000.00	201200.00	221800.00	211033.33
delta-BHC		16451250	13624300	15698900	15497967
gamma-BHC (Lindane)		530500.00	432100.00	493400.00	481000.00
alpha-chlordane		15584750	12394500	13527300	13054100
gamma-chlordane		15696000	12433300	13706300	13263167
Chlordane			15740.000		
(2)			23810.000		
(3)			17745.000		
(4)			44580.000		
(5)			38610.000		
Chlorpyrifos		241000.00	187700.00	147200.00	163033.33
4,4'-DDD		11761250	9371900.0	10508000	10212467
4,4'-DDE		15112000	11923800	13135450	12549633
4,4'-DDT		387500.00	301800.00	340850.00	339666.67
Dieldrin		15102750	12123800	13856650	12973400
Endosulfan I		437250.00	355100.00	395100.00	388300.00
Endosulfan II		416000.00	338100.00	358650.00	352333.33
Endosulfan sulfate		13819500	10757600	11750450	11329233
Endrin		14789000	11888700	13064200	12733567
Endrin aldehyde		325000.00	254900.00	288500.00	263866.67
Endrin ketone		444000.00	358500.00	392950.00	370500.00
Heptachlor		454750.00	379900.00	411750.00	400433.33
Heptachlor epoxide		460250.00	374800.00	409600.00	398566.67
Methoxychlor		249250.00	181700.00	198000.00	188700.00
Toxaphene			12737.000		
(2)			12402.000		
(3)			9314.000		
(4)			8404.000		
(5)			14273.000		
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		374500.00	293300.00	305350.00	298066.67
Tetrachloro-m-xylene		336000.00	266700.00	278500.00	271933.33

FORM VI PESTICIDE

000194

656 876

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0102-795

Instrument ID: PEST3A Calibration Date(s): 03/08/01 03/08/01

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1701 2300

LAB FILE ID: RF0.04: P303081A-ORF0.06: P303081A-ORF0.4: P303081A-10

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	13366425	12622383	14370643
alpha-BHC	504975.00	478383.33	606180.00
beta-BHC	195325.00	182333.33	204490.00
delta-BHC	14764350	14187583	17261380
gamma-BHC (Lindane)	465625.00	435366.67	539340.00
alpha-chlordane	12169075	11529050	13116995
gamma-chlordane	12392200	11771950	13783955
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	152825.00	152233.33	133667.50
4,4'-DDD	9537475.0	9101833.3	10501803
4,4'-DDE	11691250	11024850	11793585
4,4'-DDT	306825.00	301416.67	347782.50
Dieldrin	12146550	11546417	12986120
Endosulfan I	357275.00	351600.00	406920.00
Endosulfan II	325950.00	314300.00	329465.00
Endosulfan sulfate	10464500	9838933.3	10387738
Endrin	11850300	11036983	11819393
Endrin aldehyde	249575.00	238050.00	248997.50
Endrin ketone	344725.00	330200.00	351350.00
Heptachlor	370775.00	352216.67	408835.00
Heptachlor epoxide	370300.00	352700.00	376437.50
Methoxychlor	169725.00	151766.67	154020.00
Toxaphene			
(2)			
(3)			
(4)			
(5)			
=====	=====	=====	=====
Decachlorobiphenyl	278750.00	251366.67	273647.50
Tetrachloro-m-xylene	257875.00	235700.00	276722.50

FORM VI PESTICIDE

000195

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST3A

Calibration Date(s): 03/08/01 03/08/01

Column: RTX-CLP2 ID: 0.32 (mm)

Calibration Time(s): 1701 2300

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
=====	=====	=====	=====	=====
Aldrin	AVRG		14116607.3	8.8
alpha-BHC	AVRG		520553.095	9.2
beta-BHC	AVRG		212311.667	13.3
delta-BHC	AVRG		15355104.3	8.3
gamma-BHC (Lindane)	AVRG		482475.952	8.8
alpha-chlordane	AVRG		13053681.4	10.0
gamma-chlordane	AVRG		13292410.2	9.7
Chlordane	LINR	0.00000000	6.353e-005	1.000
(2)	LINR	0.00000000	4.2e-005	1.000
(3)	LINR	0.00000000	5.635e-005	1.000
(4)	LINR	0.00000000	2.243e-005	1.000
(5)	LINR	0.00000000	2.59e-005	1.000
Chlorpyrifos	LINR	-5.24e-003	7.566e-006	1.000
4,4'-DDD	AVRG		10142103.9	8.9
4,4'-DDE	AVRG		12461509.8	10.8
4,4'-DDT	AVRG		332262.976	9.5
Dieldrin	AVRG		12962241.0	9.3
Endosulfan I	AVRG		384506.429	8.3
Endosulfan II	AVRG		347828.333	9.7
Endosulfan sulfate	AVRG		11192564.9	11.8
Endrin	AVRG		12454591.8	9.8
Endrin aldehyde	AVRG		266984.167	11.3
Endrin ketone	AVRG		370317.857	10.3
Heptachlor	AVRG		396951.429	8.4
Heptachlor epoxide	AVRG		391807.738	9.1
Methoxychlor	AVRG		184737.381	18.0
Toxaphene	LINR	0.00000000	7.851e-005	1.000
(2)	LINR	0.00000000	8.063e-005	1.000
(3)	LINR	0.00000000	1.074e-004	1.000
(4)	LINR	0.00000000	1.19e-004	1.000
(5)	LINR	0.00000000	7.006e-005	1.000
=====	=====	=====	=====	=====
Decachlorobiphenyl	AVRG		296425.833	13.1
Tetrachloro-m-xylene	AVRG		274775.833	11.2

FORM VI PESTICIDE

656 878

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Herbicides**

000197

ENVIRONMENTAL TESTING & CONSULTING, INC
GC Herbicides Method 8151B/6640 Sequence Check List

Sequence ID: H203051 System ID: 2 Date: 3/05/01 Analyst: RG

Column ID: Primary Confirmation Column Description: 2B35 Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0102795 _____

1. Initial Calibration E2030501b.m

RSD of analytes $\leq 20\%$ may use average RF.

RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)

2. Calibration Verification -- Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
 %Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Dalapon	MCPP	Dicamba	MCPA	Dichloroprop	2,4-D	Silvex	2,4,5-T	Dinoseb	2,4-DB	DCAA	Average
1A	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
1B	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
2A	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
2B	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
3A	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
3B	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

3. Method Blanks -- Note results for positive results. Flag final results as B -- Detected in Blank.
 1 per 20 samples per matrix.

Method Blank				
P110871B OK				
P110871B2 OK				

4. Laboratory Control Samples -- Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD				
P110871C50/245T OK				

5. Matrix Spike/Matrix Spike Duplicate -- 1 per 20 samples per matrix.

0102795 - 1 MS, MSD OK
5.46 low MS, MSD
240 low on MS

6. Notes

656 880

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST2B

Calibration Date: 03/05/01

Time: 2016

Lab File ID: H203051B-16R

Init. Calib. Date(s): 03/05/01

03/05/01

Init. Calib. Times: 1424

1655

GC Column: ZB-35

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
2,4-D	0.101	0.100	LINR	1.0	15.0
Silvex	0.00924	0.0100	LINR	7.6	15.0
2,4,5-T	0.00956	0.0100	LINR	4.4	15.0

FORM VII HERBICIDE

000199

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST2B

Calibration Date: 03/05/01

Time: 2312

Lab File ID: H203051B-23R

Init. Calib. Date(s): 03/05/01 03/05/01

Init. Calib. Times: 1424 1655

GC Column: ZB-35

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
2,4-D	0.101	0.100	LINR	1.0	15.0
Silvex	0.00940	0.0100	LINR	6.0	15.0
2,4,5-T	0.00926	0.0100	LINR	7.4	15.0

FORM VII HERBICIDE

656 882

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC. Contract:
Lab Code: Case No.: SAS No.: SDG No.: 0102-795
Instrument ID: PEST2B Calibration Date(s): 03/05/01 03/05/01
Column: ZB-35 ID: 0.25 (mm) Calibration Time(s): 1424 1655
LAB FILE ID: RF0.01: H203051B RF0.02: H203051B RF0.04: H203051B
RF0.1: H203051B RF0.25: H203051B

COMPOUND	RF0.01	RF0.02	RF0.04	RF0.1	RF0.25
=====	=====	=====	=====	=====	=====
2,4-D	2839400.0	1313366.7	1152320.0	983810.00	910470.00
Silvex	115366000	75922667	68420400	64292100	66596150
=====	=====	=====	=====	=====	=====
2,4,5-T	108400000	82901000	68954200	81373800	70353600
=====	=====	=====	=====	=====	=====

FORM VI HERBICIDE

000201

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST2B

Calibration Date(s): 03/05/01 03/05/01

Column: ZB-35

ID: 0.25 (mm)

Calibration Time(s): 1424

1655

LAB FILE ID:

RF0.35: H203051B RF0: H203051B-08R

COMPOUND	RF0.35	RF0
=====	=====	=====
2,4-D	846188.00	741892.00
Silvex	71311880	68277850
=====	=====	=====
2,4,5-T	76693680	72969010

FORM VI HERBICIDE

656 884

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-795

Instrument ID: PEST2B

Calibration Date(s): 03/05/01 03/05/01

Column: ZB-35

ID: 0.25 (mm)

Calibration Time(s): 1424

1655

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
=====	=====	=====	=====	=====
2,4-D	LINR	-3.59e-002	1.363e-006	0.997
Silvex	LINR	-1.63e-004	1.457e-008	0.999
=====	=====	=====	=====	=====
2,4,5-T	LINR	-3.96e-004	1.364e-008	0.999
=====	=====	=====	=====	=====

FORM VI HERBICIDE

000203



ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

656 885 ✓

Founded 1972

March 16, 2001

Mr Jerry Girardea
Innovative Waste Management
P.O. Box 50397
Summerville, SC 29485-0397

Ref: Analytical Testing
ETC Order # 0102839
Project Description Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, instrumentation maintenance and calibration were performed in accordance with guidelines established by the USEPA.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Chet Scheibel
Laboratory Project Manager

rt
Attachment

INNOVWASTE

Certifications

Tennessee #TN02027
Arkansas #40730
Kentucky #90047
North Carolina #415
South Carolina #84002002

Mississippi
Oklahoma #9311
Virginia #00106
Washington #C248
US Army Corps of Engineers

Environmental Testing & Consulting, Inc.
Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING & CONSULTING, INC.

656 887

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLEClient Name **Innovative Waste Management**
Site ID **Dunn Field**

ETC Order #0102839

<u>ETC</u> <u>Sample ID</u>	<u>Field</u> <u>ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
010283901	DF/24-B/1059/SDC/006	SOIL	7.3.3	Reactive Cyanide
010283901	DF/24-B/1059/SDC/006	SOIL	1010	Ignitability/Flashpoint
010283901	DF/24-B/1059/SDC/006	SOIL	9045C	pH - Corrosivity
010283901	DF/24-B/1059/SDC/006	SOIL	7.3.4	Reactive Sulfide
010283901	DF/24-B/1059/SDC/006	SOIL	1311	TCLP Extraction
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Silver - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Arsenic - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Arsenic
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Barium - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Cadmium - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Chromium - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	7470A	Mercury - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Lead - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	6010B	Selenium - TCLP
010283901	DF/24-B/1059/SDC/006	SOIL	8270C	TCLP Semivolatiles
010283901	DF/24-B/1059/SDC/006	SOIL	8151A	TCLP Herbicides
010283901	DF/24-B/1059/SDC/006	SOIL	8081A	TCLP Pesticides
010283901	DF/24-B/1059/SDC/006	SOIL	1311	TCLP Extraction Organics
010283901	DF/24-B/1059/SDC/006	SOIL	1311	TCLP Extraction ZHE
010283901	DF/24-B/1059/SDC/006	SOIL	8260B	TCLP Volatile Organics
010283902	DF/24-B/1059/SDC/007	SOIL	7.3.3	Reactive Cyanide
010283902	DF/24-B/1059/SDC/007	SOIL	1010	Ignitability/Flashpoint
010283902	DF/24-B/1059/SDC/007	SOIL	9045C	pH - Corrosivity
010283902	DF/24-B/1059/SDC/007	SOIL	7.3.4	Reactive Sulfide
010283902	DF/24-B/1059/SDC/007	SOIL	1311	TCLP Extraction
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Silver - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Arsenic - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Arsenic
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Barium - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Cadmium - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Chromium - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	7470A	Mercury - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Lead - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	6010B	Selenium - TCLP
010283902	DF/24-B/1059/SDC/007	SOIL	8270C	TCLP Semivolatiles
010283902	DF/24-B/1059/SDC/007	SOIL	8151A	TCLP Herbicides
010283902	DF/24-B/1059/SDC/007	SOIL	8081A	TCLP Pesticides
010283902	DF/24-B/1059/SDC/007	SOIL	1311	TCLP Extraction Organics
010283902	DF/24-B/1059/SDC/007	SOIL	1311	TCLP Extraction ZHE
010283902	DF/24-B/1059/SDC/007	SOIL	8260B	TCLP Volatile Organics
010283903	DF/24-B/1059/SDC/008	SOIL	7.3.3	Reactive Cyanide
010283903	DF/24-B/1059/SDC/008	SOIL	1010	Ignitability/Flashpoint
010283903	DF/24-B/1059/SDC/008	SOIL	9045C	pH - Corrosivity
010283903	DF/24-B/1059/SDC/008	SOIL	7.3.4	Reactive Sulfide
010283903	DF/24-B/1059/SDC/008	SOIL	1311	TCLP Extraction
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Silver - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Arsenic - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Arsenic
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Barium - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Cadmium - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Chromium - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	7470A	Mercury - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Lead - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	6010B	Selenium - TCLP
010283903	DF/24-B/1059/SDC/008	SOIL	8270C	TCLP Semivolatiles

656 888

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Innovative Waste Management**
 Site ID **Dunn Field**

ETC Order #0102839

<u>ETC Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
010283903	DF/24-B/1059/SDC/008	SOIL	8151A	TCLP Herbicides
010283903	DF/24-B/1059/SDC/008	SOIL	8081A	TCLP Pesticides
010283903	DF/24-B/1059/SDC/008	SOIL	1311	TCLP Extraction Organics
010283903	DF/24-B/1059/SDC/008	SOIL	1311	TCLP Extraction ZHE
010283903	DF/24-B/1059/SDC/008	SOIL	8260B	TCLP Volatile Organics
010283904	DF/24-B/1059/SDC/009	SOIL	7.3.3	Reactive Cyanide
010283904	DF/24-B/1059/SDC/009	SOIL	1010	Ignitability/Flashpoint
010283904	DF/24-B/1059/SDC/009	SOIL	9045C	pH - Corrosivity
010283904	DF/24-B/1059/SDC/009	SOIL	7.3.4	Reactive Sulfide
010283904	DF/24-B/1059/SDC/009	SOIL	1311	TCLP Extraction
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Silver - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Arsenic - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Arsenic
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Barium - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Cadmium - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Chromium - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	7470A	Mercury - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Lead - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	6010B	Selenium - TCLP
010283904	DF/24-B/1059/SDC/009	SOIL	8270C	TCLP Semivolatiles
010283904	DF/24-B/1059/SDC/009	SOIL	8151A	TCLP Herbicides
010283904	DF/24-B/1059/SDC/009	SOIL	8081A	TCLP Pesticides
010283904	DF/24-B/1059/SDC/009	SOIL	1311	TCLP Extraction Organics
010283904	DF/24-B/1059/SDC/009	SOIL	1311	TCLP Extraction ZHE
010283904	DF/24-B/1059/SDC/009	SOIL	8260B	TCLP Volatile Organics
010283905	DF/24-B/1059/SDC/010	SOIL	7.3.3	Reactive Cyanide
010283905	DF/24-B/1059/SDC/010	SOIL	1010	Ignitability/Flashpoint
010283905	DF/24-B/1059/SDC/010	SOIL	9045C	pH - Corrosivity
010283905	DF/24-B/1059/SDC/010	SOIL	7.3.4	Reactive Sulfide
010283905	DF/24-B/1059/SDC/010	SOIL	1311	TCLP Extraction
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Silver - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Arsenic - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Arsenic
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Barium - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Cadmium - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Chromium - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	7470A	Mercury - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Lead - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	6010B	Selenium - TCLP
010283905	DF/24-B/1059/SDC/010	SOIL	8270C	TCLP Semivolatiles
010283905	DF/24-B/1059/SDC/010	SOIL	8151A	TCLP Herbicides
010283905	DF/24-B/1059/SDC/010	SOIL	8081A	TCLP Pesticides
010283905	DF/24-B/1059/SDC/010	SOIL	1311	TCLP Extraction Organics
010283905	DF/24-B/1059/SDC/010	SOIL	1311	TCLP Extraction ZHE
010283905	DF/24-B/1059/SDC/010	SOIL	8260B	TCLP Volatile Organics
010283906	DF/24-B/1059/GRAB/020	SOIL	7.3.3	Reactive Cyanide
010283906	DF/24-B/1059/GRAB/020	SOIL	1010	Ignitability/Flashpoint
010283906	DF/24-B/1059/GRAB/020	SOIL	9045C	pH - Corrosivity
010283906	DF/24-B/1059/GRAB/020	SOIL	7.3.4	Reactive Sulfide
010283906	DF/24-B/1059/GRAB/020	SOIL	1311	TCLP Extraction
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Silver - TCLP
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Arsenic - TCLP
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Arsenic
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Barium - TCLP
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Cadmium - TCLP

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

656 889

Client Name **Innovative Waste Management**
Site ID **Dunn Field**

ETC Order #0102839

ETC <u>Sample ID</u>	<u>Field</u> <u>ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Chromium - TCLP
010283906	DF/24-B/1059/GRAB/020	SOIL	7470A	Mercury - TCLP
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Lead - TCLP
010283906	DF/24-B/1059/GRAB/020	SOIL	6010B	Selenium - TCLP
010283906	DF/24-B/1059/GRAB/020	SOIL	8270C	TCLP Semivolatiles
010283906	DF/24-B/1059/GRAB/020	SOIL	8151A	TCLP Herbicides
010283906	DF/24-B/1059/GRAB/020	SOIL	8081A	TCLP Pesticides
010283906	DF/24-B/1059/GRAB/020	SOIL	1311	TCLP Extraction Organics
010283906	DF/24-B/1059/GRAB/020	SOIL	1311	TCLP Extraction ZHE
010283906	DF/24-B/1059/GRAB/020	SOIL	8260B	TCLP Volatile Organics

656 890

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

000005



Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111

(901)327-2750 FAX (901)327-6334

CHAIN OF CUSTODY RECORD

ETC Work Order : 0102839

000006

Company Name ETC		Phone # (901) 745-4999		Fax Results									
Project/Site Dunn Field		Fax # (901) 745-4280		RUSH									
Project #		FID #		Ice									
Project Manager/Contact Sam Dunkle		Matrix		4 Sludge									
		1 Wastewater		5 Oil/Solvent									
		2 Aqueous		6 Other									
		3 Soil/Sediment											
# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type	Grab/Comp	Analysis Requested					
	DE/24-8/1059/SDC/006		28Feb01	0724	Soil	Comp		(Note special detection limits or methods)					
	DE/24-8/1059/SDC/007		28Feb01	0741	Soil	Comp		Metals					
	DE/24-8/1059/SDC/008		28Feb01	0759	Soil	Comp		VOC					
	DE/24-8/1059/SDC/009		28Feb01	0812	Soil	Comp		SVOC					
	DE/24-8/1059/SDC/010		28Feb01	0821	Soil	Comp		Pesticides					
	DE/24-8/1059/SDC/020		28Feb01	0741	Soil	Grab		Herbicides					
								Reactive Cyanide					
								Reactive Sulfide					
								Total Arsenic					
								Ignitability / Flashpoint					
								PH Corrosivity					
								Comments					
Sampled By Sam Dunkle		Method of Shipment		Blank/Cooler Temp 24°C		Remarks							
RELINQUISHED BY (sign) [Signature]		DATE 28Feb01		TIME 1607		RECEIVED BY (sign) [Signature]		DATE 28Feb01		TIME 1607		Sample Delivery Group ID	
RELINQUISHED BY (sign) [Signature]		DATE 28Feb01		TIME 1607		RECEIVED BY (sign) [Signature]		DATE 28Feb01		TIME 1607			
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY LAB (print/sign) [Signature]		DATE 28Feb01		TIME 1607			

Environmental Testing & Consulting, Inc.
Cooler Receipt FormDate Received 2/28/01
Date/Time Checked In 2/28/01-16:07
Carrier/Bill# Hand-DeliveredLIMS# 0102-839
Project Dunn Field
By Rebekah Barger

1. Custody Seals?/Location-	No
2. Samples are non-radioactive?	Yes
3. Chain of Custody in plastic?	Yes
4. Temperature at receipt (ok = 4 ± 2 °C) <40C	OK
5. Ice & Packing-bags, ice, bubble wrap	Yes
6. Chain of Custody filled out properly?	Yes
7. All containers in separate bags?	No
8. Sample containers intact?	Yes
9. Label(s) complete and in good condition?	Yes
10. Label(s) agree with Chain of Custody?	Yes
11. Correct containers used?	Yes
12. Sufficient sample?	Yes
13. VOA vials bubble-free (H ₂ O) or no head space (soil)?	Yes
14. Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

Environmental Testing & Consulting, Inc.

Sample Reports

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 894

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-01**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/006**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/09/01	GD	1010	IG030911
pH - Corrosivity	6.3	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000009

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 895

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

Date Arrived **02/28/01**
ETC Order Number **0102839**

ETC Lab ID : **0102839-02**
Field ID : **DF/24-B/1059/SDC/007**

Matrix : **SOIL**
Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/09/01	GD	1010	IG030911
pH - Corrosivity	6.2	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000010

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 896

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-03**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/008**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/09/01	GD	1010	IG030911
pH - Corrosivity	7.1	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000011

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 897

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-04**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/009**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/09/01	GD	1010	IG030911
pH - Corrosivity	7.4	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000012

656 898

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-05**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/010**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/09/01	GD	1010	IG030911
pH - Corrosivity	7.4	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000013

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 899

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-06**Matrix : **SOIL**Field ID : **DF/24-B/1059/GRAB/020**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/02/01	TL	7.3.3	RC030211
Ignitability/Flashpoint	>96	oC		03/09/01	GD	1010	IG030911
pH - Corrosivity	6.7	SU		03/02/01	TL	9045C	PH030200
Reactive Sulfide	ND	mg/Kg	25	03/02/01	TL	7.3.4	RS030211

CS
Data Validator

ND - Not Detected

000014

656 900

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

**P.O. Box 50397
Summerville, SC 29485-0397**

Date Arrived **02/28/01**

ETC Order Number **0102839**

ETC Lab ID : **0102839-01**

Matrix : **SOIL**

Field ID : **DF/24-B/1059/SDC/006**

Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47				03/01/01	NR	3051
Arsenic	8.14	mg/Kg	0.500	03/05/01	03/01/01	SH	6010B

CS
Data Validator

ND - Not Detected

000015

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 901

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-02**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/007**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47						
Arsenic	7.71	mg/Kg	0.500	03/05/01	03/01/01	NR SH	3051 6010B

65
Data Validator

ND - Not Detected

000016

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 902

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-03**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/008**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47				03/01/01	NR	3051
Arsenic	9.50	mg/Kg	0.500	03/05/01	03/01/01	SH	6010B

CS
Data Validator

ND - Not Detected

000017

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 903

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-04**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/009**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47						
Arsenic	9.70	mg/Kg	0.500	03/05/01	03/01/01 03/01/01	NR SH	3051 6010B

CS
Data Validator

ND - Not Detected

000018

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 904

Client Name

Innovative Waste Management

Site ID

Dunn Field**P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-05**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/010**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47						
Arsenic	10.6	mg/Kg	0.500	03/05/01	03/01/01	NR SH	3051 6010B

C J
Data Validator

ND - Not Detected

000019

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 905

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-06**Matrix : **SOIL**Field ID : **DF/24-B/1059/GRAB/020**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-47						
Arsenic	7.89	mg/Kg	0.500	03/05/01	03/01/01 03/01/01	NR SH	3051 6010B

Data Validator

ND - Not Detected

000020

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 906

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-01**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/006**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				03/01/01	TL 1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR 3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Barium - TCLP	1.21	mg/L	0.025	03/06/01	03/02/01	SH 6010B
Cadmium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF 7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B

CS
Data Validator

ND - Not Detected

000021

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 907

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-02**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/007**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/01/01	TL	1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR	3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Barium - TCLP	1.34	mg/L	0.025	03/06/01	03/02/01	SH	6010B
Cadmium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B

CS
Data Validator

ND - Not Detected

000022

656 908

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-03**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/008**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				03/01/01	TL 1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR 3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Barium - TCLP	1.49	mg/L	0.025	03/06/01	03/02/01	SH 6010B
Cadmium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF 7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B

CS
Data Validator

ND - Not Detected

000023

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 909

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-04**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/009**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/01/01	TL	1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR	3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Barium - TCLP	1.71	mg/L	0.025	03/06/01	03/02/01	SH	6010B
Cadmium - TCLP	0.012	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH	6010B

C >
Data Validator

ND - Not Detected

000024

656 910

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-05**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/010**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				03/01/01	TL 1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR 3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Barium - TCLP	1.36	mg/L	0.025	03/06/01	03/02/01	SH 6010B
Cadmium - TCLP	0.080	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF 7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B

CS
Data Validator

ND - Not Detected

000025

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 911

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID : **0102839-06**Matrix : **SOIL**Field ID : **DF/24-B/1059/GRAB/020**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				03/01/01	TL 1311
Metals Digestion Batch	V24-AQ-83				03/02/01	NR 3015A
Mercury Digestion Batch	V8-AQ-03				03/05/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Barium - TCLP	1.37	mg/L	0.025	03/06/01	03/02/01	SH 6010B
Cadmium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/06/01	03/02/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/08/01	03/05/01	JF 7470A
Lead - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/06/01	03/02/01	SH 6010B

CS
Data Validator

ND - Not Detected

000026

656 912

ENVIRONMENTAL TESTING & CONSULTING, INC.

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Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**
ETC Order Number **0102839**ETC Lab ID **0102839-01**
Field ID : **DF/24-B/1059/SDC/006**Matrix : **SOIL**
Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				03/01/01	TL 1311
TCLP Volatile Organics				03/07/01	LS	8260B 5030B
QC Batch	V203071					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	101		74 123			
S2 - Toluene-d8	105		86 112			
S3 - 4-Bromofluorobenzene	113		81 115			
S4 - 1,2-Dichloroethane-d4	115		80 120			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000027

ENVIRONMENTAL TESTING & CONSULTING, INC. 656 913

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**

ETC Order Number **0102839**

ETC Lab ID **0102839-02**

Field ID : **DF/24-B/1059/SDC/007**

Matrix : **SOIL**

Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate					
TCLP Volatile Organics				03/07/01	03/01/01	TL 1311 LS 8260B 5030B
QC Batch	V203071					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	99		74 123			
S2 - Toluene-d8	106		86 112			
S3 - 4-Bromofluorobenzene	111		81 115			
S4 - 1,2-Dichloroethane-d4	114		80 120			

C >
 Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000028

656 914

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-03**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/008**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				03/01/01	TL 1311
TCLP Volatile Organics				03/07/01	LS	8260B 5030B
QC Batch	V203071					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	99	74 123
S2 - Toluene-d8	107	86 112
S3 - 4-Bromofluorobenzene	113	81 115
S4 - 1,2-Dichloroethane-d4	112	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000029

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 915

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-04**Field ID : **DF/24-B/1059/SDC/009**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate					
TCLP Volatile Organics				03/12/01	03/01/01	TL 1311 LS 8260B 5030B
QC Batch	V203122					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	95		74 123			
S2 - Toluene-d8	95		86 112			
S3 - 4-Bromofluorobenzene	96		81 115			
S4 - 1,2-Dichloroethane-d4	94		80 120			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000030

656 916

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-05**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/010**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				03/01/01	TL 1311
TCLP Volatile Organics				03/12/01	LS	8260B 5030B
QC Batch	V203122					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	92	74 123
S2 - Toluene-d8	94	86 112
S3 - 4-Bromofluorobenzene	98	81 115
S4 - 1,2-Dichloroethane-d4	95	80 120

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000031

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 917

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-06**Field ID : **DF/24-B/1059/GRAB/020**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				TL	1311
TCLP Volatile Organics				03/12/01	LS	8260B 5030B
QC Batch	V203122					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	95		74	123		
S2 - Toluene-d8	97		86	112		
S3 - 4-Bromofluorobenzene	99		81	115		
S4 - 1,2-Dichloroethane-d4	99		80	120		

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000032

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 918

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-01**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/006**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/08/01	PF	8270C
					03/06/01	3510C
QC Batch	P06076					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			

Surrogate Standard	% Recovery	QC Limits
S1 - Nitrobenzene-d5	84	29 110
S2 - 2-Fluorobiphenyl	70	38 107
S3 - 4-Terphenyl-d14	107	33 122
S4 - Phenol-d6	24	7 58
S5 - 2,4,6-Tribromophenol	46	16 138
S6 - 2-Fluorophenol	34	8 88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000033

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 919

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-02**Field ID : **DF/24-B/1059/SDC/007**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/01/01	TL 1311
TCLP Semivolatiles				03/08/01	PF	8270C
QC Batch	P06076				03/06/01	3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			

Surrogate Standard	% Recovery	QC Limits
S1 - Nitrobenzene-d5	79	29 110
S2 - 2-Fluorobiphenyl	67	38 107
S3 - 4-Terphenyl-d14	89	33 122
S4 - Phenol-d6	22	7 58
S5 - 2,4,6-Tribromophenol	40	16 138
S6 - 2-Fluorophenol	32	8 88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000034

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2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 920

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-03**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/008**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/01/01	TL 1311
TCLP Semivolatiles				03/08/01	PF 8270C	
QC Batch	P06076				03/06/01	3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	84		29	110		
S2 - 2-Fluorobiphenyl	74		38	107		
S3 - 4-Terphenyl-d14	103		33	122		
S4 - Phenol-d6	24		7	58		
S5 - 2,4,6-Tribromophenol	43		16	138		
S6 - 2-Fluorophenol	34		8	88		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000035

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 921

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-04**Field ID : **DF/24-B/1059/SDC/009**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate					
TCLP Semivolatiles				03/08/01	03/01/01 03/06/01	TL 1311 PF 8270C 3510C
QC Batch	P06076					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			

Surrogate Standard	% Recovery	QC Limits
S1 - Nitrobenzene-d5	73	29 110
S2 - 2-Fluorobiphenyl	63	38 107
S3 - 4-Terphenyl-d14	98	33 122
S4 - Phenol-d6	21	7 58
S5 - 2,4,6-Tribromophenol	38	16 138
S6 - 2-Fluorophenol	30	8 88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000036

656 922

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-05**Field ID : **DF/24-B/1059/SDC/010**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/01/01	TL 1311
TCLP Semivolatiles				03/09/01	PF 8270C	3510C
QC Batch	P06076					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	78		29	110		
S2 - 2-Fluorobiphenyl	68		38	107		
S3 - 4-Terphenyl-d14	95		33	122		
S4 - Phenol-d6	22		7	58		
S5 - 2,4,6-Tribromophenol	39		16	138		
S6 - 2-Fluorophenol	32		8	88		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000037

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 923

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-06**Field ID : **DF/24-B/1059/GRAB/020**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate					
TCLP Semivolatiles				03/09/01	03/01/01 03/06/01	TL 1311 PF 8270C 3510C
QC Batch	P06076					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	79		29 110			
S2 - 2-Fluorobiphenyl	70		38 107			
S3 - 4-Terphenyl-d14	102		33 122			
S4 - Phenol-d6	22		7 58			
S5 - 2,4,6-Tribromophenol	39		16 138			
S6 - 2-Fluorophenol	32		8 88			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000038

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 924

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-01**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/006**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/01/01	TL 1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08022				03/06/01	3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	72		34	115		
S2 - Tetrachloro-m-xylene	59		31	96		

c s
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000039

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 925

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-02**Field ID : **DF/24-B/1059/SDC/007**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08022					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	68		34	115		
S2 - Tetrachloro-m-xylene	60		31	96		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000040

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 926

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-03**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/008**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/09/01	RG	8081A
					03/06/01	3510C
QC Batch	P08022					
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			

Surrogate Standard	% Recovery	QC Limits
S1 - Decachlorobiphenyl	67	34 115
S2 - Tetrachloro-m-xylene	59	31 96

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000041

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 927

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**

FID #

Summerville, SC 29485-0397Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-04**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/009**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08022				03/06/01	3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	70		34 115			
S2 - Tetrachloro-m-xylene	59		31 96			

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000042

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 928

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-05**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/010**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08022					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	64		34	115		
S2 - Tetrachloro-m-xylene	60		31	96		

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000043

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 929

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-06**Field ID : **DF/24-B/1059/GRAB/020**Matrix : **SOIL**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/01/01	TL 1311
TCLP Pesticides				03/09/01	RG	8081A
QC Batch	P08022				03/06/01	3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	69		34	115		
S2 - Tetrachloro-m-xylene	66		31	96		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000044

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 930

Client Name

Innovative Waste Management

Site ID Dunn Field

P.O. Box 50397

FID #

Summerville, SC 29485-0397

Date Arrived 02/28/01

ETC Order Number 0102839

ETC Lab ID 0102839-01

Matrix : SOIL

Field ID : DF/24-B/1059/SDC/006

Sample Date : 02/28/01

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/01/01	TL 1311
TCLP Herbicides				03/06/01	RG	8151A
QC Batch	P11088				03/06/01	8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	81		20 150			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000045

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 931

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-02**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/007**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/06/01	RG	8151A
QC Batch	P11088					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	73		20 150			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000046

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 932

Client Name

Innovative Waste Management

Site ID Dunn Field

P.O. Box 50397

Summerville, SC 29485-0397

FID #

Date Arrived 02/28/01

ETC Order Number 0102839

ETC Lab ID 0102839-03

Field ID : DF/24-B/1059/SDC/008

Matrix : SOIL

Sample Date : 02/28/01

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/06/01	RG	8151A
QC Batch	P11088					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	80		20 150			

65

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000047

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 933

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-04**Matrix : **SOIL**Field ID : **DF/24-B/1059/SDC/009**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/06/01	RG	8151A
QC Batch	P11088					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	80			20		150

C2
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000048

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 934

Client Name

Innovative Waste Management

Site ID Dunn Field

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived 02/28/01

ETC Order Number 0102839

ETC Lab ID 0102839-05

Field ID : DF/24-B/1059/SDC/010

Matrix : SOIL

Sample Date : 02/28/01

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/06/01	RG	8151A
QC Batch	P11088					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	75		20	150		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000049

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

656 935

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **02/28/01**ETC Order Number **0102839**ETC Lab ID **0102839-06**Matrix : **SOIL**Field ID : **DF/24-B/1059/GRAB/020**Sample Date : **02/28/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/06/01	RG	8151A
QC Batch	P11088					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	74		20 150			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000050

656 936

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Inorganics**

000051

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
INORGANICS – SOIL

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-839

HOLDING TIMES

Sample Analysis All samples analyzed within Method Specified Holding Times.

METHOD

Preparation/Analysis: 7.3.3
1010
9045C
7.3.4

QUALITY CONTROL

QC Batch
RC030211
IG030911
PH030200
RS030211

Method Blank

No Target Analytes detected above Detection Limit.

Laboratory Control Sample

Spike Recovery All analytes within QC limits

Duplicates

RPD All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required No dilutions required.

CS

Project Manager

656 938

METHOD BLANK
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Reactive Cyanide	RC0302111 BLK	RC030211	ND	0.125	mg/Kg	3/2/01	7.3.3
Reactive Sulfide	RS0302111 BLK	RS030211	ND	25	mg/Kg	3/2/01	7.3.4

NA - Not Applicable per Method

ND - Not Detected

Reviewed by: CS

INORG BLANK 0102-839.iqc

000053

LABORATORY CONTROL SAMPLE
INORGANICS

Lab Name. Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Spike Added	Found	Units	% Rec #	QC Limits	
Reactive Cyanide	RC0302111 LCS	RC030211	1000	309	mg/Kg	31	0	48
Reactive Sulfide	RS0302111 LCS	RS030211	285	220	mg/Kg	77	14	128
Ignitability	IG03092111 LCS	IG030911	27	27	deg C	100	96	104

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CS

INORG LCS 0102-839.iqc

000054

656 940

DUPLICATE
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	SAMPLE Result	DUP Result	Units	% RPD	#	QC Limits	Method
Ignitability	0102-839-02 DUP	IG030911	>96	>96	deg C	0		0 20	1010

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CS

INORG DUP 0102-839.iqc

000055

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Metals (ICP/GFAA/CV)**

656 942

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

METALS – SOIL

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-839

HOLDING TIMES

QC Batch(s) for this order ICP Metals V13-SO-47
Sample Preparation/Analysis All samples digested/ analyzed within holding time.

METHOD

Preparation: SW-846 3051
Analysis: SW-846 6010B

CALIBRATION

Initial Calibration All criteria met.
Continuing Calibration All criteria met.

SAMPLE ANALYSIS

Instrumentation Thermo Jarrell Ash Enviro-I ICP
Dilutions Required No dilutions required.
% Solids Adjustment Sample results were adjusted for % solids.

QUALITY CONTROL

0102-839.MQCBLANK

Method Blank

V13-SO-47BLK ICP Metals

No analytes detected in the Method Blank.

0102-839.MQCLCS

Laboratory Control Sample(s)

V13-SO-47LCS ICP Metals

All acceptance criteria met.

0102-839.MQCMSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0102-795-01	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/001	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

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Project Manager

000057

FORM 3A
SOLID METHOD BLANK
METALS

656 943

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals

V13-SO-47 BLK

QC Batch
V13-SO-47

Date Sample Prepared

3/1/01 ICP/GFAA Metals

Metals	Concentration mg/Kg	Detection Limit mg/Kg	Date Analyzed	Method
Arsenic	ND	5.00	3/5/01	6010B

ND - Not Detected

Reviewed by CS

0102-839.mqc BLANK

000058

656 944

FORM 7
SOLID LABORATORY CONTROL SAMPLE
METALS

Lab Name. Environmental Testing and Consulting, Inc

Laboratory Control ID

ICP/GFAA Metals V13-SO-47 LCSQC Batch
V13-SO-47

Date Prepared

ICP/GFAA Metals 3/1/01

Metals	Spike Added mg/Kg	Found mg/Kg	% R	#	QC Limits	
Arsenic	8.00	8.02	100		80	120

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS0102-839.mqc LCS
000059

FORM 6
SOLID MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals 0102-795-01 QC Batch V13-SO-47

Date Sample Prepared 3/1/01 ICP/GFAA Metals

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MS Conc mg/Kg	RPD <20% #	MS % Rec #	QC Limits	
Arsenic	7.55	7.96	14.7	1	89	75	125

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MSD Conc mg/Kg		MSD % Rec #	QC Limits	
Arsenic	7.55	7.96	14.9		92	75	125

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0102-839.mqc MSMSD

000060

ENVIRONMENTAL TESTING AND CONSULTING, INC.

656 946

CASE NARRATIVE

METALS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-839

HOLDING TIMES

QC Batch(s) for this order ICP Metals V24-AQ-83
Mercury V8-AQ-03

TCLP Extraction All soils extracted within 180 days.
(28 days for Mercury)

Sample Preparation All TCLP leachates prepared and analyzed within 180 days.
(28 days for Mercury)

CALIBRATION

Initial Calibration All criteria met.
Continuing Calibration All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required.

QUALITY CONTROL

0102-839.MQ1BLANK

Method Blank

V24-AQ-83BLK ICP Metals
V8-AQ-03BLK Mercury

No analytes detected in the Method Blank

0102-839.MQ1LCS

Laboratory Control Sample(s)

V24-AQ-83LCS ICP Metals
V8-AQ-03LCS Mercury

All criteria met.

0102-839.MQ1Sample MS

Matrix Spike - ICP Metals

0102-839-04

DF/24-B/1059/SDC/009 Spike Recovery All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike - Hg

0102-839-04

DF/24-B/1059/SDC/009 Spike Recovery All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

000061

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-839

QUALITY CONTROL

0102-839.MQ1MSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0102-795-05	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/005	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup - Hg

0102-795-05	RPD	All analytes within QC limits.
DF/24-B/1058/SDC/005	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is
 diluted by a factor of 5.
Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

CS
Project Manager

656 948

FORM 3A
TCLP/SPLP METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals

Laboratory ID Mercury

V24-AQ-83 BLKV8-AQ-03 BLK

QC Batch

V24-AQ-83V8-AQ-03

Date Sample Prepared

3/2/013/5/01

ICP/GFAA Metals

Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0.010	3/6/01	6010B
Arsenic	ND	0.100	3/6/01	6010B
Barium	ND	0.025	3/6/01	6010B
Cadmium	ND	0.010	3/6/01	6010B
Chromium	ND	0.010	3/6/01	6010B
Lead	ND	0.100	3/6/01	6010B
Selenium	ND	0.100	3/6/01	6010B
Mercury	ND	0.001	3/8/01	7470A

ND - Not Detected

Reviewed by CS

0102-839.mq1 BLANK

000063

FORM 7
TCLP/SPLP LABORATORY CONTROL SAMPLE
METALS

656 949

Lab Name: Environmental Testing and Consulting, Inc

Laboratory Control ID	ICP/GFAA Metals	<u>V24-AQ-83</u>	LCS	QC Batch
	Mercury	<u>V8-AQ-03</u>	LCS	<u>V24-AQ-83</u>
				<u>V8-AQ-03</u>
 Date Prepared	 ICP/GFAA Metals	 <u>3/2/01</u>		
	Mercury	<u>3/5/01</u>		

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0.250	0.265	106		80	120
Arsenic	0.100	0.104	104		80	120
Barium	2.50	2.76	110		80	120
Cadmium	0.020	0.022	110		80	120
Chromium	0.500	0.537	107		80	120
Lead	0.100	0.109	109		80	120
Selenium	0.100	0.106	106		80	120
Mercury	0.0050	0.0046	92		85	115

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

0102-839.mq1 LCS

000064

656 950

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0102-795-05	QC Batch
Laboratory ID MS Mercury	0102-795-05	V24-AQ-83
		V8-AQ-03
Date Sample Prepared	3/2/01	ICP/GFAA Metals
	3/5/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD < 20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0.271	1	108	50	150
Arsenic	1.25	ND	1.36	1	109	50	150
Barium	2.50	1.03	3.60	2	103	50	150
Cadmium	0.250	ND	0.265	2	106	50	150
Chromium	0.500	ND	0.520	1	104	50	150
Lead	1.25	ND	1.36	1	109	50	150
Selenium	1.25	ND	1.45	1	116	50	150
Mercury	0.0050	ND	0.0052	0	104	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by ES

0102-839.mq1 MSMSD

000065

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0102-795-05	QC Batch V24-AQ-83
Laboratory ID MS Mercury	0102-795-05	V8-AQ-03
Date Sample Prepared	3/2/01	ICP/GFAA Metals
	3/5/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec	QC Limits	
						#	
Silver	0.250	ND	0.269		108	50	150
Arsenic	1.25	ND	1.34		107	50	150
Barium	2.50	1.03	3.53		100	50	150
Cadmium	0.250	ND	0.260		104	50	150
Chromium	0.500	ND	0.516		103	50	150
Lead	1.25	ND	1.34		107	50	150
Selenium	1.25	ND	1.44		115	50	150
Mercury	0.0050	ND	0.0052		104	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0102-839.mq1 MSMSD

000066

656 952

FORM 6
SAMPLE MATRIX SPIKE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0102-839-04	QC Batch V24-AQ-83
Laboratory ID MS Mercury	0102-839-04	V8-AQ-03
Date Sample Prepared	3/2/01	ICP/GFAA Metals
	3/5/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L		MS % Rec	#	QC Limits
Silver	0.250	ND	0.280		112	50	150
Arsenic	1.25	ND	1.37		110	50	150
Barium	2.50	1.71	4.31		104	50	150
Cadmium	0.250	0.012	0.271		104	50	150
Chromium	0.500	ND	0.516		103	50	150
Lead	1.25	ND	1.36		109	50	150
Selenium	1.25	ND	1.49		119	50	150
Mercury	0.0050	ND	0.0052		104	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0102-839.mq1 Sample MS

000067

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Volatiles**

656 954

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

GC/MS VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management

Project Name Dunn Field

ETC Order # 0102-839

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Analysis All VOC extracts analyzed within 14days.

METHOD

Preparation: SW-846 1311

Analysis: SW-846 8260B

QUALITY CONTROL

QC Batch Form 4 Summary

V203071 V2030711LB

V203122 V2031221LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits.

Method Blank FORM 4

V2030711LB

V2031221LB

Target Analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3

V2030711LCS/LCSD

V2031221LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3

Batch V203071

Due to an instrumentation malfunction, data for the associated Matrix Spike and Matrix Spike Duplicate were not acquired.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup FORM 3

Batch V203122

0102-839-04

RPD

All analytes within QC limits.

DF/24-B/1059/SDC/009 Spike Recovery

All analytes within QC limits, except as listed below

Chloroform, 1,4-Dichlorobenzene, and 1,2-Dichloroethane were flagged for high recovery in the MS. MSD recoveries for these analytes were within control limits. Analytes were not detected in the associated project samples.

Refer to Laboratory Control Sample(s) for system verification.

000069

**CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - TCLP**

Client Name Innovative Waste Management
Project Name Dunn Field
ETC Order # 0102-839

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, Responses >30% non-target analytes.

Volatile Internal Standard Area and RT FORM 8

Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

CS
Project Manager

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	V2030711LCS	118	113	108	92	0
02	V2030711LCSD	112	108	108	93	0
03	V2030711LB	110	103	103	105	0
04	0102-839-1T	115	101	105	113	0
05	0102-839-2T	114	99	106	111	0
06	0102-839-3T	112	99	107	113	0
07	V2031221LCS	92	94	97	90	0
08	V2031221LB	87	88	91	94	0
09	0102-839-4T	94	95	95	96	0
10	0102-839-5T	95	92	94	98	0
11	0102-839-6T	99	95	97	99	0
12	0102-839-4TM	103	122	107	84	0
13	0102-839-4TM	94	101	104	83	0
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QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (80-120)
 SMC2 (DFM) = Dibromofluoromethane (74-123)
 SMC3 (TOL) = Toluene-d8 (86-112)
 OTHER (BFB) = Bromofluorobenzene (81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

056 957
CLIENT SAMPLE NO.

V2030711LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: 0302004

Lab Prep Batch: V203071

Date Analyzed: 03/07/01

Time Analyzed: 1149

GC Column:

ID: 2 (mm)

Heated Purge: (Y/N) Y

Instrument ID: VOC2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V2030711LCS	V203071	0201001TLCS	0952
02	V2030711LCSD	V203071	0202002TLCS	1035
03	0102-839-1T	V203071	0701008	1350
04	0102-839-2T	V203071	0801009	1420
05	0102-839-3T	V203071	0901010	1450
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COMMENTS:

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

656 958

V2030711LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix: (soil/water) WATER

Lab Prep Batch: V203071

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0302004

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 03/07/01

GC Column: ID: 2.00 (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
71-43-2-----	Benzene	1.00	U
78-93-3-----	2-Butanone	20.00	U
56-23-5-----	Carbon Tetrachloride	1.00	U
108-90-7-----	Chlorobenzene	1.00	U
67-66-3-----	Chloroform	1.00	U
106-46-7-----	1,4-Dichlorobenzene	1.00	U
107-06-2-----	1,2-Dichloroethane	1.00	U
75-35-4-----	1,1-Dichloroethene	1.00	U
127-18-4-----	Tetrachloroethene	1.00	U
79-01-6-----	Trichloroethene	1.00	U
75-01-4-----	Vinyl Chloride	1.00	U

FORM I VOA-GCMS

000073

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

656 959

Lab Name: ETC, INC.

Lab Prep Batch: V203071

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix, Spike - Sample No.: V2030711LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0		89.94	90	72-124
2-Butanone	100.0		103.7	104	55-151
Carbon Tetrachloride	100.0		120.6	121	64-123
Chlorobenzene	100.0		90.26	90	77-112
Chloroform	100.0		101.1	101	70-115
1,4-Dichlorobenzene	100.0		99.48	99	78-116
1,2-Dichloroethane	100.0		116.5	116	62-124
1,1-Dichloroethene	100.0		99.46	99	69-121
Tetrachloroethene	100.0		102.5	102	77-115
Trichloroethene	100.0		103.3	103	75-113
Vinyl Chloride	100.0		129.1	129	65-134

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	REC.
=====	=====	=====	=====	=====	=====	=====
Benzene	100.0	80.49	80	12	20	72-124
2-Butanone	100.0	103.9	104	0	20	55-151
Carbon Tetrachloride	100.0	102.1	102	17	20	64-123
Chlorobenzene	100.0	78.20	78	14	20	77-112
Chloroform	100.0	95.40	95	6	20	70-115
1,4-Dichlorobenzene	100.0	93.25	93	6	20	78-116
1,2-Dichloroethane	100.0	106.0	106	9	20	62-124
1,1-Dichloroethene	100.0	88.02	88	12	20	69-121
Tetrachloroethene	100.0	86.76	87	16	20	77-115
Trichloroethene	100.0	92.93	93	10	20	75-113
Vinyl Chloride	100.0	105.4	105	20	20	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS:

FORM III VOA-GCMS

000074

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

656 960

V2031221LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: 0301003

Lab Prep Batch: V203122

Date Analyzed: 03/12/01

Time Analyzed: 1517

GC Column: ID: 2 (mm)

Heated Purge: (Y/N) Y

Instrument ID: VOC2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V2031221LCS	V203122	0201001TLCS	1355
02	0102-839-4T	V203122	0402004	1548
03	0102-839-5T	V203122	0501005	1618
04	0102-839-6T	V203122	0601006	1649
05	0102-839-4TM	V203122	2001020	2358
06	0102-839-4TM	V203122	2101021	0028
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COMMENTS:

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

656 961
CLIENT SAMPLE NO.

V2031221LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix: (soil/water) WATER

Lab Prep Batch: V203122

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0301003

Level: (low/med) . LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 03/12/01

GC Column: ID: 2.00 (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

71-43-2-----	Benzene	1.00	U
78-93-3-----	2-Butanone	20.00	U
56-23-5-----	Carbon Tetrachloride	1.00	U
108-90-7-----	Chlorobenzene	1.00	U
67-66-3-----	Chloroform	1.00	U
106-46-7-----	1,4-Dichlorobenzene	1.00	U
107-06-2-----	1,2-Dichloroethane	1.00	U
75-35-4-----	1,1-Dichloroethene	1.00	U
127-18-4-----	Tetrachloroethene	1.00	U
79-01-6-----	Trichloroethene	1.00	U
75-01-4-----	Vinyl Chloride	1.00	U

FORM I VOA-GCMS

000076

656 962

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: V203122

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: V2031221LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0		96.67	97	72-124
2-Butanone	100.0		108.6	109	55-151
Carbon Tetrachloride	100.0		104.8	105	64-123
Chlorobenzene	100.0		109.7	110	77-112
Chloroform	100.0		98.90	99	70-115
1,4-Dichlorobenzene	100.0		107.5	108	78-116
1,2-Dichloroethane	100.0		116.3	116	62-124
1,1-Dichloroethene	100.0		98.24	98	69-121
Tetrachloroethene	100.0		92.60	93	77-115
Trichloroethene	100.0		107.8	108	75-113
Vinyl Chloride	100.0		105.0	105	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III VOA-GCMS

000077

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

656 963

Lab Name: ETC, INC.

Lab Prep Batch: V203122

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: 0102-839-4T

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0	0.000	111.2	111	72-124
2-Butanone	100.0	0.000	108.6	109	55-151
Carbon Tetrachloride	100.0	0.000	114.9	115	64-123
Chlorobenzene	100.0	0.000	96.77	97	77-112
Chloroform	100.0	0.000	117.3	117*	70-115
1,4-Dichlorobenzene	100.0	0.000	120.4	120*	78-116
1,2-Dichloroethane	100.0	0.000	128.2	128*	62-124
1,1-Dichloroethene	100.0	0.000	100.7	101	69-121
Tetrachloroethene	100.0	0.000	83.43	83	77-115
Trichloroethene	100.0	0.000	105.2	105	75-113
Vinyl Chloride	100.0	0.000	101.9	102	65-134

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
=====	=====	=====	=====	=====	=====	=====
Benzene	100.0	118.9	119	7	20	72-124
2-Butanone	100.0	111.8	112	3	20	55-151
Carbon Tetrachloride	100.0	115.1	115	0	20	64-123
Chlorobenzene	100.0	107.2	107	10	20	77-112
Chloroform	100.0	114.7	115	2	20	70-115
1,4-Dichlorobenzene	100.0	108.4	108	10	20	78-116
1,2-Dichloroethane	100.0	123.9	124	3	20	62-124
1,1-Dichloroethene	100.0	114.4	114	12	20	69-121
Tetrachloroethene	100.0	84.73	85	2	20	77-115
Trichloroethene	100.0	110.0	110	5	20	75-113
Vinyl Chloride	100.0	111.8	112	9	20	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 3 out of 22 outside limits

COMMENTS:

FORM III VOA-GCMS

000078

656 964

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Semi-Volatiles**

000079

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

656 965

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-839

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Extraction All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311/3510C
Analysis: SW-846 8270C

QUALITY CONTROL

QC Batch Form 4 Summary
P06076 P06076LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P06076LB

Target Analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3
P06076LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P06076

0102-839-01	RPD	All analytes within QC limits.
DF/24-B/1059/SDC/007	Spike Recovery	All analytes within QC limits, except as listed below.

Recoveries for 2-Methylphenol, 3&4-Methylphenol, 2,4,5-Trichlorophenol, and 2,4,6-Trichlorophenol were flagged for low recovery in the MS/MSD. Analytes were not detected in the associated project samples.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

000080

656 966

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management

Project Name Dunn Field

ETC Order # 0102-839

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD

Dilutions Required No dilutions required.

OTHER

Samples 0102-839-01MS/MSD were analyzed outside the 12-hour tune time. There is no effect on the data.



Project Manager

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

656 967

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P06076LB	59	60	94	19	31	28			0
02	P06076LCS	65	63	62	19	41	27			0
03	0102-839-1	84	70	107	24	46	34			0
04	0102-839-2	79	67	89	22	40	32			0
05	0102-839-3	84	74	103	24	43	34			0
06	0102-839-4	73	63	98	21	38	30			0
07	0102-839-5	78	68	95	22	39	32			0
08	0102-839-6	79	70	102	22	39	32			0
09	0102-839-1MS	88	69	93	25	48	35			0
10	0102-839-1MS	87	73	112	23	49	34			0
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QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (29-110)
 S2 (FBP) = 2-Fluorobiphenyl (38-107)
 S3 (TPH) = Terphenyl-d14 (33-122)
 S4 (PHL) = Phenol-d6 (7- 58)
 S5 (TBP) = 2,4,6-Tribromophenol (16-138)
 S6 (2FP) = 2-Fluorophenol (8- 88)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

656 968

FORM 4
BNA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P06076LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: 0701008

Lab Prep Batch: P06076

Instrument ID: BNA1

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/08/01

Level: (low/med) LOW

Time Analyzed: 1745

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P06076LCS	1818	0801009	03/08/01
02	0102-839-1	2211	1501016	03/08/01
03	0102-839-2	2244	1601017	03/08/01
04	0102-839-3	2316	1701018	03/08/01
05	0102-839-4	2350	1801019	03/08/01
06	0102-839-5	0023	1901020	03/09/01
07	0102-839-6	0056	2001021	03/09/01
08	0102-839-1MS	0235	2301024	03/09/01
09	0102-839-1MS	0309	2401025	03/09/01
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COMMENTS:

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 656 969

P06076LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix: (soil/water) WATER

Lab Prep Batch: P06076

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 0701008

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 1(mL)

Date Analyzed: 03/08/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7-----	1,4-Dichlorobenzene	5.00	U
121-14-2-----	2,4-Dinitrotoluene	5.00	U
118-74-1-----	Hexachlorobenzene	5.00	U
87-68-3-----	Hexachlorobutadiene	5.00	U
67-72-1-----	Hexachloroethane	5.00	U
95-48-7-----	2-Methylphenol	5.00	U
108-39-4-----	3&4-Methylphenol	5.00	U
98-95-3-----	Nitrobenzene	5.00	U
87-86-5-----	Pentachlorophenol	10.00	U
110-86-1-----	Pyridine	5.00	U
95-95-4-----	2,4,5-Trichlorophenol	5.00	U
88-06-2-----	2,4,6-Trichlorophenol	5.00	U

FORM I BNA-GCMS

000084

656 970

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06076

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: P06076LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	50.00		34.25	68	31- 97
2,4-Dinitrotoluene	50.00		35.70	71	34-130
Hexachlorobenzene	50.00		36.04	72	65-133
Hexachlorobutadiene	50.00		30.70	61	50-112
Hexachloroethane	50.00		29.43	59	37-100
2-Methylphenol	50.00		33.56	67	48-117
3&4-Methylphenol	50.00		31.06	62	46- 99
Nitrobenzene	50.00		33.42	67	57-120
Pentachlorophenol	50.00		31.09	62	22-171
Pyridine	50.00		11.70	23	10- 82
2,4,5-Trichlorophenol	50.00		34.22	68	31-147
2,4,6-Trichlorophenol	50.00		34.25	68	31-147

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 12 outside limits

COMMENTS:

FORM III BNA-GCMS

000085

Lab Name: ETC, INC.

Lab Prep Batch: P06076

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: 0102-839-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	400.0	0.000	281.1	70	31- 97
2,4-Dinitrotoluene	400.0	0.000	464.8	116	34-130
Hexachlorobenzene	400.0	0.000	339.5	85	65-133
Hexachlorobutadiene	400.0	0.000	275.9	69	50-112
Hexachloroethane	400.0	0.000	252.7	63	37-100
2-Methylphenol	1600	0.000	309.5	19*	40-117
3&4-Methylphenol	1600	0.000	567.8	35*	46- 99
Nitrobenzene	400.0	1.36	347.8	87	57-120
Pentachlorophenol	1600	0.000	389.4	24	22-171
Pyridine	400.0	0.000	229.6	57	10- 82
2,4,5-Trichlorophenol	1600	0.000	322.6	20*	31-147
2,4,6-Trichlorophenol	1600	0.000	314.7	20*	30-163

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,4-Dichlorobenzene	400.0	273.4	68	3	20 31- 97
2,4-Dinitrotoluene	400.0	475.9	119	2	20 34-130
Hexachlorobenzene	400.0	347.3	87	2	20 65-133
Hexachlorobutadiene	400.0	271.2	68	1	20 50-112
Hexachloroethane	400.0	257.2	64	2	20 37-100
2-Methylphenol	1600	288.0	18*	5	20 40-117
3&4-Methylphenol	1600	532.7	33*	6	20 46- 99
Nitrobenzene	400.0	344.3	86	1	20 57-120
Pentachlorophenol	1600	415.8	26	8	20 22-171
Pyridine	400.0	199.3	50	13	20 10- 82
2,4,5-Trichlorophenol	1600	323.8	20*	0	20 31-147
2,4,6-Trichlorophenol	1600	325.3	20*	0	20 30-163

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 8 out of 24 outside limits

COMMENTS:

656 972

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Pesticides**

000087

CASE NARRATIVE

PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field
ETC Order # 0102-839

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Extraction All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8081A

QUALITY CONTROL

QC Batch Form 4 Summary
P08022 P08022LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P08022LB

Target analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3
P08022LCS

All acceptance criteria met.

Matrix Spike/Matrix Spike Dup FORM 3
Batch P08022

0102-839-04 RPD All analytes within QC limits, except as listed below.
DF/24-B/1059/SDC/009 Spike Recovery All analytes within QC limits.

RPDs for Gamma-BHC (Lindane) and Heptachlor were flagged for high recovery due to variances in the MS/MSD recoveries.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration All criteria met. FORM 6
Calibration Verification All criteria met. FORM 7, Responses >15% affecting data listed below.

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE
PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-839

CALIBRATION

Calibration Verification (CV): Date 03/08/01 Time: 0506

<u>Analyte</u>	<u>%Diff(15% Max)</u>	<u>Response</u>
Endrin	-29.0	Low

Samples affected by this CV include P08022LB, P08022LCS, 0102-839-04MS/MSD. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in the method blank. LCS, MS and MSD recoveries were within control limits. Average response of all analytes was less than 15% and CV is considered acceptable per SW-846.

Calibration Verification (CV): Date 03/09/01 Time: 1332

<u>Analyte</u>	<u>%Diff(15% Max)</u>	<u>Response</u>
Endrin	-30.0	Low

Samples affected by this CV include 0102-839-01 through 0102-839-06. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in the associated project samples. Average response of all analytes was less than 15% and CV is considered acceptable per SW-846.

Calibration Verification (CV): Date 03/09/01 Time: 1740

<u>Analyte</u>	<u>%Diff(15% Max)</u>	<u>Response</u>
Endrin	-41.5	Low
Decachlorobiphenyl	-16.0	Low (Surrogate)

Samples affected by this CV include 0102-839-01 through 0102-839-06. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in the associated project samples. Surrogate recoveries were within control limits for all associated project samples. This run was an ending calibration verification. The previous CV @1332 was within control limits for the surrogate. Average response of all analytes was less than 15% and CV is considered acceptable per SW-846.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.



Project Manager

FORM 2
WATER PESTICIDE SURROGATE RECOVERY

656 975

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

	CLIENT SAMPLE NO.	S1 (DCB) #	S2 (TCX) #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P08022LB	64	50							0
02	P08022LCS	76	55							0
03	0102-839-4MS	76	64							0
04	0102-839-4MS	75	50							0
05	0102-839-1	72	59							0
06	0102-839-2	68	60							0
07	0102-839-3	67	59							0
08	0102-839-4	70	59							0
09	0102-839-5	64	60							0
10	0102-839-6	69	66							0
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QC LIMITS
S1 (DCB) = Decachlorobiphenyl (34-115)
S2 (TCX) = Tetrachloro-m-xylene (31- 96)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

656 976

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P08022LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: P303071B-21R

Lab Prep Batch: P08022

Instrument ID: PEST3B

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/08/01

Level: (low/med) LOW

Time Analyzed: 0031

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P08022LCS	0221	P303071B-25R	03/08/01
02	0102-839-4MS	0344	P303071B-28R	03/08/01
03	0102-839-4MS	0411	P303071B-29R	03/08/01
04	0102-839-1	1455	P303081A-49R	03/09/01
05	0102-839-2	1522	P303081A-50R	03/09/01
06	0102-839-3	1550	P303081A-51R	03/09/01
07	0102-839-4	1617	P303081A-52R	03/09/01
08	0102-839-5	1645	P303081A-53R	03/09/01
09	0102-839-6	1712	P303081A-54R	03/09/01
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COMMENTS:

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 656 977

P08022LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix: (soil/water) WATER

Lab Prep Batch: P08022

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: P303071B-21R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 10 (mL)

Date Analyzed: 03/08/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

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

309-00-2-----	Aldrin	0.0400	U
319-84-6-----	alpha-BHC	0.0400	U
959-98-8-----	Endosulfan I	0.0400	U
319-85-7-----	beta-BHC	0.0400	U
319-86-8-----	delta-BHC	0.0400	U
58-89-9-----	gamma-BHC (Lindane)	0.0400	U
5103-71-9-----	alpha-chlordane	0.0400	U
5103-74-2-----	gamma-chlordane	0.0400	U
57-74-9-----	Chlordane	0.250	U
2921-88-2-----	Chlorpyrifos	0.0400	U
72-54-8-----	4,4'-DDD	0.0400	U
72-55-9-----	4,4'-DDE	0.0400	U
50-29-3-----	4,4'-DDT	0.0400	U
60-57-1-----	Dieldrin	0.0400	U
33213-65-9-----	Endosulfan II	0.0400	U
1031-07-8-----	Endosulfan sulfate	0.0400	U
72-20-8-----	Endrin	0.0400	U
7421-93-4-----	Endrin aldehyde	0.0400	U
53494-70-5-----	Endrin ketone	0.0400	U
76-44-8-----	Heptachlor	0.0400	U
1024-57-3-----	Heptachlor epoxide	0.0400	U
72-43-5-----	Methoxychlor	0.0400	U
8001-35-2-----	Toxaphene	2.50	U

FORM I PESTICIDE

000092

656 978

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P08022

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: P08022LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	1.00		0.619	62	41-102
Endrin	1.00		0.626	63	45-117
Heptachlor	1.00		0.643	64	43-114
Methoxychlor	1.00		0.810	81	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

FORM III PESTICIDE

000093

FORM 3
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

656 979

Lab Name: ETC, INC.

Lab Prep Batch: P08022

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: 0102-839-4

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	4.00		3.17	79	41-102
Endrin	4.00		2.92	73	45-117
Heptachlor	4.00		3.34	84	43-114
Methoxychlor	4.00		3.68	92	39-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
=====	=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	4.00	2.49	62	24*	20	41-102
Endrin	4.00	2.42	60	20	20	45-117
Heptachlor	4.00	2.65	66	24*	20	43-114
Methoxychlor	4.00	3.27	82	11	20	39-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 2 out of 4 outside limits

Spike Recovery: 0 out of 8 outside limits

COMMENTS:

FORM III PESTICIDE

000094

656 980

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Herbicides**

000095

CASE NARRATIVE
HERBICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0102-839

HOLDING TIMES

TCLP Extraction	All samples extracted within 14 days.
Sample Extraction	All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis	All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation. SW-846 1311
Analysis: SW-846 8151A

QUALITY CONTROL

QC Batch Form 4 Summary
P11088 P11088LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P11088LB
P11088LB2

Target analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3
P11088LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P11088

0102-839-04	RPD	All analytes within QC limits.
DF/24-B/1059/SDC/009	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

656 982

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

HERBICIDE - TCLP

Client Name Innovative Waste Management

Project Name Dunn Field

ETC Order # 0102-839

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC

Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.



Project Manager

000097

FORM 2
WATER HERBICIDE SURROGATE RECOVERY

656 983

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

	EPA GC SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P11088LB	33								0
02	P11088LB2	87								0
03	P11088LCS	83								0
04	0102-839-4MS	94								0
05	0102-839-4MS	93								0
06	0102-839-1	81								0
07	0102-839-2	73								0
08	0102-839-3	80								0
09	0102-839-4	80								0
10	0102-839-5	75								0
11	0102-839-6	74								0
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

S1 = 2,4,5-T

QC LIMITS
(20-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

656 984

FORM 4
HERBICIDE METHOD BLANK SUMMARY

EPA GC SAMPLE NO.

P11088LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: H203061B-03R

Lab Prep Batch: P11088

Instrument ID: PEST2B

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/06/01

Level: (low/med) LOW

Time Analyzed: 1624

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P11088LCS	1714	H203061B-05R	03/06/01
02	0102-839-4MS	1739	H203061B-06R	03/06/01
03	0102-839-4MS	1804	H203061B-07R	03/06/01
04	0102-839-1	1920	H203061B-10R	03/06/01
05	0102-839-2	1945	H203061B-11R	03/06/01
06	0102-839-3	2010	H203061B-12R	03/06/01
07	0102-839-4	2035	H203061B-13R	03/06/01
08	0102-839-5	2101	H203061B-14R	03/06/01
09	0102-839-6	2126	H203061B-15R	03/06/01
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
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25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

656 985

EPA GC SAMPLE NO.

P11088LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix: (soil/water) WATER

Lab Prep Batch: P11088

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: H203061B-03R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/06/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
94-75-7-----	2,4-D	0.0500	U	
93-72-1-----	Silvex	0.00500	U	

FORM I HERBICIDE

000100

P11088LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: H203061B-04R

Lab Prep Batch: P11088

Instrument ID: PEST2B

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/06/01

Level: (low/med) LOW

Time Analyzed: 1649

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P11088LCS	1714	H203061B-05R	03/06/01
02	0102-839-4MS	1739	H203061B-06R	03/06/01
03	0102-839-4MS	1804	H203061B-07R	03/06/01
04	0102-839-1	1920	H203061B-10R	03/06/01
05	0102-839-2	1945	H203061B-11R	03/06/01
06	0102-839-3	2010	H203061B-12R	03/06/01
07	0102-839-4	2035	H203061B-13R	03/06/01
08	0102-839-5	2101	H203061B-14R	03/06/01
09	0102-839-6	2126	H203061B-15R	03/06/01
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
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26				
27				
28				
29				
30				

COMMENTS:

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

EPA GC SAMPLE NO. 656 987

P11088LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix: (soil/water) WATER

Lab Prep Batch: P11088

Sample wt/vol: 250.0 (g/mL) ML

Lab File ID: H203061B-04R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/06/01

Injection Volume: 1.0 (uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
94-75-7-----	2,4-D	1.00	U	
93-72-1-----	Silvex	0.100	U	

FORM I HERBICIDE

000102

656 988

FORM 3
WATER HERBICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P11088

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: P11088LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2,4-D	5.00		4.02	80	20-150
Silvex	5.00		3.50	70	20-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM III HERBICIDE

000103

FORM 3
WATER HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

656 989

Lab Name: ETC, INC.

Lab Prep Batch: P11088

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Matrix Spike - Sample No.: 0102-839-4

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2,4-D	20.00	0.000	19.66	98	20-150
Silvex	20.00	0.000	15.57	78	20-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
=====	=====	=====	=====	=====	=====	=====
2,4-D	20.00	19.40	97	1	20	20-150
Silvex	20.00	15.91	80	2	20	20-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS:

FORM III HERBICIDE

000104

656 990

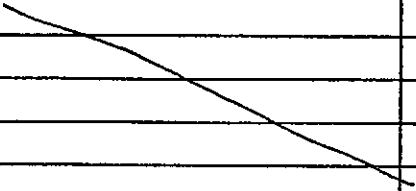
Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
Inorganics**

000105

Environmental Testing and Consulting, Inc.
Ignitability

Batch: IG030911Analyst: gtDate: 3/9/01Time: 0745Page of

ETC Sample ID	Result 1 oC	Result 2 oC	Average Result oC	QC Data	Observations
p-Xylene Std ¹	27		27		
0102-839-01	>96		>96		
02	>96		>96		
03	>96		>96		
04	>96		>96		
05	>96		>96		
06	>96		>96		
					
0102-839-02 Duplicate	>96		>96		

1: p-Xylene Standard Ignition Point = 27oC

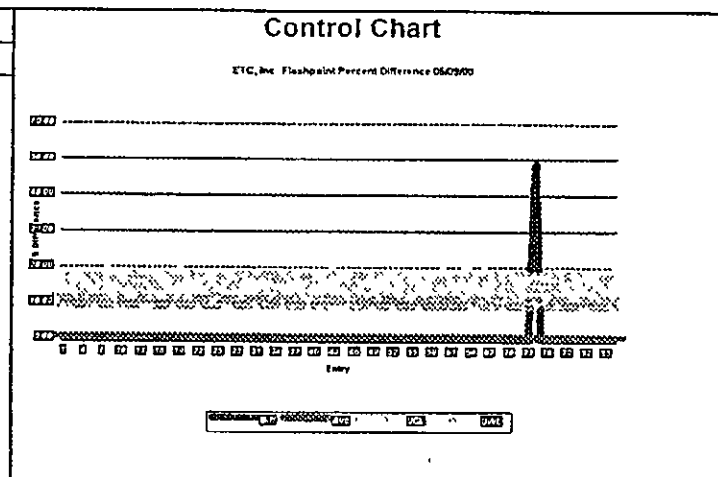
Acceptance Range = +/- 1oC.

If any samples ignite at >90oC then acceptable range = +/- 0.5oC.

Standards Verification	
p-Xylene SRN 1B-5-15	

QC Limits	
UCL:	15
UWL:	9.79
AVE:	0.45

Notes:

**Data Validation**Analyst: gt 3/9/01Supervisor: gt 3/9/01

QAO: _____

RC030211
RS030211

Analyst Date Time	ETC Sample ID	Samp Size	S- Abs	CNR Abs	S- ppm	CNR ppm	Observations
TL	Sulfide LCS	10.4	21.0/15.5	—	220	—	77 %Rec
3-2-01	Cyanide LCS	10.4	—	1.100/0.427	—	309	31 %Rec
	BLANK	10.4	11.0/11.0	0.000	<25	<0.125	
	INNOV WASTE 0102-795-01	10.3	11.0/11.0	—	<25	—	
	01	10.4	—	0.000	—	<0.125	
	02	10.4	11.0/10.95	—	<25	—	
	02	10.2	—	0.000	—	<0.125	
	03	10.2	11.0/10.8	—	<25	—	
	03	10.3	—	0.000	—	<0.125	
	04	10.0	11.0/11.0	—	<25	—	
	04	10.2	—	0.000	—	<0.125	
	05	10.1	11.0/10.9	—	<25	—	
	05	10.4	—	0.000	—	<0.125	

S- LCS Concentration: 285 mg/LS- LCS SRN: W-5-90-2CN- LCS Concentration: 1000 mg/LCN- LCS SRN: W-5-77-23

Reac CN % REC

UCL: 48

LCL: 0

Reac S- % REC

UCL: 128

LCL: 14

Method Detection Limit = 0.125 mg/L Reactive Cyanide

Method Detection Limit = 25 mg/L Reactive Sulfide

NOTES: _____

Analyst (Date/Sign): TRG 3/2/01Supervisor (Date/Sign): gpc 3/2/01

QAO: _____

SLOP\reac.wks

000107

RC030211
RS030211

Analyst Date Time	ETC Sample ID	Samp Size	S- Abs	CNR Abs	S- ppm	CNR ppm	Observations
TL	Sulfide LCS						%Rec
3.2.01	Cyanide LCS						%Rec
	BLANK						
	INDU WASTE 0102-839-01	10.3	11.0/ 10.75	-	<25	-	
	01	10.2	-	0.000	-	<0.125	
	02	10.1	11.0/ 10.7	-	<25	-	
	02	10.4	-	0.000	-	<0.125	
	03	10.3	11.0/ 10.6	-	<25	-	
	03	10.2	-	0.000	-	<0.125	
	04	10.2	11.0/ 10.7	-	<25	-	
	04	10.7	-	0.000	-	<0.125	
	05	10.2	11.0/ 10.6	-	<25	-	
	05	10.4	-	0.000	-	<0.125	
	06	10.1	11.0/ 10.8	-	<25	-	
	06	10.2	-	0.000	-	<0.125	

S- LCS Concentration: _____ mg/L

S- LCS SRN: _____

CN- LCS Concentration: _____ mg/L

CN- LCS SRN: _____

Reac CN % REC

UCL: 48

LCL: 0

Reac S- % REC

UCL: 128

LCL: 14

Method Detection Limit = 0.125 mg/L Reactive Cyanide
Method Detection Limit = 25 mg/L Reactive Sulfide

NOTES: _____

Analyst (Date/Sign): TL/gt 3/2/01

Supervisor (Date/Sign): gt/gt 3/2/01

QAO: _____

SLOP\reac.wks

656 994

CN⁺

1117/01

578 nm gD

CY IC-011701

std	abs
0.000	0.000
0.010	0.014, 0.016
0.020	0.029, 0.033
0.040	0.057, 0.063
0.100	0.136, 0.143
0.200	0.276, 0.280
0.400	0.548, 0.551

V
T
S
T
S

ABS

0.600

0.500

0.400

0.300

0.200

0.100

 $r = 0.9999$ $\text{abs} = 1.0038$

1.370

0.100

0.200

0.300

0.400

mg/L

000109

U.S. GOVERNMENT PRINTING OFFICE: 1964 O 344-104

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
Metals (ICP/GFAA/CV)**

ENVIRONMENTAL TESTING & CONSULTING, INC

ICP Metals Sequence Check List

Sequence ID : 030501 System ID : ICP/ICPT Date/Time: 3-5-01 1305Analyst : SL
Supervisor: JF

1. Instrument Profile Intensity Check

8580

2. Initial Calibration

- Initial Calibration Blank (STD1-Blank)
- Initial Calibration Standard 1 (C1) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 2 (C2) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 3 (C3) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 4 (C4) 3 Exposures at less than 3% RSD
- Standardization Report

3. Initial Calibration Readback (+/- 5% Difference Check Table)

Failures

a. Initial Calibration Standard 1 (C1)	_____	✓	_____
b. Initial Calibration Standard 2 (C2)	_____	✓	_____
c. Initial Calibration Standard 3 (C3)	_____	✓	_____
d. Initial Calibration Standard 4 (C4)	_____	✓	_____

4. Initial Calibration Verification

e. Initial Calibration Blank (ICB) – All elements below MDL/MQL	_____	✓	_____
f. Initial Calibration Verification (ICV1) – (5%)	<u>ALL OK AT ± 10%</u>	✓	<u>Pb, Fe, Pb, Zn</u>
g. Low Level Check (LLC1) – (20%)	_____	✓	<u>ATM</u>
h. Low Level Check (LLC2) – (20%)	_____	—	_____
i. Interelement Correction Standard – Initial (ICSAB) – (20%)	_____	✓	_____
j. Interelement Correction Standard – Final (ICSAB) – (20%)	_____	✓	_____

Comments

Applicable ETC Order Nos. for this sequence:

<u>024-AQ-71</u>	_____	_____	_____	_____
<u>710</u>	_____	_____	_____	_____
<u>013-50-40</u>	_____	_____	_____	_____
<u>47</u>	_____	_____	_____	_____
<u>0102-670</u>	_____	_____	_____	_____
<u>671</u>	_____	_____	_____	_____
<u>542</u>	_____	_____	_____	_____
<u>719</u>	_____	_____	_____	_____
<u>722</u>	_____	_____	_____	_____
<u>776</u>	_____	_____	_____	_____
<u>6660</u>	_____	_____	_____	_____
<u>795</u>	_____	_____	_____	_____
<u>839</u>	_____	_____	_____	_____

Table Name: PLASMA1 Autosampler Type: TYPE TJA
 Sample Positions: 42/192 QC Positions: 19/19 # Sets: 1
 Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	19	10
2	Sample (16mm)	Samples	0	1
3	Sample (16mm)	Samples	0	1
4	Sample (16mm)	Samples	0	1
5	Sample (16mm)	Samples	42	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No		ICPT	150	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor
No Samples Prepared.				

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...19 Not Used)						

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	V24-AQ-71 S.B.	1	-NA-	Sample
2	1	2	V24-AQ-76 S.B.	1	-NA-	Sample
3	1	3	V13-SO-46 S.B.	1	-NA-	Sample
4	1	4	V13-SO-47 S.B.	1	-NA-	Sample
5	1	5	V24-AQ-71 LC.	1	-NA-	Sample
6	1	6	V24-AQ-76 LC.	1	-NA-	Sample
7	1	7	V13-SO-46 LC.	1	-NA-	Sample
8	1	8	V13-SO-47 LC.	1	-NA-	Sample
9	1	9	0102-670-11	1	-NA-	Sample
10	1	10	0102-670-12	1	-NA-	Sample
11	1	11	CCB1	1	-NA-	Sample
12	1	12	CCV1	1	-NA-	Sample
13	2	1	0102-670-12 MS	1	-NA-	Sample
14	2	2	0102-670-12 MSD	1	-NA-	Sample
15	2	3	0102-670-13	1	-NA-	Sample
16	2	4	0102-670-14	1	-NA-	Sample
17	2	5	0102-670-15	1	-NA-	Sample
18	2	6	0102-671-01	1	-NA-	Sample
19	2	7	0102-671-02	1	-NA-	Sample
20	2	8	0102-671-03	1	-NA-	Sample
21	2	9	0102-671-04	1	-NA-	Sample

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0102-671-05	1	-NA-	Sample
23	2	11	CCB2	1	-NA-	Sample
24	2	12	CCV2	1	-NA-	Sample
25	3	1	0102-671-06	1	-NA-	Sample
26	3	2	0102-671-07	1	-NA-	Sample
27	3	3	0102-671-08	1	-NA-	Sample
28	3	4	0102-671-09	1	-NA-	Sample
29	3	5	0102-671-10	1	-NA-	Sample
30	3	6	0102-542-01	1	-NA-	Sample
31	3	7	0102-542-03	1	-NA-	Sample
32	3	8	0102-542-04	1	-NA-	Sample
33	3	9	0102-542-05	1	-NA-	Sample
34	3	10	0102-719-18	1	-NA-	Sample
35	3	11	CCB3	1	-NA-	Sample
36	3	12	CCV3	1	-NA-	Sample
37	4	1	0102-719-18 MS	1	-NA-	Sample
38	4	2	0102-719-18 MSD	1	-NA-	Sample
39	4	3	0102-719-19	1	-NA-	Sample
40	4	4	0102-722-20	1	-NA-	Sample
41	4	5	0102-722-21	1	-NA-	Sample
42	4	6	0102-722-22	1	-NA-	Sample
43	4	7	0102-722-23	1	-NA-	Sample
44	4	8	0102-722-24	1	-NA-	Sample
45	4	9	0102-722-25	1	-NA-	Sample
46	4	10	0102-776-01	1	-NA-	Sample
47	4	11	CCB4	1	-NA-	Sample
48	4	12	CCV4	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	0102-776-02	1	-NA-	Sample
2	1	2	0102-776-03	1	-NA-	Sample
3	1	3	0102-776-04	1	-NA-	Sample
4	1	4	0102-776-05	1	-NA-	Sample
5	1	5	0102-776-06	1	-NA-	Sample
6	1	6	0102-670-01	1	-NA-	Sample
7	1	7	0102-670-02	1	-NA-	Sample
8	1	8	0102-670-03	1	-NA-	Sample
9	1	9	0102-670-04	1	-NA-	Sample
10	1	10	0102-670-05	1	-NA-	Sample
11	1	11	CCB5	1	-NA-	Sample
12	1	12	CCV5	1	-NA-	Sample
13	2	1	0102-670-06	1	-NA-	Sample
14	2	2	0102-670-07	1	-NA-	Sample
15	2	3	0102-670-08	1	-NA-	Sample
16	2	4	0102-670-09	1	-NA-	Sample
17	2	5	0102-670-10	1	-NA-	Sample
18	2	6	0102-670-10 MS	1	-NA-	Sample
19	2	7	0102-670-10 MSD	1	-NA-	Sample
20	2	8	0102-666-01	1	-NA-	Sample
21	2	9	0102-666-02	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0102-666-03	1	-NA-	Sample
23	2	11	CCB6	1	-NA-	Sample
24	2	12	CCV6	1	-NA-	Sample
25	3	1	0102-666-04	1	-NA-	Sample
26	3	2	0102-666-06	1	-NA-	Sample
27	3	3	0102-795-01	1	-NA-	Sample
28	3	4	0102-795-01 MS	1	-NA-	Sample
29	3	5	0102-795-01 MSD	1	-NA-	Sample
30	3	6	0102-795-02	1	-NA-	Sample
31	3	7	0102-795-03	1	-NA-	Sample
32	3	8	0102-795-04	1	-NA-	Sample
33	3	9	0102-795-05	1	-NA-	Sample
34	3	10	0102-839-01	1	-NA-	Sample
35	3	11	CCB7	1	-NA-	Sample
36	3	12	CCV7	1	-NA-	Sample
37	4	1	0102-839-02	1	-NA-	Sample
38	4	2	0102-839-03	1	-NA-	Sample
39	4	3	0102-839-04	1	-NA-	Sample
40	4	4	0102-839-05	1	-NA-	Sample
41	4	5	0102-839-06	1	-NA-	Sample
42	4	6	CCB8	1	-NA-	Sample
43	4	7	CCV8	1	-NA-	Sample
44	4	8	ICSA	1	-NA-	Sample
45	4	9	ICSAB	1	-NA-	Sample
46	4	10	(empty)	1	-NA-	-NA-
47	4	11	(empty)	1	-NA-	-NA-
48	4	12	(empty)	1	-NA-	-NA-

Rack #4

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	(empty)	1	-NA-	-NA-
2	1	2	(empty)	1	-NA-	-NA-
3	1	3	(empty)	1	-NA-	-NA-
4	1	4	(empty)	1	-NA-	-NA-
5	1	5	(empty)	1	-NA-	-NA-
6	1	6	(empty)	1	-NA-	-NA-
7	1	7	(empty)	1	-NA-	-NA-
8	1	8	(empty)	1	-NA-	-NA-
9	1	9	(empty)	1	-NA-	-NA-
10	1	10	(empty)	1	-NA-	-NA-
11	1	11	(empty)	1	-NA-	-NA-
12	1	12	(empty)	1	-NA-	-NA-
13	2	1	(empty)	1	-NA-	-NA-
14	2	2	(empty)	1	-NA-	-NA-
15	2	3	(empty)	1	-NA-	-NA-
16	2	4	(empty)	1	-NA-	-NA-
17	2	5	(empty)	1	-NA-	-NA-
18	2	6	(empty)	1	-NA-	-NA-
19	2	7	(empty)	1	-NA-	-NA-
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-

6561000

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/05/01 1305 Instrument ICPT

Initial Calibration Source C1 M5-30-21 C2 M5-33-11 C3 M5-33-03 C4 M5-18-04

Continuing Calibration Source ICV/CCV M5-29-18

Analyte	Initial Calibration Verification				Continuing CCV1			Continuing CCV6			Continuing CCV7			
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag
Arsenic	500	508	2	<5	500	508	2	<5	527	5	<10	520	4	<5

Analyte	Continuing CCV8			Found			Flag		
	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found	%Diff(1)
Arsenic	500	521	4	<5					

(1) Percent difference from true value. ICP Method 6010B - 10% ICP Method 200.7 - 5%

000115

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc Date/Time of Sequence 03/05/01 1305 Instrument ICPT

Analyte	Initial Calibration Blank ug/L	Continuing Calibration Blank ug/L							
		CCB1	CCB6	CCB7	CCB8				
Arsenic	ND	ND	ND	ND	ND				

6561002

FORM 4
INTERFERENCE CHECK SAMPLE
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/05/01 1305 Instrument ICPT

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	AB	Sol AB	%REC	Sol AB	%REC
Aluminum	250000	251000	100	256000	102
Arsenic	200	212	106	220	110
Calcium	250000	247000	99	252000	101
Iron	100000	99300	99	105000	105
Magnesium	250000	259000	104	266000	106

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	A	Sol A	%REC	Sol A	%REC
Aluminum	250000	254000	102	256000	102
Arsenic	0	ND	0	ND	0
Calcium	250000	256000	102	258000	103
Iron	100000	98100	98	103000	103
Magnesium	250000	258000	103	263000	105

ENVIRONMENTAL TESTING & CONSULTING, INC

ICP Metals Sequence Check List

Sequence ID : 30601

System ID : ICP/ICPT Date/Time: 3-6-01 1554

Analyst : SH
Supervisor: JF

1. Instrument Profile Intensity Check

8720

2 Initial Calibration

- Initial Calibration Blank (STD1-Blank)
- Initial Calibration Standard 1 (C1) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 2 (C2) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 3 (C3) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 4 (C4) 3 Exposures at less than 3% RSD
- Standardization Report

3. Initial Calibration Readback (+/- 5% Difference Check Table)

Failures

a. Initial Calibration Standard 1 (C1)	_____	✓	_____
b. Initial Calibration Standard 2 (C2)	_____	✓	_____
c. Initial Calibration Standard 3 (C3)	_____	✓	_____
d. Initial Calibration Standard 4 (C4)	_____	✓	_____

4 Initial Calibration Verification

e.	Initial Calibration Blank (ICB) – All elements below MDL/MQL	✓	
f.	Initial Calibration Verification (ICV1) – (5%)	✓	Na, B
g.	Low Level Check (LLC1) – (20%)	✓	Na
h.	Low Level Check (LLC2) – (20%)	—	
i.	Interelement Correction Standard – Initial (ICSAB) – (20%)	✓	
j.	Interelement Correction Standard – Final (ICSAB) – (20%)	✓	

Comments

Applicable ETC Order Nos. for this sequence:

U24-AQ-83

V13-50-48

0102-795

-99

839

810

0105-047

0102-719

1000

Table Name: PLASMA1 Autosampler Type: TYPE TJA
Sample Positions: 42/192 QC Positions: 19/19 # Sets: 1
Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	19	10
2	Sample (16mm)	Samples	0	1
3	Sample (16mm)	Samples	0	1
4	Sample (16mm)	Samples	0	1
5	Sample (16mm)	Samples	42	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No		ICPT	150	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor
No Samples Prepared.				

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...19 Not Used)						

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	V24-AQ-83 SB.	1	-NA-	Sample
2	1	2	V13-SO-48 S.B.	1	-NA-	Sample
3	1	3	2-28-01 BLANK F1	1	-NA-	Sample
4	1	4	3-01-01 BLANK F1	1	-NA-	Sample
5	1	5	V24-AQ-83 LC.	1	-NA-	Sample
6	1	6	V13-SO-48 LC.	1	-NA-	Sample
7	1	7	0102-795-01	1	-NA-	Sample
8	1	8	0102-795-02	1	-NA-	Sample
9	1	9	0102-795-03	1	-NA-	Sample
10	1	10	0102-795-04	1	-NA-	Sample
11	1	11	CCB1	1	-NA-	Sample
12	1	12	CCV1	1	-NA-	Sample
13	2	1	0102-795-05	1	-NA-	Sample
14	2	2	0102-795-05 MS	1	-NA-	Sample
15	2	3	0102-795-05 MSD	1	-NA-	Sample
16	2	4	0102-799-01	1	-NA-	Sample
17	2	5	0102-799-01 MS	1	-NA-	Sample
18	2	6	0102-839-01	1	-NA-	Sample
19	2	7	0102-839-02	1	-NA-	Sample
20	2	8	0102-839-03	1	-NA-	Sample
21	2	9	0102-839-04	1	-NA-	Sample

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0102-839-04 MS	1	-NA-	Sample
23	2	11	CCB2	1	-NA-	Sample
24	2	12	CCV2	1	-NA-	Sample
25	3	1	0102-839-05	1	-NA-	Sample
26	3	2	0102-839-06	1	-NA-	Sample
27	3	3	0102-810-01	1	-NA-	Sample
28	3	4	0102-810-01 MS	1	-NA-	Sample
29	3	5	0102-810-01 MSD	1	-NA-	Sample
30	3	6	0102-810-02	1	-NA-	Sample
31	3	7	0102-810-03	1	-NA-	Sample
32	3	8	0102-810-04	1	-NA-	Sample
33	3	9	0102-810-05	1	-NA-	Sample
34	3	10	0102-810-06	1	-NA-	Sample
35	3	11	CCB3	1	-NA-	Sample
36	3	12	CCV3	1	-NA-	Sample
37	4	1	0103-047-11	1	-NA-	Sample
38	4	2	0102-719-01	1	-NA-	Sample
39	4	3	0102-719-01 MS	1	-NA-	Sample
40	4	4	0102-719-01 MSD	1	-NA-	Sample
41	4	5	0102-719-02	1	-NA-	Sample
42	4	6	0102-719-03	1	-NA-	Sample
43	4	7	0102-719-04	1	-NA-	Sample
44	4	8	0102-719-05	1	-NA-	Sample
45	4	9	0102-719-06	1	-NA-	Sample
46	4	10	0102-719-07	1	-NA-	Sample
47	4	11	CCB4	1	-NA-	Sample
48	4	12	CCV4	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	0102-719-08	1	-NA-	Sample
2	1	2	0102-719-09	1	-NA-	Sample
3	1	3	0102-719-10	1	-NA-	Sample
4	1	4	0102-719-11	1	-NA-	Sample
5	1	5	0102-719-12	1	-NA-	Sample
6	1	6	0102-719-13	1	-NA-	Sample
7	1	7	0102-719-14	1	-NA-	Sample
8	1	8	0102-719-15	1	-NA-	Sample
9	1	9	0102-719-16	1	-NA-	Sample
10	1	10	0102-719-17	1	-NA-	Sample
11	1	11	CCB5	1	-NA-	Sample
12	1	12	CCV5	1	-NA-	Sample
13	2	1	ICSA	1	-NA-	Sample
14	2	2	ICSAB	1	-NA-	Sample
15	2	3	(empty)	1	-NA-	-NA-
16	2	4	(empty)	1	-NA-	-NA-
17	2	5	(empty)	1	-NA-	-NA-
18	2	6	(empty)	1	-NA-	-NA-
19	2	7	(empty)	1	-NA-	-NA-
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-

6561006

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/06/01 1554 Instrument ICPT

Initial Calibration Source C1 M5-30-21 C2 M5-33-11 C3 M5-33-03 C4 M5-18-04

Continuing Calibration Source ICV/CCV M5-34-01

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV2			Continuing CCV3		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found
Silver	100	103	3	<5	100	99	1	<5	99	1	<5	100
Arsenic	500	500	0	<5	500	485	3	<5	489	2	<5	492
Barium	1000	1050	5	<10	1000	1020	2	<5	1030	3	<5	1040
Cadmium	100	102	2	<5	100	99.8	0	<5	98.9	1	<5	100
Chromium	200	203	2	<5	200	198	1	<5	198	1	<5	200
Lead	500	518	4	<5	500	505	1	<5	502	0	<5	508
Selenium	500	500	0	<5	500	486	3	<5	489	2	<5	491

000121

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name

Environmental Testing and Consulting, Inc

Date/Time of Sequence

03/06/01 1554

Instrument

ICPT

Analyte	Initial Calibration Blank ug/L	CCB1	CCB2	CCB3	Continuing Calibration Blank ug/L				
Silver	ND	ND	ND	ND					
Arsenic	ND	ND	ND	ND					
Barium	ND	ND	ND	ND					
Cadmium	ND	ND	ND	ND					
Chromium	ND	ND	ND	ND					
Lead	ND	ND	ND	ND					
Selenium	ND	ND	ND	ND					

000122

6561007

6561008

FORM 4
INTERFERENCE CHECK SAMPLE
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence

03/06/01 1554

Instrument

ICPT

Concentration Units: ug/L

Analyte	True	Initial Found		Final Found	
	Sol AB	Sol AB	%REC	Sol AB	%REC
Silver	200	214	107	218	109
Aluminum	250000	247000	99	250000	100
Arsenic	200	212	106	214	107
Barium	500	527	105	540	108
Calcium	250000	243000	97	245000	98
Cadmium	200	198	99	202	101
Chromium	200	187	94	192	96
Iron	100000	96800	97	98000	98
Magnesium	250000	254000	102	258000	103
Lead	200	205	103	209	105
Selenium	200	209	105	216	108

Concentration Units: ug/L

Analyte	True	Initial Found		Final Found	
	Sol A	Sol A	%REC	Sol A	%REC
Silver	0	ND	0	ND	0
Aluminum	250000	248000	99	255000	102
Arsenic	0	ND	0	ND	0
Barium	0	ND	0	ND	0
Calcium	250000	251000	100	254000	102
Cadmium	0	ND	0	ND	0
Chromium	0	ND	0	ND	0
Iron	100000	95300	95	97200	97
Magnesium	250000	252000	101	259000	104
Lead	0	ND	0	ND	0
Selenium	0	ND	0	ND	0

ENVIRONMENTAL TESTING & CONSULTING, INC

Mercury Sequence Check List

Sequence ID : _____

Date/Time: 3/8/01 1532Analyst : JF
Supervisor: AA

Instrument ID: CETAC M-6000A

1. General Maintenance Check

Action Taken

- a. Lamp Warm-up ☒
- b. Pump Winding ☒
- c. Check GLS ☒
- d. Nafion Dryer ☒

2. Sequence Check List

Initial Calibration

- a. Initial Calibration Blank (STD1-Blank)
- b. Initial Calibration Standard 1 0.20 ug/L
- c. Initial Calibration Standard 2 1.0 ug/L
- d. Initial Calibration Standard 3 2.0 ug/L
- e. Initial Calibration Standard 4 5.0 ug/L
- f. Initial Calibration Standard 5 10.0 ug/L

☒

☒

☒

☒

☒

☒

3. Regression coefficient (minimum = 0.995)

☒

☒

4. Initial Calibration Blank (ICB) – All elements below MQL
Water = 0.20 ug/L Soil = 0.02 mg/Kg5. Initial Calibration Verification (ICV) – 2nd Source SRN: M-5-33-15

Concentration 5.0 ug/L +/- 10%

Found: 5.01 %Difference: 0

6. Continuing Calibration Blank (CCB) – All elements below MQL indicate by ✓

Metal	CCB1	CCB2	CCB3	CCB4	CCB5	CCB6	CCB7	CCB8	CCB9	CCB10	CCB11	CCB12	CCB13	CCB14	CCB15
Hg	☒	☒	☒												

7. Continuing Calibration Verification (CCV) – Range: EPA 90-110% SW-846 80-120%

All elements within QC limits indicate by ✓ (Concentration same as ICV) SRN: M-5-33-15

Metal	CCV1	CCV2	CCV3	CCV4	CCV5	CCV6	CCV7	CCV8	CCV9	CCV10	CCV11	CCV12	CCV13	CCV14	CCV15
Hg	☒	☒	☒												

Applicable ETC Order Nos. for this sequence:

01027950102839

6561010

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
MERCURY

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/08/01 1532 Instrument M6000

Initial Calibration Source C1 M5-33-14

Continuing Calibration Source ICV/CCV M5-33-15

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV2			Continuing CCV3		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Flag
Mercury	5.00	5.01	0.2	<5	5.00	5.60	12.0	<20	5.60	12.0	<20	<20

000125

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc
Date/Time of Sequence 03/08/01 1532 Instrument M6000

Analyte	MDL ug/L	Initial Cal Blank (ICB) ug/L	Continuing Calibration Blank ug/L									
			CCB1	CCB2	CCB3							
Mercury	0.06	ND	ND	ND	ND							

6561012

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Volatiles**

000127

ENVIRONMENTAL TESTING & CONSULTING, INC
GC/MS VOC Method 8260B Sequence Check List (SW-846)

Sequence ID ✓ 203071
Date 3-8-01

Matrix: H₂O

Analyst: SS

Applicable ETC Order Nos. for this sequence:

0103-008-4,5 0102-839-1-4

Validated

1. BFB Daily 12-Hour Tune Meets Criteria. No analyses begins until criteria are met. (SOP) ✓

2. Initial Calibration Verification Criteria - Method: ✓ 203041, 8260M

- a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1,1,2,2-Tetrachloroethene) ✓
- b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ✓
- c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ✓
- d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 ✓

3. Calibration Verification - Each 12-Hour Shift

- a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1,1,2,2-Tetrachloroethene) ✓
- b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ✓
- c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ✓
- d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ ✓

e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ✓

f. Internal Standards - Areas within (-50% to +100%) from Mid-Point ICAL STD ✓

4. Method Blanks included in this sequence:

Analyze daily or for each analytical batch (20 samples): ✓

List compounds identified in Method Blank w/concentration. ✓

Flag final result "B-Detected in Blank" ✓

MEC12 @ BDL

5. Matrix Spike/Matrix Spike Duplicates included in this sequence:

Analyze daily or for each matrix (ms/msd per 20 samples of same matrix) ✓

List MS/MSD(s) performed with any failures: ✓

*Septern Stopped before MS, MSD.

6. Laboratory Control Samples included in this sequence:

Must contain all Target Analytes. ✓

See LCS / LCSD

7. Surrogate Recoveries within QC Limits ✓

8. All positive compounds within calibration range ✓

Narrative/Notes

(MS malfunction)

FORM 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

6561014

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: 0101001

BFB Injection Date: 03/07/01

Instrument ID: VOC2

BFB Injection Time: 0936

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	51.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	70.9
175	5.0 - 9.0% of mass 174	4.9 (6.9)1
176	95.0 - 101.0% of mass 174	71.2 (100.5)1
177	5.0 - 9.0% of mass 176	5.2 (7.3)2
1-Value is % mass 174		2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V2030711LCS		0201001TLCS	03/07/01	0952
02	DCS100		0201001	03/07/01	0952
03	V2030711LCSD		0202002TLCS	03/07/01	1035
04	DCS100		0202002	03/07/01	1035
05	V2030711LB		0302004	03/07/01	1149
06	0102-839-1T		0701008	03/07/01	1350
07	0102-839-2T		0801009	03/07/01	1420
08	0102-839-3T		0901010	03/07/01	1450
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561015

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: VOC2

Calibration Date: 03/07/01 Time: 0952

Lab File ID: 0201001

Init. Calib. Date(s): 03/04/01 03/05/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1430 1024

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Acetone	126.8	100.0	AVRG	26.8	30.0
Acetonitrile	1108	1000	AVRG	10.8	30.0
Acrolein	130.4	100.0	AVRG	30.4	30.0
Acrylonitrile	98.15	100.0	AVRG	1.8	30.0
Allyl chloride	98.60	100.0	AVRG	1.4	30.0
Benzene	89.94	100.0	AVRG	10.1	30.0
Bromobenzene	88.22	100.0	AVRG	11.8	30.0
Bromochloromethane	99.87	100.0	AVRG	0.1	30.0
Bromodichloromethane	115.1	100.0	AVRG	15.1	30.0
Bromoform	105.5	100.0	AVRG	5.5	30.0
2-Butanone	103.7	100.0	AVRG	3.7	30.0
Bromomethane	117.0	100.0	AVRG	17.0	30.0
n-Butylbenzene	111.2	100.0	AVRG	11.2	30.0
sec-Butylbenzene	94.21	100.0	AVRG	5.8	30.0
tert-Butylbenzene	94.49	100.0	AVRG	5.5	30.0
Carbon Disulfide	98.26	100.0	AVRG	1.7	30.0
Carbon Tetrachloride	120.6	100.0	AVRG	20.6	30.0
Chlorobenzene	90.26	100.0	AVRG	9.7	30.0
Chlorodibromomethane	121.5	100.0	AVRG	21.5	30.0
Chloroethane	122.5	100.0	AVRG	22.5	30.0
2-Chloroethyl vinyl ether	145.7	100.0	AVRG	45.7	30.0
Chloroform	101.1	100.0	AVRG	1.1	20.0
Chloromethane	105.4	100.0	AVRG	5.4	30.0
Chloroprene	100.2	100.0	AVRG	0.2	30.0
2-Chlorotoluene	99.77	100.0	AVRG	0.2	30.0
4-Chlorotoluene	109.5	100.0	AVRG	9.5	30.0
1,2-Dibromo-3-chloropropane	128.4	100.0	AVRG	28.4	30.0
1,2-Dibromoethane	111.6	100.0	AVRG	11.6	30.0
Dibromomethane	113.2	100.0	AVRG	13.2	30.0
1,2-Dichlorobenzene	101.6	100.0	AVRG	1.6	30.0
1,3-Dichlorobenzene	97.33	100.0	AVRG	2.7	30.0
1,4-Dichlorobenzene	99.48	100.0	AVRG	0.5	30.0
trans-1,4-Dichloro-2-butene	108.8	100.0	AVRG	8.8	30.0
Dichlorodifluoromethane	149.9	100.0	AVRG	49.9	30.0
1,1-Dichloroethane	97.28	100.0	AVRG	2.7	30.0
1,2-Dichloroethane	116.5	100.0	AVRG	16.5	30.0
1,1-Dichloroethene	99.46	100.0	AVRG	0.5	20.0

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6561016

FORM 7

VOA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: VOC2

Calibration Date: 03/07/01 Time: 0952

Lab File ID: 0201001

Init. Calib. Date(s): 03/04/01 03/05/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1430

1024

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
cis-1,2-Dichloroethene	92.45	100.0	AVRG	7.6	30.0
trans-1,2-Dichloroethene	91.88	100.0	AVRG	8.1	30.0
1,2-Dichloropropane	95.16	100.0	AVRG	4.8	20.0
1,3-Dichloropropane	109.1	100.0	AVRG	9.1	30.0
2,2-Dichloropropane	122.1	100.0	AVRG	22.1	30.0
1,1-Dichloropropene	103.7	100.0	AVRG	3.7	30.0
cis-1,3-Dichloropropene	120.4	100.0	AVRG	20.4	30.0
trans-1,3-Dichloropropene	112.4	100.0	AVRG	12.4	30.0
Di isopropyl ether	89.13	100.0	AVRG	10.9	30.0
1,4-Dioxane	2289	2000	AVRG	14.4	30.0
Ethyl Acetate	101.7	100.0	AVRG	1.7	30.0
Ethylbenzene	93.84	100.0	AVRG	6.2	20.0
Ethyl methacrylate	213.8	200.0	AVRG	6.9	30.0
Furan	175.0	153.0	AVRG	14.4	30.0
Hexachlorobutadiene	131.3	100.0	AVRG	31.3	30.0
Hexane	101.0	117.0	AVRG	13.7	30.0
2-Hexanone	110.8	100.0	AVRG	10.8	30.0
Iodomethane	110.4	100.0	LINR	10.4	30.0
Isobutyl Alcohol	2045	2000	AVRG	2.2	30.0
Isopropylbenzene	92.40	100.0	AVRG	7.6	30.0
4-Isopropyltoluene	100.2	100.0	AVRG	0.2	30.0
Methacrylonitrile	957.5	1000	AVRG	4.2	30.0
Methylene Chloride	99.80	100.0	LINR	0.2	30.0
Methyl methacrylate	208.0	200.0	AVRG	4.0	30.0
4-Methyl-2-Pentanone	108.8	100.0	AVRG	8.8	30.0
Methyl-tertbutyl-Ether	106.6	100.0	AVRG	6.6	30.0
Naphthalene	105.8	100.0	AVRG	5.8	30.0
Pentachloroethane	125.3	100.0	AVRG	25.3	30.0
Propionitrile	943.1	1000	AVRG	5.7	30.0
n-Propyl Acetate	156.3	151.0	AVRG	3.5	30.0
n-Propylbenzene	92.43	100.0	AVRG	7.6	30.0
Styrene	88.02	100.0	AVRG	12.0	30.0
1,1,1,2-Tetrachloroethane	102.3	100.0	AVRG	2.3	30.0
1,1,2,2-Tetrachloroethane	103.2	100.0	AVRG	3.2	30.0
Tetrachloroethene	102.5	100.0	AVRG	2.5	30.0
Tetrahydrofuran	90.09	91.50	AVRG	1.5	30.0
1,2,3-Trichlorobenzene	109.4	100.0	AVRG	9.4	30.0

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FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561017

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: VOC2

Calibration Date: 03/07/01 Time: 0952

Lab File ID: 0201001

Init. Calib. Date(s): 03/04/01 03/05/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1430 1024

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Toluene	99.70	100.0	AVRG	0.3	20.0
1,1,1-Trichloroethane	114.4	100.0	AVRG	14.4	30.0
1,1,2-Trichloroethane	106.2	100.0	AVRG	6.2	30.0
1,1,2-trichloro-1,2,2-triflu	106.5	100.0	AVRG	6.5	30.0
Trichloroethene	103.3	100.0	AVRG	3.3	30.0
Trichlorofluoromethane	106.4	100.0	AVRG	6.4	30.0
1,2,3-Trichloropropane	107.1	100.0	AVRG	7.1	30.0
1,2,4-Trichlorobenzene	111.6	100.0	AVRG	11.6	30.0
1,2,4-Trimethylbenzene	94.20	100.0	AVRG	5.8	30.0
1,3,5-Trimethylbenzene	92.20	100.0	AVRG	7.8	30.0
Vinyl Acetate	103.3	100.0	AVRG	3.3	30.0
Vinyl Chloride	129.1	100.0	AVRG	29.1	20.0
Xylene-mp	178.3	200.0	AVRG	10.8	30.0
Xylene-o	90.31	100.0	AVRG	9.7	30.0
cis-1,4-Dichloro-2-butene	103.8	100.0	AVRG	3.8	30.0
=====	=====	=====	=====	=====	=====
1,2-Dichloroethane-d4	49.80	42.20	AVRG	18.0	30.0
Dibromofluoromethane	44.76	39.60	AVRG	13.0	30.0
Toluene-d8	46.69	43.00	AVRG	8.6	30.0
Bromofluorobenzene	45.13	49.30	AVRG	8.4	30.0

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6561018

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: VOC2

Calibration Date: 03/07/01 Time: 1035

Lab File ID: 0202002

Init. Calib. Date(s): 03/04/01 03/05/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1229 1024

GC Column:

ID: 2.00 (mm)

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	1.106	1.100		0.5	30.0
Hexachlorobutadiene	0.738	0.819		11.0	30.0
Vinyl Chloride	2.294	2.418		5.4	20.0
1,2-Dichloroethane-d4	4.887	5.489		12.3	30.0
Dibromofluoromethane	3.650	3.932		7.7	30.0
Toluene-d8	1.384	1.499		8.3	30.0
Bromofluorobenzene	0.610	0.569		6.7	30.0

FORM VII VOA-GCMS

000133

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

6561019

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID (Standard): 0202002

Date Analyzed: 03/07/01

Instrument ID: VOC2

Time Analyzed: 1035

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	77002	8.11	657981	8.85	747614	11.62
UPPER LIMIT	154004	8.61	1315962	9.35	1495228	12.12
LOWER LIMIT	38501	7.61	328991	8.35	373807	11.12
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V2030711LB	60903	8.13	475789	8.87	428604	11.64
02 0102-839-1T	48651	8.15	379958	8.90	356919*	11.66
03 0102-839-2T	47739	8.16	373019	8.90	347990*	11.66
04 0102-839-3T	45207	8.15	338975	8.90	322418*	11.66
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

6561020

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID (Standard): 0202002

Date Analyzed: 03/07/01

Instrument ID: VOC2

Time Analyzed: 1035

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS4 (DCB)					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	339880	13.91				
UPPER LIMIT	679760	14.41				
LOWER LIMIT	169940	13.41				
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V2030711LB	211368	13.93				
02 0102-839-1T	180198	13.95				
03 0102-839-2T	173210	13.95				
04 0102-839-3T	160812*	13.95				
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

Report Date : 06-Mar-2001 09:34

Page 1

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

QC REVIEWED

Calibration File Names:

Level 1: \\ETCBDC\DD\chem\voc2.i\V203041.B\0301007.D
 Level 2: \\ETCBDC\DD\chem\voc2.i\V203041.B\0401008.D
 Level 3: \\ETCBDC\DD\chem\voc2.i\V203041.B\0501010.D
 Level 4: \\ETCBDC\DD\chem\voc2.i\V203041.B\0601011.D
 Level 5: \\ETCBDC\DD\chem\voc2.i\V203041.B\0701012.D
 Level 6: \\ETCBDC\DD\chem\voc2.i\V203041.B\0801013.D
 Level 7: \\ETCBDC\DD\chem\voc2.i\V203041.B\0901014.D
 Level 8: \\ETCBDC\DD\chem\voc2.i\V203041.B\1001015.D
 Level 9: \\ETCBDC\DD\chem\voc2.i\V203041.B\1101003.D
 Level 10: \\ETCBDC\DD\chem\voc2.i\V203041.B\1201004.D

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients m1	m2	RSR or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
1 Dichlorodifluoromethane	0.89500	1.23787	1.32512	0.98784	1.16956	1.12008	AVRG		1.10645		13 96120
	0.95459	1.06663	1.32358	0.98425							

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000		1.0000		5.0000		20.0000		50.0000		100.0000		Curve		Coefficients		%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Level 13	Level 14	b	m1	m2	or R^2
2 Chloromethane	2.66527	2.39774	2.43935	2.21611	2.50611	2.23977	2.46561	2.39774	2.43935	2.21611	2.50611	2.23977	AVRG	2.46561	2.82780	2.82780	14.71082	
3 Vinyl Chloride	2.10779	2.04845	2.28069	2.04394	2.50611	2.23977	2.46561	2.39774	2.43935	2.21611	2.50611	2.23977	AVRG	2.46561	2.29452	2.29452	8.97180	
4 Bromomethane	1.83247	1.74521	1.52871	1.38033	1.97601	2.07093	1.97601	1.74521	1.52871	1.38033	1.97601	2.07093	AVRG	1.97601	1.85178	1.85178	12.54094	
5 Chloroethane	1.43427	1.41779	1.46829	1.43991	1.59961	1.62641	1.59961	1.41779	1.46829	1.43991	1.59961	1.62641	AVRG	1.59961	1.51434	1.51434	5.18766	
6 Trichlorofluoromethane	3.41161	2.78153	2.95849	2.74516	2.77897	2.76007	2.77897	2.78153	2.95849	2.74516	2.77897	2.76007	AVRG	2.77897	2.86073	2.86073	7.35344	

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
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 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0 500000	1 1.000	5 0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
7 Acetone	++++	++++	++++	1 18216	1 00684	1 18140	AVRG				
	0.92081	0.99754	1.15333	0.99123				1 06190			10.11144
8 Puran	++++	5 62205	6 09562	6 07176	6 16241	6 42787	AVRG				
	5.92802	6.16925	6.68224	6.49209				6 18348			5.13014
9 1,1-Dichloroethene	3.18634	2 36415	2 35295	2 35801	2 33645	2 38887	AVRG				
	2.29634	2.52129	2.44746	2.47700				2.47289			10.51293
10 Acrylonitrile	++++	++++	0 71087	0 67020	0 72931	0 74669	AVRG				
	0.67367	0.74558	0.85132	0.75033				0 73475			7 73141
11 Iodomethane	3083	4160	23128	95621	286118	801318	LINR	0.06146	2.96701		0.99722
	1195064	1386266	1253704	1645157							

Report Date : 06-Mar-2001 09:34

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\voc2.i\v203052.B\v203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	ml	m2	%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
12 Methylene Chloride	45532	56170	68334	158375	374304	815691					
	1125681	1444964	1342239	1733868			LINR	-0.06150	2.97107		0.99711
13 1,1,2-trichloro-1,2,2-trifluo	3.41161	2.78115	2.95750	2.74527	2.78147	2.75179					
	2.65004	2.77026	2.86761	2.83268			AVRG		2.85494		7.41856
14 Acetonitrile	++++	0.31900	0.24151	0.23499	0.22324	0.24770					
	0.21401	0.23554	0.25919	0.22765			AVRG		0.24476		12.61034
15 Allyl chloride	6.26953	5.69704	4.92476	5.10861	5.06012	5.05069					
	4.60625	4.80342	4.83931	4.65578			AVRG		5.10155		10.02934
16 Carbon Disulfide	8.80738	7.77122	7.60671	7.54016	7.99906	7.83968					
	7.71564	8.31353	8.33273	8.11109			AVRG		8.00372		4.92443

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0 500000	1.0000	5.0000	20.0000	50 0000	100 0000	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120 0000	150 0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
17 trans-1,2-Dichloroethene	3.23792	3.02438	2.83948	2.86077	2.81224	2 85082	AVRG				
	2 71989	3 02802	2 84573	2 89377					2 91130		5 06277
18 Methyl-tertbutyl-Ether	10 28943	7.73338	7.62920	8.65901	8 38730	8.89052	AVRG				
	8.23488	9.18528	10.01279	9.39089					8.84127		10 11369
19 Propionitrile	++---	0.28514	0.26411	0.28422	0.27309	0.28359	AVRG				
	0.25661	0.28992	0.31337	0.27422					0 28048		5 84124
20 Chloroprene	5.92974	5.76075	6.32052	6.29764	6 14173	6.05675	AVRG				
	5.58412	6.16367	6.36039	6 22842					6.08437		4.19892
21 1,1-Dichloroethane	5.98435	4.49895	5.05499	5.46137	5.27920	5.45990	AVRG				
	5.10076	5.56581	5.65186	5.58514					5 36423		7 60114

Report Date : 06-Mar-2001 09:34

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\voc2.i\v203052.B\v203041.8260.m
 Cal Date : 06-Mar-2001 09:28 Lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	RSR or R^2
22 Vinyl Acetate	++++ 5.10299	++++ 5.67667	6 34948 5 19590	5.37692 4 69583	5.37583	5.57999	AVRG		5.41920		8.91639
23 2-Butanone	++++ 0 28123	++++ 0.31588	0.34460 0.35649	0.33390 0.30270	0.33122	0.33036	AVRG		0 32455		7 38126
24 Acrolein	++++ 0.24245	++++ 0.28504	++++ ++++	0.20890 ++++	0.20029	0.22870	AVRG		0 23308		14 33791
25 Hexane	++++ 3.32589	++++ 3.45209	3.96354 3.32276	3.79553 3.24191	3 84710	3 37925	AVRG		3.54976		7.73828
26 Di isopropyl ether	++++ 9 36786	10.32842 10.36617	9.72727 10.66020	10.67859 10.19811	10 06704	10.21265	AVRG		10.17848		4.13124

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0 500000	1.0000	5.0000	20 0000	50.0000	100 0000	Curve	b	Coefficients	m1	m2	WSTD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120.0000	150 0000	170.0000	200 0000								
	Level 7	Level 8	Level 9	Level 10								
27 Methacrylonitrile	2.02110	1.73819	1.63195	1.73006	1.68060	1.69621	AVRG			1.70389		8 25789
	1 49398	1.66224	1.80153	1.58308								
28 cis-1,2-Dichloroethene	2 91102	3.37305	3.04522	3.26358	3.09035	3.28424	AVRG			3.20687		5.13931
	3.08032	3.41840	3.33150	3.27105								
29 Ethyl Acetate	++++	++++	2.84130	2.69414	2.60112	2 80280	AVRG			2.75128		6 04507
	2.56053	2.70616	3.05290	++++								
30 Bromochloromethane	0.94126	1 35756	1.33782	1 49824	1.36022	1 48883	AVRG			1 38045		12 14187
	1.38656	1.51218	1.48593	1.43587								
31 Chloroform	7.96320	6.76077	6.67159	7.12451	6.73920	6 96827	AVRG			7.10446		6 83693
	6.43870	7.22516	7.68715	7.46608								

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSR or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
32 Isobutyl Alcohol	++++ 0 11678	++++ 0.14043	0.14217 ++++	0.13814 ++++	0.13154	0 14188	AVRG		0 13516		7 26338
33 2,2-Dichloropropane	++++ 5.18635	5.77233 5.61501	5.64982 5.55922	5.81642 5.38076	5.63859	5 65631	AVRG		5 58609		3.48393
35 Tetrahydrofuran	++++ 1 29639	++++ 1.44641	1.29311 1.53424	1.61352 1.34440	1.41408	1.47643	AVRG		1 42732		7.99189
38 1,2-Dichloroethane	5.29641 5.06040	5.28970 5.39103	5.40565 6.16110	5.60093 ++++	5.45793	5.67594	AVRG		5.48211		5.68392
39 1,1,1-Trichloroethane	6.77240 6.20923	6.08277 6.79440	6.39637 7.41267	7.01100 7.00004	6.87934	6 89046	AVRG		6.74487		5.99418

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients ml	m2	VRSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
40 1,1-Dichloropropene	5.10755	4.09894	4.60229	5.04764	4.82698	4.82592	AVRG		4.75984		6.28309
	4.47268	4.90526	4.93042	4.77370							
41 Carbon Tetrachloride	5.32523	5.05803	5.62924	6.19300	6.03343	5.98615	AVRG		5.82201		8.16025
	5.34563	5.88279	6.59983	6.16681							
42 Benzene	13.69877	12.14082	12.48848	13.18633	12.81451	12.99901	AVRG		12.88908		4.39075
	11.91274	13.33458	13.38625	12.92934							
44 1,4-Dioxane	+++++	+++++	0.00331	0.00315	0.00328	0.00347	AVRG		0.00324		6.23589
	0.00288	0.00328	0.00349	0.00308							
45 Dibromomethane	0.22872	0.25253	0.24915	0.27864	0.26635	0.26754	AVRG		0.25667		6.33772
	0.23522	0.25383	0.27560	0.25912							

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\voç2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 Lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
46 1,2-Dichloropropane	0.34941	0.36285	0.36672	0.41498	0.39980	0.40316	AVRG			0.37969		5.85646
47 Trichloroethene	0.79464	0.70596	0.65225	0.69035	0.68689	0.68122	AVRG			0.68283		7.22417
48 n-Propyl Acetate	0.56145	0.62404	0.70152	0.68518	0.65747	0.67432	AVRG			0.65164		7.21217
49 Bromodichloromethane	0.69202	0.58836	0.62159	0.67539	0.65748	0.67390	AVRG			0.65237		6.43293
50 Ethyl methacrylate	0.22943	0.26794	0.25458	0.26316	0.25984	0.26909	AVRG			0.25843		5.35734

Report Date : 06-Mar-2001 09:34

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients ml	m2	RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
51 Methyl methacrylate	0.27418	0.24306	0.23103	0.24385	0.24720	0.25593	AVRG		0.24386		6.60614
	0.21597	0.24009	0.25591	0.23134							
52 2-Chloroethyl vinyl ether	++++	++++	0.10605	0.12592	0.13410	0.14077	AVRG		0.12945		9.34251
	0.11862	0.13347	0.14169	0.13499							
53 4-Methyl-2-Pentanone	++++	++++	0.41197	0.39545	0.39755	0.41713	AVRG		0.39557		7.65836
	0.34206	0.37816	0.44302	0.37919							
54 trans-1,3-Dichloropropene	0.61933	0.55042	0.65119	0.66451	0.65174	0.66662	AVRG		0.62798		5.94399
	0.58100	0.63797	0.63879	0.61823							
55 cis-1,3-Dichloropropene	0.61701	0.52279	0.58096	0.63176	0.62083	0.63238	AVRG		0.59459		6.20602
	0.54700	0.60103	0.61341	0.57873							

Report Date : 06-Mar-2001 09:34

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-MAR-2001 12:29
 End Cal Date : 05-MAR-2001 10:24
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\voc2.i\v203052.B\v203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
56 1,1,2-Trichloroethane	0.24954 0.25145	0.26546 0.27671	0.25669 0.30013	0.29103 0.28082	0.27825	0.29480	AVRG		0.27449		6.60102
58 Toluene	1.05949 0.90313	0.85416 1.00991	0.95087 1.00296	1.04863 0.98870	1.03032	1.01142	AVRG		0.98596		6.61487
59 1,3-Dichloropropane	0.56918 0.53719	0.55771 0.59067	0.56770 0.64025	0.53236 0.59538	0.63021	0.62899	AVRG		0.59497		6.13766
60 2-Hexanone	++++ 0.25346	++++ 0.27676	0.32810 0.32719	0.29521 0.27089	0.29500	0.30557	AVRG		0.29402		8.97649
61 Chlorodibromomethane	0.37607 0.41441	0.38637 0.45196	0.42703 0.50265	0.46874 0.47376	0.47525	0.48392	AVRG		0.44601		9.63718

Environmental Testing and Consulting, Inc.

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Start Cal Date : 04-MAR-2001 12:29
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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\voc2.i\V203052.B\V203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
62 1,2-Dibromoethane	0.32050	0.33569	0.34739	0.36901	0.36488	0.37290	AVRG		0.35207		6.19154
	0.32183	0.35047	0.38653	0.35147							
63 Tetrachloroethene	++++	0.31740	0.36463	0.41792	0.41397	0.40551	AVRG		0.40199		14.83107
	0.37128	0.40084	0.52437	++++							
64 1,1,1,2-Tetrachloroethane	0.43228	0.40763	0.45403	0.45997	0.46277	0.40277	AVRG		0.43879		6.11183
	0.41665	0.45066	0.41897	0.48218							
66 Chlorobenzene	1.25536	1.06546	1.12419	1.13368	1.10575	0.95932	AVRG		1.08810		8.07816
	1.02758	1.13220	0.96661	1.13084							
67 Ethylbenzene	2.44533	2.03328	2.11582	2.06453	2.08517	1.79103	AVRG		2.06107		8.78150
	1.93893	2.12359	1.85634	2.15671							

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Method file : \\ETCDBC\DD\chem\voc2.i\V203052.B\v203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0	5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6				m1		
68 Xylene-mp	0.89226	0.75125	0.75883	0.74556	0.73750	0.62230		AVRG		0.72861		10.66453
69 cis-1,4-Dichloro-2-butene	0.55345	0.48482	0.50679	0.52063	0.53079	0.47249		AVRG		0.49998		5.58753
70 Bromoform	0.25933	0.31425	0.31246	0.33559	0.32899	0.29884		AVRG		0.31605		8.04142
71 Styrene	1.58523	1.26475	1.26571	1.29900	1.30580	1.11803		AVRG		1.27711		10.02752
72 Xylene-o	0.76711	0.69717	0.71452	0.72877	0.71532	0.60914		AVRG		0.69022		7.31909

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\voc2.i\v203052.B\v203041.8260.m
 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0 500000	1.0000	5.0000	20 0000	50.0000	100 0000	Curve	b	Coefficients	m2	TRSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
73 1,1,2,2-Tetrachloroethane	0.95577	0.84790	0.81365	0.83180	0.82710	0.84067	AVRG		0.83273		6 41760
	0.73847	0.84578	0.81781	0.80832							
74 1,2,3-Trichloropropane	0.39993	0.48482	0.50679	0.52063	0.53079	0.47249	AVRG		0.48463		7 47096
	0.46559	0.49826	0.47845	0.48753							
75 trans-1,4-Dichloro-2-butene	0.14944	0.11883	0.14662	0.15491	0.15637	0.14250	AVRG		0.14289		8 26893
	0.14179	0.15218	0.13027	0.13600							
76 Isopropylbenzene	2.55250	1.99055	2.05244	2.08960	2.06555	1.78446	AVRG		2.04681		10 21212
	1.92728	2.07986	1.83287	2.09301							
78 Bromobenzene	0.66334	0.47415	0.52069	0.50184	0.49588	0.44327	AVRG		0.50206		12.38076
	0.45633	0.49549	0.45823	0.51137							

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Environmental Testing and Consulting, Inc.

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
79 n-Propylbenzene	3.26005	2.55931	2.52360	2.56870	2.52113	2.19569	AVRG		2.51932		11.75886
	2.37997	2.53233	2.18801	2.46440							
80 2-Chlorotoluene	1.90587	1.78980	1.61327	1.67455	1.61257	1.50365	AVRG		1.62411		8.62406
	1.48523	1.62970	1.44801	1.57847							
81 4-Chlorotoluene	2.10904	1.78015	1.61327	1.51792	1.61257	1.35855	AVRG		1.62404		12.95689
	1.48523	1.47018	1.56627	1.72717							
82 1,3,5-Trimethylbenzene	0.88623	0.66497	0.76142	0.76327	0.74907	0.63796	AVRG		0.71782		10.76966
	0.68219	0.72230	0.62203	0.68878							
83 Pentachloroethane	0.50709	0.46654	0.44978	0.48273	0.48723	0.49304	AVRG		0.47706		5.62048
	0.42896	0.50100	+++++	+++++							

Environmental Testing and Consulting, Inc.

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			ml		or R^2
84 tert-Butylbenzene	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
	1.80939	1.43668	1.48611	1.44625	1.46603	1.26103	AVRG		1.45129		9.84034
	1.33317	1.40444	1.45455	1.41526							
85 1,2,4-Trimethylbenzene	2.14373	1.81676	1.77205	1.78086	1.77109	1.51056	AVRG		1.73779		10.14648
	1.61667	1.72890	1.54836	1.68894							
86 sec-Butylbenzene	2.73391	2.33574	2.36734	2.36774	2.35452	2.06893	AVRG		2.30143		8.31448
	2.20195	2.29406	2.05326	2.23684							
87 1,3-Dichlorobenzene	2.40606	1.94875	1.68122	1.91772	1.83867	1.75524	AVRG		1.87301		11.36478
	1.66606	1.94568	1.76793	1.80277							
88 4-Isopropyltoluene	2.06153	1.62413	1.81050	1.80401	1.79463	1.55361	AVRG		1.70005		10.19849
	1.62688	1.69201	1.45340	1.57980							

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Environmental Testing and Consulting, Inc.

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Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1		or R^2
90 1,4-Dichlorobenzene	++++	2.12774	2.02638	1.70961	1.63697	1.96857	AVRG		1.84937		9.36371
	1.66606	1.94487	1.76712	1.79702							
91 n-Butylbenzene	4.22787	3.42038	3.46622	3.58187	3.47538	3.44191	AVRG		3.42722		10.36284
	3.19067	3.51085	2.98451	2.97198							
92 1,2-Dichlorobenzene	1.85844	1.71022	1.63908	1.63211	1.63282	1.65039	AVRG		1.64450		5.90913
	1.48759	1.67718	1.58781	1.56940							
93 1,2-Dibromo-3-chloropropane	++++	0.14065	0.17489	0.17487	0.17832	0.17644	AVRG		0.16827		8.88080
	0.15018	0.16532	0.18881	0.16495							
94 1,2,4-Trichlorobenzene	1.40835	1.17507	1.06325	1.10468	1.19766	1.23909	AVRG		1.18370		8.68671
	1.12611	1.25981	1.11067	1.07233							

Report Date : 06-Mar-2001 09:34

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Environmental Testing and Consulting, Inc.

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	SRSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
95 Naphthalene	120.0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
	2.73032	2.18048	2.00056	2.08590	2.20636	2.25468	AVRG			2.23663		9.31454
	2.03664	2.31450	2.36419	2.19170								
96 Hexachlorobutadiene	0.75187	0.59723	0.70569	0.76937	0.78369	0.80876						
	0.73725	0.80058	0.72072	0.70358			AVRG			0.73788		8.39463
97 1,2,3-Trichlorobenzene	1.18569	0.97478	1.02937	1.10778	1.11657	1.16474						
	1.04478	1.16763	1.07679	1.04941			AVRG			1.09175		6.30015
34 Dibromofluoromethane	4.81448	3.77684	3.53723	3.49513	3.24288	3.65452						
	3.15299	3.48035	3.62712	3.72261			AVRG			3.65042		12.44067
37 1,2-Dichloroethane-d4	6.36684	5.12962	4.96825	4.95769	4.41657	4.82468						
	4.03493	4.37590	5.00603	4.78807			AVRG			4.88686		12.75509

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 Cal Date : 06-Mar-2001 09:28 lisa

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coeficients	m2	SRSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					or R^2
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
\$ 57 Toluene-d8	+++++	1.57476	1.43669	1.41453	1.32629	1.39714	AVRG		1.38381		6.93772
	1.22250	1.33889	1.34247	1.40106							
\$ 77 Bromofluorobenzene	+++++	+++++	0.73442	0.66542	0.60995	0.60364	AVRG		0.60994		10.82124
	0.54321	0.58427	0.52767	0.61091							

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

ENVIRONMENTAL TESTING & CONSULTING, INC
GC/MS VOC Method 8260B Sequence Check List (SW-846)

Sequence ID 1203122

Matrix: H₂O

Date 3-13-01

Analyst SS

Applicable ETC Order Nos. for this sequence:

0102-839-4-6 0103-297-1,2
0103-295-1-11

Validated

1. BFB Daily 12-Hour Tune Meets Criteria. No analyses begins until criteria are met. (SOP)
2. Initial Calibration Verification Criteria - Method: 203091.8260m
 - a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
 - b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ☒
 - c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ☒
 - d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 ☒

3. Calibration Verification - Each 12-Hour Shift

- a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
- b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ☒
- c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ☒
- d. % Difference/Drift for all other Target Analytes - $\leq 30\%$ ☒
Chloromethane, Iodomethane,
Pentachloroethane
- e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ☒
- f. Internal Standards - Areas within $(-50\% \text{ to } +100\%)$ from Mid-Point ICAL STD ☒

4. Method Blanks included in this sequence:

Analyze daily or for each analytical batch (20 samples): ☒

List compounds identified in Method Blank w/concentration.

Flag final result "B Detected in Blank"

Method = BDL

5. Matrix Spike/Matrix Spike Duplicates included in this sequence:

Analyze daily or for each matrix (ms/msd per 20 samples of same matrix) ☒

List MS/MSD(s) performed with any failures

3 out of 2 recoveries exceed QC limits

6. Laboratory Control Samples included in this sequence:

Must contain all Target Analytes.

7. Surrogate Recoveries within QC Limits ☒

8. All positive compounds within calibration range ☒

Narrative/Notes:

8270C Revision 1 December 1996
Form Date 06/01/99

6561042 FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: 0101001

BFB Injection Date: 03/12/01

Instrument ID: VOC2

BFB Injection Time: 1312

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.9
75	30.0 - 60.0% of mass 95	47.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	82.4
175	5.0 - 9.0% of mass 174	7.0 (8.5)1
176	95.0 - 101.0% of mass 174	79.3 (96.2)1
177	5.0 - 9.0% of mass 176	5.3 (6.7)2
1-Value is % mass 174		2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V2031221LCS		0201001TLCS	03/12/01	1355
02	DCS100PPB		0201001	03/12/01	1355
03	V2031221LB		0301003	03/12/01	1517
04	0102-839-4T		0402004	03/12/01	1548
05	0102-839-5T		0501005	03/12/01	1618
06	0102-839-6T		0601006	03/12/01	1649
07	0102-839-4TM		2001020	03/12/01	2358
08	0102-839-4TM		2101021	03/13/01	0028
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561043

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: VOC2

Calibration Date: 03/12/01 Time: 1355

Lab File ID: 0201001

Init. Calib. Date(s): 03/09/01 03/12/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1518 1152

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Acetone	107.1	100.0	AVRG	7.1	30.0
Acetonitrile	1016	1000	AVRG	1.6	30.0
Acrolein	109.6	100.0	AVRG	9.6	30.0
Acrylonitrile	106.4	100.0	AVRG	6.4	30.0
Allyl chloride	97.58	100.0	AVRG	2.4	30.0
Benzene	96.67	100.0	AVRG	3.3	30.0
Bromobenzene	108.2	100.0	AVRG	8.2	30.0
Bromochloromethane	94.90	100.0	AVRG	5.1	30.0
Bromodichloromethane	114.9	100.0	AVRG	14.9	30.0
Bromoform	112.5	100.0	AVRG	12.5	30.0
2-Butanone	108.6	100.0	AVRG	8.6	30.0
Bromomethane	93.50	100.0	AVRG	6.5	30.0
n-Butylbenzene	120.5	100.0	AVRG	20.5	30.0
sec-Butylbenzene	117.2	100.0	AVRG	17.2	30.0
tert-Butylbenzene	114.4	100.0	AVRG	14.4	30.0
Carbon Disulfide	98.52	100.0	AVRG	1.5	30.0
Carbon Tetrachloride	104.8	100.0	AVRG	4.8	30.0
Chlorobenzene	109.7	100.0	AVRG	9.7	30.0
Chlorodibromomethane	116.7	100.0	AVRG	16.7	30.0
Chloroethane	103.7	100.0	AVRG	3.7	30.0
2-Chloroethyl vinyl ether	102.3	100.0	LINR	2.3	30.0
Chloroform	98.90	100.0	AVRG	1.1	20.0
Chloromethane	139.8	100.0	LINR	39.8	30.0
Chloroprene	102.6	100.0	AVRG	2.6	30.0
2-Chlorotoluene	124.4	100.0	AVRG	24.4	30.0
4-Chlorotoluene	114.8	100.0	AVRG	14.8	30.0
1,2-Dibromo-3-chloropropane	120.3	100.0	AVRG	20.3	30.0
1,2-Dibromoethane	117.0	100.0	AVRG	17.0	30.0
Dibromomethane	116.8	100.0	AVRG	16.8	30.0
1,2-Dichlorobenzene	112.2	100.0	AVRG	12.2	30.0
1,3-Dichlorobenzene	119.8	100.0	AVRG	19.8	30.0
1,4-Dichlorobenzene	107.5	100.0	AVRG	7.5	30.0
trans-1,4-Dichloro-2-butene	127.1	100.0	AVRG	27.1	30.0
Dichlorodifluoromethane	128.2	100.0	AVRG	28.2	30.0
1,1-Dichloroethane	101.5	100.0	AVRG	1.5	30.0
1,2-Dichloroethane	116.3	100.0	AVRG	16.3	30.0
1,1-Dichloroethene	98.24	100.0	AVRG	1.8	20.0

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6561044

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: VOC2

Calibration Date: 03/12/01 Time: 1355

Lab File ID: 0201001

Init. Calib. Date(s): 03/09/01 03/12/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1518 1152

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
cis-1,2-Dichloroethene	98.39	100.0	AVRG	1.6	30.0
trans-1,2-Dichloroethene	95.94	100.0	AVRG	4.1	30.0
1,2-Dichloropropane	114.4	100.0	AVRG	14.4	20.0
1,3-Dichloropropane	117.6	100.0	AVRG	17.6	30.0
2,2-Dichloropropane	114.1	100.0	AVRG	14.1	30.0
1,1-Dichloropropene	101.0	100.0	AVRG	1.0	30.0
cis-1,3-Dichloropropene	119.5	100.0	AVRG	19.5	30.0
trans-1,3-Dichloropropene	115.9	100.0	AVRG	15.9	30.0
Di isopropyl ether	101.6	100.0	AVRG	1.6	30.0
1,4-Dioxane	2190	2000	AVRG	9.5	30.0
Ethyl Acetate	106.6	100.0	AVRG	6.6	30.0
Ethylbenzene	112.9	100.0	AVRG	12.9	20.0
Ethyl methacrylate	231.4	200.0	AVRG	15.7	30.0
Furan	158.2	153.0	AVRG	3.4	30.0
Hexachlorobutadiene	110.2	100.0	AVRG	10.2	30.0
Hexane	120.1	117.0	AVRG	2.6	30.0
2-Hexanone	125.1	100.0	AVRG	25.1	30.0
Iodomethane	63.24	100.0	LINR	36.8	30.0
Isobutyl Alcohol	2094	2000	AVRG	4.7	30.0
Isopropylbenzene	114.2	100.0	AVRG	14.2	30.0
4-Isopropyltoluene	118.3	100.0	AVRG	18.3	30.0
Methacrylonitrile	1045	1000	AVRG	4.5	30.0
Methylene Chloride	93.68	100.0	LINR	6.3	30.0
Methyl methacrylate	237.0	200.0	AVRG	18.5	30.0
4-Methyl-2-Pentanone	120.5	100.0	AVRG	20.5	30.0
Methyl-tertbutyl-Ether	101.4	100.0	AVRG	1.4	30.0
Naphthalene	109.7	100.0	AVRG	9.7	30.0
Pentachloroethane	132.2	100.0	AVRG	32.2	30.0
Propionitrile	1019	1000	AVRG	1.9	30.0
n-Propyl Acetate	180.9	151.0	AVRG	19.8	30.0
n-Propylbenzene	115.8	100.0	AVRG	15.8	30.0
Styrene	111.2	100.0	AVRG	11.2	30.0
1,1,1,2-Tetrachloroethane	111.4	100.0	AVRG	11.4	30.0
1,1,2,2-Tetrachloroethane	115.8	100.0	AVRG	15.8	30.0
Tetrachloroethene	92.60	100.0	LINR	7.4	30.0
Tetrahydrofuran	96.57	91.50	AVRG	5.5	30.0
1,2,3-Trichlorobenzene	109.4	100.0	AVRG	9.4	30.0

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FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561045

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: VOC2

Calibration Date: 03/12/01 Time: 1355

Lab File ID: 0201001

Init. Calib. Date(s): 03/09/01 03/12/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1518 1152

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Toluene	112.2	100.0	AVRG	12.2	20.0
1,1,1-Trichloroethane	108.9	100.0	AVRG	8.9	30.0
1,1,2-Trichloroethane	115.1	100.0	AVRG	15.1	30.0
1,1,2-trichloro-1,2,2-triflu	96.59	100.0	AVRG	3.4	30.0
Trichloroethene	107.8	100.0	AVRG	7.8	30.0
Trichlorofluoromethane	96.68	100.0	AVRG	3.3	30.0
1,2,3-Trichloropropane	118.9	100.0	AVRG	18.9	30.0
1,2,4-Trichlorobenzene	111.1	100.0	AVRG	11.1	30.0
1,2,4-Trimethylbenzene	113.4	100.0	AVRG	13.4	30.0
1,3,5-Trimethylbenzene	113.5	100.0	AVRG	13.5	30.0
Vinyl Acetate	106.4	100.0	AVRG	6.4	30.0
Vinyl Chloride	105.0	100.0	AVRG	5.0	20.0
Xylene-mp	228.4	200.0	AVRG	14.2	30.0
Xylene-o	113.4	100.0	AVRG	13.4	30.0
cis-1,4-Dichloro-2-butene	118.9	100.0	AVRG	18.9	30.0
=====	=====	=====	=====	=====	=====
1,2-Dichloroethane-d4	42.84	46.80	AVRG	8.5	30.0
Dibromofluoromethane	39.30	41.60	AVRG	5.5	30.0
Toluene-d8	44.59	45.90	AVRG	2.8	30.0
Bromofluorobenzene	44.44	49.40	AVRG	10.0	30.0

6561046

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID (Standard): 0201001

Date Analyzed: 03/12/01

Instrument ID: VOC2

Time Analyzed: 1355

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	166643	8.18	1433493	8.92	1534304	11.68
UPPER LIMIT	333286	8.68	2866986	9.42	3068608	12.18
LOWER LIMIT	83322	7.68	716747	8.42	767152	11.18
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V2031221LB	134633	8.19	1249438	8.93	1146309	11.70
02 0102-839-4T	129017	8.19	1232135	8.94	1157580	11.71
03 0102-839-5T	122828	8.20	1151915	8.94	1073432	11.71
04 0102-839-6T	120917	8.20	1149086	8.94	1091410	11.71
05 0102-839-4TM	125421	8.21	1269337	8.95	1584535	11.71
06 0102-839-4TM	136230	8.21	1328533	8.95	1504697	11.70
07						
08						
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19						
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22						

IS1 = Pentafluorobenzene
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

6561047

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID (Standard): 0201001

Date Analyzed: 03/12/01

Instrument ID: VOC2

Time Analyzed: 1355

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS4 (DCB)					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	739474	13.98				
UPPER LIMIT	1478948	14.48				
LOWER LIMIT	369737	13.48				
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V2031221LB	506363	13.99				
02 0102-839-4T	518861	14.00				
03 0102-839-5T	482239	14.01				
04 0102-839-6T	479128	14.01				
05 0102-839-4TM	609874	14.01				
06 0102-839-4TM	602866	14.00				
07						
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18						
19						
20						
21						
22						

IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

Report Date : 13-Mar-2001 09:19

Page 2

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients ml	m2	RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
2 Chloromethane	8309	12649	52600	169654	428760	993453	LINR	-0.00129	2.72922		0.99582
	1132481	1480036	1883399	2246381							
3 Vinyl Chloride	3.62700	3.86944	3.17889	2.63806	2.99277	3.12516					
	2.81370	++++	++++	++++			AVRG		3.17786		13.72273
4 Bromomethane	2.14781	1.88600	1.62418	1.51447	2.02164	2.34416					
	2.17706	2.02674	2.19920	2.18862			AVRG		2.01299		13.20971
5 Chloroethane	1.88131	1.75783	1.76307	1.53762	1.73075	1.81587					
	1.73146	1.57783	1.70406	1.71357			AVRG		1.72134		5.88946
6 Trichlorofluoromethane	2.85692	2.73864	2.66797	2.50071	2.83823	2.87886					
	2.80054	2.60158	2.77361	2.82827			AVRG		2.74853		4.47366

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RSR	or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6							
7 Acetone	++++	++++	++++	1.09901	1.20586	1.10596	AVRG			1.03082			10.37603
	0.96382	0.98094	0.91553	0.94459									
8 Furan	++++	6.33196	6.17022	5.36682	6.00579	6.08578	AVRG			5.97986			5.21637
	6.10557	5.55529	6.04288	6.15438									
9 1,1-Dichloroethene	2.83537	3.04877	2.75183	2.46504	2.75886	2.84707	AVRG			2.79000			5.50149
	2.81998	2.64937	2.84264	2.88103									
10 Acrylonitrile	++++	++++	0.71789	0.65759	0.77530	0.74226	AVRG			0.74447			5.39215
	0.76275	0.75798	0.76246	0.77955									
11 Iodomethane	++++	5692	25151	160991	545314	1365837	LNIR	0.03332		3.65467			0.99311
	1609617	1981618	2506467	2845121									

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203122.B\v203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	ml	m2	RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
12 Methylene Chloride	105615	85440	97806	196123	504211	1102050	LINE	-0.08432	3.13176		0.99720
	1396362	1809321	2185766	2638439							
13 1,1,2-trichloro-1,2,2-trifluoroethane	2.85692	2.73864	2.66797	2.50071	2.83461	2.87139					
	2.80166	2.58851	2.77320	2.82715			AVRG		2.74608		4.49972
14 Acetonitrile	++++	0.31843	0.28659	0.21884	0.26921	0.25430					
	0.25026	0.25746	0.24615	0.25525			AVRG		0.26183		10.64790
15 Allyl chloride	6.25841	6.87150	5.41377	4.50524	5.12098	5.05776					
	5.17202	4.72556	4.92970	5.00355			AVRG		5.30585		13.61188
16 Carbon Disulfide	8.98076	8.74059	8.13365	7.35396	8.30917	8.81615					
	8.63147	8.38343	9.20984	9.37065			AVRG		8.59297		6.80717

6561052

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
17 trans-1,2-Dichloroethene	3.38152	3.23805	3.05158	2.86380	3.24130	3.21765	AVRG			3.22913		5.26466
	3.38050	3.15439	3.28561	3.41677								
18 Methyl-tertbutyl-Ether	8.38099	8.80453	8.52478	8.32909	9.60377	9.42332	AVRG			9.07496		5.68378
	9.54049	9.21888	9.31551	9.60826								
19 Propionitrile	0.40249	0.32725	0.31393	0.26970	0.31762	0.29962	AVRG			0.31409		11.05152
	0.29772	0.31113	0.29692	0.30447								
20 Chloroprene	5.54668	5.33128	5.41450	4.98546	5.54353	5.37828	AVRG			5.29409		3.92743
	5.39986	4.97608	5.12068	5.24457								
21 1,1-Dichloroethane	5.42368	5.48834	5.23783	4.89222	5.38382	5.30980	AVRG			5.31721		3.53001
	5.50595	5.14335	5.33217	5.45495								

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	TRSD or R^2
22 Vinyl Acetate	++++ 4.76748	++++ 4.62726	4.57523 4.53585	4.19307 4.71131	4.77333	4.70549	AVRG		4.61113		4.11216
23 2-Butanone	++++ 0.35820	++++ 0.37110	0.28824 0.34883	0.36136 0.36194	0.40343	0.38152	AVRG		0.35933		9.26117
24 Acrolein	++++ 0.35082	++++ 0.36927	0.40823 0.35014	0.24845 0.36959	0.32987	0.34827	AVRG		0.34683		13.25194
25 Hexane	++++ 3.67821	4.91078 3.39449	4.01335 3.59458	3.45070 3.60064	3.82502	3.73278	AVRG		3.80006		12.01503
26 Di isopropyl ether	11.04132 10.39805	10.75077 9.71055	10.10415 9.93166	9.20700 10.21536	10.21563	9.71277	AVRG		10.12873		5.24934

Report Date : 13-Mar-2001 09:19

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	ml	m2	RSR
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					or R^2
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
27 Methacrylonitrile	2.16316	1.95107	1.77663	1.56589	1.81752	1.63082	AVRG		1.73504		11.20929
	1.61233	1.62904	1.58270	1.62122							
28 cis-1,2-Dichloroethene	3.50084	3.51997	3.15145	3.16647	3.54850	3.49168	AVRG		3.44503		4.89198
	3.68492	3.37877	3.47774	3.52997							
29 Ethyl Acetate	++++	++++	2.93739	2.45412	2.90660	2.77809	AVRG		2.76423		5.43474
	2.70082	2.81411	2.71217	2.81055							
30 Bromochloromethane	1.94701	1.68960	1.73231	1.74691	1.97222	1.83552	AVRG		1.86650		5.92550
	1.99465	1.87544	1.90570	1.96562							
31 Chloroform	6.74937	6.40860	5.57804	5.98857	6.49797	5.79018	AVRG		6.24728		5.99864
	6.60289	6.14130	6.22185	6.49405							

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Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients ml	m2	MSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
120.0000	150.0000	170.0000	200.0000								
Level 7	Level 8	Level 9	Level 10								
32 Isobutyl Alcohol	++++	++++	0.12024	0.12572	0.15111	0.14110	AVRG		0.13494		8.80648
	0.12851	0.14296	++++	++++							
33 2,2-Dichloropropane	4.90643	4.87576	4.59916	4.70732	4.99301	4.68711	AVRG		4.87223		3.63524
	5.20172	4.85124	4.88192	5.01863							
35 Tetrahydrofuran	++++	++++	1.02093	1.27793	1.46708	1.41585	AVRG		1.34947		10.68532
	1.38777	1.44726	1.38667	1.39230							
38 1,2-Dichloroethane	3.60650	3.90633	4.02155	3.90154	4.42148	4.08317	AVRG		3.94818		5.67126
	4.09446	3.79655	3.76086	3.88935							
39 1,1,1-Trichloroethane	4.17998	4.64954	4.66658	4.72596	5.35489	5.05236	AVRG				
	5.00852	4.63260	4.71330	4.82739					4.78111		6.53326

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Compound	0 500000	1.0000	Level 2	5 0000	Level 3	20.0000	Level 4	50.0000	Level 5	100 0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10						
40 1,1-Dichloropropene	3.73581	4.19033	4.05542	3.88232	4.39361	4.31760					AVRG			4.16674		5.30291
	4.33140	4.11820	4.25672	4.38597												
41 Carbon Tetrachloride	3.97656	3.98563	4.07206	4.49655	5.09568	4.87613					AVRG			4.48713		8.54662
	4.78483	4.43143	4.50614	4.64628												
42 Benzene	12.01220	11.43344	11.22311	10.96484	12.45896	12.39884					AVRG			12.30507		7.30125
	13.06141	12.61644	13.14819	13.73327												
44 1,4-Dioxane	++++	++++	0.00212	0.00267	0.00335	0.00308					AVRG			0.00284		12.61918
	0.00284	0.00302	0.00285	0.00282												
45 Dibromomethane	0.14955	0.14603	0.16780	0.18739	0.21297	0.20219					AVRG			0.18365		12.03231
	0.19673	0.19256	0.19039	0.19090												

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Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
46 1,2-Dichloropropane	0.26264	0.27830	0.30819	0.30938	0.34057	0.32670	AVRG		0.31089		7.59023
	0.32822	0.31522	0.32076	0.31888							
47 Trichloroethene	0.54999	0.54118	0.48223	0.51232	0.56806	0.55080	AVRG		0.53254		4.47782
	0.53866	0.51984	0.51179	0.53052							
48 n-Propyl Acetate	0.55284	0.55330	0.54375	0.53268	0.62967	0.59677	AVRG		0.56616		5.49636
		0.58328	0.55833	0.54482							
49 Bromodichloromethane	0.33946	0.40362	0.41833	0.45231	0.51305	0.48488	AVRG		0.44663		10.92644
	0.47651	0.45686	0.46134	0.45990							
50 Ethyl methacrylate	0.24657	0.22539	0.21205	0.21949	0.25464	0.24576	AVRG		0.23353		5.57430
	0.23437	0.23679	0.23044	0.22977							

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Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
51 Methyl methacrylate	0.19104	0.20653	0.19871	0.20454	0.24202	0.23341	AVRG		0.21657		7 42032
	0.22207	0.22733	0.22184	0.21818							
52 2-Chloroethyl vinyl ether	++++	3314	18422	81665	243985	514625	LNLR	0.01387	0.16250		0.99950
	640626	907498	1038305	1266928							
53 4-Methyl-2-Pentanone	++++	++++	0.33187	0.31889	0.38627	0.36802	AVRG		0.34851		6.24893
	0.34021	0.36129	0.34281	0.33877							
54 trans-1,3-Dichloropropene	0.48144	0.47514	0.51709	0.54698	0.61268	0.58851	AVRG		0.55013		8.32626
	0.58870	0.55962	0.56509	0.56602							
55 cis-1,3-Dichloropropene	0.37855	0.40835	0.43683	0.47612	0.53794	0.51708	AVRG		0.46717		10 28795
	0.49598	0.47740	0.47206	0.47135							

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Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	TRSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
56 1,1,2-Trichloroethane	0.17775	0.22132	0.21371	0.21890	0.24970	0.24098	AVRG		0.22437		8.67960
	0.23434	0.23086	0.22746	0.22863							
58 Toluene	0.79780	0.75499	0.72039	0.76022	0.87142	0.84068	AVRG		0.80426		5.77279
	0.84063	0.80850	0.82345	0.82457							
59 1,1-Dichloropropane	0.39963	0.44558	0.45966	0.47197	0.55130	0.52406	AVRG		0.48567		8.91109
	0.51426	0.49978	0.49635	0.49408							
60 2-Hexanone	++++	++++	0.24810	0.24432	0.29676	0.27527	AVRG		0.25711		7.62045
	0.24110	0.25978	0.24894	0.24261							
61 Chlorodibromomethane	0.28478	0.33973	0.32584	0.41030	0.46647	0.44336	AVRG		0.39129		14.46765
	0.42616	0.40828	0.40537	0.40261							

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Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
62 1,2-Dibromoethane	0.23580 0.30858	0.24276 0.30384	0.25744 0.29653	0.29117 0.29478	0.34120	0.31931	AVRG		0.28914		11.70339
63 Tetrachloroethene	5500 1739934	10296 2383612	44216 2948512	224290 3580103	654673	1371578	LINR	0.03777	0.45274		0.99790
64 1,1,1,2-Tetrachloroethane	-0.30312 0.38057	0.31761 0.36357	0.34076 0.35745	0.38365 0.41833	0.39408	0.38120	AVRG		0.36403		9.71374
66 Chlorobenzene	1.02263 0.95593	0.96680 0.92256	0.91939 0.93184	0.93708 1.09041	0.96779	0.94878	AVRG		0.96632		5.47020
67 Ethylbenzene	1.54555 1.50385	1.50795 1.44727	1.45887 1.45243	1.46772 1.70423	1.51256	1.49293	AVRG		1.50933		4.98626

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Compound	0.500000										1.0000										5.0000										20.0000										50.0000										100.0000										Coefficients		m2	b	Curve	RSD or R^2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Level 13	Level 14	Level 15	Level 16	Level 17	Level 18	Level 19	Level 20	Level 21	Level 22	Level 23	Level 24	Level 25	Level 26	Level 27	Level 28	Level 29	Level 30	Level 31	Level 32	Level 33	Level 34	Level 35	Level 36	Level 37	Level 38	Level 39	Level 40	Level 41	Level 42	Level 43	Level 44	Level 45	Level 46	Level 47	Level 48	Level 49	Level 50	Level 51	Level 52	Level 53	Level 54	Level 55	Level 56	Level 57	Level 58	Level 59	Level 60	Level 61	Level 62					Level 63	Level 64	Level 65	Level 66	Level 67	Level 68	Level 69	Level 70	Level 71	Level 72	Level 73	Level 74	Level 75	Level 76	Level 77	Level 78	Level 79	Level 80	Level 81	Level 82	Level 83	Level 84	Level 85	Level 86	Level 87	Level 88	Level 89	Level 90	Level 91	Level 92	Level 93	Level 94	Level 95	Level 96	Level 97	Level 98	Level 99	Level 100	Level 101	Level 102	Level 103	Level 104	Level 105	Level 106	Level 107	Level 108	Level 109	Level 110	Level 111	Level 112	Level 113	Level 114	Level 115	Level 116	Level 117	Level 118	Level 119	Level 120	Level 121	Level 122	Level 123	Level 124	Level 125	Level 126	Level 127	Level 128	Level 129	Level 130	Level 131	Level 132	Level 133	Level 134	Level 135	Level 136	Level 137	Level 138	Level 139	Level 140	Level 141	Level 142	Level 143	Level 144	Level 145	Level 146	Level 147	Level 148	Level 149	Level 150	Level 151	Level 152	Level 153	Level 154	Level 155	Level 156	Level 157	Level 158	Level 159	Level 160	Level 161	Level 162	Level 163	Level 164	Level 165	Level 166	Level 167	Level 168	Level 169	Level 170	Level 171	Level 172	Level 173	Level 174	Level 175	Level 176	Level 177	Level 178	Level 179	Level 180	Level 181	Level 182	Level 183	Level 184	Level 185	Level 186	Level 187	Level 188	Level 189	Level 190	Level 191	Level 192	Level 193	Level 194	Level 195	Level 196	Level 197	Level 198	Level 199	Level 200	Level 201	Level 202	Level 203	Level 204	Level 205	Level 206	Level 207	Level 208	Level 209	Level 210	Level 211	Level 212	Level 213	Level 214	Level 215	Level 216	Level 217	Level 218	Level 219	Level 220	Level 221	Level 222	Level 223	Level 224	Level 225	Level 226	Level 227	Level 228	Level 229	Level 230	Level 231	Level 232	Level 233	Level 234	Level 235	Level 236	Level 237	Level 238	Level 239	Level 240	Level 241	Level 242	Level 243	Level 244	Level 245	Level 246	Level 247	Level 248	Level 249	Level 250	Level 251	Level 252	Level 253	Level 254	Level 255	Level 256	Level 257	Level 258	Level 259	Level 260	Level 261	Level 262	Level 263	Level 264	Level 265	Level 266	Level 267	Level 268	Level 269	Level 270	Level 271	Level 272	Level 273	Level 274	Level 275	Level 276	Level 277	Level 278	Level 279	Level 280	Level 281	Level 282	Level 283	Level 284	Level 285	Level 286	Level 287	Level 288	Level 289	Level 290	Level 291	Level 292	Level 293	Level 294	Level 295	Level 296	Level 297	Level 298	Level 299	Level 300	Level 301	Level 302	Level 303	Level 304	Level 305	Level 306	Level 307	Level 308	Level 309	Level 310	Level 311	Level 312	Level 313	Level 314	Level 315	Level 316	Level 317	Level 318	Level 319	Level 320	Level 321	Level 322	Level 323	Level 324	Level 325	Level 326	Level 327	Level 328	Level 329	Level 330	Level 331	Level 332	Level 333	Level 334	Level 335	Level 336	Level 337	Level 338	Level 339	Level 340	Level 341	Level 342	Level 343	Level 344	Level 345	Level 346	Level 347	Level 348	Level 349	Level 350	Level 351	Level 352	Level 353	Level 354	Level 355	Level 356	Level 357	Level 358	Level 359	Level 360	Level 361	Level 362	Level 363	Level 364	Level 365	Level 366	Level 367	Level 368	Level 369	Level 370	Level 371	Level 372	Level 373	Level 374	Level 375	Level 376	Level 377	Level 378	Level 379	Level 380	Level 381	Level 382	Level 383	Level 384	Level 385	Level 386	Level 387	Level 388	Level 389	Level 390	Level 391	Level 392	Level 393	Level 394	Level 395	Level 396	Level 397	Level 398	Level 399	Level 400	Level 401	Level 402	Level 403	Level 404	Level 405	Level 406	Level 407	Level 408	Level 409	Level 410	Level 411	Level 412	Level 413	Level 414	Level 415	Level 416	Level 417	Level 418	Level 419	Level 420	Level 421	Level 422	Level 423	Level 424	Level 425	Level 426	Level 427	Level 428	Level 429	Level 430	Level 431	Level 432	Level 433	Level 434	Level 435	Level 436	Level 437	Level 438	Level 439	Level 440	Level 441	Level 442	Level 443	Level 444	Level 445	Level 446	Level 447	Level 448	Level 449	Level 450	Level 451	Level 452	Level 453	Level 454	Level 455	Level 456	Level 457	Level 458	Level 459	Level 460	Level 461	Level 462	Level 463	Level 464	Level 465	Level 466	Level 467	Level 468	Level 469	Level 470	Level 471	Level 472	Level 473	Level 474	Level 475	Level 476	Level 477	Level 478	Level 479	Level 480	Level 481	Level 482	Level 483	Level 484	Level 485	Level 486	Level 487	Level 488	Level 489	Level 490	Level 491	Level 492	Level 493	Level 494	Level 495	Level 496	Level 497	Level 498	Level 499	Level 500	Level 501	Level 502	Level 503	Level 504	Level 505	Level 506	Level 507	Level 508	Level 509	Level 510	Level 511	Level 512	Level 513	Level 514	Level 515	Level 516	Level 517	Level 518	Level 519	Level 520	Level 521	Level 522	Level 523	Level 524	Level 525	Level 526	Level 527	Level 528	Level 529	Level 530	Level 531	Level 532	Level 533	Level 534	Level 535	Level 536	Level 537	Level 538	Level 539	Level 540	Level 541	Level 542	Level 543	Level 544	Level 545	Level 546	Level 547	Level 548	Level 549	Level 550	Level 551	Level 552	Level 553	Level 554	Level 555	Level 556	Level 557	Level 558	Level 559	Level 560	Level 561	Level 562	Level 563	Level 564	Level 565	Level 566	Level 567	Level 568	Level 569	Level 570	Level 571	Level 572	Level 573	Level 574	Level 575	Level 576	Level 577	Level 578	Level 579	Level 580	Level 581	Level 582	Level 583	Level 584	Level 585	Level 586	Level 587	Level 588	Level 589	Level 590	Level 591	Level 592	Level 593	Level 594	Level 595	Level 596	Level 597	Level 598	Level 599	Level 600	Level 601	Level 602	Level 603	Level 604	Level 605	Level 606	Level 607	Level 608	Level 609	Level 610	Level 611	Level 612	Level 613	Level 614	Level 615	Level 616	Level 617	Level 618	Level 619	Level 620	Level 621	Level 622	Level 623	Level 624	Level 625	Level 626	Level 627	Level 628	Level 629	Level 630	Level 631	Level 632	Level 633	Level 634	Level 635	Level 636	Level 637	Level 638	Level 639	Level 640	Level 641	Level 642	Level 643	Level 644	Level 645	Level 646	Level 647	Level 648	Level 649	Level 650	Level 651	Level 652	Level 653	Level 654	Level 655	Level 656	Level 657	Level 658	Level 659	Level 660	Level 661	Level 662	Level 663	Level 664	Level 665	Level 666	Level 667	Level 668	Level 669	Level 670	Level 671	Level 672	Level 673	Level 674	Level 675	Level 676	Level 677	Level 678	Level 679	Level 680	Level 681	Level 682	Level 683	Level 684	Level 685	Level 686	Level 687	Level 688	Level 689	Level 690	Level 691	Level 692	Level 693	Level 694	Level 695	Level 696	Level 697	Level 698	Level 699	Level 700	Level 701	Level 702	Level 703	Level 704	Level 705	Level 706	Level 707	Level 708	Level 709	Level 710	Level 711	Level 712	Level 713	Level 714	Level 715	Level 716	Level 717	Level 718	Level 719	Level 720	Level 721	Level 722	Level 723	Level 724	Level 725	Level 726	Level 727	Level 728	Level 729	Level 730	Level 731	Level 732	Level 733	Level 734	Level 735	Level 736	Level 737	Level 738	Level 739	Level 740	Level 741	Level 742	Level 743	Level 744	Level 745	Level 746	Level 747	Level 748	Level 749	Level 750	Level 751	Level 752	Level 753	Level 754	Level 755	Level 756	Level 757	Level 758	Level 759	Level 760	Level 761	Level 762	Level 763	Level 764	Level 765	Level 766	Level 767	Level 768	Level 769	Level 770	Level 771	Level 772	Level 773	Level 774	Level 775	Level 776	Level 777	Level 778	Level 779	Level 780	Level 781	Level 782	Level 783	Level 784	Level 785	Level 786	Level 787	Level 788	Level 789	Level 790	Level 791	Level 792	Level 793	Level 794	Level 795	Level 796	Level 797	Level 798	Level 799	Level 800	Level 801	Level 802	Level 803	Level 804	Level 805	Level 806	Level 807	Level 808	Level 809	Level 810	Level 811	Level 812	Level 813	Level 814	Level 815	Level 816	Level 817	Level 818	Level 819	Level 820	Level 821	Level 822	Level 823	Level 824	Level 825	Level 826	Level 827	Level 828	Level 829	Level 830	Level 831	Level 832	Level 833	Level 834	Level 835	Level 836	Level 837	Level 838	Level 839	Level 840	Level 841	Level 842	Level 843	Level 844	Level 845	Level 846	Level 847	Level 848	Level 849	Level 850	Level 851	Level 852	Level 853	Level 854	Level 855	Level 856	Level 857	Level 858	Level 859	Level 860	Level 861	Level 862	Level 863	Level 864	Level 865	Level 866	Level 867	Level 868	Level 869	Level 870	Level 871	Level 872	Level 873	Level 874	Level 875	Level 876	Level 877	Level 878	Level 879	Level 880	Level 881	Level 882	Level 883	Level 884	Level 885	Level 886	Level 887	Level 888	Level 889	Level 890	Level 891	Level 892	Level 893	Level 894	Level 895	Level 896	Level 897	Level 898	Level 899	Level 900	Level 901	Level 902	Level 903	Level 904	Level 905	Level 906	Level 907	Level 908	Level 909	Level 910	Level 911	Level 912	Level 913	Level 914	Level 915	Level 916	Level 917	Level 918	Level 919	Level 920	Level 921	Level 922	Level 923	Level 924	Level 925	Level 926	Level 927	Level 928	Level 929	Level 930	Level 931	Level 932	Level 933	Level 934	Level 935	Level 936	Level 937	Level 938	Level 939	Level 940	Level 941	Level 942	Level 943	Level 944	Level 945	Level 946	Level 947	Level 948	Level 949	Level 950	Level 951	Level 952	Level 953	Level 954	Level 955	Level 956	Level 957	Level 958	Level 959	Level 960	Level 961	Level 962	Level 963	Level 964	Level 965	Level 966	Level 967	Level 968	Level 969	Level 970	Level 971	Level 972	Level 973	Level 974	Level 975	Level 976	Level 977	Level 978	Level 979	Level 980	Level 981	Level 982	Level 983	Level 984	Level 985	Level 986	Level 987	Level 988	Level 989	Level 990	Level 991	Level 992	Level 993	Level 994	Level 995	Level 996	Level 997	Level 998	Level 999	Level 1000	Level 1001	Level 1002	Level 1003	Level 1004	Level 1005	Level 1006	Level 1007	Level 1008	Level 1009	Level 1010	Level 1011	Level 1012	Level 1013	Level 1014	Level 1015	Level 1016	Level 1017	Level 1018	Level 1019	Level 1020	Level 1021	Level 1022	Level 1023	Level 1024	Level 1025	Level 1026	Level 1027	Level 1028	Level 1029	Level 1030	Level 1031	Level 1032	Level 1033	Level 1034	Level 1035	Level 1036	Level 1037	Level 1038	Level 1039	Level 1040	Level 1041	Level 1042	Level 1043	Level 1044	Level 1045	Level 1046	Level 1047	Level 1048	Level 1049	Level 1050	Level 1051	Level 1052	Level 1053	Level 1054	Level 1055	Level 1056	Level 1057	Level 1058	Level 1059	Level 1060	Level 1061	Level 1062	Level 1063	Level 1064	Level 1065	Level 1066	Level 1067	Level 1068	Level 1069	Level 1070	Level 1071	Level 1072	Level 1073	Level 1074	Level 1075	Level 1076	Level 1077	Level 1078	Level 1079	Level 1080	Level 1081	Level 1082	Level 1083	Level 1084	Level 1085	Level 1086	Level 1087	Level 1088	Level 1089	Level 1090	Level 1091	Level 1092	Level 1093	Level 1094	Level 1095	Level 1096	Level 1097	Level 1098	Level 1099	Level 1100	Level 1101	Level 1102	Level 1103	Level 1104	Level 1105	Level 1106	Level 1107	Level 1108	Level 1109	Level 1110	Level 1111	Level 1112	Level 1113	Level 1114	Level 1115	Level 1116	Level 1117	Level 1118	Level 1119	Level 1120	Level 1121	Level 1122	Level 1123	Level 1124	Level 1125	Level 1126	Level 1127	Level 1128	Level 1129	Level 1130	Level 1131	Level 1132	Level 1133	Level 1134	Level 1135	Level 1136	Level 1137	Level 1138	Level 1139	Level 1140	Level 1141	Level 1142	Level 1143	Level 1144	Level 1145	Level 1146	Level 1147	Level 1148	Level 1149	Level 1150	Level 1151	Level 1152	Level 1153	Level 1154	Level 1155	Level 1156	Level 1157	Level 1158	Level 1159	Level 1160	Level 1161	Level 1162	Level 1163	Level 1164	Level 1165	Level 1166	Level 1167	Level 1168	Level 1169	Level 1170	Level 1171	Level 1172	Level 1173	Level 1174	Level 1175	Level 1176	Level 1177	Level 1178	Level 1179	Level 1180	Level 1181	Level 1182	Level 1183	Level 1184	Level 1185	Level 1186	Level 1187	Level 1188	Level 1189	Level 1190	Level 1191	Level 1192	Level 1193	Level 1194	Level 1195	Level 1196	Level 1197	Level 1198	Level 1199	Level 1200	Level 1201	Level 1202	Level 1203	Level 1204	Level 1205	Level 1206	Level 1207

Report Date : 13-Mar-2001 09:19

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0 5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120.0000	150 0000	170 0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
73 1,1,2,2-Tetrachloroethane	0.63256	0.67810	0.65357	0.67345	0.76222	0.70842	AVRG			0.69783		5.56870
	0.69983	0.73321	0.72171	0.71528								
74 1,2,3-Trichloropropane	0.38403	0.38574	0.37945	0.40279	0.43878	0.41212	AVRG			0.39793		5.35148
	0.38995	0.39506	0.36902	0.42236								
75 trans-1,4-Dichloro-2-butene	0.09683	0.11856	0.11894	0.12788	0.13628	0.13130	AVRG			0.12447		9.71066
	0.12617	0.12756	0.12056	0.14060								
76 Isopropylbenzene	1.42204	1.49459	1.41123	1.46451	1.51523	1.47960	AVRG			1.47739		5.39397
	1.49167	1.41349	1.40756	1.67399								
78 Bromobenzene	0.42107	0.41053	0.40130	0.43401	0.45166	0.43493	AVRG			0.42816		5.18159
	0.43331	0.41666	0.40505	0.47312								

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0 500000	1 0000	5 0000	20 0000	50 0000	100 0000	Curve	b	Coefficients	m2	or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
79 n-Propylbenzene	1 90709	1 78295	1 74143	1 76191	1 83823	1 81467	AVRG		1 80701		5 26590
	1 81421	1 70379	1 69704	2 00882							
80 2-Chlorotoluene	1 16686	1 02663	1 12156	1 08865	1 11186	1 13180	AVRG		1 08628		9 18411
	1 02934	0 99555	0 91652	1 27405							
81 4-Chlorotoluene	0 42222	0 42105	0 38583	0 39237	0 42680	0 43667	AVRG		0 41204		6 02871
	0 41800	0 39010	0 37529	0 45207							
82 1,3,5-Trimethylbenzene	1 34267	1 21056	1 21581	1 22326	1 26619	1 23146	AVRG		1 23593		5 69094
	1 23183	1 14763	1 13768	1 35220							
83 Pentachloroethane	0 32860	0 41082	0 41036	0 43683	0 48474	0 46416	AVRG		0 41778		10 88428
	0 45527	0 41692	0 38367	0 38639							

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Report Date : 13-Mar-2001 09:19

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0 5000000	1 0000	5 0000	20 0000	50 0000	100 0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120.0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
84 tert-Butylbenzene	1.15187	1.17854	1.15971	1.19789	1.27423	1.22594	AVRG			1.20010		5.24203
	1.23369	1.13058	1.12970	1.31889								
85 1,2,4-Trimethylbenzene	1.34289	1.21056	1.21597	1.22334	1.26903	1.23093	AVRG			1.23700		5.62470
	1.23419	1.15333	1.13802	1.35171								
86 sec-Butylbenzene	1.65059	1.66119	1.61153	1.68073	1.75682	1.70308	AVRG			1.67651		4.81208
	1.71154	1.58594	1.56847	1.83517								
87 1,3-Dichlorobenzene	1.93418	1.75849	1.59217	1.78209	1.90797	1.99265	AVRG			1.83716		6.05752
	1.84449	1.83602	1.89604	1.82749								
88 4-Isopropyltoluene	1.57299	1.53044	1.49727	1.52772	1.59685	1.56967	AVRG			1.54076		4.78320
	1.56738	1.45090	1.41909	1.67532								

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	RESD or R ²
90 1,4-Dichlorobenzene	2.28149 2.06003	2.23062 1.78530	1.59090 1.74707	1.70570 2.01466	1.90254	2.11536	AVRG		1.94337		12.01916
91 n-Butylbenzene	2.86395 2.79519	2.61422 2.61538	2.54471 2.64495	2.59250 2.62771	2.89609	2.74931	AVRG		2.69440		4.54472
92 1,2-Dichlorobenzene	1.65184 1.69127	1.51551 1.67223	1.44749 1.67368	1.56651 1.65952	1.76644	1.70039	AVRG		1.63449		5.86167
93 1,2-Dibromo-3-chloropropane	++++ 0.11927	0.09291 0.12455	0.10020 0.11659	0.12508 0.11160	0.14197	0.13089	AVRG		0.11812		12.78374
94 1,2,4-Trichlorobenzene	1.27535 1.10501	1.00622 1.05760	0.94386 1.05203	1.03393 1.03964	1.17888	1.11957	AVRG		1.08121		8.67225

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000	1.0000	Level 1	Level 2	5.0000	Level 3	20.0000	Level 4	50.0000	Level 5	100.0000	Level 6	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Level 13	Level 14	Level 15	Level 16	Level 17	Level 18
95 Naphthalene	3.12502	2.52138	1.90079	2.22374	2.61412	2.52642							AVRG			2.46627		12.45288
96 Hexachlorobutadiene	0.54317	0.52227	0.53747	0.61620	0.69307	0.64665							AVRG			0.60164		9.18202
97 1,2,3-Trichlorobenzene	0.97523	0.94059	0.85956	0.97346	1.10758	1.05171							AVRG			0.98777		6.69863
34 Dibromofluoromethane	4.11191	3.34904	3.06644	3.27909	3.36046	3.50510							AVRG			3.50223		7.90416
37 1,2-Dichloroethane-d4	4.51808	3.68837	3.46727	3.44717	3.60103	3.50831							AVRG			3.51250		11.37155

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Report Date : 13-Mar-2001 09:19

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 13:15
 End Cal Date : 12-MAR-2001 11:52
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\voc2.i\V203122.B\V203091.8260.m
 Cal Date : 13-Mar-2001 09:19 lisa

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSR	or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1			
	120.0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
\$ 57 Toluene-d8	1.38408	1.15984	1.02934	1.08527	1.16360	1.13846	AVRG		1.13979		8	62846
	1.17269	1.07950	1.12452	1.06058								
\$ 77 Bromofluorobenzene	++++	0.53307	0.45456	0.43645	0.41374	0.42709	AVRG		0.42705		11.00361	
	0.41772	0.38321	0.37352	0.40414								

Curve	Formula	Units
Averaged	Amt = Resp/ml	Response
Linear	Amt = b + Rsp/ml	Response

6561068

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Semi-Volatiles**

ENVIRONMENTAL TESTING & CONSULTING, INC

GC/MS BNA Sequence Check List (SW-846)

Sequence ID B1030801.bSystem ID BNA1Date 3/8/01Analyst PP

Applicable ETC Order Nos. for this sequence:

0102-723 0102-799 0102-795
0102-718 0102-839

Validated

1. DFTPP Daily 12-Hour Tune Meets Criteria. No analysis begins until criteria are met. (SOP) ✓2. Degradation/Peak Tailing Check (may be combined with DFTPP Tune): ✓a. DDT to DDE/DDD $\leq 20\%$ Benzidine/PCP - Normal Response with no visible peak tailing. ✓2. Initial Calibration Verification Criteria - Method: B1030701.ma. SPCC - Mean RF ≥ 0.050 ✓b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ✓c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ✓d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 ✓

3. Calibration Verification - Each 12-Hour Shift

a. SPCC - RF ≥ 0.050 ✓b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ✓c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ✓d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ ✓e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ✓f. Internal Standards - Areas within (-50% to $+100\%$) from Mid-Point ICAL STD ✓

3. Method Blanks included in this sequence:

Analyze for each analytical batch (20 samples): ✓

List compounds identified in Method Blank w/concentration.

Flag final result "B-Detected in Blank"

PD60761B

4. Matrix Spike/Matrix Spike Duplicates included in this sequence:

Analyze for each analytical batch (20 samples) . List MS/MSD(s) performed with any failures: ✓0102-795-1ms/msd0102-839-4ms/msd

5. Laboratory Control Samples included in this sequence:

Must contain all Target Analytes.

PD60761CS6. Surrogate Recoveries within QC Limits ✓7. All positive compounds within calibration range ✓Narrative/Notes: 0102-839-01 ms/msd analyzed outside 12-hr Tune

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	45.12		PASS
68	Less than 2% of mass 69	0.11	(0.23)	PASS
69	Mass 69 relative abundance	48.09		PASS
70	Less than 2% of mass 69	0.33	(0.68)	PASS
127	40 - 60% of mass 198	55.03		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.71		PASS
275	10 - 30% of mass 198	25.43		PASS
365	Greater than 1% of mass 198	4.13		PASS
441	Present, but less than mass 443	14.26	(85.38)	PASS
442	Greater than 40% of mass 198	88.72		PASS
443	17 - 23% of mass 442	16.70	(18.82)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1716049	5.000	PASS
Benzidine	1.0108959	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	418718			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	0	0.0	15.0	PASS
4,4-DDD + DDE	0	0.0	15.0	PASS

Tuning Sample, //ETCBDC/DD/chem/bna1.i/b1030801.b/0101001.D/0101001.D,*** PASSED **

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

6561071

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID: 0101001

DFTPP Injection Date: 03/08/01

Instrument ID: BNA1

DFTPP Injection Time: 1354

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.1
68	Less than 2.0% of mass 69	0.1 (0.2)1
69	Mass 69 relative abundance	48.1
70	Less than 2.0% of mass 69	0.3 (0.7)1
127	40.0 - 60.0% of mass 198	55.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	25.4
365	Greater than 1.0% of mass 198	4.13
441	Present, but less than mass 443	14.3
442	Greater than 40.0% of mass 198	88.7
443	17.0 - 23.0% of mass 442	16.7 (18.8)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WS 50NG		0202003	03/08/01	1453
02	P06076LB		0701008	03/08/01	1745
03	P06076LCS		0801009	03/08/01	1818
04	0102-839-1		1501016	03/08/01	2211
05	0102-839-2		1601017	03/08/01	2244
06	0102-839-3		1701018	03/08/01	2316
07	0102-839-4		1801019	03/08/01	2350
08	0102-839-5		1901020	03/09/01	0023
09	0102-839-6		2001021	03/09/01	0056
10	0102-839-1MS		2301024	03/09/01	0235
11	0102-839-1MS		2401025	03/09/01	0309
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

6561072

FORM 7
BNA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: BNA1

Calibration Date: 03/08/01 Time: 1453

Lab File ID: 0202003

Init. Calib. Date(s): 03/07/01 03/07/01

Init. Calib. Times: 0855 1407

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	49.98	50.00	AVRG	0.0	20.0
2,4-Dinitrotoluene	41.44	50.00	AVRG	17.1	30.0
Hexachlorobenzene	50.35	50.00	AVRG	0.7	30.0
Hexachlorobutadiene	49.34	50.00	AVRG	1.3	20.0
Hexachloroethane	49.27	50.00	AVRG	1.5	30.0
2-Methylphenol	52.35	50.00	AVRG	4.7	30.0
3&4-Methylphenol	52.74	50.00	AVRG	5.5	30.0
Nitrobenzene	49.98	50.00	AVRG	0.0	30.0
Pentachlorophenol	48.72	50.00	AVRG	2.6	20.0
Pyridine	54.19	50.00	AVRG	8.4	30.0
2,4,5-Trichlorophenol	49.58	50.00	AVRG	0.8	30.0
2,4,6-Trichlorophenol	51.87	50.00	AVRG	3.7	20.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	46.01	50.00	AVRG	8.0	30.0
2-Fluorobiphenyl	50.88	50.00	AVRG	1.8	30.0
Terphenyl-d14	41.41	50.00	LINR	17.2	30.0
Phenol-d6	52.82	50.00	AVRG	5.6	30.0
2,4,6-Tribromophenol	41.57	50.00	LINR	16.9	30.0
2-Fluorophenol	49.74	50.00	AVRG	0.5	30.0

FORM VII BNA-GCMS

000187

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

6561073

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID (Standard): 0202003

Date Analyzed: 03/08/01

Instrument ID: BNA1

Time Analyzed: 1453

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	800362	5.53	2945960	6.82	1128295	9.38
UPPER LIMIT	1600724	6.03	5891920	7.32	2256590	9.88
LOWER LIMIT	400181	5.03	1472980	6.32	564148	8.88
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06076LB	773897	5.53	2858870	6.81	1325316	9.37
02 P06076LCS	1043122	5.53	3942595	6.81	1622761	9.37
03 0102-839-1	861842	5.53	3348824	6.81	1623999	9.37
04 0102-839-2	934396	5.53	3460184	6.81	1636742	9.37
05 0102-839-3	842524	5.53	3109288	6.81	1392210	9.37
06 0102-839-4	905537	5.53	3320127	6.81	1540127	9.37
07 0102-839-5	905472	5.53	3283827	6.81	1466247	9.37
08 0102-839-6	848624	5.53	3108721	6.81	1404306	9.37
09 0102-839-1MS	991908	5.53	3878580	6.81	1856374	9.37
10 0102-839-1MS	866931	5.53	3178878	6.81	1450962	9.37
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Lab File ID (Standard): 0202003

Date Analyzed: 03/08/01

Instrument ID: BNA1

Time Analyzed: 1453

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	967936	12.11	345838	17.37	228818	20.21
UPPER LIMIT	1935872	12.61	691676	17.87	457636	20.71
LOWER LIMIT	483968	11.61	172919	16.87	114409	19.71
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06076LB	1323564	12.10	230499	17.37	139026	20.20
02 P06076LCS	1388132	12.10	481449	17.37	338230	20.20
03 0102-839-1	1536289	12.10	277671	17.36	170345	20.20
04 0102-839-2	1728170	12.10	420158	17.36	266201	20.20
05 0102-839-3	1359977	12.10	296112	17.36	186266	20.20
06 0102-839-4	1506508	12.10	276157	17.36	166045	20.20
07 0102-839-5	1496416	12.10	347976	17.36	217341	20.21
08 0102-839-6	1389845	12.10	267668	17.36	153078	20.20
09 0102-839-1MS	1833461	12.10	435677	17.37	271906	20.20
10 0102-839-1MS	1513604	12.10	302040	17.37	179641	20.20
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 6
BNA-GCMS INITIAL CALIBRATION DATA

6561075

3/9/01 pf
all 3/9/01

Lab Name: ETC, INC.

Contract:

QC REVIEWED

Lab Code:

Case No.:

SAS No.:

SDG No.: B1030701

Instrument ID: BNA1

Calibration Date(s): 03/07/01 03/07/01

Column: DB-5MS

ID: 0.25 (mm)

Calibration Time(s): 0855 1407

LAB FILE ID:
RF20: 0601008

RF2: 0301005
RF50: 0201004

RF5: 0401006

RF10: 0501007

COMPOUND	RF2	RF5	RF10	RF20	RF50
1,4-Dichlorobenzene	1.581	1.537	1.590	1.612	1.538
2,4-Dinitrotoluene	0.084	0.082	0.085	0.103	0.099
Hexachlorobenzene	0.207	0.198	0.208	0.230	0.232
Hexachlorobutadiene	0.202	0.189	0.198	0.200	0.195
Hexachloroethane	0.180	0.189	0.183	0.194	0.191
2-Methylphenol	1.088	0.931	1.060	1.032	1.042
3&4-Methylphenol	1.190	1.024	1.200	1.202	1.187
Nitrobenzene		0.294	0.342	0.365	0.386
Pentachlorophenol		0.050	0.055	0.059	0.069
Pyridine	0.960	1.049	1.058	1.210	1.318
2,4,5-Trichlorophenol	0.301	0.291	0.334	0.339	0.354
2,4,6-Trichlorophenol	0.273	0.270	0.302	0.318	0.345
Nitrobenzene-d5	0.308	0.272	0.315	0.341	0.355
2-Fluorobiphenyl	1.367	1.329	1.448	1.506	1.528
Terphenyl-d14	3.437	1.494	1.364	1.549	1.199
Phenol-d6	1.502	1.416	1.563	1.561	1.512
2,4,6-Tribromophenol	0.064	0.064	0.080	0.088	0.101
2-Fluorophenol	1.233	1.264	1.282	1.313	1.246

FORM VI BNA-GCMS

000190

6561076

FORM 6
BNA-GCMS INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: B1030701

Instrument ID: BNA1

Calibration Date(s): 03/07/01 03/07/01

Column: DB-5MS

ID: 0.25 (mm)

Calibration Time(s): 0855

1407

LAB FILE ID:

RF80: 0701009

RF100: 0801010

RF120: 0901011

RF160: 1001012

COMPOUND	RF80	RF100	RF120	RF160
=====	=====	=====	=====	=====
1,4-Dichlorobenzene	1.446	1.430	1.481	
2,4-Dinitrotoluene	0.097	0.087	0.112	0.087
Hexachlorobenzene	0.225	0.232	0.240	0.256
Hexachlorobutadiene	0.185	0.187	0.199	0.189
Hexachloroethane	0.190	0.194	0.209	0.200
2-Methylphenol	0.978	0.969	0.997	0.942
3&4-Methylphenol	1.117	1.114	1.128	1.063
Nitrobenzene	0.368	0.374	0.395	0.372
Pentachlorophenol	0.063	0.056	0.074	
Pyridine	1.340	1.333	1.471	1.354
2,4,5-Trichlorophenol	0.359	0.349	0.388	0.374
2,4,6-Trichlorophenol	0.349	0.355	0.380	0.372
=====	=====	=====	=====	=====
Nitrobenzene-d5	0.350	0.369	0.385	0.367
2-Fluorobiphenyl	1.512	1.597	1.660	1.551
Terphenyl-d14	1.005	1.089	0.987	
Phenol-d6	1.428	1.458	1.513	1.397
2,4,6-Tribromophenol	0.097	0.104	0.109	0.113
2-Fluorophenol	1.220	1.224	1.315	1.186

FORM VI BNA-GCMS

000191

FORM 6
BNA-GCMS INITIAL CALIBRATION DATA

6561077

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: B1030701

Instrument ID: BNA1

Calibration Date(s): 03/07/01 03/07/01

Column: DB-5MS

ID: 0.25 (mm)

Calibration Time(s): 0855 1407

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
=====	=====	=====	=====	=====
1,4-Dichlorobenzene	AVRG		1.52690986	4.4
2,4-Dinitrotoluene	AVRG		9.309e-002	11.1
Hexachlorobenzene	AVRG		0.22555139	8.0
Hexachlorobutadiene	AVRG		0.19382395	3.2
Hexachloroethane	AVRG		0.19221207	4.6
2-Methylphenol	AVRG		1.00417801	5.4
3&4-Methylphenol	AVRG		1.13604851	5.6
Nitrobenzene	AVRG		0.36201860	8.7
Pentachlorophenol	AVRG		6.088e-002	13.7
Pyridine	AVRG		1.23257204	14.0
2,4,5-Trichlorophenol	AVRG		0.34309347	9.2
2,4,6-Trichlorophenol	AVRG		0.32923062	12.4
=====	=====	=====	=====	=====
Nitrobenzene-d5	AVRG		0.34011913	10.5
2-Fluorobiphenyl	AVRG		1.49983888	7.0
Terphenyl-d14	LINR	-0.1481151	1.01815061	0.990
Phenol-d6	AVRG		1.48333137	4.1
2,4,6-Tribromophenol	LINR	0.10444931	8.86666237	0.996
2-Fluorophenol	AVRG		1.25365274	3.5

FORM VI BNA-GCMS

000192

6561078

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Pesticides**

000193

ENVIRONMENTAL TESTING & CONSULTING, INC GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: 0303071 System ID: 3 Date: 3/07/01 Analyst: K G

Column ID: Primary Confirmation Column Description: RTXCLP Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0102839 0102795 no confirmation needed

1. Initial Calibration 03030701b.m
RSD of analytes $\leq 20\%$ may use average RF.
RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)
2. Endrin/DDT Breakdown – Breakdown for each should not exceed 15%. 45
3. Calibration Verification – Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptachlor	Hept Epoxide	Methoxychlor	DCB	TMX	Average
1A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	29.0	208	/	/	/	/	/	/	6.4
1B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2A																								
2B																								
3A																								
3B																								

4. Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank			
P08021UB OK			
P08022UB OK			
P08021UB2 OK			
P08022UB2 OK			

5. Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD			
P08021LCS OK			
P08022LCS OK			

6. Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0102795 - SMS, MSD OK

7. Notes

0102739 - SMS, MSD

\\SERVER\ETC_SOP\Organics\gcsvo\NestPCBHerbs\8081\GC Pesticides 8081A Check List 032900 doc

6561080

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3B

Calibration Date: 03/08/01 Time: 0506

Lab File ID: P303071B-31R

Init. Calib. Date(s): 03/07/01 03/07/01

Init. Calib. Times: 1616

1928

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0206	0.0200	AVRG	3.0	15.0
alpha-BHC	0.0218	0.0200	2ORDR	9.0	15.0
Endosulfan I	0.0209	0.0200	AVRG	4.5	15.0
beta-BHC	0.0212	0.0200	AVRG	6.0	15.0
delta-BHC	0.0214	0.0200	2ORDR	7.0	15.0
gamma-BHC (Lindane)	0.0200	0.0200	AVRG	0.0	15.0
alpha-chlordane	0.0211	0.0200	AVRG	5.5	15.0
gamma-chlordane	0.0195	0.0200	AVRG	2.5	15.0
Chlorpyrifos	0.0170	0.0200	AVRG	15.0	15.0
4,4'-DDD	0.0201	0.0200	AVRG	0.5	15.0
4,4'-DDE	0.0199	0.0200	AVRG	0.5	15.0
4,4'-DDT	0.0200	0.0200	AVRG	0.0	15.0
Dieldrin	0.0213	0.0200	AVRG	6.5	15.0
Endosulfan II	0.0215	0.0200	AVRG	7.5	15.0
Endosulfan sulfate	0.0211	0.0200	AVRG	5.5	15.0
Endrin	0.0142	0.0200	AVRG	29.0	15.0 <-
Endrin aldehyde	0.0241	0.0200	AVRG	20.5	15.0 <-
Endrin ketone	0.0219	0.0200	AVRG	9.5	15.0
Heptachlor	0.0206	0.0200	AVRG	3.0	15.0
Heptachlor epoxide	0.0210	0.0200	AVRG	5.0	15.0
Methoxychlor	0.0194	0.0200	AVRG	3.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0206	0.0200	AVRG	3.0	15.0
Tetrachloro-m-xylene	0.0206	0.0200	AVRG	3.0	15.0

FORM VII PESTICIDE

000195

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561081

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3B

Calibration Date(s): 03/07/01 03/07/01

Column: RTX-CLP

ID: 0.32 (mm)

Calibration Time(s): 1616

2213

LAB FILE ID: RF0.0004: P303071BRF0.004: P303071B RF0.01: P303071B-1
RF0.02: P303071B RF0.03: P303071B

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		273250.00	201100.00	238650.00	244333.33
alpha-BHC		282000.00	215100.00	271000.00	282366.67
Endosulfan I		253750.00	188200.00	216950.00	217666.67
beta-BHC		183750.00	133100.00	148250.00	152333.33
delta-BHC		247250.00	191800.00	239550.00	243333.33
gamma-BHC (Lindane)		281000.00	212800.00	265350.00	267566.67
alpha-chlordane		276250.00	200900.00	236050.00	231200.00
gamma-chlordane		11613500	7774000.0	8232050.0	8144433.3
Chlordane			9485.000		
(2)			14960.000		
(3)			11905.000		
(4)			24360.000		
(5)			26060.000		
Chlorpyrifos		168750.00	129900.00	101650.00	123466.67
4,4'-DDD		5193250.0	4044500.0	4347750.0	4488233.3
4,4'-DDE		217750.00	160200.00	187850.00	190033.33
4,4'-DDT		6136750.0	4587200.0	5031350.0	4983333.3
Dieldrin		219500.00	163300.00	193800.00	192000.00
Endosulfan II		212250.00	158000.00	179050.00	178200.00
Endosulfan sulfate		195750.00	150000.00	166550.00	165566.67
Endrin		192500.00	142400.00	156550.00	157166.67
Endrin aldehyde		168000.00	123300.00	147500.00	138900.00
Endrin ketone		7948250.0	7011700.0	6299350.0	6384900.0
Heptachlor		308500.00	227100.00	270850.00	269166.67
Heptachlor epoxide		278500.00	204500.00	238050.00	236933.33
Methoxychlor		99000.000	81500.000	82650.000	82133.333
Toxaphene			4155.000		
(2)			4492.000		
(3)			3379.000		
(4)			4483.000		
(5)			4165.000		
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		193250.00	141300.00	147800.00	144666.67
Tetrachloro-m-xylene		254000.00	184000.00	210500.00	215766.67

FORM VI PESTICIDE

000196

6561082

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3B

Calibration Date(s): 03/07/01 03/07/01

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1616 2213

LAB FILE ID: RF0.04: P303071B RF0.06: P303071B-ORF0.4: P303071B-10

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	213725.00	215550.00	304580.00
alpha-BHC	249550.00	264950.00	433512.50
Endosulfan I	185150.00	185066.67	226570.00
beta-BHC	131250.00	128033.33	150912.50
delta-BHC	215725.00	230316.67	359505.00
gamma-BHC (Lindane)	238875.00	248783.33	376757.50
alpha-chlordane	201775.00	199383.33	247472.50
gamma-chlordane	7048925.0	6916150.0	8606282.5
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	110925.00	117433.33	110155.00
4,4'-DDD	3964625.0	4007166.7	5248665.0
4,4'-DDE	168450.00	168166.67	234217.50
4,4'-DDT	4441275.0	4346716.7	5492102.5
Dieldrin	168550.00	165800.00	224732.50
Endosulfan II	158725.00	152250.00	178520.00
Endosulfan sulfate	144475.00	139200.00	156385.00
Endrin	129950.00	129433.33	161275.00
Endrin aldehyde	124200.00	120500.00	136127.50
Endrin ketone	5766100.0	5225333.3	6018052.5
Heptachlor	232225.00	235200.00	322282.50
Heptachlor epoxide	205625.00	205583.33	253975.00
Methoxychlor	77125.000	72483.333	74082.500
Toxaphene			
(2)			
(3)			
(4)			
(5)			
=====	=====	=====	=====
Decachlorobiphenyl	133175.00	120866.67	117535.00
Tetrachloro-m-xylene	186600.00	185983.33	236830.00

FORM VI PESTICIDE

000197

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561083

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3B

Calibration Date(s): 03/07/01 03/07/01

Column: RTX-CLP ID: 0.32 (mm)

Calibration Time(s): 1616 2213

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
=====	=====	=====	=====	=====	=====
Aldrin	AVRG		241598.333		15.2
alpha-BHC	2ORDR	2.676e-005	3.904e-006	-9.21e-012	1.000
Endosulfan I	AVRG		210479.048		12.3
beta-BHC	AVRG		146804.167		13.0
delta-BHC	2ORDR	-1.27e-004	4.511e-006	-1.2e-011	1.000
gamma-BHC (Lindane)	AVRG		270161.786		19.2
alpha-chlordane	AVRG		227575.833		12.7
gamma-chlordane	AVRG		8333620.12		18.9
Chlordane	LINR	0.00000000	1.054e-004		1.000
(2)	LINR	0.00000000	6.684e-005		1.000
(3)	LINR	0.00000000	8.4e-005		1.000
(4)	LINR	0.00000000	4.105e-005		1.000
(5)	LINR	0.00000000	3.837e-005		1.000
Chlorpyrifos	AVRG		123182.857		18.0
4,4'-DDD	AVRG		4470598.57		12.2
4,4'-DDE	AVRG		189523.929		14.5
4,4'-DDT	AVRG		5002675.36		12.8
Dieldrin	AVRG		189668.929		13.4
Endosulfan II	AVRG		173856.429		11.7
Endosulfan sulfate	AVRG		159703.810		11.8
Endrin	AVRG		152753.571		14.3
Endrin aldehyde	AVRG		136932.500		12.3
Endrin ketone	AVRG		6379097.98		13.9
Heptachlor	AVRG		266474.881		14.2
Heptachlor epoxide	AVRG		231880.952		12.3
Methoxychlor	AVRG		81282.0238		10.8
Toxaphene	LINR	0.00000000	2.407e-004		1.000
(2)	LINR	0.00000000	2.226e-004		1.000
(3)	LINR	0.00000000	2.959e-004		1.000
(4)	LINR	0.00000000	2.231e-004		1.000
(5)	LINR	0.00000000	2.401e-004		1.000
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	AVRG		142656.190		17.6
Tetrachloro-m-xylene	AVRG		210525.714		13.0

FORM VI PESTICIDE

000198

6561084

ENVIRONMENTAL TESTING & CONSULTING, INC
GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: P303081 System ID: 3 Date: 3/8/06 Analyst: KG

Column ID: Primary Confirmation Column Description: RTXCLP2 Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0102795 0102799
0103135 0102895

1. Initial Calibration P3030801a.m

RSD of analytes $\leq 20\%$ may use average RF.

RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)

2. Endrin/DDT Breakdown – Breakdown for each should not exceed 15%.

3. Calibration Verification – Beginning/Every 20th Sample/Ending. Note only those %D that affect data.
 %Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptach, or	Hept Epoxide	Methoxychlor	DCB	TMX	Average
1A <u>41</u>	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	34.9	23.0	/	/	/	/	/	/	6.2
1B																								
2A <u>47</u>	/	/	/	/	/	/	/	18.5	/	/	/	/	/	/	/	30.0	65	-	-	-	-	-	-	6.0
2B																								
3A <u>55</u>	/	/	/	/	/	/	/	18.7	/	/	/	/	/	/	/	41.4	26.9	/	/	/	/	16.2	-	7.2
3B																								

4. Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
 1 per 20 samples per matrix.

Method Blank				
<u>P08023 LB OK</u>				

5. Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD			
<u>P08023 LCS</u>			

6. Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103135-IMS, MSD % RPD out methoxychlor

7. Notes

\\SERVER\ETC_SOP\Organics\gcsvo\PestPCBHerbs\8081\GC Pesticides 8081A Check List 032900.doc

000199

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

6561085

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3A

Calibration Date: 03/09/01 Time: 1027

Lab File ID: P303081A-41R

Init. Calib. Date(s): 03/08/01 03/08/01

Init. Calib. Times: 1701 2015

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0205	0.0200	AVRG	2.5	15.0
alpha-BHC	0.0201	0.0200	AVRG	0.5	15.0
beta-BHC	0.0206	0.0200	AVRG	3.0	15.0
delta-BHC	0.0202	0.0200	AVRG	1.0	15.0
gamma-BHC (Lindane)	0.0203	0.0200	AVRG	1.5	15.0
alpha-chlordane	0.0205	0.0200	AVRG	2.5	15.0
gamma-chlordane	0.0204	0.0200	AVRG	2.0	15.0
Chlorpyrifos	0.0171	0.0200	LINR	14.5	15.0
4,4'-DDD	0.0208	0.0200	AVRG	4.0	15.0
4,4'-DDE	0.0209	0.0200	AVRG	4.5	15.0
4,4'-DDT	0.0194	0.0200	AVRG	3.0	15.0
Dieldrin	0.0210	0.0200	AVRG	5.0	15.0
Endosulfan I	0.0204	0.0200	AVRG	2.0	15.0
Endosulfan II	0.0207	0.0200	AVRG	3.5	15.0
Endosulfan sulfate	0.0206	0.0200	AVRG	3.0	15.0
Endrin	0.0132	0.0200	AVRG	34.0	15.0 <-
Endrin aldehyde	0.0246	0.0200	AVRG	23.0	15.0 <-
Endrin ketone	0.0227	0.0200	AVRG	13.5	15.0
Heptachlor	0.0202	0.0200	AVRG	1.0	15.0
Heptachlor epoxide	0.0204	0.0200	AVRG	2.0	15.0
Methoxychlor	0.0187	0.0200	AVRG	6.5	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0178	0.0200	AVRG	11.0	15.0
Tetrachloro-m-xylene	0.0198	0.0200	AVRG	1.0	15.0

FORM VII PESTICIDE

000200

6561086

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3A

Calibration Date: 03/09/01 Time: 1332

Lab File ID: P303081A-47R

Init. Calib. Date(s): 03/08/01 03/08/01

Init. Calib. Times: 1701

2015

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0202	0.0200	AVRG	1.0	15.0
alpha-BHC	0.0191	0.0200	AVRG	4.5	15.0
beta-BHC	0.0203	0.0200	AVRG	1.5	15.0
delta-BHC	0.0198	0.0200	AVRG	1.0	15.0
gamma-BHC (Lindane)	0.0193	0.0200	AVRG	3.5	15.0
alpha-chlordane	0.0202	0.0200	AVRG	1.0	15.0
gamma-chlordane	0.0201	0.0200	AVRG	0.5	15.0
Chlorpyrifos	0.0163	0.0200	LINR	18.5	15.0
4,4'-DDD	0.0201	0.0200	AVRG	0.5	15.0
4,4'-DDE	0.0205	0.0200	AVRG	2.5	15.0
4,4'-DDT	0.0188	0.0200	AVRG	6.0	15.0
Dieldrin	0.0207	0.0200	AVRG	3.5	15.0
Endosulfan I	0.0199	0.0200	AVRG	0.5	15.0
Endosulfan II	0.0203	0.0200	AVRG	1.5	15.0
Endosulfan sulfate	0.0203	0.0200	AVRG	1.5	15.0
Endrin	0.0140	0.0200	AVRG	30.0	15.0
Endrin aldehyde	0.0233	0.0200	AVRG	16.5	15.0
Endrin ketone	0.0217	0.0200	AVRG	8.5	15.0
Heptachlor	0.0181	0.0200	AVRG	9.5	15.0
Heptachlor epoxide	0.0198	0.0200	AVRG	1.0	15.0
Methoxychlor	0.0179	0.0200	AVRG	10.5	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0173	0.0200	AVRG	13.5	15.0
Tetrachloro-m-xylene	0.0198	0.0200	AVRG	1.0	15.0

<- NT

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<- NT

FORM VII PESTICIDE

000201

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

6561087

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3A

Calibration Date: 03/09/01 Time: 1740

Lab File ID: P303081A-55R

Init. Calib. Date(s): 03/08/01 03/08/01

Init. Calib. Times: 1701

2015

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0204	0.0200	AVRG	2.0	15.0
alpha-BHC	0.0196	0.0200	AVRG	2.0	15.0
beta-BHC	0.0206	0.0200	AVRG	3.0	15.0
delta-BHC	0.0201	0.0200	AVRG	0.5	15.0
gamma-BHC (Lindane)	0.0198	0.0200	AVRG	1.0	15.0
alpha-chlordane	0.0203	0.0200	AVRG	1.5	15.0
gamma-chlordane	0.0202	0.0200	AVRG	1.0	15.0
Chlorpyrifos	0.0162	0.0200	LINR	19.0	15.0
4,4'-DDD	0.0202	0.0200	AVRG	1.0	15.0
4,4'-DDE	0.0207	0.0200	AVRG	3.5	15.0
4,4'-DDT	0.0185	0.0200	AVRG	7.5	15.0
Dieldrin	0.0207	0.0200	AVRG	3.5	15.0
Endosulfan I	0.0199	0.0200	AVRG	0.5	15.0
Endosulfan II	0.0204	0.0200	AVRG	2.0	15.0
Endosulfan sulfate	0.0203	0.0200	AVRG	1.5	15.0
Endrin	0.0117	0.0200	AVRG	41.5	15.0
Endrin aldehyde	0.0244	0.0200	AVRG	22.0	15.0
Endrin ketone	0.0225	0.0200	AVRG	12.5	15.0
Heptachlor	0.0182	0.0200	AVRG	9.0	15.0
Heptachlor epoxide	0.0203	0.0200	AVRG	1.5	15.0
Methoxychlor	0.0174	0.0200	AVRG	13.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0168	0.0200	AVRG	16.0	15.0
Tetrachloro-m-xylene	0.0198	0.0200	AVRG	1.0	15.0

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FORM VII PESTICIDE

000202

6561088

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3A

Calibration Date(s): 03/08/01 03/08/01

Column: RTX-CLP2 ID: 0.32 (mm)

Calibration Time(s): 1701 2300

LAB FILE ID: RF0.0004: P303081A RF0.004: P303081A-RF0.01: P303081A-1
RF0.02: P303081A-ORF0.03: P303081A-0

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		16400000	13211700	14619000	14226100
alpha-BHC		545250.00	460000.00	532950.00	516133.33
beta-BHC		270000.00	201200.00	221800.00	211033.33
delta-BHC		16451250	13624300	15698900	15497967
gamma-BHC (Lindane)		530500.00	432100.00	493400.00	481000.00
alpha-chlordane		15584750	12394500	13527300	13054100
gamma-chlordane		15696000	12433300	13706300	13263167
Chlordane			15740.000		
(2)			23810.000		
(3)			17745.000		
(4)			44580.000		
(5)			38610.000		
Chlorpyrifos		241000.00	187700.00	147200.00	163033.33
4,4'-DDD		11761250	9371900.0	10508000	10212467
4,4'-DDE		15112000	11923800	13135450	12549633
4,4'-DDT		387500.00	301800.00	340850.00	339666.67
Dieldrin		15102750	12123800	13856650	12973400
Endosulfan I		437250.00	355100.00	395100.00	388300.00
Endosulfan II		416000.00	338100.00	358650.00	352333.33
Endosulfan sulfate		13819500	10757600	11750450	11329233
Endrin		14789000	11888700	13064200	12733567
Endrin aldehyde		325000.00	254900.00	288500.00	263866.67
Endrin ketone		444000.00	358500.00	392950.00	370500.00
Heptachlor		454750.00	379900.00	411750.00	400433.33
Heptachlor epoxide		460250.00	374800.00	409600.00	398566.67
Methoxychlor		249250.00	181700.00	198000.00	188700.00
Toxaphene			12737.000		
(2)			12402.000		
(3)			9314.000		
(4)			8404.000		
(5)			14273.000		
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		374500.00	293300.00	305350.00	298066.67
Tetrachloro-m-xylene		336000.00	266700.00	278500.00	271933.33

FORM VI PESTICIDE

000203

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561089

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3A

Calibration Date(s): 03/08/01 03/08/01

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1701 2300

LAB FILE ID: RF0.04: P303081A-ORF0.06: P303081A-ORF0.4: P303081A-10

0.00

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	13366425	12622383	14370643
alpha-BHC	504975.00	478383.33	606180.00
beta-BHC	195325.00	182333.33	204490.00
delta-BHC	14764350	14187583	17261380
gamma-BHC (Lindane)	465625.00	435366.67	539340.00
alpha-chlordane	12169075	11529050	13116995
gamma-chlordane	12392200	11771950	13783955
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	152825.00	152233.33	133667.50
4,4'-DDD	9537475.0	9101833.3	10501803
4,4'-DDE	11691250	11024850	11793585
4,4'-DDT	306825.00	301416.67	347782.50
Dieldrin	12146550	11546417	12986120
Endosulfan I	357275.00	351600.00	406920.00
Endosulfan II	325950.00	314300.00	329465.00
Endosulfan sulfate	10464500	9838933.3	10387738
Endrin	11850300	11036983	11819393
Endrin aldehyde	249575.00	238050.00	248997.50
Endrin ketone	344725.00	330200.00	351350.00
Heptachlor	370775.00	352216.67	408835.00
Heptachlor epoxide	370300.00	352700.00	376437.50
Methoxychlor	169725.00	151766.67	154020.00
Toxaphene			
(2)			
(3)			
(4)			
(5)			
=====	=====	=====	=====
Decachlorobiphenyl	278750.00	251366.67	273647.50
Tetrachloro-m-xylene	257875.00	235700.00	276722.50

FORM VI PESTICIDE

000204

6561090

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST3A

Calibration Date(s): 03/08/01 03/08/01

Column: RTX-CLP2 ID: 0.32 (mm)

Calibration Time(s): 1701 2300

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
=====	=====	=====	=====	=====
Aldrin	AVRG		14116607.3	8.8
alpha-BHC	AVRG		520553.095	9.2
beta-BHC	AVRG		212311.667	13.3
delta-BHC	AVRG		15355104.3	8.3
gamma-BHC (Lindane)	AVRG		482475.952	8.8
alpha-chlordane	AVRG		13053681.4	10.0
gamma-chlordane	AVRG		13292410.2	9.7
Chlordane	LINR	0.00000000	6.353e-005	1.000
(2)	LINR	0.00000000	4.2e-005	1.000
(3)	LINR	0.00000000	5.635e-005	1.000
(4)	LINR	0.00000000	2.243e-005	1.000
(5)	LINR	0.00000000	2.59e-005	1.000
Chlorpyrifos	LINR	-5.24e-003	7.566e-006	1.000
4,4'-DDD	AVRG		10142103.9	8.9
4,4'-DDE	AVRG		12461509.8	10.8
4,4'-DDT	AVRG		332262.976	9.5
Dieldrin	AVRG		12962241.0	9.3
Endosulfan I	AVRG		384506.429	8.3
Endosulfan II	AVRG		347828.333	9.7
Endosulfan sulfate	AVRG		11192564.9	11.8
Endrin	AVRG		12454591.8	9.8
Endrin aldehyde	AVRG		266984.167	11.3
Endrin ketone	AVRG		370317.857	10.3
Heptachlor	AVRG		396951.429	8.4
Heptachlor epoxide	AVRG		391807.738	9.1
Methoxychlor	AVRG		184737.381	18.0
Toxaphene	LINR	0.00000000	7.851e-005	1.000
(2)	LINR	0.00000000	8.063e-005	1.000
(3)	LINR	0.00000000	1.074e-004	1.000
(4)	LINR	0.00000000	1.19e-004	1.000
(5)	LINR	0.00000000	7.006e-005	1.000
=====	=====	=====	=====	=====
Decachlorobiphenyl	AVRG		296425.833	13.1
Tetrachloro-m-xylene	AVRG		274775.833	11.2

FORM VI PESTICIDE

000205

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Herbicides**

6561092

ENVIRONMENTAL TESTING & CONSULTING, INC

GC Herbicides Method 8151B/6640 Sequence Check List

Sequence ID: H203061 System ID: 2 Date: 03/06/06 Analyst: RGColumn ID: Primary / Confirmation Column Description: ZB3S Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0102839No confirmation
needed1. Initial Calibration E20305016.mRSD of analytes $\leq 20\%$ may use average RF.RSD of analytes $\geq 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)2. Calibration Verification – Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Dalapon	MCP	Dicamba	MCPA	Dichloroprop	2,4-D	Silvex	2,4,5-T	Dinoseb	2,4-DB	DCAA	Average %
1A	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
1B												
2A	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
2B												
3A	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
3B												

3. Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank				
P11098LB	OK			
P11098LB	OK			

4. Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD				
P11098LCS	OK			

5. Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0102839-4MS, MSD OK

6. Notes

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST2B

Calibration Date: 03/06/01 Time: 1439

Lab File ID: H203061B-02R Init. Calib. Date(s): 03/05/01 03/05/01

Init. Calib. Times: 1424 1655

GC Column: ZB-35 ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.102	0.100	LINR	2.0	15.0
Silvex	0.00995	0.0100	LINR	0.5	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.00997	0.0100	LINR	0.3	15.0

FORM VII HERBICIDE

6561094

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST2B

Calibration Date: 03/06/01

Time: 1830

Lab File ID: H203061B-08R

Init. Calib. Date(s): 03/05/01 03/05/01

Init. Calib. Times: 1424

1655

GC Column: ZB-35

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.102	0.100	LINR	2.0	15.0
Silvex	0.00972	0.0100	LINR	2.8	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.00940	0.0100	LINR	6.0	15.0

FORM VII HERBICIDE

000209

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

6561095

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST2B

Calibration Date: 03/06/01 Time: 2151

Lab File ID: H203061B-16R

Init. Calib. Date(s): 03/05/01 03/05/01

Init. Calib. Times: 1424 1655

GC Column: ZB-35

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.0987	0.100	LINR	1.3	15.0
Silvex	0.00936	0.0100	LINR	6.4	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.00924	0.0100	LINR	7.6	15.0
=====	=====	=====	=====	=====	=====

FORM VII HERBICIDE

000210

6561096

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST2B

Calibration Date(s): 03/05/01 03/05/01

Column: ZB-35

ID: 0.25 (mm)

Calibration Time(s): 1424

1655

LAB FILE ID: RF0.01: H203051B RF0.02: H203051B RF0.04: H203051B

RF0.1: H203051B RF0.25: H203051B

COMPOUND	RF0.01	RF0.02	RF0.04	RF0.1	RF0.25
=====	=====	=====	=====	=====	=====
2,4-D	2839400.0	1313366.7	1152320.0	983810.00	910470.00
Silvex	115366000	75922667	68420400	64292100	66596150
=====	=====	=====	=====	=====	=====
2,4,5-T	108400000	82901000	68954200	81373800	70353600
=====	=====	=====	=====	=====	=====

FORM VI HERBICIDE

000211

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

6561097

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST2B

Calibration Date(s): 03/05/01 03/05/01

Column: ZB-35

ID: 0.25 (mm)

Calibration Time(s): 1424

1655

LAB FILE ID:

RF0.35: H203051B RF0: H203051B-08R

COMPOUND	RF0.35	RF0
=====	=====	=====
2,4-D	846188.00	741892.00
Silvex	71311880	68277850
=====	=====	=====
2,4,5-T	76693680	72969010
=====	=====	=====

FORM VI HERBICIDE

000212

6561098

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0102-839

Instrument ID: PEST2B

Calibration Date(s): 03/05/01 03/05/01

Column: ZB-35

ID: 0.25 (mm)

Calibration Time(s): 1424

1655

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
2,4-D	LINR	-3.59e-002	1.363e-006	0.997
Silvex	LINR	-1.63e-004	1.457e-008	0.999
2,4,5-T	LINR	-3.96e-004	1.364e-008	0.999

FORM VI HERBICIDE

000213

Environmental Testing & Consulting, Inc.
Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

Reviewed
4/13/01
OK
014
04/02/02 Lead Telp Field 0.239/ND(0.1)

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561100

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Innovative Waste Management**
 Site ID **Dunn Field**

ETC Order #0103239
 7512-060

<u>ETC Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
010323901	DF/24-B/1066/SDC/011	SOIL	7.3.3	Reactive Cyanide
010323901	DF/24-B/1066/SDC/011	SOIL	1010	Ignitability/Flashpoint
010323901	DF/24-B/1066/SDC/011	SOIL	9045C	pH - Corrosivity
010323901	DF/24-B/1066/SDC/011	SOIL	7.3.4	Reactive Sulfide
010323901	DF/24-B/1066/SDC/011	SOIL	1311	TCLP Extraction
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Silver - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Arsenic - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Arsenic
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Barium - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Cadmium - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Chromium - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	7470A	Mercury - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Lead - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	6010B	Selenium - TCLP
010323901	DF/24-B/1066/SDC/011	SOIL	8270C	TCLP Semivolatiles
010323901	DF/24-B/1066/SDC/011	SOIL	8151A	TCLP Herbicides
010323901	DF/24-B/1066/SDC/011	SOIL	8081A	TCLP Pesticides
010323901	DF/24-B/1066/SDC/011	SOIL	1311	TCLP Extraction Organics
010323901	DF/24-B/1066/SDC/011	SOIL	1311	TCLP Extraction ZHE
010323901	DF/24-B/1066/SDC/011	SOIL	8260B	TCLP Volatile Organics
010323902	DF/24-B/1066/SDC/012	SOIL	7.3.3	Reactive Cyanide
010323902	DF/24-B/1066/SDC/012	SOIL	1010	Ignitability/Flashpoint
010323902	DF/24-B/1066/SDC/012	SOIL	9045C	pH - Corrosivity
010323902	DF/24-B/1066/SDC/012	SOIL	7.3.4	Reactive Sulfide
010323902	DF/24-B/1066/SDC/012	SOIL	1311	TCLP Extraction
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Silver - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Arsenic - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Arsenic
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Barium - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Cadmium - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Chromium - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	7470A	Mercury - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Lead - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	6010B	Selenium - TCLP
010323902	DF/24-B/1066/SDC/012	SOIL	8270C	TCLP Semivolatiles
010323902	DF/24-B/1066/SDC/012	SOIL	8151A	TCLP Herbicides
010323902	DF/24-B/1066/SDC/012	SOIL	8081A	TCLP Pesticides
010323902	DF/24-B/1066/SDC/012	SOIL	1311	TCLP Extraction Organics
010323902	DF/24-B/1066/SDC/012	SOIL	1311	TCLP Extraction ZHE
010323902	DF/24-B/1066/SDC/012	SOIL	8260B	TCLP Volatile Organics
010323903	DF/24-B/1066/SDC/013	SOIL	7.3.3	Reactive Cyanide
010323903	DF/24-B/1066/SDC/013	SOIL	1010	Ignitability/Flashpoint
010323903	DF/24-B/1066/SDC/013	SOIL	9045C	pH - Corrosivity
010323903	DF/24-B/1066/SDC/013	SOIL	7.3.4	Reactive Sulfide
010323903	DF/24-B/1066/SDC/013	SOIL	1311	TCLP Extraction
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Silver - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Arsenic - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Arsenic
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Barium - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Cadmium - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Chromium - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	7470A	Mercury - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Lead - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	6010B	Selenium - TCLP
010323903	DF/24-B/1066/SDC/013	SOIL	8270C	TCLP Semivolatiles

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561101

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Innovative Waste Management**
Site ID **Dunn Field**

ETC Order #**0103239**
7512-060

<u>ETC</u> <u>Sample ID</u>	<u>Field</u> <u>ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
010323903	DF/24-B/1066/SDC/013	SOIL	8151A	TCLP Herbicides
010323903	DF/24-B/1066/SDC/013	SOIL	8081A	TCLP Pesticides
010323903	DF/24-B/1066/SDC/013	SOIL	1311	TCLP Extraction Organics
010323903	DF/24-B/1066/SDC/013	SOIL	1311	TCLP Extraction ZHE
010323903	DF/24-B/1066/SDC/013	SOIL	8260B	TCLP Volatile Organics
010323904	DF/24-B/1066/SDC/014	SOIL	7.3.3	Reactive Cyanide
010323904	DF/24-B/1066/SDC/014	SOIL	1010	Ignitability/Flashpoint
010323904	DF/24-B/1066/SDC/014	SOIL	9045C	pH - Corrosivity
010323904	DF/24-B/1066/SDC/014	SOIL	7.3.4	Reactive Sulfide
010323904	DF/24-B/1066/SDC/014	SOIL	1311	TCLP Extraction
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Silver - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Arsenic - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Arsenic
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Barium - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Cadmium - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Chromium - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	7470A	Mercury - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Lead - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	6010B	Selenium - TCLP
010323904	DF/24-B/1066/SDC/014	SOIL	8270C	TCLP Semivolatiles
010323904	DF/24-B/1066/SDC/014	SOIL	8151A	TCLP Herbicides
010323904	DF/24-B/1066/SDC/014	SOIL	8081A	TCLP Pesticides
010323904	DF/24-B/1066/SDC/014	SOIL	1311	TCLP Extraction Organics
010323904	DF/24-B/1066/SDC/014	SOIL	1311	TCLP Extraction ZHE
010323904	DF/24-B/1066/SDC/014	SOIL	8260B	TCLP Volatile Organics
010323905	DF/24-B/1066/SDC/015	SOIL	7.3.3	Reactive Cyanide
010323905	DF/24-B/1066/SDC/015	SOIL	1010	Ignitability/Flashpoint
010323905	DF/24-B/1066/SDC/015	SOIL	9045C	pH - Corrosivity
010323905	DF/24-B/1066/SDC/015	SOIL	7.3.4	Reactive Sulfide
010323905	DF/24-B/1066/SDC/015	SOIL	1311	TCLP Extraction
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Silver - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Arsenic - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Arsenic
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Barium - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Cadmium - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Chromium - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	7470A	Mercury - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Lead - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	6010B	Selenium - TCLP
010323905	DF/24-B/1066/SDC/015	SOIL	8270C	TCLP Semivolatiles
010323905	DF/24-B/1066/SDC/015	SOIL	8151A	TCLP Herbicides
010323905	DF/24-B/1066/SDC/015	SOIL	8081A	TCLP Pesticides
010323905	DF/24-B/1066/SDC/015	SOIL	1311	TCLP Extraction Organics
010323905	DF/24-B/1066/SDC/015	SOIL	1311	TCLP Extraction ZHE
010323905	DF/24-B/1066/SDC/015	SOIL	8260B	TCLP Volatile Organics
010323906	DF/24-B/1066/SDC/016	SOIL	7.3.3	Reactive Cyanide
010323906	DF/24-B/1066/SDC/016	SOIL	1010	Ignitability/Flashpoint
010323906	DF/24-B/1066/SDC/016	SOIL	9045C	pH - Corrosivity
010323906	DF/24-B/1066/SDC/016	SOIL	7.3.4	Reactive Sulfide
010323906	DF/24-B/1066/SDC/016	SOIL	1311	TCLP Extraction
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Silver - TCLP
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Arsenic - TCLP
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Arsenic
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Barium - TCLP
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Cadmium - TCLP

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Innovative Waste Management**
 Site ID **Dunn Field**

ETC Order #0103239
 7512-060

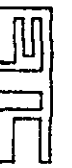
ETC Sample ID	Field ID	Matrix	Method	Method Description
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Chromium - TCLP
010323906	DF/24-B/1066/SDC/016	SOIL	7470A	Mercury - TCLP
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Lead - TCLP
010323906	DF/24-B/1066/SDC/016	SOIL	6010B	Selenium - TCLP
010323906	DF/24-B/1066/SDC/016	SOIL	8270C	TCLP Semivolatiles
010323906	DF/24-B/1066/SDC/016	SOIL	8151A	TCLP Herbicides
010323906	DF/24-B/1066/SDC/016	SOIL	8081A	TCLP Pesticides
010323906	DF/24-B/1066/SDC/016	SOIL	1311	TCLP Extraction Organics
010323906	DF/24-B/1066/SDC/016	SOIL	1311	TCLP Extraction ZHE
010323906	DF/24-B/1066/SDC/016	SOIL	8260B	TCLP Volatile Organics
010323907	DF/24-B/1066/SDC/017	SOIL	7.3.3	Reactive Cyanide
010323907	DF/24-B/1066/SDC/017	SOIL	1010	Ignitability/Flashpoint
010323907	DF/24-B/1066/SDC/017	SOIL	9045C	pH - Corrosivity
010323907	DF/24-B/1066/SDC/017	SOIL	7.3.4	Reactive Sulfide
010323907	DF/24-B/1066/SDC/017	SOIL	1311	TCLP Extraction
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Silver - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Arsenic - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Arsenic
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Barium - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Cadmium - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Chromium - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	7470A	Mercury - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Lead - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	6010B	Selenium - TCLP
010323907	DF/24-B/1066/SDC/017	SOIL	8270C	TCLP Semivolatiles
010323907	DF/24-B/1066/SDC/017	SOIL	8151A	TCLP Herbicides
010323907	DF/24-B/1066/SDC/017	SOIL	8081A	TCLP Pesticides
010323907	DF/24-B/1066/SDC/017	SOIL	1311	TCLP Extraction Organics
010323907	DF/24-B/1066/SDC/017	SOIL	1311	TCLP Extraction ZHE
010323907	DF/24-B/1066/SDC/017	SOIL	8260B	TCLP Volatile Organics
010323908	DF/24-B/1066/SDC/022	SOIL	7.3.3	Reactive Cyanide
010323908	DF/24-B/1066/SDC/022	SOIL	1010	Ignitability/Flashpoint
010323908	DF/24-B/1066/SDC/022	SOIL	9045C	pH - Corrosivity
010323908	DF/24-B/1066/SDC/022	SOIL	7.3.4	Reactive Sulfide
010323908	DF/24-B/1066/SDC/022	SOIL	1311	TCLP Extraction
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Silver - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Arsenic - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Arsenic
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Barium - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Cadmium - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Chromium - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	7470A	Mercury - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Lead - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	6010B	Selenium - TCLP
010323908	DF/24-B/1066/SDC/022	SOIL	8270C	TCLP Semivolatiles
010323908	DF/24-B/1066/SDC/022	SOIL	8151A	TCLP Herbicides
010323908	DF/24-B/1066/SDC/022	SOIL	8081A	TCLP Pesticides
010323908	DF/24-B/1066/SDC/022	SOIL	1311	TCLP Extraction Organics
010323908	DF/24-B/1066/SDC/022	SOIL	1311	TCLP Extraction ZHE
010323908	DF/24-B/1066/SDC/022	SOIL	8260B	TCLP Volatile Organics

3/15/01

Environmental Testing & Consulting, Inc.

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Login
Chain-of-Custody



Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

CHAIN OF CUSTODY RECORD

ETC Work Order :

0103-239

000000

Company Name UATB		Phone # (901) 745-4999		Fax Results													
Project/Site Dunn Field		Fax # : (901) 745-4280		RUSH													
Project # 2512-060		FID #		Ice													
Project Manager/Contact Jim Dunkle		PO # :															
		Matrix															
		1 Wastewater		4 Sludge													
		2 Aqueous		5 Oil/Solvent													
		3 Soil/Sediment		6 Other													
# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type	Analysis Requested					Comments					
							(Note special detection limits or methods)										
1	DF/24-8/1066/SDC/011		7 Mar 01	0909	Soil	Comp	Metals TCLP	X	X	X	X	X	X	X	X	X	X
1	DF/24-8/1066/SDC/012		7 Mar 01	0928	Soil	Comp	Volatile TCLP	X	X	X	X	X	X	X	X	X	X
1	DF/24-8/1066/SDC/013		7 Mar 01	0945	Soil	Comp	Organics	X	X	X	X	X	X	X	X	X	X
1	DF/24-8/1066/SDC/014		7 Mar 01	1005	Soil	Comp	Semi-Volatiles	X	X	X	X	X	X	X	X	X	X
1	DF/24-8/1066/SDC/015		7 Mar 01	1029	Soil	Comp	Organics TCLP	X	X	X	X	X	X	X	X	X	X
1	DF/24-8/1066/SDC/016		7 Mar 01	1043	Soil	Comp	Pesticides TCLP	X	X	X	X	X	X	X	X	X	X
1	DF/24-8/1066/SDC/017		7 Mar 01	1058	Soil	Comp	Herbicides	X	X	X	X	X	X	X	X	X	X
1	DF/24-8/1066/SDC/022		7 Mar 01	1112	Soil	Grab	Arsenic Totals	X	X	X	X	X	X	X	X	X	X
							Reactive Cyanide	X	X	X	X	X	X	X	X	X	X
							Reactive Sulfide	X	X	X	X	X	X	X	X	X	X
							Ignitability/Flashpoint	X	X	X	X	X	X	X	X	X	X
							PH Corrosivity	X	X	X	X	X	X	X	X	X	X
Sampled By STADunkle		Method of Shipment Hand		Blank/Cooler Temp 40°C		Remarks											
RELINQUISHED BY (sign) [Signature]		DATE 3/8/01		TIME 1002		RECEIVED BY (sign)		DATE 3/8/01		TIME 1002		Sample Delivery Group ID					
RELINQUISHED BY (sign) [Signature]		DATE 3/8/01		TIME 1002		RECEIVED BY (sign)		DATE 3/8/01		TIME 1002							
RELINQUISHED BY (sign) [Signature]		DATE 3/8/01		TIME 1002		RECEIVED BY (sign)		DATE 3/8/01		TIME 1002							

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 3/8/01
Date/Time Checked In 3/8/01-10:02
Carrier/Bill# Hand-Delivered

LIMS# 0103-239
Project Dunn Field
By Rebekah Barger

1. Custody Seals?/Location-	No
2. Samples are non-radioactive?	Yes
3. Chain of Custody in plastic?	Yes
4. Temperature at receipt (ok = 4 ± 2 °C) <4°C	OK
5. Ice & Packing-ice, bubble wrap	Yes
6. Chain of Custody filled out properly?	Yes
7. All containers in separate bags?	No
8. Sample containers intact?	Yes
9. Label(s) complete and in good condition?	Yes
10. Label(s) agree with Chain of Custody?	Yes
11. Correct containers used?	Yes
12. Sufficient sample?	Yes
13. VOA vials bubble-free (H ₂ O) or no head space (soil)?	Yes
14. Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

6561106

Environmental Testing & Consulting, Inc.

Sample Reports

000008

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561107

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-01**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/011**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	6.7	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3 4	RS031211


Data Validator

ND - Not Detected

000009

6561108

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-02**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/012**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.0	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211

Data Validator

ND - Not Detected

000010

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561109

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-03**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/013**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.0	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211

Data Validator

ND - Not Detected

000011

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561110

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-04**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/014**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3 3	RC031211
Ignitability/Flashpoint	> 96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.1	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7 3.4	RS031211

CS

Data Validator

ND - Not Detected

000012

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561111

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-05**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/015**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.2	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211


Data Validator

ND - Not Detected

000013

6561112

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-06**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/016**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.4	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211


Data Validator

ND - Not Detected

000014

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561113

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-07**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/017**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.4	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211


Data Validator

ND - Not Detected

000015

6561114

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-08**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/022**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.1	SU		03/09/01	TL	9045C	PH030911
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211

CS
Data Validator

ND - Not Detected

000016

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561115

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-01**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/011**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50				03/12/01	NR	3051
Arsenic	7.91	mg/Kg	0.500	03/15/01	03/12/01	SH	6010B

CS
Data Validator

ND - Not Detected

000017

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561116

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-02**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/012**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50				03/12/01	NR	3051
Arsenic	7.09	mg/Kg	0.500	03/15/01	03/12/01	SH	6010B

CS
Data Validator

ND - Not Detected

000018

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-03**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/013**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50						
Arsenic	12.1	mg/Kg	0.500	03/15/01	03/12/01 03/12/01	NR SH	3051 6010B

CS
Data Validator

ND - Not Detected

000019

6561118

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-04**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/014**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50				03/12/01	NR	3051
Arsenic	9.26	mg/Kg	0.500	03/15/01	03/12/01	SH	6010B

Data Validator

ND - Not Detected

000020

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561119

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-05**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/015**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50				03/12/01	NR	3051
Arsenic	8.13	mg/Kg	0.500	03/15/01	03/12/01	SH	6010B


Data Validator

ND - Not Detected

000021

6561120

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-06**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/016**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50				03/12/01	NR	3051
Arsenic	10.5	mg/Kg	0.500	03/15/01	03/12/01	SH	6010B

CS
Data Validator

ND - Not Detected

000022

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561121

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-07**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/017**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50						
Arsenic	6.82	mg/Kg	0.500	03/15/01	03/12/01 03/12/01	NR SH	3051 6010B

CS
Data Validator

ND - Not Detected

000023

6561122

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-08**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/022**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-50				03/12/01	NR	3051
Arsenic	11.4	mg/Kg	0.500	03/15/01	03/12/01	SH	6010B

Data Validator CS

ND - Not Detected

000024

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561123

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-01**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/011**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	1.30	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B

CS
Data Validator

ND - Not Detected

000025

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561124

Client Name

Innovative Waste Management

Site ID Dunn Field

P.O. Box 50397

Summerville, SC 29485-0397

Date Arrived 03/08/01

ETC Order Number 0103239

ETC Lab ID : 0103239-02

Matrix : SOIL

Field ID : DF/24-B/1066/SDC/012

Sample Date : 03/07/01

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	1.27	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B

CS

Data Validator

ND - Not Detected

000026

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561125

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-03**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/013**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	0.944	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	0.052	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B

CS
Data Validator

ND - Not Detected

000027

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561126

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-04**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/014**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	0.772	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	0.113	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	0.239	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B

CS
Data Validator

ND - Not Detected

000028

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561127

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

Date Arrived **03/08/01**

ETC Order Number **0103239**

ETC Lab ID : **0103239-05**

Matrix : **SOIL**

Field ID : **DF/24-B/1066/SDC/015**

Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL 1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR 3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH 6010B
Barium - TCLP	1.41	mg/L	0.025	03/15/01	03/14/01	SH 6010B
Cadmium - TCLP	0.053	mg/L	0.010	03/15/01	03/14/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF 7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH 6010B

CS
Data Validator

ND - Not Detected

000029

6561128

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-06**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/016**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	1.10	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	0.060	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B

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Data Validator

ND - Not Detected

000030

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561129

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-07**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/017**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	1.20	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B

CS
Data Validator

ND - Not Detected

000031

6561130

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID : **0103239-08**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/022**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	0.778	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	0.116	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B

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Data Validator

ND - Not Detected

000032

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561131

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-01**Field ID : **DF/24-B/1066/SDC/011**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				03/12/01	TL 1311
TCLP Volatile Organics				03/15/01	EM	8260B 5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	99		74	123		
S2 - Toluene-d8	101		86	112		
S3 - 4-Bromofluorobenzene	93		81	115		
S4 - 1,2-Dichloroethane-d4	94		80	120		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000033

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561132

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-02**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/012**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE TCLP Volatile Organics	Leachate			03/15/01	03/12/01	TL 1311 EM 8260B 5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	100	74 123
S2 - Toluene-d8	101	86 112
S3 - 4-Bromofluorobenzene	95	81 115
S4 - 1,2-Dichloroethane-d4	98	80 120

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561133

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-03**Field ID : **DF/24-B/1066/SDC/013**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate					
TCLP Volatile Organics				03/15/01	03/12/01	TL 1311 EM 8260B 5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	102		74 123			
S2 - Toluene-d8	101		86 112			
S3 - 4-Bromofluorobenzene	93		81 115			
S4 - 1,2-Dichloroethane-d4	99		80 120			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000035

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561134

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-04**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/014**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				TL	1311
TCLP Volatile Organics				03/15/01	EM	8260B 5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	104	74 123
S2 - Toluene-d8	100	86 112
S3 - 4-Bromofluorobenzene	95	81 115
S4 - 1,2-Dichloroethane-d4	103	80 120

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000036

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561135

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-05**Field ID : **DF/24-B/1066/SDC/015**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate					
TCLP Volatile Organics				03/15/01	03/12/01	TL 1311 EM 8260B 5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	102		74 123			
S2 - Toluene-d8	100		86 112			
S3 - 4-Bromofluorobenzene	96		81 115			
S4 - 1,2-Dichloroethane-d4	100		80 120			

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000037

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561136
Client Name

Innovative Waste Management

Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**
ETC Order Number **0103239**ETC Lab ID **0103239-06**
Field ID : **DF/24-B/1066/SDC/016**Matrix : **SOIL**
Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				TL	1311
TCLP Volatile Organics				03/15/01	EM	8260B 5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery			QC Limits		
S1 - Dibromofluoromethane	100			74 123		
S2 - Toluene-d8	100			86 112		
S3 - 4-Bromofluorobenzene	96			81 115		
S4 - 1,2-Dichloroethane-d4	97			80 120		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000038

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561137

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-07**Field ID : **DF/24-B/1066/SDC/017**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				03/12/01	TL 1311
TCLP Volatile Organics				03/15/01	EM 8260B	5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	103		74 123			
S2 - Toluene-d8	101		86 112			
S3 - 4-Bromofluorobenzene	96		81 115			
S4 - 1,2-Dichloroethane-d4	103		80 120			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000039

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561138

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-08**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/022**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				03/12/01	TL 1311
TCLP Volatile Organics				03/15/01	EM	8260B 5030B
QC Batch	V403151					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	101		74	123		
S2 - Toluene-d8	100		86	112		
S3 - 4-Bromofluorobenzene	96		81	115		
S4 - 1,2-Dichloroethane-d4	100		80	120		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000040

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561139

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-01**Field ID : **DF/24-B/1066/SDC/011**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/16/01	PF	8270C
QC Batch	P06081				03/16/01	3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	79		29	110		
S2 - 2-Fluorobiphenyl	81		38	107		
S3 - 4-Terphenyl-d14	98		33	122		
S4 - Phenol-d6	20		7	58		
S5 - 2,4,6-Tribromophenol	48		16	138		
S6 - 2-Fluorophenol	30		8	88		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000041

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561140

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-02**Field ID : **DF/24-B/1066/SDC/012**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/16/01	PF	8270C
QC Batch	P06081				03/16/01	3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			

Surrogate Standard	% Recovery	QC Limits
S1 - Nitrobenzene-d5	72	29 110
S2 - 2-Fluorobiphenyl	75	38 107
S3 - 4-Terphenyl-d14	100	33 122
S4 - Phenol-d6	19	7 58
S5 - 2,4,6-Tribromophenol	44	16 138
S6 - 2-Fluorophenol	29	8 88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000042

ENVIRONMENTAL TESTING & CONSULTING, INC.

6561141

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-03**Field ID : **DF/24-B/1066/SDC/013**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Semivolatiles				03/16/01	PF 8270C	3510C
QC Batch	P06081					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	80		29	110		
S2 - 2-Fluorobiphenyl	77		38	107		
S3 - 4-Terphenyl-d14	114		33	122		
S4 - Phenol-d6	20		7	58		
S5 - 2,4,6-Tribromophenol	49		16	138		
S6 - 2-Fluorophenol	31		8	88		

CS
Data Validator ND - Not Detected

Q - Recovery Outside QC Limits

000043

6561142

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-04**Field ID : **DF/24-B/1066/SDC/014**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/16/01	PF	8270C
QC Batch	P06081					3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			

Surrogate Standard	% Recovery	QC Limits
S1 - Nitrobenzene-d5	97	29 110
S2 - 2-Fluorobiphenyl	90	38 107
S3 - 4-Terphenyl-d14	129 Q	33 122
S4 - Phenol-d6	24	7 58
S5 - 2,4,6-Tribromophenol	56	16 138
S6 - 2-Fluorophenol	36	8 88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000044

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561143

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-05**Field ID : **DF/24-B/1066/SDC/015**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate					
TCLP Semivolatiles				03/16/01	03/13/01 03/16/01	TL 1311 PF 8270C 3510C
QC Batch	P06081					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	83		29 110			
S2 - 2-Fluorobiphenyl	84		38 107			
S3 - 4-Terphenyl-d14	107		33 122			
S4 - Phenol-d6	20		7 58			
S5 - 2,4,6-Tribromophenol	46		16 138			
S6 - 2-Fluorophenol	31		8 88			

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000045

6561144

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-06**Field ID : **DF/24-B/1066/SDC/016**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/16/01	PF	8270C
					03/16/01	3510C
QC Batch	P06081					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	82		29	110		
S2 - 2-Fluorobiphenyl	84		38	107		
S3 - 4-Terphenyl-d14	107		33	122		
S4 - Phenol-d6	23		7	58		
S5 - 2,4,6-Tribromophenol	51		16	138		
S6 - 2-Fluorophenol	33		8	88		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000046

ENVIRONMENTAL TESTING & CONSULTING, INC. 6561145

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**

ETC Order Number **0103239**

ETC Lab ID **0103239-07**

Field ID : **DF/24-B/1066/SDC/017**

Matrix : **SOIL**

Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate					
TCLP Semivolatiles				03/16/01	03/13/01	TL 1311
					03/16/01	PF 8270C
QC Batch	P06081					3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			

Surrogate Standard	% Recovery	QC Limits
S1 - Nitrobenzene-d5	71	29 110
S2 - 2-Fluorobiphenyl	71	38 107
S3 - 4-Terphenyl-d14	93	33 122
S4 - Phenol-d6	19	7 58
S5 - 2,4,6-Tribromophenol	45	16 138
S6 - 2-Fluorophenol	29	8 88

CS
 Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000047

6561146

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-08**Field ID : **DF/24-B/1066/SDC/022**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Semivolatiles				03/16/01	PF 8270C	3510C
QC Batch	P06081					
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	75		29	110		
S2 - 2-Fluorobiphenyl	74		38	107		
S3 - 4-Terphenyl-d14	100		33	122		
S4 - Phenol-d6	21		7	58		
S5 - 2,4,6-Tribromophenol	46		16	138		
S6 - 2-Fluorophenol	32		8	88		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000048

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561147

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-01**Field ID : **DF/24-B/1066/SDC/011**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/20/01	RG	8081A
QC Batch	P08025					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	111		34	115		
S2 - Tetrachloro-m-xylene	88		31	96		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000049

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561148

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-02**Field ID : **DF/24-B/1066/SDC/012**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/20/01	RG	8081A
QC Batch	P08025					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	111		34	115		
S2 - Tetrachloro-m-xylene	89		31	96		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000050

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561149

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-03**Field ID : **DF/24-B/1066/SDC/013**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Pesticides				03/20/01	RG 8081A	
QC Batch	P08025				03/15/01	3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	108		34	115		
S2 - Tetrachloro-m-xylene	89		31	96		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000051

6561150

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-04**Field ID : **DF/24-B/1066/SDC/014**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Pesticides				03/21/01	RG 8081A	3510C
QC Batch	P08025					
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	106		34	115		
S2 - Tetrachloro-m-xylene	84		31	96		

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000052

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561151

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**

ETC Order Number **0103239**

ETC Lab ID **0103239-05**

Field ID : **DF/24-B/1066/SDC/015**

Matrix : **SOIL**

Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate					
TCLP Pesticides				03/21/01	03/13/01	TL 1311
					03/15/01	RG 8081A
QC Batch	P08025					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	105		34	115		
S2 - Tetrachloro-m-xylene	88		31	96		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000053

6561152

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field**P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-06**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/016**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Pesticides				03/21/01	RG 03/15/01	8081A 3510C
QC Batch	P08025					
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	106		34	115		
S2 - Tetrachloro-m-xylene	90		31	96		

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561153

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-07**Field ID : **DF/24-B/1066/SDC/017**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate					
TCLP Pesticides				03/20/01	03/13/01	TL 1311
					03/15/01	RG 8081A
QC Batch	P08025					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - Decachlorobiphenyl	92		34	115		
S2 - Tetrachloro-m-xylene	89		31	96		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000055

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561154

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-08**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/022**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/21/01	RG	8081A
QC Batch	P08025					3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	105		34	115		
S2 - Tetrachloro-m-xylene	78		31	96		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000056

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561155

Client Name **Innovative Waste Management**

Site ID **Dunn Field**

P.O. Box 50397
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**

ETC Order Number **0103239**

ETC Lab ID **0103239-01**

Field ID : **DF/24-B/1066/SDC/011**

Matrix : **SOIL**

Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	87		20 150			

6561156

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**

 P.O. Box 50397
 Summerville, SC 29485-0397

Site ID **Dunn Field**

FID #

Date Arrived **03/08/01**
ETC Order Number **0103239**

ETC Lab ID **0103239-02**
Field ID : **DF/24-B/1066/SDC/012**

Matrix : **SOIL**
Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089				03/14/01	8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	88		20	150		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000058

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561157

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-03**Field ID : **DF/24-B/1066/SDC/013**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	100		20 150			

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000059

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561158

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-04**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/014**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	91			20		150

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000060

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561159

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-05**Field ID : **DF/24-B/1066/SDC/015**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089				03/14/01	8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	94			20	150	

C 5

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000061

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561160

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-06**Matrix : **SOIL**Field ID : **DF/24-B/1066/SDC/016**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Herbicides				03/15/01	RG 8151A	8151A
QC Batch	P11089					
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	92				20	150

Data Validator 13

ND - Not Detected

Q - Recovery Outside QC Limits

000062

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561161

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/08/01**ETC Order Number **0103239**ETC Lab ID **0103239-07**Field ID : **DF/24-B/1066/SDC/017**Matrix : **SOIL**Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	94		20 150			

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

000063

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561162

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/08/01**
ETC Order Number **0103239**ETC Lab ID **0103239-08**
Field ID : **DF/24-B/1066/SDC/022**Matrix : **SOIL**
Sample Date : **03/07/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
SI - 2,4,5-T	78		20 150			

Data Validator

65

ND - Not Detected

Q - Recovery Outside QC Limits

000064

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Inorganics**

6561164

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE
INORGANICS – SOIL

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

HOLDING TIMES

Sample Analysis All samples analyzed within Method Specified Holding Times.

METHOD

Preparation/Analysis: 7.3.3
1010
9045C
7.3.4

QUALITY CONTROL

QC Batch

RC031211
IG031411
PH030911
RS031211

Method Blank

No Target Analytes detected above Detection Limit.

Laboratory Control Sample

Spike Recovery All analytes within QC limits

Duplicates

RPD All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required No dilutions required.

CS

Project Manager

000066

METHOD BLANK
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc

Analyte	QC Sample No.	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Reactive Cyanide	RC0312111 BLK	RC031211	ND	0.125	mg/Kg	03/12/01	7.3.3
Reactive Sulfide	RS0312111 BLK	RS031211	ND	25	mg/Kg	03/12/01	7.3.4

NA - Not Applicable per Method
ND - Not DetectedReviewed by: CSINORG BLANK 0103-239.iqc
000067

6561166

LABORATORY CONTROL SAMPLE/ DAILY CHECK STANDARD
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Spike Added	Found	Units	% Rec	#	QC Limits	
Reactive Cyanide	RC0312111 LCS	RC031211	1000	215	mg/Kg	22		0	48
Reactive Sulfide	RS0312111 LCS	RS031211	285	212	mg/Kg	74		14	128
Ignitability	IG0314111 DCS	IG031411	27	27	deg C	100		96	104

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CS

INORG LCS-DCS 0103-239.lqc

000068

DUPLICATE
INORGANICS

6561167

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	SAMPLE Result	DUP Result	Units	% RPD	QC Limits		Method
Ignitability	0103-344-02 DUP	IG031411	> 96	> 96	deg C	0	0	20	1010

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CS

INORG DUP 0103-239.iqc

000069

6561168

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Metals (ICP/GFAA/CV)**

000070

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS – SOIL

6561169

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

HOLDING TIMES

QC Batch(s) for this order ICP Metals V13-SO-50
Sample Preparation/Analysis All samples digested/ analyzed within holding time.

METHOD

Preparation: SW-846 3051
Analysis: SW-846 6010B

CALIBRATION

Initial Calibration All criteria met.
Continuing Calibration All criteria met.

SAMPLE ANALYSIS

Instrumentation Thermo Jarrell Ash Enviro-I ICP
Dilutions Required No dilutions required.
% Solids Adjustment Sample results were adjusted for % solids.

QUALITY CONTROL

0103-239.MQ1BLANK

Method Blank

V13-SO-50BLK ICP Metals

No analytes detected in the Method Blank.

0103-239.MQ1LCS

Laboratory Control Sample(s)

V13-SO-50LCS ICP Metals

All acceptance criteria met.

0103-239.MQ1MSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0102-809-01 RPD All analytes within QC limits.
Spike Recovery All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.


Project Manager

000071

6561170

FORM 3A
SOLID METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals

V13-SO-50 BLK

QC Batch
V13-SO-50

Date Sample Prepared

3/12/01 ICP/GFAA Metals

Metals	Concentration mg/Kg	Detection Limit mg/Kg	Date Analyzed	Method
Arsenic	ND	0.500	3/15/01	6010B

ND - Not Detected

Reviewed by CS

0103-239.mq1 BLANK

000072

6561171

FORM 7
SOLID LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory Control ID

ICP/GFAA Metals V13-SO-50 LCSQC Batch
V13-SO-50

Date Prepared

ICP/GFAA Metals 3/12/01

Metals	Spike Added mg/Kg	Found mg/Kg	% R	#	QC Limits	
Arsenic	8.00	6.93	87		80	120

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS0103-239.mq1 LCS
000073

6561172

FORM 6
SOLID MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals 0102-809-01 QC Batch
V13-SO-50

Date Sample Prepared 3/12/01 ICP/GFAA Metals

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MS Conc mg/Kg	RPD <20% #	MS % Rec #	QC Limits	
Arsenic	11.2	7.24	16.0	19	78	75	125

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MSD Conc mg/Kg		MSD % Rec #	QC Limits	
Arsenic	10.8	7.24	19.3		112	75	125

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0103-239.mq1 MSMSD

000074

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		39.04	78	40-108
Di-n-butyl phthalate	50.00		36.96	74	19-158
1,2-Dichlorobenzene	50.00		34.55	69	26-100
1,3-Dichlorobenzene	50.00		33.96	68	21-102
1,4-Dichlorobenzene	50.00		34.09	68	24- 99
3,3'-Dichlorobenzidine	50.00		40.20	80	6-192
2,4-Dichlorophenol	50.00		31.81	64	32-110
2,6-Dichlorophenol	50.00		31.37	63	31-112
Diethyl phthalate	50.00		47.36	95	36-130
3,3-Dimethylbenzidine	50.00		27.53	55	6-192
2,4-Dimethyphenol	50.00		30.88	62	34-105
Dimethyl phthalate	50.00		41.34	83	34-123
4,6-Dinitro-2-methylphe	50.00		42.42	85	27-128
2,4-Dinitrophenol	50.00		52.42	105	10-132
2,4-Dinitrotoluene	50.00		52.01	104	24-147
2,6-Dinitrotoluene	50.00		44.97	90	36-125
N-NitrsdiphyllAm/Dipheny	100.0		59.92	60	35-116
Di-n-octyl phthalate	50.00		24.81	50	29-136
Ethyl methanesulfonate	50.00		35.96	72	20-121
Fluoranthene	50.00		51.05	102	28-127
Fluorene	50.00		42.31	85	41-116
Hexachlorobenzene	50.00		32.91	66	18-136
Hexachlorobutadiene	50.00		30.52	61	22-109
Hexachlorocyclopentadie	50.00		27.46	55	10-102
Hexachloroethane	50.00		32.05	64	16-107
Indeno(1,2,3-cd)pyrene	50.00		27.96	56	22-126
Isophorone	50.00		30.64	61	31-116
Methyl methanesulfonate	50.00		24.38	49	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

6561174

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		32.13	64	34-108
2-Methylphenol	50.00		34.38	69	22- 97
3&4-Methylphenol	50.00		30.58	61	21- 96
Naphthalene	50.00		33.24	66	33-108
2-Nitroaniline	50.00		41.51	83	32-127
3-Nitroaniline	50.00		49.97	100	28-142
4-Nitroaniline	50.00		52.66	105	23-139
Nitrobenzene	50.00		32.25	64	27-117
2-Nitrophenol	50.00		31.83	64	25-114
4-Nitrophenol	50.00		21.09	42	1- 76
N-Nitrosodibutylamine	50.00		33.23	66	31-126
N-Nitrosodiethylamine	50.00		32.19	64	28-107
N-Nitrosodimethylamine	50.00		24.03	48	14- 84
N-Nitrosodi-n-propylami	50.00		40.67	81	29-114
Pentachloronitrobenzene	50.00		36.20	72	34-135
Pentachlorophenol	50.00		33.88	68	17-142
Phenacetin	50.00		34.13	68	29-141
Phenanthrene	50.00		36.38	73	40-120
Phenol	50.00		18.77	38	11- 55
Pyrene	50.00		59.16	118	20-154
Pyridine	50.00		19.12	38	10- 71
1,2,4,5-Tetrachlorobenz	50.00		34.74	69	28-110
2,3,4,6-Tetrachlorophen	50.00		46.56	93	28-118
1,2,4-Trichlorobenzene	50.00		30.96	62	23-106
2,4,5-Trichlorophenol	50.00		38.44	77	26-118
2,4,6-Trichlorophenol	50.00		36.42	73	26-115
1,2-Dphnylhydrzine/Azob	50.00		30.29	60	45-135

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

6561175

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	50.00	35.54	71	5	20	38-117
Acenaphthylene	50.00	35.69	71	4	20	37-114
Acetophenone	50.00	32.09	64	4	20	32-108
Aniline	50.00	31.21	62	14	20	16-133
Anthracene	50.00	35.84	72	4	20	34-128
Benzidine	50.00	3.77	8*	151*	20	22-176
Benz (a) Anthracene	50.00	39.70	79	4	20	36-127
Benzo (b) fluoranthene	50.00	25.62	51	6	20	36-131
Benzo (k) fluoranthene	50.00	24.91	50	2	20	32-132
Benzo (ghi) perylene	50.00	26.96	54	5	20	26-123
Benzo (a) pyrene	50.00	25.03	50	4	20	34-131
Benzoic acid	50.00	5.31	11	10	20	11- 58
Benzyl alcohol	50.00	34.50	69	0	20	20-109
Bis (2-chloroethoxy) meth	50.00	31.84	64	3	20	20-126
Bis (2-chloroethyl) ether	50.00	36.35	73	1	20	16-122
Bis (2-chloroisopropyl) e	50.00	38.43	77	5	20	28-108
Bis (2-ethylhexyl) phthal	50.00	45.47	91	8	20	21-162
4-Bromophenyl phenyl et	50.00	27.56	55	10	20	31-124
Butyl benzyl phthalate	50.00	50.11	100	10	20	33-142
Carbazole	50.00	39.61	79	15	20	20-147
4-Chloroaniline	50.00	31.93	64	3	20	24-127
Chlorobenzilate	50.00	50.43	101	9	20	35-118
4-Chloro-3-methylphenol	50.00	30.98	62	3	20	35-117
2-Chloronaphthalene	50.00	41.15	82	4	20	29-137
2-Chlorophenol	50.00	33.72	67	4	20	27-102
4-Chlorophenyl phenyl e	50.00	36.56	73	13	20	39-110
Chrysene	50.00	38.68	77	11	20	30-124
Dibenz (a, h) anthracene	50.00	27.48	55	5	20	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

6561176

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Dibenzofuran	50.00	35.90	72	8	20	40-108
Di-n-butyl phthalate	50.00	43.07	86	15	20	19-158
1,2-Dichlorobenzene	50.00	33.80	68	1	20	26-100
1,3-Dichlorobenzene	50.00	32.80	66	3	20	21-102
1,4-Dichlorobenzene	50.00	33.41	67	1	20	24- 99
3,3'-Dichlorobenzidine	50.00	34.12	68	16	20	6-192
2,4-Dichlorophenol	50.00	30.07	60	6	20	32-110
2,6-Dichlorophenol	50.00	30.26	60	5	20	31-112
Diethyl phthalate	50.00	40.22	80	17	20	36-130
3,3-Dimethylbenzidine	50.00	15.15	30	59*	20	6-192
2,4-Dimethyphenol	50.00	30.24	60	3	20	34-105
Dimethyl phthalate	50.00	36.18	72	14	20	34-123
4,6-Dinitro-2-methylphe	50.00	41.29	82	4	20	27-128
2,4-Dinitrophenol	50.00	44.15	88	18	20	10-132
2,4-Dinitrotoluene	50.00	44.77	90	14	20	24-147
2,6-Dinitrotoluene	50.00	38.72	77	16	20	36-125
N-NitrsdiphylAm/Dipheny	100.0	54.91	55	9	20	35-116
Di-n-octyl phthalate	50.00	27.34	55	10	20	29-136
Ethyl methanesulfonate	50.00	35.27	70	3	20	20-121
Fluoranthene	50.00	48.61	97	5	20	28-127
Fluorene	50.00	37.65	75	12	20	41-116
Hexachlorobenzene	50.00	29.90	60	10	20	18-136
Hexachlorobutadiene	50.00	28.51	57	7	20	22-109
Hexachlorocyclopentadie	50.00	26.45	53	4	20	10-102
Hexachloroethane	50.00	30.42	61	5	20	16-107
Indeno(1,2,3-cd)pyrene	50.00	25.45	51	9	20	22-126
Isophorone	50.00	29.32	59	3	20	31-116
Methyl methanesulfonate	50.00	23.15	46	6	20	15- 82

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2-Methylnaphthalene	50.00	31.22	62	3	20	34-108
2-Methylphenol	50.00	34.48	69	0	20	22- 97
3&4-Methylphenol	50.00	29.76	60	2	20	21- 96
Naphthalene	50.00	32.57	65	2	20	33-108
2-Nitroaniline	50.00	36.27	72	14	20	32-127
3-Nitroaniline	50.00	42.65	85	16	20	28-142
4-Nitroaniline	50.00	47.14	94	11	20	23-139
Nitrobenzene	50.00	31.08	62	3	20	27-117
2-Nitrophenol	50.00	31.02	62	3	20	25-114
4-Nitrophenol	50.00	20.26	40	5	20	1- 76
N-Nitrosodibutylamine	50.00	31.22	62	6	20	31-126
N-Nitrosodiethylamine	50.00	32.04	64	0	20	28-107
N-Nitrosodimethylamine	50.00	23.60	47	2	20	14- 84
N-Nitrosodi-n-propylami	50.00	39.63	79	2	20	29-114
Pentachloronitrobenzene	50.00	35.78	72	0	20	34-135
Pentachlorophenol	50.00	33.62	67	1	20	17-142
Phenacetin	50.00	44.25	88	26*	20	29-141
Phenanthrene	50.00	34.20	68	7	20	40-120
Phenol	50.00	14.83	30	24*	20	11- 55
Pyrene	50.00	58.08	116	2	20	20-154
Pyridine	50.00	5.56	11	110*	20	10- 71
1,2,4,5-Tetrachlorobenz	50.00	33.12	66	4	20	28-110
2,3,4,6-Tetrachlorophen	50.00	39.98	80	15	20	28-118
1,2,4-Trichlorobenzene	50.00	29.75	60	3	20	23-106
2,4,5-Trichlorophenol	50.00	35.69	71	8	20	26-118
2,4,6-Trichlorophenol	50.00	34.74	69	6	20	26-115
1,2-Dphnylhydrzine/Azob	50.00	29.17	58	3	20	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 5 out of 83 outside limits

Spike Recovery: 2 out of 166 outside limits

COMMENTS:

6561178

FORM 3

WATER BNA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: 0103-239-7

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	400.0	0.000	258.5	65	31- 97
2,4-Dinitrotoluene	400.0	0.000	346.3	86	34-130
Hexachlorobenzene	400.0	0.000	277.5	69	65-133
Hexachlorobutadiene	400.0	0.000	248.7	62	50-112
Hexachloroethane	400.0	0.000	229.2	57	37-100
2-Methylphenol	640.0	0.000	278.9	44	40-117
3&4-Methylphenol	640.0	0.000	521.9	82	46- 99
Nitrobenzene	400.0	0.000	293.0	73	57-120
Pentachlorophenol	640.0	0.000	324.5	51	22-171
Pyridine	400.0	0.000	198.1	50	10- 82
2,4,5-Trichlorophenol	640.0	0.000	307.8	48	31-147
2,4,6-Trichlorophenol	640.0	0.000	309.0	48	30-163

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,4-Dichlorobenzene	400.0	270.2	68	4	20 31- 97
2,4-Dinitrotoluene	400.0	347.1	87	1	20 34-130
Hexachlorobenzene	400.0	278.3	70	1	20 65-133
Hexachlorobutadiene	400.0	259.1	65	5	20 50-112
Hexachloroethane	400.0	231.8	58	2	20 37-100
2-Methylphenol	640.0	297.8	46	4	20 40-117
3&4-Methylphenol	640.0	553.9	86	5	20 46- 99
Nitrobenzene	400.0	308.0	77	5	20 57-120
Pentachlorophenol	640.0	318.6	50	2	20 22-171
Pyridine	400.0	217.4	54	8	20 10- 82
2,4,5-Trichlorophenol	640.0	326.0	51	6	20 31-147
2,4,6-Trichlorophenol	640.0	328.2	51	6	20 30-163

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 0 out of 24 outside limits

COMMENTS:

FORM III BNA-GCMS

000101

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - TCLP

6561179

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

HOLDING TIMES

QC Batch(s) for this order	ICP Metals V25-AQ-08 Mercury V8-AQ-06
TCLP Extraction	All soils extracted within 180 days. (28 days for Mercury)
Sample Preparation	All TCLP leachates prepared and analyzed within 180 days. (28 days for Mercury)

CALIBRATION

Initial Calibration	All criteria met.
Continuing Calibration	All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required.

QUALITY CONTROL

0103-239.MQCBLANK

Method Blank

V25-AQ-08BLK	ICP Metals
V8-AQ-06BLK	Mercury

No analytes detected in the Method Blank

0103-239.MQCLCS

Laboratory Control Sample(s)

V25-AQ-08LCS	ICP Metals
V8-AQ-06LCS	Mercury

All criteria met.

0103-239.MQCMSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

000075

6561180

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup - Hg

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.
Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

CS
Project Manager

000076

FORM 3A
TCLP/SPLP METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals

Laboratory ID Mercury

V25-AQ-08 BLKV8-AQ-06 BLK

QC Batch

V25-AQ-08V8-AQ-06

Date Sample Prepared

3/14/013/15/01

ICP/GFAA Metals

Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0.010	3/15/01	6010B
Arsenic	ND	0.100	3/15/01	6010B
Barium	ND	0.025	3/15/01	6010B
Cadmium	ND	0.010	3/15/01	6010B
Chromium	ND	0.010	3/15/01	6010B
Lead	ND	0.100	3/15/01	6010B
Selenium	ND	0.100	3/15/01	6010B
Mercury	ND	0.001	3/15/01	7470A

ND - Not Detected

Reviewed by CS

0103-239.mqc BLANK

000077

6561182

FORM 7
TCLP/SPLP LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory Control ID	ICP/GFAA Metals	<u>V25-AQ-08</u> LCS	QC Batch
	Mercury	<u>V8-AQ-06</u> LCS	<u>V25-AQ-08</u>
			<u>V8-AQ-06</u>
 Date Prepared	 ICP/GFAA Metals	 <u>3/14/01</u>	
	Mercury	<u>3/15/01</u>	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0.250	0.271	108		80	120
Arsenic	1.25	1.35	108		80	120
Barium	2.50	2.84	114		80	120
Cadmium	0.250	0.276	110		80	120
Chromium	0.500	0.547	109		80	120
Lead	1.25	1.38	110		80	120
Selenium	1.25	1.36	109		80	120
Mercury	0.0050	0.0052	104		85	115

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

0103-239.mqc LCS

000078

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

	QC Batch	
Laboratory ID MS ICP/GFAA Metals	0103-239-07	V25-AQ-08
Laboratory ID MS Mercury	0103-239-07	V8-AQ-06
Date Sample Prepared	3/14/01	ICP/GFAA Metals
	3/15/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD < 20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0.282	0	113	50	150
Arsenic	1.25	ND	1.37	1	110	50	150
Barium	2.50	1.20	3.81	0	104	50	150
Cadmium	0.250	ND	0.261	1	104	50	150
Chromium	0.500	ND	0.507	1	101	50	150
Lead	1.25	ND	1.33	1	106	50	150
Selenium	1.25	ND	1.48	2	118	50	150
Mercury	0.0050	ND	0.0051	2	102	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0103-239.mqc MSMSD

000079

6561184

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0103-239-07	QC Batch V25-AQ-08
Laboratory ID MS Mercury	0103-239-07	V8-AQ-06
Date Sample Prepared	3/14/01	ICP/GFAA Metals
	3/15/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec	#	QC Limits	
Silver	0.250	ND	0.283		113		50	150
Arsenic	1.25	ND	1.39		111		50	150
Barium	2.50	1.20	3.82		105		50	150
Cadmium	0.250	ND	0.264		106		50	150
Chromium	0.500	ND	0.512		102		50	150
Lead	1.25	ND	1.35		108		50	150
Selenium	1.25	ND	1.51		121		50	150
Mercury	0.0050	ND	0.0052		104		50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0103-239.mqc MSMSD
000080

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Volatiles**

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Analysis All VOC extracts analyzed within 14days.

METHOD

Preparation SW-846 1311
Analysis: SW-846 8260B

QUALITY CONTROL

QC Batch Form 4 Summary
V403151 V4031511LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
V4031511LB

Target Analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3
V4031511LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch V403151

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, Response >30% is a non-target analyte.

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

CS

Project Manager

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	V4031511LCS	104	105	102	83	0
02	V4031511LB	89	98	101	93	0
03	0103-239-1T	94	99	101	93	0
04	0103-239-2T	98	100	101	95	0
05	0103-239-3T	99	102	101	93	0
06	0103-239-4T	103	104	100	95	0
07	0103-239-5T	100	102	100	96	0
08	0103-239-6T	97	100	100	96	0
09	0103-239-7T	103	103	101	96	0
10	0103-239-8T	100	101	100	96	0
11	0103-239-7TM	99	103	103	92	0
12	0103-239-7TM	98	100	105	91	0
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QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (80-120)
 SMC2 (DFM) = Dibromofluoromethane (74-123)
 SMC3 (TOL) = Toluene-d8 (86-112)
 OTHER (BFB) = Bromofluorobenzene (81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

6561189
CLIENT SAMPLE NO.

V4031511LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: 0402005

Lab Prep Batch: V403151

Date Analyzed: 03/15/01

Time Analyzed: 1247

GC Column:

ID: 2 (mm)

Heated Purge: (Y/N) Y

Instrument ID: VOC4

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
	=====	=====	=====	=====
01	V4031511LCS	V403151	0201002LCS	1031
02	0103-239-1T	V403151	0501006	1316
03	0103-239-2T	V403151	0601007	1347
04	0103-239-3T	V403151	0701008	1419
05	0103-239-4T	V403151	0801009	1451
06	0103-239-5T	V403151	0901010	1523
07	0103-239-6T	V403151	1001011	1554
08	0103-239-7T	V403151	1101012	1626
09	0103-239-8T	V403151	1201013	1658
10	0103-239-7TM	V403151	2101022	2142
11	0103-239-7TM	V403151	2201023	2213
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COMMENTS:

6561190

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4031511LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix: (soil/water) WATER

Lab Prep Batch: V403151

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0402005

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 03/15/01

GC Column: ID: 2.00 (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

71-43-2-----	Benzene	1.00	U
78-93-3-----	2-Butanone	20.00	U
56-23-5-----	Carbon Tetrachloride	1.00	U
108-90-7-----	Chlorobenzene	1.00	U
67-66-3-----	Chloroform	1.00	U
106-46-7-----	1,4-Dichlorobenzene	1.00	U
107-06-2-----	1,2-Dichloroethane	1.00	U
75-35-4-----	1,1-Dichloroethene	1.00	U
127-18-4-----	Tetrachloroethene	1.00	U
79-01-6-----	Trichloroethene	1.00	U
75-01-4-----	Vinyl Chloride	1.00	U

FORM I VOA-GCMS

000086

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

6561191

Lab Name: ETC, INC.

Lab Prep Batch: V403151

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: V4031511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0		109.4	109	72-124
2-Butanone	100.0		107.5	108	55-151
Carbon Tetrachloride	100.0		100.0	100	64-123
Chlorobenzene	100.0		95.31	95	77-112
Chloroform	100.0		102.1	102	70-115
1,4-Dichlorobenzene	100.0		100.1	100	78-116
1,2-Dichloroethane	100.0		102.8	103	62-124
1,1-Dichloroethene	100.0		108.8	109	69-121
Tetrachloroethene	100.0		88.95	89	77-115
Trichloroethene	100.0		99.11	99	75-113
Vinyl Chloride	100.0		119.9	120	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III VOA-GCMS

000087

Lab Name: ETC, INC.

Lab Prep Batch: V403151

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: 0103-239-7T

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0	0.000	104.5	104	72-124
2-Butanone	100.0	0.000	96.93	97	55-151
Carbon Tetrachloride	100.0	0.000	104.0	104	64-123
Chlorobenzene	100.0	0.000	104.1	104	77-112
Chloroform	100.0	0.000	102.0	102	70-115
1,4-Dichlorobenzene	100.0	0.000	94.21	94	78-116
1,2-Dichloroethane	100.0	0.000	96.99	97	62-124
1,1-Dichloroethene	100.0	0.000	99.35	99	69-121
Tetrachloroethene	100.0	0.000	85.78	86	77-115
Trichloroethene	100.0	0.000	101.8	102	75-113
Vinyl Chloride	100.0	0.000	84.60	85	65-134

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0	105.4	105	1	20 72-124
2-Butanone	100.0	103.0	103	6	20 55-151
Carbon Tetrachloride	100.0	100.7	101	3	20 64-123
Chlorobenzene	100.0	102.5	102	2	20 77-112
Chloroform	100.0	99.75	100	2	20 70-115
1,4-Dichlorobenzene	100.0	91.64	92	2	20 78-116
1,2-Dichloroethane	100.0	96.97	97	0	20 62-124
1,1-Dichloroethene	100.0	107.2	107	8	20 69-121
Tetrachloroethene	100.0	83.76	84	2	20 77-115
Trichloroethene	100.0	98.09	98	4	20 75-113
Vinyl Chloride	100.0	101.6	102	18	20 65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS:

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Semi-Volatiles**

6561194

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Extraction All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation SW-846 1311/3510C
Analysis SW-846 8270C

QUALITY CONTROL

QC Batch Form 4 Summary
P06081 P06081LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits, except as listed below.

Surrogate Terphenyl-d14 was flagged for high recovery in P06081LCS/LCSD and 0103-239-04 (DF/24-B/1066/SDC/014). Analytes were not detected in the field sample. This high recovery does not affect the LCS/LCSD recovery data.

Method Blank FORM 4
P06081LB

Target Analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3
P06081LCS

All acceptance criteria met, except as listed below.

Non-target analyte was flagged for slightly low recovery (1%) in the LCS. Non-Target analyte was flagged for low recovery in the LCSD.

RPDs for 5 non-target analytes were flagged for high recovery due to variances in the LCS/LCSD recoveries.

Matrix Spike / Matrix Spike Dup FORM 3

Batch P06081

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

000090

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

6561195

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8

Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD

Dilutions Required No dilutions required.

OTHER

Sample 0103-239-07MSD was analyzed 22 minutes outside the 12-hour tune time. There is no effect on the recovery data.

CS
Project Manager

000091

6561196

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P06081LB	73	71	90	19	45	28			0
02	P06081LCS	79	74	125*	21	52	30			1
03	P06081LCSD	78	74	131*	20	45	29			1
04	0103-239-1	79	81	98	20	48	30			0
05	0103-239-2	72	75	100	19	44	29			0
06	0103-239-3	80	77	114	20	49	31			0
07	0103-239-4	97	90	129*	24	56	36			1
08	0103-239-5	83	84	107	20	46	31			0
09	0103-239-6	82	84	107	23	51	33			0
10	0103-239-7	71	71	93	19	45	29			0
11	0103-239-8	75	74	100	21	46	32			0
12	0103-239-7MS	72	72	111	20	45	30			0
13	0103-239-7MS	75	76	111	22	46	32			0
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QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (29-110)
 S2 (FBP) = 2-Fluorobiphenyl (38-107)
 S3 (TPH) = Terphenyl-d14 (33-122)
 S4 (PHL) = Phenol-d6 (7- 58)
 S5 (TBP) = 2,4,6-Tribromophenol (16-138)
 S6 (2FP) = 2-Fluorophenol (8- 88)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

FORM 4
BNA-GCMS METHOD BLANK SUMMARY

6561197
CLIENT SAMPLE NO.

P06081LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: 1201012

Lab Prep Batch: P06081

Instrument ID: BNA2

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/16/01

Level: (low/med) LOW

Time Analyzed: 1631

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P06081LCS	1703	1301013	03/16/01
02	P06081LCSD	1736	1401014	03/16/01
03	0103-239-1	1808	1501015	03/16/01
04	0103-239-2	1840	1601016	03/16/01
05	0103-239-3	1912	1701017	03/16/01
06	0103-239-4	1944	1801018	03/16/01
07	0103-239-5	2016	1901019	03/16/01
08	0103-239-6	2049	2001020	03/16/01
09	0103-239-7	2121	2101021	03/16/01
10	0103-239-8	2153	2201022	03/16/01
11	0103-239-7MS	2225	2301023	03/16/01
12	0103-239-7MS	2257	2401024	03/16/01
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COMMENTS:

6561198

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06081LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix: (soil/water) WATER

Lab Prep Batch: P06081

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 1201012

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 1 (mL)

Date Analyzed: 03/16/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
106-46-7-----	1,4-Dichlorobenzene	5.00	U	
121-14-2-----	2,4-Dinitrotoluene	5.00	U	
118-74-1-----	Hexachlorobenzene	5.00	U	
87-68-3-----	Hexachlorobutadiene	5.00	U	
67-72-1-----	Hexachloroethane	5.00	U	
95-48-7-----	2-Methylphenol	5.00	U	
108-39-4-----	3&4-Methylphenol	5.00	U	
98-95-3-----	Nitrobenzene	5.00	U	
87-86-5-----	Pentachlorophenol	10.00	U	
110-86-1-----	Pyridine	5.00	U	
95-95-4-----	2,4,5-Trichlorophenol	5.00	U	
88-06-2-----	2,4,6-Trichlorophenol	5.00	U	

FORM I BNA-GCMS

000094

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Pesticides**

11

6561200

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Extraction All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8081A

QUALITY CONTROL

QC Batch Form 4 Summary
P08025 P08025LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits, except as listed below.

Surrogate Tetrachloro-m-xylene was flagged for high recovery in P0825LB2 on the primary and confirmation analyses. Surrogate Decachlorobiphenyl were within control limits. Analytes were not detected in the sample.

Method Blank FORM 4

P08025LB
P08025LB2

Target analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3

P08025LCS

All acceptance criteria met.

Matrix Spike/Matrix Spike Dup FORM 3

Batch P08025

0103-239-07

RPD

All analytes within QC limits.

DF/24-B/1066/SDC/017

Spike Recovery

All analytes within QC limits.

||

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration

All criteria met. FORM 6

Calibration Verification

All criteria met. FORM 7, Responses >15% affecting data listed below.

000103

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

CALIBRATION

Calibration Verification (CV): Date 03/21/01 Time: 0616

<u>Analyte</u>	<u>%Diff(15% Max)</u>	<u>Response</u>
Endrin	-17.0	Low

Samples affected by this CV include 0103-239-01 through 0103-239-06, and 0103-239-08. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in associated project samples. This run was an ending calibration verification. The previous calibration @ 2200 was within calibration criteria for this analyte. The average of all analytes was less than 15 %, and CV is considered acceptable per SW846.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

CS
Project Manager

6561202

FORM 2
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

	CLIENT SAMPLE NO.	S1 (DCB) #	S2 (TCX) #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P08025LB	96	68							0
02	P08025LB2	123D	89							1
03	P08025LB2	121D	69							1
04	P08025LCS	100	78							0
05	0103-239-7	92	89							0
06	0103-239-7MS	106	89							0
07	0103-239-7MS	91	87							0
08	0103-239-1	111	88							0
09	0103-239-2	111	89							0
10	0103-239-3	108	89							0
11	0103-239-4	106	84							0
12	0103-239-5	105	88							0
13	0103-239-6	106	90							0
14	0103-239-8	105	78							0
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QC LIMITS

S1 (DCB) = Decachlorobiphenyl (34-115)
 S2 (TCX) = Tetrachloro-m-xylene (31- 96)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

111

FORM 4
PESTICIDE METHOD BLANK SUMMARY

6561203
CLIENT SAMPLE NO.

Lab Name: ETC, INC.

Contract:

P08025LB

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: P303201A-15R

Lab Prep Batch: P08025

Instrument ID: PEST3A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/20/01

Level: (low/med) LOW

Time Analyzed: 1915

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P08025LCS	2010	P303201A-17R	03/20/01
02	0103-239-7	2038	P303201A-18R	03/20/01
03	0103-239-7MS	2105	P303201A-19R	03/20/01
04	0103-239-7MS	2133	P303201A-20R	03/20/01
05	0103-239-1	2255	P303201A-23R	03/20/01
06	0103-239-2	2323	P303201A-24R	03/20/01
07	0103-239-3	2350	P303201A-25R	03/20/01
08	0103-239-4	0018	P303201A-26R	03/21/01
09	0103-239-5	0046	P303201A-27R	03/21/01
10	0103-239-6	0113	P303201A-28R	03/21/01
11	0103-239-8	0141	P303201A-29R	03/21/01
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COMMENTS:

6561204

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P08025LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: P303201A-16R

Lab Prep Batch: P08025

Instrument ID: PEST3A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/20/01

Level: (low/med) LOW

Time Analyzed: 1942

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P08025LCS	2010	P303201A-17R	03/20/01
02	0103-239-7	2038	P303201A-18R	03/20/01
03	0103-239-7MS	2105	P303201A-19R	03/20/01
04	0103-239-7MS	2133	P303201A-20R	03/20/01
05	0103-239-1	2255	P303201A-23R	03/20/01
06	0103-239-2	2323	P303201A-24R	03/20/01
07	0103-239-3	2350	P303201A-25R	03/20/01
08	0103-239-4	0018	P303201A-26R	03/21/01
09	0103-239-5	0046	P303201A-27R	03/21/01
10	0103-239-6	0113	P303201A-28R	03/21/01
11	0103-239-8	0141	P303201A-29R	03/21/01
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COMMENTS:

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

6561205
CLIENT SAMPLE NO.

P08025LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix: (soil/water) WATER

Lab Prep Batch: P08025

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: P303201A-15R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 10 (mL)

Date Analyzed: 03/20/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

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

309-00-2-----	Aldrin	0.0400	U
319-84-6-----	alpha-BHC	0.0400	U
319-85-7-----	beta-BHC	0.0400	U
319-86-8-----	delta-BHC	0.0400	U
58-89-9-----	gamma-BHC (Lindane)	0.0400	U
5103-71-9-----	alpha-chlordane	0.0400	U
5103-74-2-----	gamma-chlordane	0.0400	U
57-74-9-----	Chlordane	0.250	U
2921-88-2-----	Chlorpyrifos	0.0400	U
72-54-8-----	4,4'-DDD	0.0400	U
72-55-9-----	4,4'-DDE	0.0400	U
50-29-3-----	4,4'-DDT	0.0400	U
60-57-1-----	Dieldrin	0.0400	U
959-98-8-----	Endosulfan I	0.0400	U
33213-65-9-----	Endosulfan II	0.0400	U
1031-07-8-----	Endosulfan sulfate	0.0400	U
72-20-8-----	Endrin	0.0400	U
7421-93-4-----	Endrin aldehyde	0.0400	U
53494-70-5-----	Endrin ketone	0.0400	U
76-44-8-----	Heptachlor	0.0400	U
1024-57-3-----	Heptachlor epoxide	0.0400	U
72-43-5-----	Methoxychlor	0.0400	U
8001-35-2-----	Toxaphene	2.50	U

FORM I PESTICIDE

000108

6561206

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. .

P08025LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix: (soil/water) WATER

Lab Prep Batch: P08025

Sample wt/vol: 250.0 (g/mL) ML

Lab File ID: P303201A-16R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 10 (mL)

Date Analyzed: 03/20/01

Injection Volume: 1.0 (uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: _____

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

309-00-2-----	Aldrin	1.60	U
319-84-6-----	alpha-BHC	1.60	U
319-85-7-----	beta-BHC	1.60	U
319-86-8-----	delta-BHC	1.60	U
58-89-9-----	gamma-BHC (Lindane)	1.60	U
5103-71-9-----	alpha-chlordane	1.60	U
5103-74-2-----	gamma-chlordane	1.60	U
57-74-9-----	Chlordane	10.00	U
2921-88-2-----	Chlorpyrifos	1.60	U
72-54-8-----	4,4'-DDD	1.60	U
72-55-9-----	4,4'-DDE	1.60	U
50-29-3-----	4,4'-DDT	1.60	U
60-57-1-----	Dieldrin	1.60	U
959-98-8-----	Endosulfan I	1.60	U
33213-65-9-----	Endosulfan II	1.60	U
1031-07-8-----	Endosulfan sulfate	1.60	U
72-20-8-----	Endrin	1.60	U
7421-93-4-----	Endrin aldehyde	1.60	U
53494-70-5-----	Endrin ketone	1.60	U
76-44-8-----	Heptachlor	1.60	U
1024-57-3-----	Heptachlor epoxide	1.60	U
72-43-5-----	Methoxychlor	1.60	U
8001-35-2-----	Toxaphene	100.0	U

FORM I PESTICIDE

000109

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

6561207

Lab Name: ETC, INC.

Lab Prep Batch: P08025

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: P08025LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Aldrin	1.00		0.718	72	34-105
alpha-BHC	1.00		0.739	74	41-102
beta-BHC	1.00		0.726	73	26-151
delta-BHC	1.00		0.486	49	21- 92
gamma-BHC (Lindane)	1.00		0.754	75	41-102
alpha-chlordane	1.00		0.765	76	48-117
gamma-chlordane	1.00		0.772	77	51-108
Chlorpyrifos	1.00		0.904	90	70-130
4,4'-DDD	1.00		0.839	84	39-124
4,4'-DDE	1.00		0.767	77	41-111
4,4'-DDT	1.00		0.843	84	39-123
Dieldrin	1.00		0.790	79	42-111
Endosulfan I	1.00		0.816	82	48-117
Endosulfan II	1.00		0.826	83	52-114
Endosulfan sulfate	1.00		0.756	76	46-111
Endrin	1.00		0.776	78	45-117
Endrin aldehyde	1.00		0.784	78	48-125
Endrin ketone	1.00		0.874	87	51-112
Heptachlor	1.00		0.681	68	43-114
Heptachlor epoxide	1.00		0.782	78	42-115
Methoxychlor	1.00		0.792	79	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 21 outside limits

COMMENTS:

Lab Name: ETC, INC.

Lab Prep Batch: P08025

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: 0103-239-7

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	4.00	0.000	2.96	74	41-102
Endrin	4.00	0.000	3.30	82	45-117
Heptachlor	4.00	0.000	2.85	71	43-114
Methoxychlor	4.00	0.000	3.87	97	39-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
gamma-BHC (Lindane)	4.00	2.87	72	3	20	41-102
Endrin	4.00	3.02	76	8	20	45-117
Heptachlor	4.00	2.68	67	6	20	43-114
Methoxychlor	4.00	3.72	93	4	20	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 4 outside limits

Spike Recovery: 0 out of 8 outside limits

COMMENTS:

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Herbicides**

6561210

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

HERBICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

HOLDING TIMES

TCLP Extraction	All samples extracted within 14 days.
Sample Extraction	All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis	All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8151A

QUALITY CONTROL

QC Batch Form 4 Summary
P11089 P11089LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P11089LB
P11089LB2

Target analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3
P11089LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P11089

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

000113

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
HERBICIDE - TCLP

6561211

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-239

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms

CS
Project Manager

000114

6561212

FORM 2
WATER HERBICIDE SURROGATE RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

	EPA GC SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
01	P11089LB	70								0
02	P11089LB2	82								0
03	P11089LCS	96								0
04	0103-239-7MS	107								0
05	0103-239-7MS	111								0
06	0103-239-1	87								0
07	0103-239-2	88								0
08	0103-239-3	100								0
09	0103-239-4	91								0
10	0103-239-5	94								0
11	0103-239-6	92								0
12	0103-239-7	94								0
13	0103-239-8	78								0
14										
15										
16										
17										
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29										
30										

S1 = 2,4,5-T

QC LIMITS
(20-150)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

FORM 4
HERBICIDE METHOD BLANK SUMMARY

6561213
EPA GC SAMPLE NO.

P11089LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: H203151A-03R

Lab Prep Batch: P11089

Instrument ID: PEST2A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/15/01

Level: (low/med) LOW

Time Analyzed: 1658

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P11089LCS	1749	H203151A-05R	03/15/01
02	0103-239-7MS	1814	H203151A-06R	03/15/01
03	0103-239-7MS	1839	H203151A-07R	03/15/01
04	0103-239-1	1954	H203151A-10R	03/15/01
05	0103-239-2	2020	H203151A-11R	03/15/01
06	0103-239-3	2045	H203151A-12R	03/15/01
07	0103-239-4	2110	H203151A-13R	03/15/01
08	0103-239-5	2135	H203151A-14R	03/15/01
09	0103-239-6	2200	H203151A-15R	03/15/01
10	0103-239-7	2225	H203151A-16R	03/15/01
11	0103-239-8	2251	H203151A-17R	03/15/01
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COMMENTS:

6561214

FORM 4
HERBICIDE METHOD BLANK SUMMARY

EPA GC SAMPLE NO.

P11089LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: H203151A-04R

Lab Prep Batch: P11089

Instrument ID: PEST2A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/15/01

Level: (low/med) LOW

Time Analyzed: 1723

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P11089LCS	1749	H203151A-05R	03/15/01
02	0103-239-7MS	1814	H203151A-06R	03/15/01
03	0103-239-7MS	1839	H203151A-07R	03/15/01
04	0103-239-1	1954	H203151A-10R	03/15/01
05	0103-239-2	2020	H203151A-11R	03/15/01
06	0103-239-3	2045	H203151A-12R	03/15/01
07	0103-239-4	2110	H203151A-13R	03/15/01
08	0103-239-5	2135	H203151A-14R	03/15/01
09	0103-239-6	2200	H203151A-15R	03/15/01
10	0103-239-7	2225	H203151A-16R	03/15/01
11	0103-239-8	2251	H203151A-17R	03/15/01
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COMMENTS:

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

EPA GC SAMPLE NO. **6561215**

P11089LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix: (soil/water) WATER

Lab Prep Batch: P11089

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: H203151A-03R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/15/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
94-75-7-----	2,4-D	0.0500	U	
93-72-1-----	Silvex	0.00500	U	

FORM I HERBICIDE

000118

6561216

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

EPA GC SAMPLE NO.

P11089LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix: (soil/water) WATER

Lab Prep Batch: P11089

Sample wt/vol: 250.0 (g/mL) ML

Lab File ID: H203151A-04R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/15/01

Injection Volume: 1.0 (uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: _____

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

94-75-7-----	2,4-D	1.00	U
93-72-1-----	Silvex	0.100	U

FORM I HERBICIDE

000119

FORM 3
WATER HERBICIDE LAB CONTROL SAMPLE

6561217

Lab Name: ETC, INC.

Lab Prep Batch: P11089

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: P11089LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2,4-D	5.00		4.32	86	20-150
Silvex	5.00		3.56	71	20-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS:

FORM III HERBICIDE

000120

6561218

FORM 3

WATER HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC.

Lab Prep Batch: P11089

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Matrix Spike - Sample No.: 0103-239-7

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
2,4-D	20.00	0.000	17.52	88	20-150
Silvex	20.00	0.000	15.82	79	20-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
2,4-D	20.00	18.29	91	3	20	20-150
Silvex	20.00	16.49	82	4	20	20-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS:

FORM III HERBICIDE

000121

Environmental Testing & Consulting, Inc.

6561219

**Quality Control Reports
Level IV
Metals (ICP/GFAA/CV)**

ENVIRONMENTAL TESTING & CONSULTING, INC

ICP Metals Sequence Check List

Sequence ID : 31501 System ID : ICP/ICPT Date/Time: 3-15 1441

Analyst : SN
Supervisor: JF

1. Instrument Profile Intensity Check

7560

2 Initial Calibration

- a. Initial Calibration Blank (STD1-Blank)
- b. Initial Calibration Standard 1 (C1) 3 Exposures at less than 3% RSD
- c. Initial Calibration Standard 2 (C2) 3 Exposures at less than 3% RSD
- d. Initial Calibration Standard 3 (C3) 3 Exposures at less than 3% RSD
- e. Initial Calibration Standard 4 (C4) 3 Exposures at less than 3% RSD
- f. Standardization Report

3. Initial Calibration Readback (+/- 5% Difference Check Table)

Failures

a. Initial Calibration Standard 1 (C1)	_____	✓	_____
b. Initial Calibration Standard 2 (C2)	_____	✓	_____
c. Initial Calibration Standard 3 (C3)	_____	✓	_____
d. Initial Calibration Standard 4 (C4)	_____	✓	_____

4. Initial Calibration Verification

e. Initial Calibration Blank (ICB) – All elements below MDL/MQL	✓	B low
f. Initial Calibration Verification (ICV1) – (5%)	✓	Fe, Sn, Ti, Sb
g. Low Level Check (LLC1) – (20%)	✓	
h. Low Level Check (LLC2) – (20%)	✓	
i. Interelement Correction Standard – Initial (ICSAB) – (20%)	✓	
j. Interelement Correction Standard – Final (ICSAB) – (20%)	✓	

Comments

Applicable ETC Order Nos. for this sequence:

125-A0-8	0103-337	0103-239		
113-30-50	282			
0103-356	287			
205	293			
203	294			
227	322			
204	325			
270	239			
202	344			
218	177			
222	210			
243	209			

Table Name: PLASMA1 Autosampler Type: TYPE TJA
 Sample Positions: 42/192 QC Positions: 19/19 # Sets: 1
 Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	19	10
2	Sample (16mm)	Samples	0	1
3	Sample (16mm)	Samples	0	1
4	Sample (16mm)	Samples	0	1
5	Sample (16mm)	Samples	42	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No		ICPT	150	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor

No Samples Prepared.

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...19	Not	Used)				

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	V25-AQ-08 S.B.	1	-NA-	Sample
2	1	2	V13-SO-50 S.B.	1	-NA-	Sample
3	1	3	V25-AQ-08 LC.	1	-NA-	Sample
4	1	4	V13-SO-50 LC.	1	-NA-	Sample
5	1	5	0103-356-01	1	-NA-	Sample
6	1	6	0103-205-04	1	-NA-	Sample
7	1	7	0103-205-05	1	-NA-	Sample
8	1	8	0103-208-02	1	-NA-	Sample
9	1	9	0103-227-02	1	-NA-	Sample
10	1	10	0103-264-02	1	-NA-	Sample
11	1	11	CCB1	1	-NA-	Sample
12	1	12	CCV1	1	-NA-	Sample
13	2	1	0103-276-02	1	-NA-	Sample
14	2	2	0103-276-02 MS	1	-NA-	Sample
15	2	3	0103-276-02 MSD	1	-NA-	Sample
16	2	4	0103-202-01	1	-NA-	Sample
17	2	5	0103-202-02	1	-NA-	Sample
18	2	6	0103-202-03	1	-NA-	Sample
19	2	7	0103-202-04	1	-NA-	Sample
20	2	8	0103-202-05	1	-NA-	Sample
21	2	9	0103-202-06	1	-NA-	Sample

6561222

AutoSampler Report

Table: PLASMA1

03/16/01 10:52:33 AM

page 2

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0103-202-06 MS	1	-NA-	Sample
23	2	11	CCB2	1	-NA-	Sample
24	2	12	CCV2	1	-NA-	Sample
25	3	1	0103-202-06 MSD	1	-NA-	Sample
26	3	2	0103-218-02	1	-NA-	Sample
27	3	3	0103-222-02	1	-NA-	Sample
28	3	4	0103-243-01	1	-NA-	Sample
29	3	5	0103-337-01	1	-NA-	Sample
30	3	6	0103-282-01	1	-NA-	Sample
31	3	7	0103-282-02	1	-NA-	Sample
32	3	8	0103-282-03	1	-NA-	Sample
33	3	9	0103-282-04	1	-NA-	Sample
34	3	10	0103-287-02	1	-NA-	Sample
35	3	11	CCB3	1	-NA-	Sample
36	3	12	CCV3	1	-NA-	Sample
37	4	1	0103-287-04	1	-NA-	Sample
38	4	2	0103-293-01	1	-NA-	Sample
39	4	3	0103-294-02	1	-NA-	Sample
40	4	4	0103-322-02	1	-NA-	Sample
41	4	5	0103-322-02 MS	1	-NA-	Sample
42	4	6	0103-322-02 MSD	1	-NA-	Sample
43	4	7	0103-325-02	1	-NA-	Sample
44	4	8	0103-239-01	1	-NA-	Sample
45	4	9	0103-239-02	1	-NA-	Sample
46	4	10	0103-239-03	1	-NA-	Sample
47	4	11	CCB4	1	-NA-	Sample
48	4	12	CCV4	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	0103-239-04	1	-NA-	Sample
2	1	2	0103-239-05	1	-NA-	Sample
3	1	3	0103-239-06	1	-NA-	Sample
4	1	4	0103-239-07	1	-NA-	Sample
5	1	5	0103-239-07 MS	1	-NA-	Sample
6	1	6	0103-239-07 MSD	1	-NA-	Sample
7	1	7	0103-239-08	1	-NA-	Sample
8	1	8	0103-344-01	1	-NA-	Sample
9	1	9	0103-344-02	1	-NA-	Sample
10	1	10	0103-177-01	1	-NA-	Sample
11	1	11	CCB5	1	-NA-	Sample
12	1	12	CCV5	1	-NA-	Sample
13	2	1	0103-177-01 MS	1	-NA-	Sample
14	2	2	0103-210-01	1	-NA-	Sample
15	2	3	0103-210-01 MS	1	-NA-	Sample
16	2	4	0103-210-02	1	-NA-	Sample
17	2	5	0103-210-03	1	-NA-	Sample
18	2	6	0103-210-03 MS	1	-NA-	Sample
19	2	7	0103-210-04	1	-NA-	Sample
20	2	8	0103-210-04 MS	1	-NA-	Sample
21	2	9	0103-209-01	1	-NA-	Sample

000125

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0103-239-01	1	-NA-	Sample
23	2	11	CCB6	1	-NA-	Sample
24	2	12	CCV6	1	-NA-	Sample
25	3	1	0103-239-02	1	-NA-	Sample
26	3	2	0103-239-03	1	-NA-	Sample
27	3	3	0103-239-04	1	-NA-	Sample
28	3	4	0103-239-05	1	-NA-	Sample
29	3	5	0103-239-06	1	-NA-	Sample
30	3	6	0103-239-07	1	-NA-	Sample
31	3	7	0103-239-08	1	-NA-	Sample
32	3	8	CCB7	1	-NA-	Sample
33	3	9	CCV7	1	-NA-	Sample
34	3	10	ICSA	1	-NA-	Sample
35	3	11	ICSAB	1	-NA-	Sample
36	3	12	(empty)	1	-NA-	-NA-
37	4	1	(empty)	1	-NA-	-NA-
38	4	2	(empty)	1	-NA-	-NA-
39	4	3	(empty)	1	-NA-	-NA-
40	4	4	(empty)	1	-NA-	-NA-
41	4	5	(empty)	1	-NA-	-NA-
42	4	6	(empty)	1	-NA-	-NA-
43	4	7	(empty)	1	-NA-	-NA-
44	4	8	(empty)	1	-NA-	-NA-
45	4	9	(empty)	1	-NA-	-NA-
46	4	10	(empty)	1	-NA-	-NA-
47	4	11	(empty)	1	-NA-	-NA-
48	4	12	(empty)	1	-NA-	-NA-

Rack #4

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	(empty)	1	-NA-	-NA-
2	1	2	(empty)	1	-NA-	-NA-
3	1	3	(empty)	1	-NA-	-NA-
4	1	4	(empty)	1	-NA-	-NA-
5	1	5	(empty)	1	-NA-	-NA-
6	1	6	(empty)	1	-NA-	-NA-
7	1	7	(empty)	1	-NA-	-NA-
8	1	8	(empty)	1	-NA-	-NA-
9	1	9	(empty)	1	-NA-	-NA-
10	1	10	(empty)	1	-NA-	-NA-
11	1	11	(empty)	1	-NA-	-NA-
12	1	12	(empty)	1	-NA-	-NA-
13	2	1	(empty)	1	-NA-	-NA-
14	2	2	(empty)	1	-NA-	-NA-
15	2	3	(empty)	1	-NA-	-NA-
16	2	4	(empty)	1	-NA-	-NA-
17	2	5	(empty)	1	-NA-	-NA-
18	2	6	(empty)	1	-NA-	-NA-
19	2	7	(empty)	1	-NA-	-NA-
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-

6561224

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
ICP METALS

Lab Name Environmental Testing and Consulting, Inc Instrument ICPT

Date/Time of Sequence 03/15/01 1441

Initial Calibration Source C1 M5-30-21 C2 M5-33-11 C3 M5-33-03 C4 M5-18-04

Continuing Calibration Source ICV/CCV M5-34-01

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV2			Continuing CCV3		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found
Silver	100	99.3	1	<5	100	99	1	<5	99	1	<5	100
Arsenic	500	488	2	<5	500	490	2	<5	484	3	<5	493
Barium	1000	1030	3	<5	1000	1040	4	<5	1030	3	<5	1050
Cadmium	100	100	0	<5	100	101	1	<5	99.2	1	<5	100
Chromium	200	200	0	<5	200	199	1	<5	197	2	<5	200
Lead	500	501	0	<5	500	506	1	<5	502	0	<5	507
Selenium	500	493	1	<5	500	493	1	<5	487	3	<5	495

Analyte	Continuing CCV4			Continuing CCV5			Continuing CCV6			Continuing CCV7		
	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found	%Diff(1)
Silver	100	100	0	<5	100	0	<5	98	2	<5	101	1
Arsenic	500	487	3	<5	489	2	<5	480	4	<5	495	1
Barium	1000	1040	4	<5	1040	4	<5	1020	2	<5	1040	4
Cadmium	100	99	1	<5	99	1	<5	98	2	<5	101	1
Chromium	200	198	1	<5	197	2	<5	193	4	<5	200	0
Lead	500	502	0	<5	501	0	<5	494	1	<5	511	2
Selenium	500	491	2	<5	491	2	<5	481	4	<5	494	1

(1) Percent difference from true value. ICP Method 6010B - 10% ICP Method 200.7 - 5%

Date 01/00/00 12:00 A

000127

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name

Environmental Testing and Consulting, Inc

Date/Time of Sequence

03/15/01 1441

Instrument

ICPT

Analyte	Initial Calibration Blank ug/L	Continuing Calibration Blank ug/L							
		CCB1	CCB2	CCB3	CCB4	CCB5	CCB6	CCB7	
Silver	ND	ND	ND	ND	ND	ND	ND	ND	
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	
Barium	ND	ND	ND	ND	ND	ND	ND	ND	
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	
Lead	ND	ND	ND	ND	ND	ND	ND	ND	
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	

000128

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FORM 4
INTERFERENCE CHECK SAMPLE
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/15/01 1441 Instrument ICPT

Concentration Units: ug/L

Analyte	True	Initial Found		Final Found	
	Sol AB	Sol AB	%REC	Sol AB	%REC
Silver	200	215	108	217	109
Aluminum	250000	249000	100	252000	101
Arsenic	200	210	105	213	107
Barium	500	529	106	535	107
Calcium	250000	241000	96	237000	95
Cadmium	200	200	100	202	101
Chromium	200	189	95	190	95
Iron	100000	96800	97	97700	98
Magnesium	250000	254000	102	252000	101
Lead	200	207	104	208	104
Selenium	200	211	106	214	107

Concentration Units: ug/L

Analyte	True	Initial Found		Final Found	
	Sol A	Sol A	%REC	Sol A	%REC
Silver	0	ND	0	ND	0
Aluminum	250000	251000	100	253000	101
Arsenic	0	ND	0	ND	0
Barium	0	ND	0	ND	0
Calcium	250000	249000	100	244000	98
Cadmium	0	ND	0	ND	0
Chromium	0	ND	0	ND	0
Iron	100000	95200	95	95900	96
Magnesium	250000	252000	101	250000	100
Lead	0	ND	0	ND	0
Selenium	0	ND	0	ND	0

ENVIRONMENTAL TESTING & CONSULTING, INC

Mercury Sequence Check List

Sequence ID : _____

Date/Time: 3/15/01 1437Analyst : JE
Supervisor: [Signature]

Instrument ID: CETAC M-6000A

1. General Maintenance Check

Action Taken

- a. Lamp Warm-up ☒
- b. Pump Winding ☒
- c. Check GLS ☒
- d. Nafion Dryer ☒

2. Sequence Check List

Initial Calibration

- a. Initial Calibration Blank (STD1-Blank)
- b. Initial Calibration Standard 1 0.20 ug/L
- c. Initial Calibration Standard 2 1.0 ug/L
- d. Initial Calibration Standard 3 2.0 ug/L
- e. Initial Calibration Standard 4 5.0 ug/L
- f. Initial Calibration Standard 5 10.0 ug/L

☒

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3. Regression coefficient (minimum = 0.995)

☒

☒

4. Initial Calibration Blank (ICB) – All elements below MQL

Water = 0.20 ug/L Soil = 0.02 mg/Kg

5. Initial Calibration Verification (ICV) – 2nd Source SRN: M-5-35-09

Concentration 5.0 ug/L +/- 10%

Found: 4.59 %Difference: 86. Continuing Calibration Blank (CCB) – All elements below MQL indicate by ☒

Metal	CCB1	CCB2	CCB3	CCB4	CCB5	CCB6	CCB7	CCB8	CCB9	CCB10	CCB11	CCB12	CCB13	CCB14	CCB15
Hg	☒	☒	☒												

7. Continuing Calibration Verification (CCV) – Range: EPA 90-110% SW-846 80-120%

All elements within QC limits indicate by ☒ (Concentration same as ICV) SRN: M-5-35-09

Metal	CCV1	CCV2	CCV3	CCV4	CCV5	CCV6	CCV7	CCV8	CCV9	CCV10	CCV11	CCV12	CCV13	CCV14	CCV15
Hg	☒	☒	☒												

Applicable ETC Order Nos. for this sequence:

0103394010339401032200103239

6561228

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
MERCURY

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/15/01 1437 Instrument M6000

Initial Calibration Source C1 M5-35-08

Continuing Calibration Source ICV/CCV M5-35-09

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV2			Continuing CCV3		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Flag
Mercury	5.00	4.59	8.2	<10	5.00	4.64	7.2	<20	4.55	9.0	<20	<20

000131

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc
Date/Time of Sequence 03/15/01 1437 Instrument M6000

Analyte	MDL ug/L	Initial Cal Blank (ICB) ug/L	Continuing Calibration Blank ug/L				
			CCB1	CCB2	CCB3		
Mercury	0.06	ND	ND	ND	ND		

000132

6561229

6561230

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Volatiles**

000133

ENVIRONMENTAL TESTING & CONSULTING, INC
GC/MS VOC Method 8260B Sequence Check List (SW-846)

Sequence ID V403151Matrix: H₂ODate 3/16/01Analyst ESM

Applicable ETC Order Nos. for this sequence:

0103-239-1-8T

Validated

1. BFB Daily 12-Hour Tune Meets Criteria. No analyses begins until criteria are met. (SOP) ☒2. Initial Calibration Verification Criteria - Method: V403061-8260B

- a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
- b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ☒
- c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ☒
- d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient > 0.99 ☒

3. Calibration Verification - Each 12-Hour Shift

- a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
- b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ☒
- c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ☒
- d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ ☒

1.35 FMB

- e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ☒
- f. Internal Standards - Areas within $(-50\% \text{ to } +100\%)$ from Mid-Point ICAL STD ☒

4. Method Blanks included in this sequence:

Analyze daily or for each analytical batch (20 samples):
List compounds identified in Method Blank w/concentration.
Flag final result "B-Detected in Blank"

MECL 6 2.58 BDL

5. Matrix Spike/Matrix Spike Duplicates included in this sequence:

Analyze daily or for each matrix (ms/msd per 20 samples of same matrix)
List MS/MSD(s) performed with any failures:

0103-239-FTMS+MSD

6. Laboratory Control Samples included in this sequence:

Must contain all Target Analytes.

7. Surrogate Recoveries within QC Limits

8. All positive compounds within calibration range

Narrative/Notes

6561232

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: 0101001

BFB Injection Date: 03/15/01

Instrument ID: VOC4

BFB Injection Time: 1017

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.1
75	30.0 - 60.0% of mass 95	56.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	62.9
175	5.0 - 9.0% of mass 174	4.5 (7.2)1
176	95.0 - 101.0% of mass 174	60.9 (96.8)1
177	5.0 - 9.0% of mass 176	4.7 (7.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V4031511LCS		0201002LCS	03/15/01	1031
02	DCS100		0202003	03/15/01	1103
03	V4031511LB		0402005	03/15/01	1247
04	0103-239-1T		0501006	03/15/01	1316
05	0103-239-2T		0601007	03/15/01	1347
06	0103-239-3T		0701008	03/15/01	1419
07	0103-239-4T		0801009	03/15/01	1451
08	0103-239-5T		0901010	03/15/01	1523
09	0103-239-6T		1001011	03/15/01	1554
10	0103-239-7T		1101012	03/15/01	1626
11	0103-239-8T		1201013	03/15/01	1658
12	0103-239-7TM		2101022	03/15/01	2142
13	0103-239-7TM		2201023	03/15/01	2213
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561233

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: VOC4

Calibration Date: 03/15/01 Time: 1103

Lab File ID: 0202003

Init. Calib. Date(s): 03/06/01 03/06/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1036 1726

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Acetone	102.2	100.0	AVRG	2.2	30.0
Acetonitrile	1026	1000	AVRG	2.6	30.0
Acrolein	97.49	100.0	AVRG	2.5	30.0
Acrylonitrile	90.35	100.0	AVRG	9.6	30.0
Allyl chloride	96.15	100.0	AVRG	3.8	30.0
Benzene	100.2	100.0	AVRG	0.2	30.0
Bromobenzene	79.85	100.0	AVRG	20.2	30.0
Bromochloromethane	91.19	100.0	AVRG	8.8	30.0
Bromodichloromethane	86.66	100.0	AVRG	13.3	30.0
Bromoform	79.30	100.0	AVRG	20.7	30.0
2-Butanone	93.11	100.0	AVRG	6.9	30.0
Bromomethane	90.36	100.0	LINR	9.6	30.0
n-Butylbenzene	101.3	100.0	AVRG	1.3	30.0
sec-Butylbenzene	82.23	100.0	AVRG	17.8	30.0
tert-Butylbenzene	79.64	100.0	AVRG	20.4	30.0
Carbon Disulfide	104.1	100.0	AVRG	4.1	30.0
Carbon Tetrachloride	90.05	100.0	AVRG	10.0	30.0
Chlorobenzene	86.76	100.0	AVRG	13.2	30.0
Chlorodibromomethane	85.18	100.0	AVRG	14.8	30.0
Chloroethane	106.5	100.0	AVRG	6.5	30.0
2-Chloroethyl vinyl ether	95.98	100.0	AVRG	4.0	30.0
Chloroform	90.55	100.0	AVRG	9.4	20.0
Chloromethane	117.4	100.0	LINR	17.4	30.0
Chloroprene	87.51	100.0	AVRG	12.5	30.0
2-Chlorotoluene	79.82	100.0	AVRG	20.2	30.0
4-Chlorotoluene	79.05	100.0	AVRG	21.0	30.0
1,2-Dibromo-3-chloropropane	84.89	100.0	AVRG	15.1	30.0
1,2-Dibromoethane	88.17	100.0	AVRG	11.8	30.0
Dibromomethane	87.14	100.0	AVRG	12.9	30.0
1,2-Dichlorobenzene	94.33	100.0	AVRG	5.7	30.0
1,3-Dichlorobenzene	92.76	100.0	AVRG	7.2	30.0
1,4-Dichlorobenzene	88.94	100.0	AVRG	11.1	30.0
trans-1,4-Dichloro-2-butene	103.3	100.0	AVRG	3.3	30.0
Dichlorodifluoromethane	98.45	100.0	AVRG	1.6	30.0
1,1-Dichloroethane	94.42	100.0	AVRG	5.6	30.0
1,2-Dichloroethane	85.12	100.0	AVRG	14.9	30.0
1,1-Dichloroethene	99.99	100.0	AVRG	0.0	20.0

VOA-GCMS CONTINUING CALIBRATION CHECK

6561234

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: VOC4

Calibration Date: 03/15/01 Time: 1103

Lab File ID: 0202003

Init. Calib. Date(s): 03/06/01 03/06/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1036 1726

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
cis-1,2-Dichloroethene	91.68	100.0	AVRG	8.3	30.0
trans-1,2-Dichloroethene	97.81	100.0	AVRG	2.2	30.0
1,2-Dichloropropane	90.84	100.0	AVRG	9.2	20.0
1,3-Dichloropropane	91.17	100.0	AVRG	8.8	30.0
2,2-Dichloropropane	96.22	100.0	AVRG	3.8	30.0
1,1-Dichloropropene	98.43	100.0	AVRG	1.6	30.0
cis-1,3-Dichloropropene	89.83	100.0	AVRG	10.2	30.0
trans-1,3-Dichloropropene	91.69	100.0	AVRG	8.3	30.0
Di isopropyl ether	93.08	100.0	AVRG	6.9	30.0
1,4-Dioxane	1959	2000	AVRG	2.0	30.0
Ethyl Acetate	88.04	100.0	AVRG	12.0	30.0
Ethylbenzene	85.40	100.0	AVRG	14.6	20.0
Ethyl methacrylate	179.1	200.0	AVRG	10.4	30.0
Furan	145.4	153.0	AVRG	5.0	30.0
Hexachlorobutadiene	93.26	100.0	AVRG	6.7	30.0
Hexane	116.4	117.0	AVRG	0.5	30.0
2-Hexanone	96.74	100.0	AVRG	3.3	30.0
Iodomethane	85.23	100.0	LINR	14.8	30.0
Isobutyl Alcohol	1953	2000	AVRG	2.4	30.0
Isopropylbenzene	83.72	100.0	AVRG	16.3	30.0
4-Isopropyltoluene	79.84	100.0	AVRG	20.2	30.0
Methacrylonitrile	892.7	1000	AVRG	10.7	30.0
Methylene Chloride	98.34	100.0	LINR	1.7	30.0
Methyl methacrylate	181.8	200.0	AVRG	9.1	30.0
4-Methyl-2-Pentanone	89.84	100.0	AVRG	10.2	30.0
Methyl-tertbutyl-Ether	84.77	100.0	AVRG	15.2	30.0
Naphthalene	88.89	100.0	AVRG	11.1	30.0
Pentachloroethane	110.8	100.0	AVRG	10.8	30.0
Propionitrile	998.9	1000	AVRG	0.1	30.0
n-Propyl Acetate	136.1	151.0	AVRG	9.9	30.0
n-Propylbenzene	86.14	100.0	AVRG	13.9	30.0
Styrene	85.81	100.0	AVRG	14.2	30.0
1,1,1,2-Tetrachloroethane	82.70	100.0	AVRG	17.3	30.0
1,1,2,2-Tetrachloroethane	109.6	100.0	AVRG	9.6	30.0
Tetrachloroethene	80.20	100.0	AVRG	19.8	30.0
Tetrahydrofuran	91.66	91.50	AVRG	0.2	30.0
1,2,3-Trichlorobenzene	92.84	100.0	AVRG	7.2	30.0

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561235

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: VOC4

Calibration Date: 03/15/01 Time: 1103

Lab File ID: 0202003

Init. Calib. Date(s): 03/06/01 03/06/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1036 1726

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Toluene	91.28	100.0	AVRG	8.7	20.0
1,1,1-Trichloroethane	91.59	100.0	AVRG	8.4	30.0
1,1,2-Trichloroethane	95.32	100.0	AVRG	4.7	30.0
1,1,2-trichloro-1,2,2-triflu	97.60	100.0	AVRG	2.4	30.0
Trichloroethene	90.28	100.0	AVRG	9.7	30.0
Trichlorofluoromethane	97.47	100.0	AVRG	2.5	30.0
1,2,3-Trichloropropane	80.61	100.0	AVRG	19.4	30.0
1,2,4-Trichlorobenzene	95.30	100.0	AVRG	4.7	30.0
1,2,4-Trimethylbenzene	83.93	100.0	AVRG	16.1	30.0
1,3,5-Trimethylbenzene	62.79	100.0	AVRG	37.2	30.0
Vinyl Acetate	97.40	100.0	AVRG	2.6	30.0
Vinyl Chloride	103.0	100.0	AVRG	3.0	20.0
Xylene-mp	169.7	200.0	AVRG	15.2	30.0
Xylene-o	83.59	100.0	AVRG	16.4	30.0
cis-1,4-Dichloro-2-butene	81.86	100.0	AVRG	18.1	30.0
1,2-Dichloroethane-d4	38.32	39.40	AVRG	2.7	30.0
Dibromofluoromethane	39.73	40.40	AVRG	1.6	30.0
Toluene-d8	47.31	45.40	AVRG	4.2	30.0
Bromofluorobenzene	45.17	56.60	AVRG	20.2	30.0

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6561236

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID (Standard): 0202003

Date Analyzed: 03/15/01

Instrument ID: VOC4

Time Analyzed: 1103

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	128525	7.58	1143108	8.17	1126523	10.39
UPPER LIMIT	257050	8.08	2286216	8.67	2253046	10.89
LOWER LIMIT	64263	7.08	571554	7.67	563262	9.89
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4031511LB	105104	7.58	925228	8.18	781170	10.39
02 0103-239-1T	127071	7.58	1103154	8.18	911632	10.39
03 0103-239-2T	112349	7.58	964509	8.18	812870	10.39
04 0103-239-3T	104018	7.58	890251	8.18	755384	10.40
05 0103-239-4T	104847	7.58	909610	8.18	768086	10.40
06 0103-239-5T	98336	7.58	831869	8.18	711088	10.40
07 0103-239-6T	98532	7.58	828050	8.18	698594	10.39
08 0103-239-7T	105242	7.58	901790	8.18	775781	10.39
09 0103-239-8T	96590	7.58	804223	8.18	674539	10.39
10 0103-239-7TM	102839	7.58	896636	8.18	821882	10.39
11 0103-239-7TM	103865	7.58	922130	8.18	828955	10.39
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Pentafluorobenzene

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID (Standard): 0202003

Date Analyzed: 03/15/01

Instrument ID: VOC4

Time Analyzed: 1103

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS4 (DCB)					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	361313	12.27				
UPPER LIMIT	722626	12.77				
LOWER LIMIT	180657	11.77				
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4031511LB	301448	12.27				
02 0103-239-1T	351993	12.27				
03 0103-239-2T	318931	12.27				
04 0103-239-3T	294514	12.27				
05 0103-239-4T	303617	12.27				
06 0103-239-5T	279930	12.27				
07 0103-239-6T	275265	12.27				
08 0103-239-7T	301059	12.27				
09 0103-239-8T	260183	12.27				
10 0103-239-7TM	304513	12.27				
11 0103-239-7TM	295012	12.27				
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

6561238

Page 1

QC REVIEWED

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

```

Start Cal Date      : 06-MAR-2001 10:36
End Cal Date       : 06-MAR-2001 17:26
Quant Method       : ISTD
Target Version     : 4.00
Integrator         : HP RTE
Method file        : \\ETCBDC\CHEM\voc4.i\V403071.B\v403061.8260.m
Cal Date           : 08-Mar-2001 08:43 erica

```

Calibration File Names:

Level 1:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	0401005.D
Level 2:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	0501006.D
Level 3:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	0601008.D
Level 4:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	0701009.D
Level 5:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	0801010.D
Level 6:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	1601012.D
Level 7:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	1001012.D
Level 8:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	1101013.D
Level 9:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	1201014.D
Level 10:	ETCBDC\	CHEM\	voc4.i\	V403061.B\	1301015.D

[illegible]

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	TRSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120.0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
2 Chloromethane	1234 194779	2548 242621	10975 307570	36524 ++++	84730	++++	LINR	0.00622	0.91230			0.99811
3 Vinyl Chloride	3.07175 2.89895	3.21952 2.62217	3.08387 2.75170	2.74008 3.08845	2.43991	3.17061	AVRG		2.90870			8.94913
4 Bromomethane	1976 478498	3660 521062	13215 680334	54461 843606	165223	410603	LINR	0.09375	2.17421			0.99034
5 Chloroethane	1.44950 1.67975	1.23284 1.51095	1.68322 1.55499	1.47637 1.73036	1.28277	1.58963	AVRG		1.51904			10.93153
6 Trichlorofluoromethane	5.75710 7.45140	7.07465 6.40831	7.72475 6.62690	6.99094 6.63864	5.98787	6.89069	AVRG		6.75512			9.01287

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.5000000	1.0000	Level 1	Level 2	5 0000	Level 3	20.0000	Level 4	50.0000	Level 5	100.0000	Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
7 Acetone	+++++	+++++	0.87618	0.82751	0.91233	0.85286	0.84750	+++++	0.85088	0.77291			AVRG		0.84060		5.05038
8 Furan	+++++	+++++	7.25659	7.43494	7.55033	6.97396	7.85763		6.39153	7.40931			AVRG		7.36608		7.01938
9 1,1-Dichloroethene	2.50135	2.60335	2.74110	2.90668	2.90668	2.59799	2.6746		2.65897				AVRG		2.67398		7.49002
10 Acrylonitrile	+++++	+++++	0.46793	0.48356	0.47222	0.48192	0.59042		0.43356	0.50875			AVRG		0.49463		9.41511
11 Iodomethane	2310	4113	961127	1185934	27505	108818	326296		733087				LINR	0.02348	3.61781		0.99320

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
End Cal Date : 06-MAR-2001 17:26
Quant Method : ISTD
Target Version : 4.00
Integrator : HP RTE
Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
Cal Date : 08-Mar-2001 08:43 erica

Compound	0 500000		1.0000		5.0000		20.0000		50 0000		100.0000		Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2					
12 Methylene Chloride	++++	27286	54110	124213	283289	542244									
	667543	779336	954772	1092936			LINR	-0.04944	2.84755						0.99590
13 1,1,2-trichloro-1,2,2-trifluoroethane	2.52691	3.00048	3.21704	2.91616	2.53519	2.88411									
	3.31948	2.97202	2.97843	2.83628			AVRG		2.91861						8.63247
14 Acetonitrile	++++	++++	0.13531	0.12900	0.13634	0.15504									
	0.16135	0.16495	0.16293	0.18332			AVRG		0.15353						12.05731
15 Allyl chloride	6.10261	4.91397	5.33177	5.21947	4.44987	5.39960									
	5.52618	5.10589	5.07178	5.18031			AVRG		5.23014						8.16129
16 Carbon Disulfide	6.40007	7.72305	7.80805	7.02476	6.24445	7.55815									
	8.16665	7.38935	7.64775	8.08335			AVRG		7.40456						8.87633

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1		
17 trans-1,2-Dichloroethene	120.0000 Level 7	150.0000 Level 8	170.0000 Level 9	200.0000 Level 10							
	++++	2.70673	3.03456	2.62234	2.64846	2.99827	AVRG				
	3.34833	3.11290	3.11125	3.21022					2.97701		8.72156
18 Methyl-tertbutyl-Ether	9.45649	8.17699	8.02110	7.87003	7.88833	8.29313	AVRG		8.45302		6.32243
	8.81919	8.31035	8.57230	9.12228							
19 Propionitrile	0.17480	0.15962	0.13807	0.13424	0.17469	0.15654	AVRG		0.17081		13.41426
	0.19487	0.18733	0.19793	0.19000							
20 Chloroprene	6.78034	7.15806	7.54182	6.99256	6.09311	7.00053	AVRG		7.13363		6.56297
	7.79901	7.31437	7.26039	7.39615							
21 1,1-Dichloroethane	4.93013	5.44570	5.42720	5.08287	5.03888	5.25387	AVRG		5.48954		7.81479
	6.23867	5.73655	5.85229	5.88927							

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	TRSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
22 Vinyl Acetate	++++	3.36128	3.50479	3.45472	3.67695	3.82479	AVRG		3.72309		6.95802
	4.10470	3.71580	3.79009	4.07472							
23 2-Butanone	++++	++++	8.72005	7.90640	7.25643	8.52154	AVRG		8.58045		9.06256
	9.78109	8.46164	8.68389	9.31259							
24 Acrolein	++++	++++	0.24593	0.22003	0.19733	0.23919	AVRG		0.23558		8.81364
	0.23470	0.23616	0.24178	0.26954							
25 Hexane	++++	++++	3.34116	2.81237	2.38020	3.31778	AVRG		3.23479		14.77215
	3.99009	3.19420	3.29933	3.54317							
26 Di isopropyl ether	8.64076	8.72304	8.51185	8.28203	7.52185	8.72595	AVRG		8.92934		9.93339
	10.64421	8.87586	9.32563	10.04220							

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120 0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
27 Methacrylonitrile	1 37304	1.37808	1 22626	1.12104	1.13499	1.27495	AVRG			1.28480		7.83902
	1.35759	1.26920	1.30064	1.41219								
28 cis-1,2-Dichloroethene	3.50721	2.99843	2.99693	2.84516	2.60445	2.96970	AVRG			3.05769		8.39979
	3 37020	2 99140	3.07987	3 21250								
29 Ethyl Acetate	2.61482	2.39916	1 98828	1.78457	1.78694	2 03151	AVRG			2.07031		12.85255
	1.92260	1.95127	2 00483	2.21910								
30 Bromochloromethane	++++	1.48514	1 54067	1.50109	1 40064	1 49432	AVRG			1.48088		2.72918
	1.50950	1.44428	1.46509	1.48715								
31 Chloroform	7.50100	7.42623	7.85527	7.31562	6.75640	7 36575	AVRG			7 46290		4.40596
	7 98922	7.42833	7 44224	7.54894								

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\VOCA.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
120 0000	150.0000	170.0000	200.0000								
Level 7	Level 8	Level 9	Level 10								
32 Isobutyl Alcohol	++++	++++	0.06384	0.06518	0.06505	0.07197	AVRG		0.07014		7.88337
	0.06980	0.07176	0.07291	0.08063							
33 2,2-Dichloropropane	6.52172	7.31364	7.68127	7.17137	6.36393	7.11527	AVRG		7.04458		6.12083
	7.61701	7.03695	6.84514	6.77949							
35 Tetrahydrofuran	++++	++++	0.55734	0.65888	0.66932	0.79072	AVRG		0.73029		12.87524
	0.74710	0.77782	0.80227	0.83883							
38 1,2-Dichloroethane	6.56363	5.82133	6.26727	6.06750	5.79973	6.17625	AVRG		6.22161		4.50928
	6.64351	6.18106	6.26496	6.43085							
39 1,1,1-Trichloroethane	5.76732	7.15858	7.83872	7.41743	6.71304	7.28654	AVRG		7.32071		9.57187
	8.39480	7.66575	7.54049	7.42440							

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\CHEM\VOIC4.i\403071.B\403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0 500000	1.0000	Level 2	5.0000	Level 3	20 0000	Level 4	50.0000	Level 5	100.0000	Level 6	Curve	b	Coefficients	ml	m2	RSR	or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10								
40 1,1-Dichloropropene	3.54606	4.47437	4.81078	4.62429	4.20960	4.81594						AVRG			4.69921			11.30009
	5.44595	5.12532	4.98265	4.95715														
41 Carbon Tetrachloride	4.11441	6.18162	6.80668	6.51749	5.97836	6.40162						AVRG			6.30428			13.69877
	7.41119	6.76861	6.51815	6.34471														
42 Benzene	8.91063	8.11660	8.73207	7.88407	7.38754	8.58052						AVRG			8.69948			8.23301
	9.45235	9.05455	9.28526	9.59121														
44 1,4-Dioxane	++++	++++	0.00147	0.00165	0.00161	0.00192						AVRG			0.00180			10.23784
	0.00191	0.00190	0.00192	0.00196														
45 Dibromomethane	0.20494	0.22394	0.21853	0.22559	0.20583	0.21968						AVRG			0.21904			3.69491
	0.22906	0.22592	0.21825	0.21860														

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	RSR or R^2
46 1,2-Dichloropropane	0.25263 0.27212	0.24219 0.26265	0.23610 0.36538	0.24022 0.26711	0.21967	0.25064	AVRG		0.25087		6.57454
47 Trichloroethene	0.54593 0.64924	0.55069 0.62349	0.63335 0.59480	0.60466 0.58275	0.54177	0.59733	AVRG		0.59240		6.31855
48 n-Propyl Acetate	0.39293	0.39083 0.40257	0.38298 0.39633	0.36512 0.41513	0.37771	0.40380	AVRG		0.39193		3.84296
49 Bromodichloromethane	0.54640 0.69495	0.58868 0.65942	0.65976 0.63661	0.66204 0.61916	0.60509	0.63671	AVRG		0.63088		6.78945
50 Ethyl methacrylate	0.17536 0.15975	0.14919 0.16128	0.14739 0.16208	0.14612 0.16367	0.14016	0.15906	AVRG		0.15641		6.70303

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120 0000	150.0000	170 0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
51 Methyl methacrylate	0.13962	0.12516	0.13152	0.12967	0.12716	0.14253	AVRG			0.13605		5.23068
	0.13721	0.14083	0.14119	0.14562								
52 2-Chloroethyl vinyl ether	0.10979	0.07908	0.09338	0.10797	0.10875	0.12379	AVRG			0.11239		14.33641
	0.12136	0.12531	0.12554	0.12906								
53 4-Methyl-2-Pentanone	0.24010	0.24932	0.24523	0.25615	0.22837	0.24875	AVRG			0.24207		3.94044
	0.48347	0.53898	0.56714	0.56350	0.52130	0.56981						
54 trans-1,3-Dichloropropene	0.60648	0.58639	0.58313	0.57536			AVRG			0.55956		6.41104
	0.51863	0.52873	0.55166	0.55035	0.52388	0.56352						
55 cis-1,3-Dichloropropene	0.60094	0.57122	0.56721	0.56240			AVRG			0.55385		4.52424

Environmental Testing and Consulting, Inc.

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 Method file : \\ETC\BDC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0 5000000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1 m2	%RSD or R^2
56 1,1,2-Trichloroethane	0.15573 0.20220	0.14692 0.20112	0.18726 0.19871	0.18926 0.19739	0.17777 0.19248	0.19248	AVRG		0.18478	10 40625
58 Toluene	0.75204 0.86296	0.84736 0.83794	0.77310 0.79989	0.74782 0.77007	0.66606 0.77511	0.77511	AVRG		0.78323	7.37606
59 1,3-Dichloropropane	0.42535 0.44825	0.41532 0.44018	0.42717 0.42746	0.42021 0.42579	0.38484 0.42933	0.42933	AVRG		0.42439	3.94851
60 2-Hexanone	0.17409 0.17409	0.17787 0.17787	0.16606 0.16945	0.15928 0.17975	0.16248 0.17780	0.17780	AVRG		0.17085	4.51251
61 Chlorodibromomethane	0.34778 0.46369	0.38470 0.43661	0.42303 0.42361	0.42031 0.41189	0.40298 0.42126	0.42126	AVRG		0.41358	7 48027

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

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 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
62 1,2-Dibromoethane	0.23787	0.23984	0.28058	0.29146	0.27823	0.29504	AVRG			0.28339		8.98808
	0.31227	0.30276	0.29982	0.29509								
63 Tetrachloroethene	++++	0.32475	0.36192	0.36882	0.32510	0.36679	AVRG			0.37287		9.53101
	0.43083	0.41346	0.39007	0.37605								
64 1,1,1,2-Tetrachloroethane	0.31910	0.46165	0.44041	0.43995	0.40256	0.40659	AVRG			0.41908		10.74327
	0.44551	0.41910	0.47410	0.38180								
66 Chlorobenzene	0.94977	1.09785	1.12457	1.02403	0.91949	0.95751	AVRG			1.01297		8.27768
	1.03739	0.99765	1.12657	0.89484								
67 Ethylbenzene	1.77716	1.90550	1.97169	1.80692	1.61830	1.75914	AVRG			1.81073		7.36405
	1.86699	1.80103	2.00132	1.59926								

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
68 Xylene-mp	0.59997 0.66380	0.76721 0.62968	0.73459 0.70201	0.65625 0.55323	0.58697	0.63158	AVRG		0.65253		10.26217
69 cis-1,4-Dichloro-2-butene	0.13351 0.13144	0.14977 0.12737	0.14247 0.14452	0.13114 0.12268	0.13048	0.13381	AVRG		0.13472		6.18892
70 Bromoform	0.21900 0.26246	0.27455 0.25501	0.26691 0.29100	0.25478 0.24642	0.25347	0.25416	AVRG		0.25777		7.28259
71 Styrene	1.12338 1.02569	1.15323 0.95978	1.06264 1.08739	1.01383 0.86108	0.90957	0.95210	AVRG		1.01487		9.30675
72 Xylene-o	0.72200 0.61163	0.72465 0.56755	0.68083 0.63061	0.61673 0.49810	0.53726	0.56298	AVRG		0.61524		12.44127

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	ml	m2	RSR	or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6							
	120 0000	150.0000	170 0000	200.0000									
	Level 7	Level 8	Level 9	Level 10									
73 1,1,2,2-Tetrachloroethane	0.53386	0.59133	0.62503	0.60919	0.59959	0.67593	AVRG			0.64179		9	0.8964
	0.68365	0.70210	0.68638	0.71082									
74 1,2,3-Trichloropropane	0.10957	0.09362	0.11435	0.11504	0.10134	0.10087	AVRG			0.10322		8	1.6587
	0.09835	0.09623	0.11025	0.09262									
75 trans-1,4-Dichloro-2-butene	++++	0.07549	0.09177	0.08703	0.08641	0.09214	AVRG			0.08826		7	67673
	0.08726	0.08536	0.10100	0.08785									
76 Isopropylbenzene	++++	1.96505	2.07329	1.90451	1.67832	1.77134	AVRG			1.82535		9	16020
	1.85035	1.75421	1.91811	1.51297									
78 Bromobenzene	++++	0.49811	0.46695	0.42929	0.37573	0.38196	AVRG			0.41185		11	94594
	0.40759	0.37860	0.42741	0.34100									

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Environmental Testing and Consulting, Inc.

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 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RPD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
79 n-Propylbenzene	2.20011	2.24152	2.33230	2.15101	1.90558	2.04738	AVRG		2.10767		8.09409
	2.14451	2.03349	2.24794	1.72283							
80 2-Chlorotoluene	1.28766	1.46588	1.41413	1.39758	1.27850	1.24104	AVRG		1.30716		7.64227
	1.27604	1.26695	1.32757	1.11630							
81 4-Chlorotoluene	1.82658	1.75473	1.66942	1.59573	1.35920	1.45035	AVRG		1.53569		11.76617
	1.50142	1.40471	1.54691	1.24782							
82 1,3,5-Trimethylbenzene	2.18800	2.22020	2.18126	2.06791	1.76491	1.86139	AVRG		1.95353		11.15261
	1.92545	1.80456	1.97858	1.54305							
83 Pentachloroethane	0.54103	0.53242	0.64928	0.60251	0.57088	0.64422	AVRG		0.59125		8.04091
	0.63541	0.62882	0.58132	0.52657							

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Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
120 0000	150.0000	170 0000	200 0000								
Level 7	Level 8	Level 9	Level 10								
84 tert-Butylbenzene	1.38511	1.43946	1.50194	1.37772	1.17900	1.19601	AVRG		1.28752		11.07833
	1.26731	1.19827	1.30407	1.02825							
85 1,2,4-Trimethylbenzene	++++	1.93722	2.06462	1.90670	1.67691	1.77110	AVRG		1.82107		8.98138
	1.84747	1.75522	1.91909	1.51131							
86 sec-Butylbenzene	2.18870	2.22020	2.18088	2.06976	1.76711	1.86395	AVRG		1.95514		11.10018
	1.92756	1.80681	1.98107	1.54540							
87 1,3-Dichlorobenzene	2.01199	2.01060	1.93398	1.87461	1.66165	1.95394	AVRG		1.88964		7.04216
	2.04536	1.91678	1.78801	1.69950							
88 4-Isopropyltoluene	1.55176	1.75764	1.78912	1.65331	1.39144	1.45454	AVRG		1.51617		12.07826
	1.47761	1.37946	1.52139	1.18544							

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0 500000 Level 1	1.0000 Level 2	5 0000 Level 3	20.0000 Level 4	50.0000 Level 5	100 0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
90 1,4-Dichlorobenzene	2 12468 2.05881	2.30595 1.82348	2 15942 1.71442	1.93886 1.56007	1.62338	1.94436	AVRG		1.93534		11 84757
91 n-Butylbenzene	++++ 3 97560	3.71644 3.91505	3.74220 3 66897	3 63632 3.41941	3.13069	3 88778	AVRG		3 67694		7 21215
92 1,2-Dichlorobenzene	1.70441 1.68912	1.55809 1.55760	1 63990 1 56612	1 62547 1.46845	1.41259	1 61746	AVRG		1.59392		5 90285
93 1,2-Dibromo-3-chloropropane	0.16919 0.18656	0.24192 0.19104	0.20053 0.18931	0 17938 0 18446	0.16258	0 17926	AVRG		0.18842		11 51857
94 1,2,4-Trichlorobenzene	1.18490 1.23716	1.06233 1.24529	0.96442 1 21047	0 98584 1 12368	0.82839	1.20092	AVRG		1.10434		12 68074

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 Method file : \\ETC\BDC\CHEM\VOCA.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0 500000	1.0000	5.0000	20.0000	50 0000	100.0000	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200 0000							
	Level 7	Level 8	Level 9	Level 10							
95 Naphthalene	++++	2.25550	1.83146	1.81654	1 57206	2.09582					
	2 29391	2 32800	2.28195	2.13209			AVRG		2 06748		12.90600
96 Hexachlorobutadiene	0.72277	0 70477	0.72481	0.80502	0.65667	0 90222					
	0.94973	0.95473	0.92519	0 87780			AVRG		0.82237		13.73250
97 1,2,3-Trichlorobenzene	0.88688	0.85034	0.79575	0.78866	0 65805	0.95357					
	1.00879	1.01593	0 99646	0.94009			AVRG		0.88945		13.11065
34 Dibromofluoromethane	4.14201	4 08118	4.04390	3.79306	3.47373	4 00071					
	4.02489	4.00667	3.88784	4.01043			AVRG		3.94644		4 87511
37 1,2-Dichloroethane-d4	5 35701	5 18685	5.38415	4.93298	4.85235	5.38727					
	5.55354	5.36934	5 41103	5.58097			AVRG		5 30155		4 56085

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Environmental Testing and Consulting, Inc.

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 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	120.0000	150.0000	170.0000	200.0000						
	Level 7	Level 8	Level 9	Level 10						
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$ 57 Toluene-d8	1.13575	1.06443	1.14234	1.00599	1.04314	1.16014	AVRG	1.15779		8.63002
	1.21916	1.31592	1.25084	1.24016						
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$ 77 Bromofluorobenzene	0.53702	0.49693	0.52329	0.39862	0.45307	0.46452	AVRG	0.47419		9.12520
	0.43751	0.47578	0.51191	0.44328						
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Curve	Formula	Units
Averaged	Ant = Rsp/ml	Response
Linear	Ant = b + Rsp/ml	Response

6561258

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Semi-Volatiles**

000161

ENVIRONMENTAL TESTING & CONSULTING, INC

GC/MS BNA Sequence Check List (SW-846)

Sequence ID B2031601.bDate 3/16/01System ID BN42Analyst pfj

Applicable ETC Order Nos. for this sequence:

0102-7760103-2390103-298

Validated

1. DFTPP Daily 12-Hour Tune Meets Criteria. No analysis begins until criteria are met. (SOP) ✓2. Degradation/Peak Tailing Check (may be combined with DFTPP Tune): ✓a. DDT to DDE/DDD $\leq 20\%$ Benzdine/PCP - Normal Response with no visible peak tailing. ✓2. Initial Calibration Verification Criteria - Method : B2030901.ma. SPCC - Mean RF ≥ 0.050 ✓b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ✓c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ✓d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 ✓

3. Calibration Verification - Each 12-Hour Shift

a. SPCC - RF ≥ 0.050 ✓b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ✓c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ✓d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ ✓e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ✓f. Internal Standards - Areas within (-50% to +100%) from Mid-Point ICAL STD ✓

3. Method Blanks included in this sequence :

Analyze for each analytical batch (20 samples): ✓

List compounds identified in Method Blank w/concentration.

Flag final result "B-Detected in Blank"

D060811B

-----4. Matrix Spike/Matrix Spike Duplicates included in this sequence:-----

Analyze for each analytical batch (20 samples). List MS/MSD(s) performed with any failures : ✓0103-239-7ms/msd

5. Laboratory Control Samples included in this sequence :

Must contain all Target Analytes.

P060811C5/MSD6. Surrogate Recoveries within QC Limits ✓7. All positive compounds within calibration range ✓

Narrative/Notes :

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS
6561260

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	48.64		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	74.08		PASS
70	Less than 2% of mass 69	0.28	(0.37)	PASS
127	40 - 60% of mass 198	53.87		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.66		PASS
275	10 - 30% of mass 198	16.88		PASS
365	Greater than 1% of mass 198	1.33		PASS
441	Present, but less than mass 443	6.41	(75.11)	PASS
442	Greater than 40% of mass 198	42.55		PASS
443	17 - 23% of mass 442	8.54	(20.07)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7337278	5.000	PASS
Benzidine	1.2675159	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	224782			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	0	0.0	15.0	PASS
4,4-DDD + DDE	0	0.0	15.0	PASS

Tuning Sample, //ETCBDC/DD/chem/bna2.i/B2031601.B/0101001.D/0101001.D,*** PASSED **

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

6561261

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID: 0101001

DFTPP Injection Date: 03/16/01

Instrument ID: BNA2

DFTPP Injection Time: 1035

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	48.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	74.1
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	40.0 - 60.0% of mass 198	53.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	16.9
365	Greater than 1.0% of mass 198	1.33
441	Present, but less than mass 443	6.4
442	Greater than 40.0% of mass 198	42.5
443	17.0 - 23.0% of mass 442	8.5 (20.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WS 50.0 NG/U		0201002	03/16/01	1051
02	P06081LB		1201012	03/16/01	1631
03	P06081LCS		1301013	03/16/01	1703
04	P06081LCSD		1401014	03/16/01	1736
05	0103-239-1		1501015	03/16/01	1808
06	0103-239-2		1601016	03/16/01	1840
07	0103-239-3		1701017	03/16/01	1912
08	0103-239-4		1801018	03/16/01	1944
09	0103-239-5		1901019	03/16/01	2016
10	0103-239-6		2001020	03/16/01	2049
11	0103-239-7		2101021	03/16/01	2121
12	0103-239-8		2201022	03/16/01	2153
13	0103-239-7MS		2301023	03/16/01	2225
14	0103-239-7MS		2401024	03/16/01	2257
15					
16					
17					
18					
19					
20					
21					
22					

6561262

FORM 7
BNA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: BNA2

Calibration Date: 03/16/01 Time: 1051

Lab File ID: 0201002

Init. Calib. Date(s): 03/09/01 03/09/01

Init. Calib. Times: 1547

2037

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	48.70	50.00	AVRG	2.6	20.0
2,4-Dinitrotoluene	43.86	50.00	AVRG	12.3	30.0
Hexachlorobenzene	50.69	50.00	AVRG	1.4	30.0
Hexachlorobutadiene	50.75	50.00	AVRG	1.5	20.0
Hexachloroethane	47.59	50.00	AVRG	4.8	30.0
2-Methylphenol	50.62	50.00	AVRG	1.2	30.0
3&4-Methylphenol	51.50	50.00	AVRG	3.0	30.0
Nitrobenzene	51.39	50.00	AVRG	2.8	30.0
Pentachlorophenol	52.19	50.00	AVRG	4.4	20.0
Pyridine	50.73	50.00	LINR	1.5	30.0
2,4,5-Trichlorophenol	51.02	50.00	AVRG	2.0	30.0
2,4,6-Trichlorophenol	51.76	50.00	AVRG	3.5	20.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	49.38	50.00	AVRG	1.2	30.0
2-Fluorobiphenyl	50.49	50.00	AVRG	1.0	30.0
Terphenyl-d14	64.00	50.00	AVRG	28.0	30.0
Phenol-d6	51.18	50.00	AVRG	2.4	30.0
2,4,6-Tribromophenol	51.16	50.00	AVRG	2.3	30.0
2-Fluorophenol	49.77	50.00	AVRG	0.4	30.0

FORM VII BNA-GCMS

000165

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

6561263

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID (Standard): 0201002

Date Analyzed: 03/16/01

Instrument ID: BNA2

Time Analyzed: 1051

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	379083	5.18	1515362	6.36	836016	8.78
UPPER LIMIT	758166	5.68	3030724	6.86	1672032	9.28
LOWER LIMIT	189542	4.68	757681	5.86	418008	8.28
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06081LB	366553	5.17	1482905	6.35	728658	8.76
02 P06081LCS	362856	5.17	1423520	6.36	786823	8.78
03 P06081LCSD	258874	5.17	1018111	6.35	552051	8.76
04 0103-239-1	330386	5.17	1273562	6.35	619906	8.76
05 0103-239-2	408521	5.17	1688248	6.35	831734	8.76
06 0103-239-3	330501	5.17	1222479	6.35	600274	8.76
07 0103-239-4	297579	5.17	1114396	6.34	568263	8.76
08 0103-239-5	328973	5.17	1271793	6.35	605285	8.76
09 0103-239-6	361557	5.17	1491279	6.35	740789	8.76
10 0103-239-7	306664	5.17	1184859	6.34	589330	8.76
11 0103-239-8	390738	5.17	1573402	6.34	839801	8.76
12 0103-239-7MS	367767	5.17	1507964	6.34	831151	8.76
13 0103-239-7MS	356589	5.17	1489274	6.34	737100	8.76
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

6561264

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Lab File ID (Standard): 0201002

Date Analyzed: 03/16/01

Instrument ID: BNA2

Time Analyzed: 1051

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	1247341	11.44	182426	16.60	59393	19.22
UPPER LIMIT	2494682	11.94	364852	17.10	118786	19.72
LOWER LIMIT	623671	10.94	91213	16.10	29697	18.72
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06081LB	1269121	11.42	575083*	16.59	173093*	19.21
02 P06081LCS	1819107	11.44	195923	16.59	122001*	19.22
03 P06081LCSD	1207078	11.44	176222	16.59	93162	19.21
04 0103-239-1	1355953	11.42	498510*	16.59	139979*	19.21
05 0103-239-2	1643716	11.42	563336*	16.59	157071*	19.21
06 0103-239-3	1404664	11.42	425550*	16.59	114629	19.21
07 0103-239-4	1296718	11.42	378927*	16.59	97319	19.21
08 0103-239-5	1131114	11.42	425099*	16.59	107796	19.21
09 0103-239-6	1374315	11.42	433735*	16.59	125924*	19.21
10 0103-239-7	1147176	11.42	446115*	16.59	159365*	19.21
11 0103-239-8	1776940	11.42	530550*	16.59	204839*	19.21
12 0103-239-7MS	1662450	11.42	484510*	16.59	145491*	19.20
13 0103-239-7MS	1445906	11.42	407177*	16.58	120905*	19.21
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

01-11-104-01

3/12/01 pk
3/12/01

Page 1

QC REVIEWED

Report Date : 12-Mar-2001 09:36

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
End Cal Date : 09-MAR-2001 20:37
Quant Method : ISTD
Target Version : 4.00
Integrator : HP RTE
Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
Cal Date : 12-Mar-2001 09:11 target3

Calibration File Names:

Level 1: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0301004.D
Level 2: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0401005.D
Level 3: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0501006.D
Level 4: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0601007.D
Level 5: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0201002.D
Level 6: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0701008.D
Level 7: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0801009.D
Level 8: \\ETCDBC\DD\chem\bna2.i\B2030901.B\0901010.D
Level 9: \\ETCDBC\DD\chem\bna2.i\B2030901.B\1001011.D

Compound	2.0000		5.0000		10.0000		20.0000		50.0000		80.0000		Coefficients		%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	m1	m2	
1 N-Nitrosodimethylamine	63618	24881	77320	181648	443402	733081	828962	1192700	1609037				0.05474	1.16947	0.99964

000168

6561265

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
2 Pyridine	8927 1272713	46988 ++++	130836 ++++	329719	634981	1127399	LINR	0.02314	1.73078		0.99746
3 Methyl methanesulfonate	1.25525 1.38865	1.22819 1.42913	1.36590 1.35167	1.42627	1.41609	1.42007	AVRG		1.36458		5.49659
5 N-Nitrosodiethylamine	0.66952 0.73789	0.71471 0.75886	0.76984 0.73450	0.73698	0.76046	0.71103	AVRG		0.73264		4.22556
6 Ethyl methanesulfonate	1.43097 1.53159	1.42209 1.60932	1.52224 1.53698	1.56337	1.56054	1.52221	AVRG		1.52215		3.98298
8 Phenol	1.86017 2.02323	1.82411 2.12764	1.97387 2.08192	1.98225	2.07999	2.01310	AVRG		1.99625		5.05531

Report Date : 12-Mar-2001 09:24

Page 3

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	RSR or R ²
9 Aniline	2.07722 2.05408	2.02779 2.16785	2.08778 2.15670	2.13700	2.18872	2.05335	AVRG		2.10561		2.75617
10 Bis(2-chloroethyl)ether	1.69316 1.54198	1.55327 1.66864	1.62483 1.51418	1.63030	1.57430	1.51638	AVRG		1.59078		4.14173
11 2-Chlorophenol	1.53264 1.45425	1.50746 1.51855	1.48432 1.45963	1.53473	1.49391	1.45680	AVRG		1.49359		2.14014
12 1,3-Dichlorobenzene	1.63863 1.52995	1.51318 1.58812	1.58793 1.49186	1.64153	1.57760	1.49829	AVRG		1.56301		3.65959
14 1,4-Dichlorobenzene ccc	1.61648 1.52869	1.56239 1.57308	1.56378 1.49565	1.62815	1.56726	1.50920	AVRG		1.56052		2.84599

Report Date : 12-Mar-2001 09:24

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
15 Benzyl alcohol	0.67225 0.88012	0.73186 0.93539	0.84001 0.88472	0.84792	0.97485	0.86478	AVRG		0.84799		11.09622
16 1,2-Dichlorobenzene	1.52307 1.41046	1.42856 1.48966	1.45130 1.41911	1.51253	1.44024	1.38440	AVRG		1.45104		3.28622
17 2-Methylphenol	1.10697 1.07597	1.03855 1.18313	1.12576 1.11639	1.11944	1.14144	1.10866	AVRG		1.11292		3.60977
18 Bis(2-chloroisopropyl)ether	2.22783 2.11123	2.16864 2.16896	2.26356 2.05530	2.29458	2.13521	2.06836	AVRG		2.16596		3.84985
19 3,4-Methylphenol	1.24359 1.26204	1.22463 1.36744	1.23941 1.37061	1.23281	1.38452	1.24923	AVRG		1.28603		5.21527

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
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 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5 0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80 0000 Level 6	Curve	b	Coefficients m1	m2	RPD or R^2
20 Acetophenone	100.0000 Level 7	120 0000 Level 8	160.0000 Level 9								
	0 51799	0.52246	0.54576	0.53600	0 51454	0.48885					
	0 49631	0.52075	0.50196				AVRG		0 51607		3 54537
21 N-Nitrosodi-n-propylamine SAC	0.31084	0.28834	0 30431	0 30526	0.29137	0.28277					
	0.28177	0.30126	0 27275				AVRG		0.29319		4 39692
22 Hexachloroethane	0.20157	0.21055	0.20854	0.21963	0.18067	0.18959					
	0.18177	0.18950	0.17946				AVRG		0.19570		7.56241
24 Nitrobenzene	0.46225	0.44513	0.47661	0 48634	0 44588	0.44141					
	0.43881	0.45578	0 44102				AVRG		0.45480		3 74783
25 Isophorone	0.80386	0.81224	0.84538	0.86548	0.90698	0.80524					
	0 83924	0.91917	0.86091				AVRG		0.85106		4 92711

Report Date : 12-Mar-2001 09:24

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80 0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
26 2-Nitrophenol ccc	0.20914 0.21510	0.20689 0.23121	0.21376 0.22802	0.22864	0.22626	0.21686	AVRG		0.21954		4 15159
27 2,4-Dimethylphenol	0.40540 0.37965	0.38954 0.41570	0.39601 0.39715	0.41283	0.40555	0.38629	AVRG		0.39868		3 06007
28 Bis(2-chloroethoxy)methane =	0.45035 0.43701	0.45742 0.47921	0.47829 0.44503	0.47108	0.45862	0.43489	AVRG		0.45688		3 64842
29 Benzoic acid	6977 885048	23202 1499274	64280 1941640	163131	543676	775733	LINR	0.12655	0.35440		0.99031
30 2,4-Dichlorophenol ccc	0.28361 0.26916	0.28095 0.29865	0.28294 0.28627	0.28501	0.29352	0.27181	AVRG		0.28355		3 27197

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	RSD or R ²
31 1,2,4-Trichlorobenzene	0.29657 0.27177	0.29805 0.28113	0.30008 0.26637	0.30738	0.28472	0.27225	AVRG		0.28648		5.10641
33 Naphthalene	1.01792 0.92848	0.99995 0.98542	1.02625 0.92568	1.02568	0.98067	0.93621	AVRG		0.97958		4.35934
34 4-Chloroaniline	0.43631 0.40605	0.39207 0.47093	0.41249 0.44948	0.42327	0.44683	0.39908	AVRG		0.42628		6.19171
35 2,6-Dichlorophenol	0.26656 0.26380	0.26738 0.29737	0.28070 0.28682	0.28136	0.29426	0.26622	AVRG		0.27827		4.61554
36 Hexachlorobutadiene OCC	0.16460 0.14632	0.16762 0.14758	0.16468 0.13860	0.17176	0.15368	0.14956	AVRG		0.15604		7.33221

Report Date : 12-Mar-2001 09:24

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000	5.0000	10.0000	20.0000	50.0000	80.0000	Curve	b	Coefficients ml	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
37 N-Nitrosodibutylamine	0.27883	0.28057	0.28629	0.30338	0.33559	0.28230	AVRG		0.30000		6.52459
38 4-Chloro-3-methylphenol CCC	0.32653	0.32641	0.33628	0.35827	0.39438	0.34776	AVRG		0.36026		8.58624
39 2-Methylnaphthalene	0.64549	0.63438	0.66145	0.66285	0.70278	0.62468	AVRG		0.66183		5.05749
40 Hexachlorocyclopentadiene SPCC	0.32618	0.30242	0.36001	0.34760	0.32225	0.32633	AVRG		0.32504		5.74645
41 1,2,4,5-Tetrachlorobenzene	0.55117	0.51760	0.54098	0.53878	0.50591	0.47653	AVRG		0.50741		6.17430

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5.0000 Level 2	10 0000 Level 3	20 0000 Level 4	50 0000 Level 5	80 0000 Level 6	Curve	b	Coefficients m1	m2	FRSD or R ²
42 2,4,6-Trichlorophenol	0.36057 0.37233	0.34451 0.39874	0.37961 0.37985	0.38306	0.38580	0.36990	AVRG		0.37493		4 17559
43 2,4,5-Trichlorophenol	0.40749 0.39274	0.37273 0.40317	0.41436 0.37870	0.39500	0.41331	0.39447	AVRG		0.39688		3.63784
45 2-Chloronaphthalene	1.14537 1.00507	1.05961 1.07286	1.12685 1.04612	1.07906	1.05854	1.01662	AVRG		1.06779		4 29610
46 2-Nitroaniline	0.45383 0.51165	0.45232 0.52580	0.49731 0.49226	0.53727	0.50866	0.54020	AVRG		0.50214		6 41915
47 Dimethyl phthalate	1.47560 1.44529	1.46608 1.40997	1.49647 1.33926	1.60459	1.47215	1.46956	AVRG		1.46433		4.82193

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
End Cal Date : 09-MAR-2001 20:37
Quant Method : ISTD
Target Version : 4.00
Integrator : HP RTE
Method file : \\ETCDDC\DD\chem\bn2.i\B2030901.B\B2030901.M
Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	\$RSD or R^2
48 2,6-Dinitrotoluene	0.30241 0.35119	0.33351 0.33128	0.34174 0.31251	0.38168	0.35465	0.36705	AVRG		0.34178		7.36525
49 Acenaphthylene	1.84408 1.71661	1.81164 1.79730	1.87057 1.75388	1.87539	1.81490	1.73202	AVRG		1.80182		3.20296
50 3-Nitroaniline	0.39032 0.41945	0.41882 0.38986	0.43643 0.33502	0.48214	0.42312	0.46950	AVRG		0.41807		10.55567
52 Acenaphthene	1.11701 1.03784	1.07638 1.12254	1.10808 1.06516	1.12004	1.10214	1.03029	AVRG		1.08661		3.27805
53 2,4-Dinitrophenol	3.680 423322	12811 ++++	30451 ++++	85849	253603	386082	LINR	0.04345	0.26235		0.99239

*RF = 0.210

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
54 4-Nitrophenol <i>SPC</i>	0.28624 0.31218	0.35649 ++++	0.39351 ++++	0.43491	0.33971	0.37226	AVRG		0.35647		14.00270
55 Dibenzofuran	1.60759 1.53787	1.59993 1.64209	1.61112 1.53420	1.67063	1.60095	1.57063	AVRG		1.59722		2.79348
56 2,4-Dinitrotoluene	0.41230 0.42219	0.44622 0.34555	0.49216 ++++	0.54006	0.43067	0.47328	AVRG		0.44531		13.07918
57 2,3,4,6-Tetrachlorophenol	0.25102 0.30086	0.28101 0.29275	0.29213 0.26935	0.33190	0.30529	0.32304	AVRG		0.29415		8.56897
58 Diethyl phthalate	1.58986 1.51019	1.66322 1.34957	1.64078 1.22584	1.79512	1.51844	1.63461	AVRG		1.54751		11.13791

Report Date : 12-Mar-2001 09:24

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000	5.0000	10.0000	20.0000	50.0000	80.0000	Curve	b	Coefficients	m2	or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
59 Fluorene	1.31554	1.35263	1.34247	1.42508	1.32337	1.29885	AVRG		1.30775		5.27790
	1.27843	1.25731	1.17608								
60 4-Chlorophenyl phenyl ether	0.65378	0.61391	0.64693	0.65788	0.63648	0.60336	AVRG		0.61736		5.46791
	0.59551	0.58999	0.55842								
61 4-Nitroaniline	0.37652	0.42169	0.46942	0.48941	0.35607	0.39786	AVRG		0.40499		14.73955
	0.32395	++++									
62 4,6-Dinitro-2-methylphenol	0.10015	0.12605	0.15482	0.16617	0.16535	0.15663	AVRG		0.14541		14.48703
	0.14471	0.15356	0.14125								
63 N-NitrosdiphenylAm/Diphenylamine	0.49210	0.49393	0.49571	0.53685	0.57871	0.52127	AVRG		0.55965		13.35342
	0.55717	0.67299	0.68810								

ccc

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
64 1,2-Diphenylhydrazine/Azobenzene	1.01357 1.07512	0.96487 1.38537	0.98513 ++++	1.01726	1.12217	0.98296	AVRG		1.06831		12.95029
66 Phenacetin	25682 726668	67323 709514	137207 764041	306522	540972	742613	QUAD	0.08343	0.60926	5.38297	0.99826
67 4-Bromophenyl phenyl ether	0.18024 0.19027	0.16585 0.23538	0.16982 0.23885	0.17805	0.20079	0.17696	AVRG		0.19291		14.05952
68 Hexachlorobenzene	0.20611 0.19797	0.19359 0.22312	0.19394 0.22318	0.19803	0.20905	0.18645	AVRG		0.20349		6.38412
69 Pentachlorophenol ccc	++++ 0.14218	0.13260 0.15103	0.14816 0.13838	0.15690	0.15525	0.14850	AVRG		0.14663		5.70418

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
70 Pentachloronitrobenzene	0.07823 0.07224	0.08242 0.07347	0.08687 0.06743	0.08797	0.08193	0.07318	AVRG		0.07819		9.05800
72 Phenanthrene	1.03031 0.90063	0.98573 0.96728	1.01114 0.91934	1.00811	0.95216	0.91361	AVRG		0.96548		4.88050
73 Anthracene	0.99795 0.87992	1.00117 0.92629	1.02299 0.87611	1.00802	0.95045	0.89649	AVRG		0.95104		6.15341
74 Carbazole	63729 1738862	149172 1818544	293231 1970779	640521	1212788	1703561	QUAD	0.00825	0.90988	0.49775	0.99908
75 Di-n-butyl phthalate	93789 2729503	228705 2756159	451819 3051271	996495	1864067	2741429	QUAD	0.02645	0.52093	0.22969	0.99913

000181

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5 0000 Level 2	10 0000 Level 3	20 0000 Level 4	50 0000 Level 5	80 0000 Level 6	Curve	b	Coefficients m1	m2	RSD or R ²
76 Fluoranthene <i>ccc</i>	70123 1419274	158237 ++++	320968 ++++	622266	1100842	1465054	QUAD	0.05915	0.23226	0.00290	0.99947
77 Benzidine	0.67586 0.61815	0.72453 0.62301	0.84483 0.54513	0.86789	0.69266	0.68601	AVRG	0.69756			14.96302
78 Pyrene	68766 1258348	152548 1331750	309699 ++++	583445	993699	1289206	LINR	0.00516	3.27906		0.99637
80 Chlorobenzilate	++++ 0.60221	0.46077 0.58247	0.56946 0.53681	0.65238	0.69181	0.59992	AVRG	0.58698			11.94968
81 3,3-Dimethylbenzidine	0.60466 0.46243	0.58637 0.48864	0.64566 0.46265	0.59621	0.46859	0.46703	AVRG	0.53136			14.12169

* %RSD = 22.8

6561279

000182

6561280

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	RSR or R^2
82 Butyl benzyl phthalate	0.99023 0.96022	1.00037 0.97868	1.13384 0.93320	1.16673	1.07564	0.96421	AVRG		1.02257		8.08824
83 Benz (a) Anthracene	1.23720 1.12450	1.14644 1.17890	1.19663 1.13887	1.20704	1.13965	1.12166	AVRG		1.16565		3.50561
85 3,3'-Dichlorobenzidine	0.26994 0.33411	0.28021 0.37419	0.29114 0.36947	0.30584	0.30107	0.32691	AVRG		0.31699		11.71389
86 Chrysene	1.09669 0.99203	0.99177 1.05760	1.06713 1.03854	1.04422	1.02228	0.98301	AVRG		1.03259		3.74654
87 Bis(2-ethylhexyl)phthalate	++++ 1.17570	1.41379 1.19322	1.33613 1.16725	1.45248	1.20628	1.19053	AVRG		1.26692		9.14646

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Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5 0000 Level 2	10 0000 Level 3	20 0000 Level 4	50.0000 Level 5	80 0000 Level 6	Curve	b	Coefficients m1	m2	SRSD or R ²
88 Di-n-octyl phthalate ccc	39610 574165	87214 695249	156904 848433	233348	365094	571794	LINEAR	-0.13551	2 90042		0 99438
89 Benzo(b)fluoranthene	1.94579 1.51167	1.68127 1.58961	1.88498 1.54967	1 75464	1.63520	1 47810	AVRG		1.67010		9 78421
90 Benzo(k)fluoranthene =	1.75581 1.45630	1.77072 1.51172	1.85447 1.47323	1.77364	1.72150	1 52387	AVRG		1.64903		9 38881
91 Benzo(a)pyrene ccc	1.34280 1.36662	1.32984 1.44374	1.43246 1.40687	1 44341	1.46908	1.37058	AVRG		1 40060		3.55578
93 Indeno(1,2,3-cd)pyrene	78178 246088	18246 304068	30547 388747	55909	124269	226686	QUAD	0 04741	0 81781	-0.01664	0 99959

* SRSD = 17.4

6561282

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method File : \\ETCDDC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
94 Dibenz(a,h)anthracene	7413 228639	16279 282572	27650 359818	53262	112123	212973	QUAD	0.05028	0.87722	-0.01843	0.99976
95 Benzo(ghi)perylene	8328 248996	17675 314012	29861 390147	56140	126829	232054	QUAD	0.05623	0.78443	-0.01178	0.99914
\$ 4 2-Fluorophenol	1.32538 1.39784	1.36664 1.52633	1.40618 1.41847	1.47635	1.42857	1.35938	AVRG		1.41168		4.34445
\$ 7 Phenol-d6	1.72993 1.81245	1.74586 1.90478	1.86437 1.81437	1.85501	1.86726	1.74679	AVRG		1.81565		3.45607
\$ 23 Nitrobenzene-d5	0.47135 0.45616	0.46106 0.48201	0.49416 0.44423	0.50535	0.45646	0.45527	AVRG		0.46956		4.33421

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5 0000 Level 2	10.0000 Level 3	20 0000 Level 4	50 0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	SRSD or R^2
	100.0000 Level 7	120.0000 Level 8	160 0000 Level 9								
\$ 44 2-Fluorobiphenyl	1.24036 1.07321	1.14270 1.12956	1.26591 1.06900	1.19944	1.12519	1 07023					
							AVRG		1 14618		6.45708
\$ 65 2,4,6-Tribromophenol	0.10764 0 11345	0.09325 0 13368	0 09782 0 13168	0.11032	0.12103	0.10945					
							AVRG		0.11315		12 14292
\$ 79 Terphenyl-d14	1 18083 1 66665	1 24640 1 58492	1 41862 1.41248	1.74102	1 72051	1 63547					
							AVRG		1 51188		13 62066

000186

6561283

Report Date : 12-Mar-2001 09:24

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
End Cal Date : 09-MAR-2001 20:37
Quant Method : ISTD
Target Version : 4.00
Integrator : HP RTE
Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
Cal Date : 12-Mar-2001 09:11 target3

Curve	Formula	Units
Averaged	Amt = Resp/ml	Response
Linear	Amt = b + Resp/ml	Response
Quad	Amt = b + m1*Resp + m2*Resp^2	Response

000187

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Pesticides**

6561286

ENVIRONMENTAL TESTING & CONSULTING, INC GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: P303201 System ID: 3 Date: 3/20/01 Analyst: EL

Column ID: Primary Confirmation Column Description: RTXCLP2 Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0103239 0103403
0103344

- Initial Calibration P3032001A.m
RSD of analytes $\leq 20\%$ may use average RF.
RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 = 0.99$)
- Endrin/DDT Breakdown – Breakdown for each should not exceed 15%.
- Calibration Verification – Beginning/Every 20th Sample / Ending 415. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/ File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptachlor	Hept Epoxide	Methoxychlor	DCB	TMX	Average
1A	/	/	/	/	/	/	/	HS	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	4.1
1B	/	/	/	/	/	/	/	8.0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	4.6
2A	/	/	/	/	/	/	/	8.5	/	/	/	/	/	/	/	25.0	/	/	/	/	/	/	/	4.6
2B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	17.0	16.0	/	/	/	/	/	/	6.0
3A																								
3B																								

- Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank			
P08025LB			
P08025LBZ DCBP.kg			

- Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD			
P08025LCS OK			

- Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103239-7ms,msd OK

- Notes

\\SERVER\ETC_SOP\Organics\gcsvo\NestPCBHerbs\8081\GC Pesticides 8081A Check List 032900.doc

000189

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

6561237

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3A

Calibration Date: 03/20/01 Time: 2200

Lab File ID: P303201A-21R Init. Calib. Date(s): 03/20/01 03/20/01

Init. Calib. Times: 1344 1657

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0202	0.0200	AVRG	1.0	15.0
alpha-BHC	0.0203	0.0200	AVRG	1.5	15.0
beta-BHC	0.0210	0.0200	AVRG	5.0	15.0
delta-BHC	0.0202	0.0200	AVRG	1.0	15.0
gamma-BHC (Lindane)	0.0200	0.0200	AVRG	0.0	15.0
alpha-chlordane	0.0202	0.0200	AVRG	1.0	15.0
gamma-chlordane	0.0200	0.0200	AVRG	0.0	15.0
Chlorpyrifos	0.0165	0.0200	LINR	17.5	15.0
4,4'-DDD	0.0204	0.0200	AVRG	2.0	15.0
4,4'-DDE	0.0206	0.0200	AVRG	3.0	15.0
4,4'-DDT	0.0200	0.0200	AVRG	0.0	15.0
Dieldrin	0.0210	0.0200	AVRG	5.0	15.0
Endosulfan I	0.0195	0.0200	AVRG	2.5	15.0
Endosulfan II	0.0205	0.0200	AVRG	2.5	15.0
Endosulfan sulfate	0.0206	0.0200	AVRG	3.0	15.0
Endrin	0.0175	0.0200	AVRG	12.5	15.0
Endrin aldehyde	0.0219	0.0200	AVRG	9.5	15.0
Endrin ketone	0.0220	0.0200	AVRG	10.0	15.0
Heptachlor	0.0184	0.0200	AVRG	8.0	15.0
Heptachlor epoxide	0.0204	0.0200	AVRG	2.0	15.0
Methoxychlor	0.0212	0.0200	AVRG	6.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0199	0.0200	AVRG	0.5	15.0
Tetrachloro-m-xylene	0.0202	0.0200	AVRG	1.0	15.0

<- 47

FORM VII PESTICIDE

000190

6561288

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3A

Calibration Date: 03/21/01

Time: 0616

Lab File ID: P303201A-39R

Init. Calib. Date(s): 03/20/01

03/20/01

Init. Calib. Times: 1344

1657

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0205	0.0200	AVRG	2.5	15.0
alpha-BHC	0.0204	0.0200	AVRG	2.0	15.0
beta-BHC	0.0209	0.0200	AVRG	4.5	15.0
delta-BHC	0.0204	0.0200	AVRG	2.0	15.0
gamma-BHC (Lindane)	0.0207	0.0200	AVRG	3.5	15.0
alpha-chlordane	0.0205	0.0200	AVRG	2.5	15.0
gamma-chlordane	0.0204	0.0200	AVRG	2.0	15.0
Chlorpyrifos	0.0173	0.0200	LINR	13.5	15.0
4,4'-DDD	0.0210	0.0200	AVRG	5.0	15.0
4,4'-DDE	0.0210	0.0200	AVRG	5.0	15.0
4,4'-DDT	0.0205	0.0200	AVRG	2.5	15.0
Dieldrin	0.0214	0.0200	AVRG	7.0	15.0
Endosulfan I	0.0204	0.0200	AVRG	2.0	15.0
Endosulfan II	0.0206	0.0200	AVRG	3.0	15.0
Endosulfan sulfate	0.0210	0.0200	AVRG	5.0	15.0
Endrin	0.0166	0.0200	AVRG	17.0	15.0 <-
Endrin aldehyde	0.0232	0.0200	AVRG	16.0	15.0 <-
Endrin ketone	0.0230	0.0200	AVRG	15.0	15.0
Heptachlor	0.0218	0.0200	AVRG	9.0	15.0
Heptachlor epoxide	0.0209	0.0200	AVRG	4.5	15.0
Methoxychlor	0.0219	0.0200	AVRG	9.5	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0210	0.0200	AVRG	5.0	15.0
Tetrachloro-m-xylene	0.0204	0.0200	AVRG	2.0	15.0

FORM VII PESTICIDE

000191

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561239

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3A

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP2 ID: 0.32 (mm)

Calibration Time(s): 1344 1847

LAB FILE ID: RF0.0004: P303201A RF0.004: P303201A-RF0.01: P303201A-1
RF0.02: P303201A-0 RF0.03: P303201A-0

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		16911500	13758000	15066650	14466233
alpha-BHC		544250.00	468500.00	532250.00	522633.33
beta-BHC		256500.00	200900.00	225150.00	209500.00
delta-BHC		16735750	13955800	16021150	15510033
gamma-BHC (Lindane)		522250.00	445300.00	497100.00	486400.00
alpha-chlordane		15885250	12937500	13983600	13395167
gamma-chlordane		16135250	13031600	14182250	13611267
Chlordane			16605.000		
(2)			23185.000		
(3)			18750.000		
(4)			46830.000		
(5)			40030.000		
Chlorpyrifos		223250.00	173100.00	136150.00	149833.33
4,4'-DDD		11853500	9426500.0	10460450	9999900.0
4,4'-DDE		15342500	12494500	13575600	12961500
4,4'-DDT		388250.00	324500.00	345200.00	335233.33
Dieldrin		15323000	12437200	13983300	13043367
Endosulfan I		438750.00	365800.00	395650.00	395100.00
Endosulfan II		427500.00	347200.00	382300.00	365166.67
Endosulfan sulfate		14626750	11430700	12225450	11681800
Endrin		14403750	11480700	12636500	12043500
Endrin aldehyde		323500.00	266500.00	289150.00	269866.67
Endrin ketone		456750.00	377600.00	414950.00	383266.67
Heptachlor		443000.00	362400.00	394950.00	369200.00
Heptachlor epoxide		464000.00	384900.00	424150.00	399133.33
Methoxychlor		230000.00	174800.00	189800.00	178500.00
Toxaphene			13266.000		
(2)			12713.000		
(3)			9849.000		
(4)			8962.000		
(5)			15011.000		
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		387000.00	295200.00	302450.00	296966.67
Tetrachloro-m-xylene		335000.00	268600.00	283650.00	270133.33

FORM VI PESTICIDE

000192

6561200

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3A

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1344 1847

LAB FILE ID: RF0.04: P303201A-ORF0.06: P303201A-ORF0.4: P303201A-10

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	13809350	13240050	14638170
alpha-BHC	505950.00	496333.33	605727.50
beta-BHC	196125.00	189283.33	202022.50
delta-BHC	14966075	14574150	17453668
gamma-BHC (Lindane)	470150.00	455600.00	553900.00
alpha-chlordane	12679175	12096900	13506263
gamma-chlordane	12951650	12415400	14173155
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	143025.00	144000.00	125067.50
4,4'-DDD	9539500.0	9122216.7	10148978
4,4'-DDE	12180725	11651150	12175228
4,4'-DDT	319025.00	307116.67	339305.00
Dieldrin	12440450	11944800	13087170
Endosulfan I	363800.00	358883.33	418515.00
Endosulfan II	338775.00	325466.67	333897.50
Endosulfan sulfate	11080500	10379650	11049675
Endrin	11431900	10820433	11515773
Endrin aldehyde	260425.00	247500.00	252070.00
Endrin ketone	367550.00	344633.33	347775.00
Heptachlor	349700.00	335150.00	380542.50
Heptachlor epoxide	384925.00	361100.00	387102.50
Methoxychlor	168250.00	146650.00	142367.50
Toxaphene			
(2)			
(3)			
(4)			
(5)			
=====	=====	=====	=====
Decachlorobiphenyl	283500.00	262433.33	285212.50
Tetrachloro-m-xylene	259375.00	246116.67	278097.50

||

FORM VI PESTICIDE

000193

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561291

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3A

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP2 ID: 0.32 (mm)

Calibration Time(s): 1344 1847

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
=====	=====	=====	=====	=====
Aldrin	AVRG		14555707.6	8.3
alpha-BHC	AVRG		525092.024	8.3
beta-BHC	AVRG		211354.405	10.8
delta-BHC	AVRG		15602375.1	7.9
gamma-BHC (Lindane)	AVRG		490100.000	7.8
alpha-chlordane	AVRG		13497693.5	9.0
gamma-chlordane	AVRG		13785796.0	8.9
Chlordane	LINR	0.00000000	6.022e-005	1.000
(2)	LINR	0.00000000	4.313e-005	1.000
(3)	LINR	0.00000000	5.333e-005	1.000
(4)	LINR	0.00000000	2.135e-005	1.000
(5)	LINR	0.00000000	2.498e-005	1.000
Chlorpyrifos	LINR	-5.14e-003	8.082e-006	1.000
4,4'-DDD	AVRG		10078720.6	9.0
4,4'-DDE	AVRG		12911600.4	9.6
4,4'-DDT	AVRG		336947.143	7.7
Dieldrin	AVRG		13179898.1	8.7
Endosulfan I	AVRG		390928.333	7.7
Endosulfan II	AVRG		360043.690	9.9
Endosulfan sulfate	AVRG		11782075.0	11.7
Endrin	AVRG		12047508.0	9.8
Endrin aldehyde	AVRG		272715.952	9.6
Endrin ketone	AVRG		384646.429	10.3
Heptachlor	AVRG		376420.357	9.4
Heptachlor epoxide	AVRG		400758.690	8.4
Methoxychlor	AVRG		175766.786	16.7
Toxaphene	LINR	0.00000000	7.538e-005	1.000
(2)	LINR	0.00000000	7.866e-005	1.000
(3)	LINR	0.00000000	1.015e-004	1.000
(4)	LINR	0.00000000	1.116e-004	1.000
(5)	LINR	0.00000000	6.662e-005	1.000
=====	=====	=====	=====	=====
Decachlorobiphenyl	AVRG		301823.214	13.2
Tetrachloro-m-xylene	AVRG		277281.786	10.2

FORM VI PESTICIDE

000194

6561292

ENVIRONMENTAL TESTING & CONSULTING, INC

GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: P320 P303201 System ID: 3 Date: 3/20/01 Analyst: KC

Column ID: Primary Confirmation Column Description: RTCLP Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0103239 0103403
0103344

- Initial Calibration P3032001b.m
RSD of analytes $\leq 20\%$ may use average RF.
RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)

- Endrin/DDT Breakdown – Breakdown for each should not exceed 15%.

- Calibration Verification – Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptachlor	Hept Epoxide	Methoxychlor	DCB	TMX	Average
1A2	/	/	/	/	/	/	/	17.5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	4.2
1B2	/	/	/	/	/	/	/	16.5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	6.2
2A3	/	/	/	/	/	/	/	20.0	/	/	/	/	/	/	/	/	/	/	15.5	/	/	/	/	9.5
2B3	/	/	/	/	/	/	/	11.0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	6.1
3A																								
3B																								

- Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank			
P08025LB OK			
P08025LB2 DCBP High			

- Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD			
P08025LCS OK			

- Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103239-7ms, msd 0% RPD out for gamma chlordane

- Notes

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

6561293

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3B

Calibration Date: 03/20/01 Time: 2200

Lab File ID: P303201B-21R

Init. Calib. Date(s): 03/20/01 03/20/01

Init. Calib. Times: 1344 1657

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0180	0.0200	AVRG	10.0	15.0
alpha-BHC	0.0188	0.0200	2ORDR	6.0	15.0
Endosulfan I	0.0191	0.0200	AVRG	4.5	15.0
beta-BHC	0.0192	0.0200	AVRG	4.0	15.0
delta-BHC	0.0190	0.0200	2ORDR	5.0	15.0
gamma-BHC (Lindane)	0.0189	0.0200	2ORDR	5.5	15.0
alpha-chlordane	0.0189	0.0200	AVRG	5.5	15.0
gamma-chlordane	0.0189	0.0200	AVRG	5.5	15.0
Chlorpyrifos	0.0165	0.0200	AVRG	17.5	15.0
4,4'-DDD	0.0188	0.0200	AVRG	6.0	15.0
4,4'-DDE	0.0186	0.0200	AVRG	7.0	15.0
4,4'-DDT	0.0197	0.0200	AVRG	1.5	15.0
Dieldrin	0.0196	0.0200	AVRG	2.0	15.0
Endosulfan II	0.0199	0.0200	AVRG	0.5	15.0
Endosulfan sulfate	0.0202	0.0200	AVRG	1.0	15.0
Endrin	0.0193	0.0200	AVRG	3.5	15.0
Endrin aldehyde	0.0203	0.0200	AVRG	1.5	15.0
Endrin ketone	0.0200	0.0200	AVRG	0.0	15.0
Heptachlor	0.0185	0.0200	AVRG	7.5	15.0
Heptachlor epoxide	0.0189	0.0200	AVRG	5.5	15.0
Methoxychlor	0.0206	0.0200	AVRG	3.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0203	0.0200	AVRG	1.5	15.0
Tetrachloro-m-xylene	0.0186	0.0200	AVRG	7.0	15.0

<-

FORM VII PESTICIDE

000196

6561294

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3B

Calibration Date: 03/21/01

Time: 0616

Lab File ID: P303201B-39R

Init. Calib. Date(s): 03/20/01

03/20/01

Init. Calib. Times: 1344

1657

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0177	0.0200	AVRG	11.5	15.0
alpha-BHC	0.0187	0.0200	2ORDR	6.5	15.0
Endosulfan I	0.0187	0.0200	AVRG	6.5	15.0
beta-BHC	0.0188	0.0200	AVRG	6.0	15.0
delta-BHC	0.0186	0.0200	2ORDR	7.0	15.0
gamma-BHC (Lindane)	0.0187	0.0200	2ORDR	6.5	15.0
alpha-chlordane	0.0185	0.0200	AVRG	7.5	15.0
gamma-chlordane	0.0186	0.0200	AVRG	7.0	15.0
Chlorpyrifos	0.0166	0.0200	AVRG	17.0	15.0
4,4'-DDD	0.0184	0.0200	AVRG	8.0	15.0
4,4'-DDE	0.0180	0.0200	AVRG	10.0	15.0
4,4'-DDT	0.0189	0.0200	AVRG	5.5	15.0
Dieldrin	0.0192	0.0200	AVRG	4.0	15.0
Endosulfan II	0.0195	0.0200	AVRG	2.5	15.0
Endosulfan sulfate	0.0201	0.0200	AVRG	0.5	15.0
Endrin	0.0179	0.0200	AVRG	10.5	15.0
Endrin aldehyde	0.0202	0.0200	AVRG	1.0	15.0
Endrin ketone	0.0201	0.0200	AVRG	0.5	15.0
Heptachlor	0.0183	0.0200	AVRG	8.5	15.0
Heptachlor epoxide	0.0188	0.0200	AVRG	6.0	15.0
Methoxychlor	0.0202	0.0200	AVRG	1.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0199	0.0200	AVRG	0.5	15.0
Tetrachloro-m-xylene	0.0183	0.0200	AVRG	8.5	15.0

<-

FORM VII PESTICIDE

000197

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561295

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3B

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP

ID: 0.32 (mm)

Calibration Time(s): 1344

1847

LAB FILE ID: RF0.0004: P303201BRF0.004: P303201B-RF0.01: P303201B-1
RF0.02: P303201B-ORF0.03: P303201B-0

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		473750.00	400900.00	430650.00	441700.00
alpha-BHC		505500.00	444000.00	504900.00	537466.67
Endosulfan I		430250.00	357900.00	370300.00	375866.67
beta-BHC		327750.00	276900.00	286650.00	283066.67
delta-BHC		432250.00	376400.00	427300.00	454400.00
gamma-BHC (Lindane)		500000.00	449300.00	479750.00	511333.33
alpha-chlordane		469750.00	383600.00	406600.00	401033.33
gamma-chlordane		16725000	13682500	14145100	14118833
Chlordane			18225.000		
(2)			30910.000		
(3)			23265.000		
(4)			43485.000		
(5)			50400.000		
Chlorpyrifos		8496000.0	7438200.0	5369200.0	6538100.0
4,4'-DDD		7687000.0	6514200.0	6942800.0	7090300.0
4,4'-DDE		360000.00	304000.00	330950.00	326766.67
4,4'-DDT		9510500.0	7665900.0	8230550.0	8532433.3
Dieldrin		337750.00	283300.00	317300.00	300800.00
toxaphene			766300.00		
(2)			843900.00		
(3)			1212300.0		
(4)			729300.00		
(5)			560400.00		
Endosulfan II		301250.00	247200.00	261450.00	260400.00
Endosulfan sulfate		270750.00	222200.00	229250.00	227933.33
Endrin		291750.00	240000.00	251950.00	254066.67
Endrin aldehyde		250750.00	195600.00	212250.00	206733.33
Endrin ketone		9581250.0	7969600.0	8322600.0	7926566.7
Heptachlor		570750.00	472300.00	511650.00	517666.67
Heptachlor epoxide		464500.00	391900.00	416500.00	410033.33
Methoxychlor		133000.00	105600.00	110000.00	112766.67
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		330250.00	243400.00	238550.00	235800.00
Tetrachloro-m-xylene		471500.00	396300.00	405150.00	414133.33

FORM VI PESTICIDE

000198

6561296

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3B

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP

ID: 0.32 (mm)

Calibration Time(s): 1344

1847

LAB FILE ID:

RF0.04: P303201B-ORF0.06: P303201B-ORF0.4: P303201B-10

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	417775.00	423616.67	591492.50
alpha-BHC	543150.00	559150.00	911382.50
Endosulfan I	362525.00	341916.67	431772.50
beta-BHC	272050.00	263000.00	311855.00
delta-BHC	446000.00	453500.00	724517.50
gamma-BHC (Lindane)	504400.00	515200.00	773620.00
alpha-chlordane	387175.00	362950.00	459470.00
gamma-chlordane	13524650	12727067	16159700
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	6398150.0	6324450.0	6217065.0
4,4'-DDD	6771200.0	6216666.7	8767655.0
4,4'-DDE	316475.00	305583.33	435735.00
4,4'-DDT	7954775.0	7193283.3	9629922.5
Dieldrin	297375.00	275900.00	382117.50
toxaphene			
(2)			
(3)			
(4)			
(5)			
Endosulfan II	249175.00	223300.00	278732.50
Endosulfan sulfate	215900.00	190900.00	224187.50
Endrin	244250.00	226850.00	307567.50
Endrin aldehyde	190900.00	170650.00	199620.00
Endrin ketone	7524650.0	6850250.0	7912380.0
Heptachlor	496650.00	492666.67	642895.00
Heptachlor epoxide	386975.00	371000.00	451962.50
Methoxychlor	105750.00	92933.333	100225.00
=====	=====	=====	=====
Decachlorobiphenyl	219325.00	195233.33	188522.50
Tetrachloro-m-xylene	402650.00	396183.33	503017.50

FORM VI PESTICIDE

000199

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561297

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST3B

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP ID: 0.32 (mm)

Calibration Time(s): 1344 1847

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
Aldrin	AVRG		454269.167		14.2
alpha-BHC	2ORDR	1.271e-003	1.823e-006	-2.e-012	1.000
Endosulfan I	AVRG		381504.405		9.3
beta-BHC	AVRG		288753.095		8.0
delta-BHC	2ORDR	6.888e-004	2.254e-006	-3.02e-012	1.000
gamma-BHC (Lindane)	2ORDR	5.896e-004	1.992e-006	-2.27e-012	1.000
alpha-chlordane	AVRG		410082.619		9.7
gamma-chlordane	AVRG		14440407.1		10.1
Chlordane	LINR	0.00000000	5.487e-005		1.000
(2)	LINR	0.00000000	3.235e-005		1.000
(3)	LINR	0.00000000	4.298e-005		1.000
(4)	LINR	0.00000000	2.3e-005		1.000
(5)	LINR	0.00000000	1.984e-005		1.000
Chlorpyrifos	AVRG		6683023.57		15.0
4,4'-DDD	AVRG		7141403.10		12.0
4,4'-DDE	AVRG		339930.000		13.6
4,4'-DDT	AVRG		8388194.88		10.9
Dieldrin	AVRG		313506.071		11.7
toxaphene	LINR	0.00000000	1.305e-006		1.000
(2)	LINR	0.00000000	1.185e-006		1.000
(3)	LINR	0.00000000	8.249e-007		1.000
(4)	LINR	0.00000000	1.371e-006		1.000
(5)	LINR	0.00000000	1.784e-006		1.000
Endosulfan II	AVRG		260215.357		9.5
Endosulfan sulfate	AVRG		225874.405		10.5
Endrin	AVRG		259490.595		11.2
Endrin aldehyde	AVRG		203786.190		12.1
Endrin ketone	AVRG		8012470.95		10.4
Heptachlor	AVRG		529225.476		11.1
Heptachlor epoxide	AVRG		413267.262		8.3
Methoxychlor	AVRG		108610.714		11.6
Decachlorobiphenyl	AVRG		235868.690		19.8
Tetrachloro-m-xylene	AVRG		426990.595		10.0

FORM VI PESTICIDE

000200

6561298

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Herbicides**

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·
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000201

ENVIRONMENTAL TESTING & CONSULTING, INC
GC Herbicides Method 8151B/6640 Sequence Check List

6561299

Sequence ID: 4203151 System ID: 2 Date: 3/15/01 Analyst: LC

Column ID: Primary Confirmation Column Description: 2B-5 Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0103239 _____ TCLP _____
0103344 _____ _____

- Initial Calibration 4203140 a.m
RSD of analytes $\leq 20\%$ may use average RF.
RSD of analytes $\geq 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)
- Calibration Verification – Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Dalapon	MCP	Dicamba	MCPA	Dichloroprop	2,4-D	Silvex	2,4,5-T	Dinoseb	2,4-DB	DCAA	Average
1A	TCLP OK											
1B												
2A	TCLP OK											
2B												
3A	TCLP OK											
3B												

- Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank				
P110891B OK				
P110891B2 OK				

- Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD				
P110891C OK				

- Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103239 - 7MS, MSD OK

- Notes

6561300

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST2A

Calibration Date: 03/15/01

Time: 0848

Lab File ID: H203151A-01R

Init. Calib. Date(s): 03/14/01 03/14/01

Init. Calib. Times: 1134

1405

GC Column: ZB-5

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.0879	0.100	2ORDR	12.1	15.0
Silvex	0.00923	0.0100	LINR	7.7	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.00902	0.0100	LINR	9.8	15.0

FORM VII HERBICIDE

000203

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

6561301

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST2A

Calibration Date: 03/15/01 Time: 1904

Lab File ID: H203151A-08R

Init. Calib. Date(s): 03/14/01 03/14/01

Init. Calib. Times: 1134 1405

GC Column: ZB-5

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.0987	0.100	2ORDR	1.3	15.0
Silvex	0.00980	0.0100	LINR	2.0	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.00969	0.0100	LINR	3.1	15.0
=====	=====	=====	=====	=====	=====

FORM VII HERBICIDE

000204

6561302

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST2A

Calibration Date: 03/16/01

Time: 0006

Lab File ID: H203151A-20R

Init. Calib. Date(s): 03/14/01

03/14/01

Init. Calib. Times: 1134

1405

GC Column: ZB-5

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.0989	0.100	2ORDR	1.1	15.0
Silvex	0.0101	0.0100	LINR	1.0	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.0104	0.0100	LINR	4.0	15.0

FORM VII HERBICIDE

000205

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

6561303

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST2A

Calibration Date(s): 03/14/01 03/14/01

Column: ZB-5

ID: 0.25 (mm)

Calibration Time(s): 1134 1405

LAB FILE ID: RF0.01: H203141A-ORF0.02: H203141A-ORF0.04: H203141A-0
RF0.1: H203141A-04RF0.25: H203141A-0

COMPOUND	RF0.01	RF0.02	RF0.04	RF0.1	RF0.25
2,4-D	1713500.0	973733.33	898600.00	665670.00	660250.00
Silvex	5453000.0	3212000.0	3237000.0	2543200.0	2707450.0
2,4,5-T	4036000.0	2649333.3	2668600.0	2166500.0	2292550.0

FORM VI HERBICIDE

000206

6561304

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-239

Instrument ID: PEST2A

Calibration Date(s): 03/14/01 03/14/01

Column: ZB-5

ID: 0.25 (mm)

Calibration Time(s): 1134

1405

LAB FILE ID:

RF0.35: H203141A-0RF0: H203141A-07R

COMPOUND	RF0.35	RF0
=====	=====	=====
2,4-D	590808.00	477314.00
Silvex	2754920.0	
=====	=====	=====
2,4,5-T	2311620.0	1898010.0

FORM VI HERBICIDE

000207

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC. Contract: 6561305

Lab Code: Case No.: SAS No.: SDG No.: 0103-239

Instrument ID: PEST2A Calibration Date(s): 03/14/01 03/14/01

Column: ZB-5 ID: 0.25 (mm) Calibration Time(s): 1134 1405

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
2,4-D	2ORDR	-2.46e-003	1.191e-006	1.886e-012	0.999
Silvex	LINR	-4.2e-004	3.681e-007		0.999
2,4,5-T	LINR	-2.32e-003	5.154e-007		0.990

FORM VI HERBICIDE

000208

6561306

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Environmental Testing & Consulting, Inc.
Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

*OK dds
3/14/01
cyarick? OK per PRG's*

6561308

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Innovative Waste Management**
 Site ID **Dunn Field**

ETC Order #**0103344**
7512-060

<u>ETC Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
010334401	MCIP/1071/GRAB/01	SOIL	7.3.3	Reactive Cyanide
010334401	MCIP/1071/GRAB/01	SOIL	1010	Ignitability/Flashpoint
010334401	MCIP/1071/GRAB/01	SOIL	9045C	pH - Corrosivity
010334401	MCIP/1071/GRAB/01	SOIL	7.3.4	Reactive Sulfide
010334401	MCIP/1071/GRAB/01	SOIL	1311	TCLP Extraction
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Silver - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Arsenic - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Arsenic
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Barium - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Cadmium - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Chromium - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	7470A	Mercury - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Lead - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	6010B	Selenium - TCLP
010334401	MCIP/1071/GRAB/01	SOIL	8270C	TCLP Semivolatiles
010334401	MCIP/1071/GRAB/01	SOIL	8151A	TCLP Herbicides
010334401	MCIP/1071/GRAB/01	SOIL	8081A	TCLP Pesticides
010334401	MCIP/1071/GRAB/01	SOIL	1311	TCLP Extraction Organics
010334401	MCIP/1071/GRAB/01	SOIL	1311	TCLP Extraction ZHE
010334401	MCIP/1071/GRAB/01	SOIL	8260B	TCLP Volatile Organics
010334402	MCIP/1071/GRAB/02	SOIL	7.3.3	Reactive Cyanide
010334402	MCIP/1071/GRAB/02	SOIL	1010	Ignitability/Flashpoint
010334402	MCIP/1071/GRAB/02	SOIL	9045C	pH - Corrosivity
010334402	MCIP/1071/GRAB/02	SOIL	7.3.4	Reactive Sulfide
010334402	MCIP/1071/GRAB/02	SOIL	1311	TCLP Extraction
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Silver - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Arsenic - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Arsenic
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Barium - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Cadmium - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Chromium - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	7470A	Mercury - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Lead - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	6010B	Selenium - TCLP
010334402	MCIP/1071/GRAB/02	SOIL	8270C	TCLP Semivolatiles
010334402	MCIP/1071/GRAB/02	SOIL	8151A	TCLP Herbicides
010334402	MCIP/1071/GRAB/02	SOIL	8081A	TCLP Pesticides
010334402	MCIP/1071/GRAB/02	SOIL	1311	TCLP Extraction Organics
010334402	MCIP/1071/GRAB/02	SOIL	1311	TCLP Extraction ZHE
010334402	MCIP/1071/GRAB/02	SOIL	8260B	TCLP Volatile Organics

② 3/15/01

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody



ETC Work Order: 01032114

FAX (901)327-6334

ΕΙΝΑΙ ΑΝΤΙΣΤΟΙΧΟ ΤΟ ΕΝΤΕΡΟ ΤΗΣ

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 3/12/01
Date/Time Checked In 3/12/01-11:48
Carrier/Bill# Hand-Delivered

LIMS# 0103-344
Project Dunn Field

By Rebekah Barger

1. Custody Seals?/Location-	No
2. Samples are non-radioactive?	Yes
3. Chain of Custody in plastic?	Yes
4. Temperature at receipt (ok = 4 ± 2 °C) <4°C	OK
5. Ice & Packing-ice, bubble wrap	Yes
6. Chain of Custody filled out properly?	Yes
7. All containers in separate bags?	No
8. Sample containers intact?	Yes
9. Label(s) complete and in good condition?	Yes
10. Label(s) agree with Chain of Custody?	Yes
11. Correct containers used?	Yes
12. Sufficient sample?	Yes
13. VOA vials bubble-free (H ₂ O) or no head space (soil)?	Yes
14. Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

6561312

Environmental Testing & Consulting, Inc.

Sample Reports

000006

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561313

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID : **0103344-01**Matrix : **SOIL**Field ID : **MCIP/1071/GRAB/01**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	ND	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	>96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.3	SU		03/12/01	TL	9045C	PH031211
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211

Data Validator 

ND - Not Detected

000007

6561314

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID : **0103344-02**Matrix : **SOIL**Field ID : **MCIP/1071/GRAB/02**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Reactive Cyanide	0.494	mg/Kg	0.125	03/12/01	TL	7.3.3	RC031211
Ignitability/Flashpoint	> 96	oC		03/14/01	GD	1010	IG031411
pH - Corrosivity	7.4	SU		03/12/01	TL	9045C	PH031211
Reactive Sulfide	ND	mg/Kg	25	03/12/01	TL	7.3.4	RS031211

*PR 6' s ok**~~2-24-01~~*

Data Validator

ND - Not Detected

000008

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561315

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397****Summerville, SC 29485-0397**Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID : **0103344-01**Matrix : **SOIL**Field ID : **MCIP/1071/GRAB/01**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-55				03/16/01	NR	3051
Arsenic	5.82	mg/Kg	0.500	03/20/01	03/16/01	SH	6010B

Data Validator

ND - Not Detected

000009

6561316

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID : **0103344-02**Matrix : **SOIL**Field ID : **MCIP/1071/GRAB/02**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Metals Digestion Batch	V13-SO-55				03/16/01	NR	3051
Arsenic	3.10	mg/Kg	0.500	03/20/01	03/16/01	SH	6010B

CS
Data Validator

ND - Not Detected

000010

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561317

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID : **0103344-01**Matrix : **SOIL**Field ID : **MCIP/1071/GRAB/01**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL	1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR	3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF	7470
Silver - TCLP	ND	mg/L	0 010	03/15/01	03/14/01	SH	6010B
Arsenic - TCLP	ND	mg/L	0 100	03/15/01	03/14/01	SH	6010B
Barium - TCLP	1.18	mg/L	0.025	03/15/01	03/14/01	SH	6010B
Cadmium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH	6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF	7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH	6010B
Selenium - TCLP	ND	mg/L	0 100	03/15/01	03/14/01	SH	6010B

CJ
Data Validator

ND - Not Detected

000011

6561318

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID : **0103344-02**Matrix : **SOIL**Field ID : **MCIP/1071/GRAB/02**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED BY	METHOD
TCLP Extraction	Leachate				03/13/01	TL 1311
Metals Digestion Batch	V25-AQ-08				03/14/01	NR 3015A
Mercury Digestion Batch	V8-AQ-06				03/15/01	JF 7470
Silver - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH 6010B
Arsenic - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH 6010B
Barium - TCLP	1.82	mg/L	0.025	03/15/01	03/14/01	SH 6010B
Cadmium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH 6010B
Chromium - TCLP	ND	mg/L	0.010	03/15/01	03/14/01	SH 6010B
Mercury - TCLP	ND	mg/L	0.001	03/15/01	03/15/01	JF 7470A
Lead - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH 6010B
Selenium - TCLP	ND	mg/L	0.100	03/15/01	03/14/01	SH 6010B

CS
Data Validator

ND - Not Detected

000012

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561319

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-01**Field ID : **MCIP/1071/GRAB/01**Matrix : **SOIL**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				03/12/01	TL 1311
TCLP Volatile Organics				03/14/01	EM	8260B 5030B
QC Batch	V403141					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			
Surrogate Standard	% Recovery		QC Limits			
S1 - Dibromofluoromethane	100		74	123		
S2 - Toluene-d8	104		86	112		
S3 - 4-Bromofluorobenzene	95		81	115		
S4 - 1,2-Dichloroethane-d4	102		80	120		

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000013

6561320

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-02**Field ID : **MCIP/1071/GRAB/02**Matrix : **SOIL**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction ZHE	Leachate				TL	1311
TCLP Volatile Organics				03/14/01	EM	8260B 5030B
QC Batch	V403141					
Dilution Factor	10					
Benzene	ND	mg/L	0.010			
Carbon Tetrachloride	ND	mg/L	0.010			
Chlorobenzene	ND	mg/L	0.010			
Chloroform	ND	mg/L	0.010			
1,4-Dichlorobenzene	ND	mg/L	0.010			
1,2-Dichloroethane	ND	mg/L	0.010			
1,1-Dichloroethene	ND	mg/L	0.010			
2-Butanone (MEK)	ND	mg/L	1.00			
Tetrachloroethene	ND	mg/L	0.010			
Trichloroethene	ND	mg/L	0.010			
Vinyl Chloride	ND	mg/L	0.010			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	104	74 123
S2 - Toluene-d8	101	86 112
S3 - 4-Bromofluorobenzene	99	81 115
S4 - 1,2-Dichloroethane-d4	104	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000014

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561321

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-01**Field ID : **MCIP/1071/GRAB/01**Matrix : **SOIL**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/20/01	PF	8270C
QC Batch	P06081				03/16/01	3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	75		29	110		
S2 - 2-Fluorobiphenyl	78		38	107		
S3 - 4-Terphenyl-d14	90		33	122		
S4 - Phenol-d6	20		7	58		
S5 - 2,4,6-Tribromophenol	48		16	138		
S6 - 2-Fluorophenol	30		8	88		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000015

6561322

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-02**Field ID : **MCIP/1071/GRAB/02**Matrix : **SOIL**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Semivolatiles				03/20/01	PF	8270C
QC Batch	P06081					3510C
Dilution Factor	1					
1,4-Dichlorobenzene	ND	mg/L	0.020			
2,4-Dinitrotoluene	ND	mg/L	0.020			
Hexachlorobenzene	ND	mg/L	0.020			
Hexachlorobutadiene	ND	mg/L	0.020			
Hexachloroethane	ND	mg/L	0.020			
2-Methylphenol	ND	mg/L	0.020			
3-Methylphenol	ND	mg/L	0.020			
4-Methylphenol	ND	mg/L	0.020			
Nitrobenzene	ND	mg/L	0.020			
Pentachlorophenol	ND	mg/L	0.040			
Pyridine	ND	mg/L	0.020			
2,4,5-Trichlorophenol	ND	mg/L	0.020			
2,4,6-Trichlorophenol	ND	mg/L	0.020			
Surrogate Standard	% Recovery		QC Limits			
S1 - Nitrobenzene-d5	74		29	110		
S2 - 2-Fluorobiphenyl	78		38	107		
S3 - 4-Terphenyl-d14	79		33	122		
S4 - Phenol-d6	20		7	58		
S5 - 2,4,6-Tribromophenol	48		16	138		
S6 - 2-Fluorophenol	30		8	88		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000016

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561323

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397**
Summerville, SC 29485-0397

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-01**Field ID : **MCIP/1071/GRAB/01**Matrix : **SOIL**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				03/13/01	TL 1311
TCLP Pesticides				03/21/01	RG	8081A
QC Batch	P08025				03/15/01	3510C
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	90		34 115			
S2 - Tetrachloro-m-xylene	89		31 96			

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000017

6561324

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-02**Matrix : **SOIL**Field ID : **MCIP/1071/GRAB/02**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Pesticides				03/21/01	RG	8081A
					03/15/01	3510C
QC Batch	P08025					
Dilution Factor	10					
Gamma-BHC (Lindane)	ND	mg/L	0.001			
Chlordane	ND	mg/L	0.010			
Endrin	ND	mg/L	0.001			
Heptachlor	ND	mg/L	0.001			
Methoxychlor	ND	mg/L	0.040			
Toxaphene	ND	mg/L	0.100			
Surrogate Standard	% Recovery		QC Limits			
S1 - Decachlorobiphenyl	79		34	115		
S2 - Tetrachloro-m-xylene	78		31	96		

CJ

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000018

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

6561325

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-01**Field ID : **MCIP/1071/GRAB/01**Matrix : **SOIL**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>			
S1 - 2,4,5-T	97			20	150	

6561326

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Innovative Waste Management**Site ID **Dunn Field****P.O. Box 50397
Summerville, SC 29485-0397**

FID #

Date Arrived **03/12/01**ETC Order Number **0103344**ETC Lab ID **0103344-02**Field ID : **MCIP/1071/GRAB/02**Matrix : **SOIL**Sample Date : **03/12/01**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
TCLP Extraction Organics	Leachate				TL	1311
TCLP Herbicides				03/15/01	RG	8151A
QC Batch	P11089					8151A
Dilution Factor	5					
2,4-D	ND	mg/L	0.010			
Silvex	ND	mg/L	0.010			
<u>Surrogate Standard</u>	<u>% Recovery</u>			<u>QC Limits</u>		
S1 - 2,4,5-T	104			20 150		

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000020

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Inorganics**

6561328

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE
INORGANICS – SOIL

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

HOLDING TIMES

Sample Analysis All samples analyzed within Method Specified Holding Times.

METHOD

Preparation/Analysis: 7.3.3
1010
9045C
7.3.4

QUALITY CONTROL

QC Batch
RC031211
IG031411
PH031211
RS031211

Method Blank
No Target Analytes detected above Detection Limit.

Laboratory Control Sample
Spike Recovery All analytes within QC limits

Duplicates
RPD All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required No dilutions required.

CS
Project Manager

000022

METHOD BLANK
INORGANICS

6561329

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Reactive Cyanide	RC0312111 BLK	RC031211	ND	0.125	mg/Kg	03/12/01	7.3.3
Reactive Sulfide	RS0312111 BLK	RS031211	ND	25	mg/Kg	03/12/01	7.3.4

NA - Not Applicable per Method
ND - Not Detected

Reviewed by: 9

000023
INORG BLANK 0103-344.iqc

6561330

LABORATORY CONTROL SAMPLE/ DAILY CHECK STANDARD
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.		QC Batch	Spike Added	Found	Units	% Rec	#	QC Limits	
Reactive Cyanide	RC0312111	LCS	RC031211	1000	215	mg/Kg	22		0	48
Reactive Sulfide	RS0312111	LCS	RS031211	285	212	mg/Kg	74		14	128
Ignitability	IG0314111	DCS	IG031411	27	27	deg C	100		96	104

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CS000024
INORG LCS-DCS 0103-344.iqc

DUPLICATE
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	SAMPLE Result	DUP Result	Units	% RPD	QC Limits		Method
Ignitability	0103-344-02 DUP	IG031411	>96	>96	deg C	0	0	20	1010

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by: CS000025
INORG DUP 0103-344.iqc

6561332

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
Metals (ICP/GFAA/CV)**

000026

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS – SOIL

6561333

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

HOLDING TIMES

QC Batch(s) for this order ICP Metals V13-SO-55
Sample Preparation/Analysis All samples digested/ analyzed within holding time.

METHOD

Preparation: SW-846 3051
Analysis: SW-846 6010B

CALIBRATION

Initial Calibration All criteria met.
Continuing Calibration All criteria met.

SAMPLE ANALYSIS

Instrumentation Thermo Jarrell Ash Enviro-I ICP
Dilutions Required No dilutions required.
% Solids Adjustment Sample results were adjusted for % solids.

QUALITY CONTROL

0103-344.MQ1BLANK

Method Blank

V13-SO-55BLK ICP Metals

No analytes detected in the Method Blank.

0103-344.MQ1LCS

Laboratory Control Sample(s)

V13-SO-55LCS ICP Metals

All acceptance criteria met.

0103-344.MQ1MSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0103-343-12	RPD	All analytes within QC limits.
	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.



Project Manager

000027

6561334

FORM 3A
SOLID METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals

V13-SO-55 BLKQC Batch
V13-SO-55

Date Sample Prepared

3/16/01 ICP/GFAA Metals

Metals	Concentration mg/Kg	Detection Limit mg/Kg	Date Analyzed	Method
Arsenic	ND	0.500	3/20/01	6010B

ND - Not Detected

Reviewed by CS

000028

0103-344.mq1 BLANK

FORM 7
SOLID LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory Control ID

ICP/GFAA Metals V13-SO-55 LCSQC Batch
V13-SO-55

Date Prepared

ICP/GFAA Metals 3/16/01

Metals	Spike Added mg/Kg	Found mg/Kg	% R	#	QC Limits	
Arsenic	8.00	8.10	101		80	120

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

000029

0103-344.mq1 LCS

6561336

FORM 6
SOLID MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals 0103-343-12 QC Batch
V13-SO-55

Date Sample Prepared 3/16/01 ICP/GFAA Metals

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MS Conc mg/Kg	RPD < 20% #	MS % Rec #	QC Limits	
Arsenic	9.02	2.78	11.5	12	97	75	125

Metals	SPIKE Added mg/Kg	SAMPLE Conc mg/Kg	MSD Conc mg/Kg		MSD % Rec #	QC Limits	
Arsenic	8.67	2.78	10.2		86	75	125

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

000030
0103-344.mq1 MSMSD

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - TCLP

6561337

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V25-AQ-08
	Mercury	V8-AQ-06

TCLP Extraction All soils extracted within 180 days.
(28 days for Mercury)

Sample Preparation All TCLP leachates prepared and analyzed within 180 days.
(28 days for Mercury)

CALIBRATION

Initial Calibration	All criteria met.
Continuing Calibration	All criteria met

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer

Dilutions Required No dilutions required.

QUALITY CONTROL

0103-344.MQCBLANK

Method Blank

V25-AQ-08BLK	ICP Metals
V8-AQ-06BLK	Mercury

No analytes detected in the Method Blank

0103-344.MQCLCS

Laboratory Control Sample(s)

V25-AQ-08LCS	ICP Metals
V8-AQ-06LCS	Mercury

All criteria met.

0103-344.MQCMSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

000031

6561338

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

METALS - TCLP

Client Name Innovative Waste Management

Project Name Dunn Field

ETC Order # 0103-344

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup - Hg

0103-239-07 RPD All analytes within QC limits.

DF/24-B/1066/SDC/017 Spike Recovery All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

CS

Project Manager

000032

FORM 3A
TCLP/SPLP METHOD BLANK
METALS

6561339

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals
Laboratory ID Mercury

V25-AQ-08 BLK
V8-AQ-06 BLK

QC Batch
V25-AQ-08
V8-AQ-06

Date Sample Prepared
3/14/01

3/14/01
3/15/01

ICP/GFAA Metals
Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0.010	3/15/01	6010B
Arsenic	ND	0.100	3/15/01	6010B
Barium	ND	0.025	3/15/01	6010B
Cadmium	ND	0.010	3/15/01	6010B
Chromium	ND	0.010	3/15/01	6010B
Lead	ND	0.100	3/15/01	6010B
Selenium	ND	0.100	3/15/01	6010B
Mercury	ND	0.001	3/15/01	7470A

ND - Not Detected

Reviewed by CS

0103-344.mqc BLANK

000033

6561340

FORM 7
TCLP/SPLP LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory Control ID	ICP/GFAA Metals	<u>V25-AQ-08</u> LCS	QC Batch
	Mercury	<u>V8-AQ-06</u> LCS	<u>V25-AQ-08</u>
			<u>V8-AQ-06</u>
 Date Prepared	 ICP/GFAA Metals	 <u>3/14/01</u>	
	Mercury	<u>3/15/01</u>	

Metals	Spike Added mg/L	Found mg/L	% R	QC Limits	
				#	
Silver	0.250	0.271	108	80	120
Arsenic	1.25	1.35	108	80	120
Barium	2.50	2.84	114	80	120
Cadmium	0.250	0.276	110	80	120
Chromium	0.500	0.547	109	80	120
Lead	1.25	1.38	110	80	120
Selenium	1.25	1.36	109	80	120
Mercury	0.0050	0.0052	104	85	115

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

0103-344.mqc LCS
000034

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0103-239-07	QC Batch V25-AQ-08
Laboratory ID MS Mercury	0103-239-07	V8-AQ-06
Date Sample Prepared		
	3/14/01	ICP/GFAA Metals
	3/15/01	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD < 20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0.282	0	113	50	150
Arsenic	1.25	ND	1.37	1	110	50	150
Barium	2.50	1.20	3.81	0	104	50	150
Cadmium	0.250	ND	0.261	1	104	50	150
Chromium	0.500	ND	0.507	1	101	50	150
Lead	1.25	ND	1.33	1	106	50	150
Selenium	1.25	ND	1.48	2	118	50	150
Mercury	0.0050	ND	0.0051	2	102	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

0103-344.mqc MSMSD

000035

6561342

FORM 6
TCLP/SPLP MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name. Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0103-239-07	QC Batch V25-AQ-08
Laboratory ID MS Mercury	0103-239-07	V8-AQ-06
Date Sample Prepared	3/14/01	ICP/GFAA Metals
	<u>3/15/01</u>	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec #	QC Limits	
Silver	0.250	ND	0.283		113	50	150
Arsenic	1.25	ND	1.39		111	50	150
Barium	2.50	1.20	3.82		105	50	150
Cadmium	0.250	ND	0.264		106	50	150
Chromium	0.500	ND	0.512		102	50	150
Lead	1.25	ND	1.35		108	50	150
Selenium	1.25	ND	1.51		121	50	150
Mercury	0.0050	ND	0.0052		104	50	150

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by CS

000036
0103-344.mqc MSMSD

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Volatiles**

6561344

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

GC/MS VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Analysis All VOC extracts analyzed within 14days.

METHOD

Preparation: SW-846 1311/5030B
Analysis: SW-846 8260B

QUALITY CONTROL

QC Batch Form 4 Summary
V403141 V4031411LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
V4031411LB

Target Analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3
V4031411LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch V403141

0103-344-01	RPD	All analytes within QC limits.
MCIP/1071/GRAB/01	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, Responses >30% were non-target analytes.

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

000038

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - TCLP

6561345

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

CJ

Project Manager

000039

FORM 2
WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY

6561346

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	V4031411LCS	107	106	103	88	0
02	V4031411LB	99	103	102	93	0
03	0103-344-1T	102	100	104	95	0
04	0103-344-2T	104	104	101	99	0
05	0103-344-1TM	110	106	107	90	0
06	0103-344-1TM	104	103	104	87	0
07						
08						
09						
10						
11						
12						
13						
14						
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18						
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21						
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25						
26						
27						
28						
29						
30						

QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (80-120)
 SMC2 (DFM) = Dibromofluoromethane (74-123)
 SMC3 (TOL) = Toluene-d8 (86-112)
 OTHER (BFB) = Bromofluorobenzene (81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

6561347
CLIENT SAMPLE NO.

V4031411LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: 0402006

Lab Prep Batch: V403141

Date Analyzed: 03/14/01

Time Analyzed: 1459

GC Column:

ID: 2 (mm)

Heated Purge: (Y/N) Y

Instrument ID: VOC4

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4031411LCS	V403141	0201004LCS	1253
02	0103-344-1T	V403141	0601008	1602
03	0103-344-2T	V403141	0701009	1634
04	0103-344-1TM	V403141	1901021	2252
05	0103-344-1TM	V403141	2001022	2323
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

6561348

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4031411LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix: (soil/water) WATER

Lab Prep Batch: V403141

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0402006

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 03/14/01

GC Column: ID: 2.00 (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

71-43-2-----	Benzene	1.00	U
78-93-3-----	2-Butanone	20.00	U
56-23-5-----	Carbon Tetrachloride	1.00	U
108-90-7-----	Chlorobenzene	1.00	U
67-66-3-----	Chloroform	1.00	U
106-46-7-----	1,4-Dichlorobenzene	1.00	U
107-06-2-----	1,2-Dichloroethane	1.00	U
75-35-4-----	1,1-Dichloroethene	1.00	U
127-18-4-----	Tetrachloroethene	1.00	U
79-01-6-----	Trichloroethene	1.00	U
75-01-4-----	Vinyl Chloride	1.00	U

FORM I VOA-GCMS

000042

Lab Name: ETC, INC.

Lab Prep Batch: V403141

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: V4031411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0		107.0	107	72-124
2-Butanone	100.0		101.0	101	55-151
Carbon Tetrachloride	100.0		94.17	94	64-123
Chlorobenzene	100.0		96.94	97	77-112
Chloroform	100.0		98.87	99	70-115
1,4-Dichlorobenzene	100.0		108.5	108	78-116
1,2-Dichloroethane	100.0		100.1	100	62-124
1,1-Dichloroethene	100.0		104.0	104	69-121
Tetrachloroethene	100.0		82.39	82	77-115
Trichloroethene	100.0		95.74	96	75-113
Vinyl Chloride	100.0		102.6	103	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

6561350

Lab Name: ETC, INC.

Lab Prep Batch: V403141

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: 0103-344-1T

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Benzene	100.0	0.000	102.8	103	72-124
2-Butanone	100.0	0.000	117.6	118	55-151
Carbon Tetrachloride	100.0	0.000	108.1	108	64-123
Chlorobenzene	100.0	0.000	96.92	97	77-112
Chloroform	100.0	0.000	105.9	106	70-115
1,4-Dichlorobenzene	100.0	0.000	97.24	97	78-116
1,2-Dichloroethane	100.0	0.000	107.9	108	62-124
1,1-Dichloroethene	100.0	0.000	104.4	104	69-121
Tetrachloroethene	100.0	0.000	87.66	88	77-115
Trichloroethene	100.0	0.000	104.9	105	75-113
Vinyl Chloride	100.0	0.000	83.49	83	65-134

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
=====	=====	=====	=====	=====	=====	=====
Benzene	100.0	107.4	107	4	20	72-124
2-Butanone	100.0	101.6	102	14	20	55-151
Carbon Tetrachloride	100.0	95.55	96	12	20	64-123
Chlorobenzene	100.0	94.69	95	2	20	77-112
Chloroform	100.0	104.0	104	2	20	70-115
1,4-Dichlorobenzene	100.0	88.68	89	9	20	78-116
1,2-Dichloroethane	100.0	101.0	101	7	20	62-124
1,1-Dichloroethene	100.0	100.7	101	3	20	69-121
Tetrachloroethene	100.0	78.35	78	12	20	77-115
Trichloroethene	100.0	95.69	96	9	20	75-113
Vinyl Chloride	100.0	95.71	96	14	20	65-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS:

FORM III VOA-GCMS

000044

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC/MS Semi-Volatiles**

6561352

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

Client Name Innovative Waste Management

Project Name Dunn Field

ETC Order # 0103-344

HOLDING TIMES

TCLP Extraction All samples extracted within 14 days.
Sample Extraction All TCLP leachate/filtrates extracted within 7 days
Sample Analysis All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311/3510C
Analysis: SW-846 8270C

QUALITY CONTROL

QC Batch Form 4 Summary
P06081 P06081LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits, except as listed below.

Surrogate Terphenyl-d14 was flagged for high recovery in P06081LCS/LCSD.

Method Blank FORM 4

P06081LB

Target Analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3

P06081LCS

All acceptance criteria met, except as listed below.

One non-target analyte was flagged for slightly low recovery in the LCS. One non-target analyte was flagged for slightly low recovery in the LCSD.

RPDs for Pyridine and four non-target analytes were flagged for high recovery due to variances in the MS/MSD recoveries.

Matrix Spike / Matrix Spike Dup FORM 3

Batch P06081

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

000046

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - TCLP

6561353

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD
Dilutions Required No dilutions required.

OTHER

Sample 0103-239-07MSD was analyzed outside the 12-hour tune time



Project Manager

000047

6561354

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P06081LB	73	71	90	19	45	28			0
02	P06081LCS	79	74	125*	21	52	30			1
03	P06081LCSD	78	74	131*	20	45	29			1
04	0103-344-1	75	78	90	20	48	30			0
05	0103-344-2	74	78	79	20	48	30			0
06										
07										
08										
09										
10										
11										
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28										
29										
30										

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (29-110)
 S2 (FBP) = 2-Fluorobiphenyl (38-107)
 S3 (TPH) = Terphenyl-d14 (33-122)
 S4 (PHL) = Phenol-d6 (7- 58)
 S5 (TBP) = 2,4,6-Tribromophenol (16-138)
 S6 (2FP) = 2-Fluorophenol (8- 88)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

FORM 4
BNA-GCMS METHOD BLANK SUMMARY

6561355
CLIENT SAMPLE NO.

Lab Name: ETC, INC.

Contract:

P06081LB

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: 1201012

Lab Prep Batch: P06081

Instrument ID: BNA2

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/16/01

Level: (low/med) LOW

Time Analyzed: 1631

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P06081LCS	1703	1301013	03/16/01
02	P06081LCSD	1736	1401014	03/16/01
03	0103-239-7	2121	2101021	03/16/01
04	0103-239-7MS	2225	2301023	03/16/01
05	0103-239-7MS	2257	2401024	03/16/01
06	0103-344-1	1818	0901009	03/20/01
07	0103-344-2	1850	1001010	03/20/01
08				
09				
10				
11				
12				
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29				
30				

COMMENTS:

6561356

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06081LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix: (soil/water) WATER

Lab Prep Batch: P06081

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 1201012

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 1 (mL)

Date Analyzed: 03/16/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
			Q
106-46-7-----	1,4-Dichlorobenzene	5.00	U
121-14-2-----	2,4-Dinitrotoluene	5.00	U
118-74-1-----	Hexachlorobenzene	5.00	U
87-68-3-----	Hexachlorobutadiene	5.00	U
67-72-1-----	Hexachloroethane	5.00	U
95-48-7-----	2-Methylphenol	5.00	U
108-39-4-----	3&4-Methylphenol	5.00	U
98-95-3-----	Nitrobenzene	5.00	U
87-86-5-----	Pentachlorophenol	10.00	U
110-86-1-----	Pyridine	5.00	U
95-95-4-----	2,4,5-Trichlorophenol	5.00	U
88-06-2-----	2,4,6-Trichlorophenol	5.00	U

FORM I BNA-GCMS

000050

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

6561357

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Acenaphthene	50.00		37.35	75	38-117
Acenaphthylene	50.00		36.91	74	37-114
Acetophenone	50.00		33.49	67	32-108
Aniline	50.00		35.70	71	16-133
Anthracene	50.00		37.51	75	34-128
Benzidine	50.00		28.45	57	22-176
Benz(a)Anthracene	50.00		41.02	82	36-127
Benzo(b)fluoranthene	50.00		26.85	54	36-131
Benzo(k)fluoranthene	50.00		25.60	51	32-132
Benzo(ghi)perylene	50.00		28.58	57	26-123
Benzo(a)pyrene	50.00		26.08	52	34-131
Benzoic acid	50.00		5.18	10*	11- 58
Benzyl alcohol	50.00		34.60	69	20-109
Bis(2-chloroethoxy)meth	50.00		33.25	66	20-126
Bis(2-chloroethyl)ether	50.00		36.78	74	16-122
Bis(2-chloroisopropyl)e	50.00		40.64	81	28-108
Bis(2-ethylhexyl)phthal	50.00		42.23	84	21-162
4-Bromophenyl phenyl et	50.00		30.74	61	31-124
Butyl benzyl phthalate	50.00		45.06	90	33-142
Carbazole	50.00		34.16	68	20-147
4-Chloroaniline	50.00		32.92	66	24-127
Chlorobenzilate	50.00		45.90	92	35-118
4-Chloro-3-methylphenol	50.00		32.28	64	35-117
2-Chloronaphthalene	50.00		42.73	85	29-137
2-Chlorophenol	50.00		34.89	70	27-102
4-Chlorophenyl phenyl e	50.00		41.57	83	39-110
Chrysene	50.00		43.00	86	30-124
Dibenz(a,h)anthracene	50.00		29.24	58	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

6561358

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		39.04	78	40-108
Di-n-butyl phthalate	50.00		36.96	74	19-158
1,2-Dichlorobenzene	50.00		34.55	69	26-100
1,3-Dichlorobenzene	50.00		33.96	68	21-102
1,4-Dichlorobenzene	50.00		34.09	68	24- 99
3,3'-Dichlorobenzidine	50.00		40.20	80	6-192
2,4-Dichlorophenol	50.00		31.81	64	32-110
2,6-Dichlorophenol	50.00		31.37	63	31-112
Diethyl phthalate	50.00		47.36	95	36-130
3,3-Dimethylbenzidine	50.00		27.53	55	6-192
2,4-Dimethyphenol	50.00		30.88	62	34-105
Dimethyl phthalate	50.00		41.34	83	34-123
4,6-Dinitro-2-methylphe	50.00		42.42	85	27-128
2,4-Dinitrophenol	50.00		52.42	105	10-132
2,4-Dinitrotoluene	50.00		52.01	104	24-147
2,6-Dinitrotoluene	50.00		44.97	90	36-125
N-NitrsdiphyllAm/Dipheny	100.0		59.92	60	35-116
Di-n-octyl phthalate	50.00		24.81	50	29-136
Ethyl methanesulfonate	50.00		35.96	72	20-121
Fluoranthene	50.00		51.05	102	28-127
Fluorene	50.00		42.31	85	41-116
Hexachlorobenzene	50.00		32.91	66	18-136
Hexachlorobutadiene	50.00		30.52	61	22-109
Hexachlorocyclopentadie	50.00		27.46	55	10-102
Hexachloroethane	50.00		32.05	64	16-107
Indeno(1,2,3-cd)pyrene	50.00		27.96	56	22-126
Isophorone	50.00		30.64	61	31-116
Methyl methanesulfonate	50.00		24.38	49	15- 82

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

6561359

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2-Methylnaphthalene	50.00		32.13	64	34-108
2-Methylphenol	50.00		34.38	69	22- 97
3&4-Methylphenol	50.00		30.58	61	21- 96
Naphthalene	50.00		33.24	66	33-108
2-Nitroaniline	50.00		41.51	83	32-127
3-Nitroaniline	50.00		49.97	100	28-142
4-Nitroaniline	50.00		52.66	105	23-139
Nitrobenzene	50.00		32.25	64	27-117
2-Nitrophenol	50.00		31.83	64	25-114
4-Nitrophenol	50.00		21.09	42	1- 76
N-Nitrosodibutylamine	50.00		33.23	66	31-126
N-Nitrosodiethylamine	50.00		32.19	64	28-107
N-Nitrosodimethylamine	50.00		24.03	48	14- 84
N-Nitrosodi-n-propylami	50.00		40.67	81	29-114
Pentachloronitrobenzene	50.00		36.20	72	34-135
Pentachlorophenol	50.00		33.88	68	17-142
Phenacetin	50.00		34.13	68	29-141
Phenanthrene	50.00		36.38	73	40-120
Phenol	50.00		18.77	38	11- 55
Pyrene	50.00		59.16	118	20-154
Pyridine	50.00		19.12	38	10- 71
1,2,4,5-Tetrachlorobenz	50.00		34.74	69	28-110
2,3,4,6-Tetrachlorophen	50.00		46.56	93	28-118
1,2,4-Trichlorobenzene	50.00		30.96	62	23-106
2,4,5-Trichlorophenol	50.00		38.44	77	26-118
2,4,6-Trichlorophenol	50.00		36.42	73	26-115
1,2-Dphnylhydrzine/Azob	50.00		30.29	60	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

6561360

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	50.00	35.54	71	5	20	38-117
Acenaphthylene	50.00	35.69	71	4	20	37-114
Acetophenone	50.00	32.09	64	4	20	32-108
Aniline	50.00	31.21	62	14	20	16-133
Anthracene	50.00	35.84	72	4	20	34-128
Benzidine	50.00	3.77	8*	151*	20	22-176
Benz(a)Anthracene	50.00	39.70	79	4	20	36-127
Benzo(b)fluoranthene	50.00	25.62	51	6	20	36-131
Benzo(k)fluoranthene	50.00	24.91	50	2	20	32-132
Benzo(ghi)perylene	50.00	26.96	54	5	20	26-123
Benzo(a)pyrene	50.00	25.03	50	4	20	34-131
Benzoic acid	50.00	5.31	11	10	20	11- 58
Benzyl alcohol	50.00	34.50	69	0	20	20-109
Bis(2-chloroethoxy)meth	50.00	31.84	64	3	20	20-126
Bis(2-chloroethyl)ether	50.00	36.35	73	1	20	16-122
Bis(2-chloroisopropyl)e	50.00	38.43	77	5	20	28-108
Bis(2-ethylhexyl)phthal	50.00	45.47	91	8	20	21-162
4-Bromophenyl phenyl et	50.00	27.56	55	10	20	31-124
Butyl benzyl phthalate	50.00	50.11	100	10	20	33-142
Carbazole	50.00	39.61	79	15	20	20-147
4-Chloroaniline	50.00	31.93	64	3	20	24-127
Chlorobenzilate	50.00	50.43	101	9	20	35-118
4-Chloro-3-methylphenol	50.00	30.98	62	3	20	35-117
2-Chloronaphthalene	50.00	41.15	82	4	20	29-137
2-Chlorophenol	50.00	33.72	67	4	20	27-102
4-Chlorophenyl phenyl e	50.00	36.56	73	13	20	39-110
Chrysene	50.00	38.68	77	11	20	30-124
Dibenz(a,h)anthracene	50.00	27.48	55	5	20	27-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

6561361

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Dibenzofuran	50.00	35.90	72	8	20	40-108
Di-n-butyl phthalate	50.00	43.07	86	15	20	19-158
1,2-Dichlorobenzene	50.00	33.80	68	1	20	26-100
1,3-Dichlorobenzene	50.00	32.80	66	3	20	21-102
1,4-Dichlorobenzene	50.00	33.41	67	1	20	24- 99
3,3'-Dichlorobenzidine	50.00	34.12	68	16	20	6-192
2,4-Dichlorophenol	50.00	30.07	60	6	20	32-110
2,6-Dichlorophenol	50.00	30.26	60	5	20	31-112
Diethyl phthalate	50.00	40.22	80	17	20	36-130
3,3-Dimethylbenzidine	50.00	15.15	30	59*	20	6-192
2,4-Dimethyphenol	50.00	30.24	60	3	20	34-105
Dimethyl phthalate	50.00	36.18	72	14	20	34-123
4,6-Dinitro-2-methylphe	50.00	41.29	82	4	20	27-128
2,4-Dinitrophenol	50.00	44.15	88	18	20	10-132
2,4-Dinitrotoluene	50.00	44.77	90	14	20	24-147
2,6-Dinitrotoluene	50.00	38.72	77	16	20	36-125
N-NitrsdiphyAm/Dipheny	100.0	54.91	55	9	20	35-116
Di-n-octyl phthalate	50.00	27.34	55	10	20	29-136
Ethyl methanesulfonate	50.00	35.27	70	3	20	20-121
Fluoranthene	50.00	48.61	97	5	20	28-127
Fluorene	50.00	37.65	75	12	20	41-116
Hexachlorobenzene	50.00	29.90	60	10	20	18-136
Hexachlorobutadiene	50.00	28.51	57	7	20	22-109
Hexachlorocyclopentadie	50.00	26.45	53	4	20	10-102
Hexachloroethane	50.00	30.42	61	5	20	16-107
Indeno(1,2,3-cd)pyrene	50.00	25.45	51	9	20	22-126
Isophorone	50.00	29.32	59	3	20	31-116
Methyl methanesulfonate	50.00	23.15	46	6	20	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

6561362

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P06081LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2-Methylnaphthalene	50.00	31.22	62	3	20	34-108
2-Methylphenol	50.00	34.48	69	0	20	22- 97
3&4-Methylphenol	50.00	29.76	60	2	20	21- 96
Naphthalene	50.00	32.57	65	2	20	33-108
2-Nitroaniline	50.00	36.27	72	14	20	32-127
3-Nitroaniline	50.00	42.65	85	16	20	28-142
4-Nitroaniline	50.00	47.14	94	11	20	23-139
Nitrobenzene	50.00	31.08	62	3	20	27-117
2-Nitrophenol	50.00	31.02	62	3	20	25-114
4-Nitrophenol	50.00	20.26	40	5	20	1- 76
N-Nitrosodibutylamine	50.00	31.22	62	6	20	31-126
N-Nitrosodiethylamine	50.00	32.04	64	0	20	28-107
N-Nitrosodimethylamine	50.00	23.60	47	2	20	14- 84
N-Nitrosodi-n-propylami	50.00	39.63	79	2	20	29-114
Pentachloronitrobenzene	50.00	35.78	72	0	20	34-135
Pentachlorophenol	50.00	33.62	67	1	20	17-142
Phenacetin	50.00	44.25	88	26*	20	29-141
Phenanthrene	50.00	34.20	68	7	20	40-120
Phenol	50.00	14.83	30	24*	20	11- 55
Pyrene	50.00	58.08	116	2	20	20-154
Pyridine	50.00	5.56	11	110*	20	10- 71
1,2,4,5-Tetrachlorobenz	50.00	33.12	66	4	20	28-110
2,3,4,6-Tetrachlorophen	50.00	39.98	80	15	20	28-118
1,2,4-Trichlorobenzene	50.00	29.75	60	3	20	23-106
2,4,5-Trichlorophenol	50.00	35.69	71	8	20	26-118
2,4,6-Trichlorophenol	50.00	34.74	69	6	20	26-115
1,2-Dphnylhydrzine/Azob	50.00	29.17	58	3	20	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 5 out of 83 outside limits

Spike Recovery: 2 out of 166 outside limits

COMMENTS:

FORM 3
WATER BNA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

6561363

Lab Name: ETC, INC.

Lab Prep Batch: P06081

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: 0103-239-7

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	400.0	0.000	258.5	65	31- 97
2,4-Dinitrotoluene	400.0	0.000	346.3	86	34-130
Hexachlorobenzene	400.0	0.000	277.5	69	65-133
Hexachlorobutadiene	400.0	0.000	248.7	62	50-112
Hexachloroethane	400.0	0.000	229.2	57	37-100
2-Methylphenol	640.0	0.000	278.9	44	40-117
3&4-Methylphenol	640.0	0.000	521.9	82	46- 99
Nitrobenzene	400.0	0.000	293.0	73	57-120
Pentachlorophenol	640.0	0.000	324.5	51	22-171
Pyridine	400.0	0.000	198.1	50	10- 82
2,4,5-Trichlorophenol	640.0	0.000	307.8	48	31-147
2,4,6-Trichlorophenol	640.0	0.000	309.0	48	30-163

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,4-Dichlorobenzene	400.0	270.2	68	4	20 31- 97
2,4-Dinitrotoluene	400.0	347.1	87	1	20 34-130
Hexachlorobenzene	400.0	278.3	70	1	20 65-133
Hexachlorobutadiene	400.0	259.1	65	5	20 50-112
Hexachloroethane	400.0	231.8	58	2	20 37-100
2-Methylphenol	640.0	297.8	46	4	20 40-117
3&4-Methylphenol	640.0	553.9	86	5	20 46- 99
Nitrobenzene	400.0	308.0	77	5	20 57-120
Pentachlorophenol	640.0	318.6	50	2	20 22-171
Pyridine	400.0	217.4	54	8	20 10- 82
2,4,5-Trichlorophenol	640.0	326.0	51	6	20 31-147
2,4,6-Trichlorophenol	640.0	328.2	51	6	20 30-163

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 12 outside limits

Spike Recovery: 0 out of 24 outside limits

COMMENTS:

6561364

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Pesticides**

000058

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

HOLDING TIMES

TCLP Extraction	All samples extracted within 14 days.
Sample Extraction	All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis	All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8081A

QUALITY CONTROL

<u>QC Batch</u>	<u>Form 4 Summary</u>
P08025	P08025LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits, except as listed below.

Surrogate Tetrachloro-m-xylene was flagged for high recovery in P0825LB2 on the primary and confirmation analyses. Surrogate Decachlorobiphenyl were within control limits. Analytes were not detected in the sample.

Method Blank FORM 4

P08025LB
P08025LB2

Target analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3

P08025LCS

All acceptance criteria met.

Matrix Spike/Matrix Spike Dup FORM 3

Batch P08025

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, Responses >15% affecting data listed below.

6561366

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
PESTICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

CALIBRATION

Calibration Verification (CV): Date 03/21/01 Time: 0616

Analyte	%Diff(15% Max)	Response
Endrin	-17.0	Low

Samples affected by this CV include 0103-344-01 and 0103-344-02. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in associated project samples. This run was an ending calibration verification. The previous calibration @ 2200 was within calibration criteria for this analyte. The average of all analytes was less than 15 % and CV is considered acceptable per SW846.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC
Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.

CS

Project Manager

000060

FORM 2
WATER PESTICIDE SURROGATE RECOVERY

6561367

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

	CLIENT SAMPLE NO.	S1 (DCB) #	S2 (TCX) #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P08025LB	96	68							0
02	P08025LB2	121D	69							1
03	P08025LB2	123D	89							1
04	P08025LCS	100	78							0
05	0103-344-1	90	89							0
06	0103-344-2	79	78							0
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QC LIMITS

S1 (DCB) = Decachlorobiphenyl (34-115)
S2 (TCX) = Tetrachloro-m-xylene (31- 96)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

6561368

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P08025LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: P303201A-15R

Lab Prep Batch: P08025

Instrument ID: PEST3A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/20/01

Level: (low/med) LOW

Time Analyzed: 1915

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P08025LCS	2010	P303201A-17R	03/20/01
02	0103-239-7	2038	P303201A-18R	03/20/01
03	0103-239-7MS	2105	P303201A-19R	03/20/01
04	0103-239-7MS	2133	P303201A-20R	03/20/01
05	0103-344-1	0208	P303201A-30R	03/21/01
06	0103-344-2	0236	P303201A-31R	03/21/01
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COMMENTS:

FORM 4
PESTICIDE METHOD BLANK SUMMARY

6561369
CLIENT SAMPLE NO.

Lab Name: ETC, INC.

Contract:

P08025LB2

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: P303201A-16R

Lab Prep Batch: P08025

Instrument ID: PEST3A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/20/01

Level: (low/med) LOW

Time Analyzed: 1942

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P08025LCS	2010	P303201A-17R	03/20/01
02	0103-239-7	2038	P303201A-18R	03/20/01
03	0103-239-7MS	2105	P303201A-19R	03/20/01
04	0103-239-7MS	2133	P303201A-20R	03/20/01
05	0103-344-1	0208	P303201A-30R	03/21/01
06	0103-344-2	0236	P303201A-31R	03/21/01
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COMMENTS:

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

6561370

P08025LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix: (soil/water) WATER

Lab Prep Batch: P08025

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: P303201A-15R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 10 (mL)

Date Analyzed: 03/20/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

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

309-00-2-----	Aldrin	0.0400	U
319-84-6-----	alpha-BHC	0.0400	U
319-85-7-----	beta-BHC	0.0400	U
319-86-8-----	delta-BHC	0.0400	U
58-89-9-----	gamma-BHC (Lindane)	0.0400	U
5103-71-9-----	alpha-chlordane	0.0400	U
5103-74-2-----	gamma-chlordane	0.0400	U
57-74-9-----	Chlordane	0.250	U
2921-88-2-----	Chlorpyrifos	0.0400	U
72-54-8-----	4,4'-DDD	0.0400	U
72-55-9-----	4,4'-DDE	0.0400	U
50-29-3-----	4,4'-DDT	0.0400	U
60-57-1-----	Dieldrin	0.0400	U
959-98-8-----	Endosulfan I	0.0400	U
33213-65-9-----	Endosulfan II	0.0400	U
1031-07-8-----	Endosulfan sulfate	0.0400	U
72-20-8-----	Endrin	0.0400	U
7421-93-4-----	Endrin aldehyde	0.0400	U
53494-70-5-----	Endrin ketone	0.0400	U
76-44-8-----	Heptachlor	0.0400	U
1024-57-3-----	Heptachlor epoxide	0.0400	U
72-43-5-----	Methoxychlor	0.0400	U
8001-35-2-----	Toxaphene	2.50	U

FORM I PESTICIDE

000064

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

6561371
CLIENT SAMPLE NO.

P08025LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix: (soil/water) WATER

Lab Prep Batch: P08025

Sample wt/vol: 250.0 (g/mL) ML

Lab File ID: P303201A-16R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 10 (mL)

Date Analyzed: 03/20/01

Injection Volume: 1.0 (uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: _____

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

309-00-2-----	Aldrin	1.60	U
319-84-6-----	alpha-BHC	1.60	U
319-85-7-----	beta-BHC	1.60	U
319-86-8-----	delta-BHC	1.60	U
58-89-9-----	gamma-BHC (Lindane)	1.60	U
5103-71-9-----	alpha-chlordane	1.60	U
5103-74-2-----	gamma-chlordane	1.60	U
57-74-9-----	Chlordane	10.00	U
2921-88-2-----	Chlorpyrifos	1.60	U
72-54-8-----	4,4'-DDD	1.60	U
72-55-9-----	4,4'-DDE	1.60	U
50-29-3-----	4,4'-DDT	1.60	U
60-57-1-----	Dieldrin	1.60	U
959-98-8-----	Endosulfan I	1.60	U
33213-65-9-----	Endosulfan II	1.60	U
1031-07-8-----	Endosulfan sulfate	1.60	U
72-20-8-----	Endrin	1.60	U
7421-93-4-----	Endrin aldehyde	1.60	U
53494-70-5-----	Endrin ketone	1.60	U
76-44-8-----	Heptachlor	1.60	U
1024-57-3-----	Heptachlor epoxide	1.60	U
72-43-5-----	Methoxychlor	1.60	U
8001-35-2-----	Toxaphene	100.0	U

FORM I PESTICIDE

000065

6561372

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P08025

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P08025LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
Aldrin	1.00		0.718	72	34-105
alpha-BHC	1.00		0.739	74	41-102
beta-BHC	1.00		0.726	73	26-151
delta-BHC	1.00		0.486	49	21- 92
gamma-BHC (Lindane)	1.00		0.754	75	41-102
alpha-chlordane	1.00		0.765	76	48-117
gamma-chlordane	1.00		0.772	77	51-108
Chlorpyrifos	1.00		0.904	90	70-130
4,4'-DDD	1.00		0.839	84	39-124
4,4'-DDE	1.00		0.767	77	41-111
4,4'-DDT	1.00		0.843	84	39-123
Dieldrin	1.00		0.790	79	42-111
Endosulfan I	1.00		0.816	82	48-117
Endosulfan II	1.00		0.826	83	52-114
Endosulfan sulfate	1.00		0.756	76	46-111
Endrin	1.00		0.776	78	45-117
Endrin aldehyde	1.00		0.784	78	48-125
Endrin ketone	1.00		0.874	87	51-112
Heptachlor	1.00		0.681	68	43-114
Heptachlor epoxide	1.00		0.782	78	42-115
Methoxychlor	1.00		0.792	79	39-140

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 21 outside limits

COMMENTS:

FORM 3
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

6561373

Lab Name: ETC, INC.

Lab Prep Batch: P08025

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: 0103-239-7

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	4.00	0.000	2.96	74	41-102
Endrin	4.00	0.000	3.30	82	45-117
Heptachlor	4.00	0.000	2.85	71	43-114
Methoxychlor	4.00	0.000	3.87	97	39-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
=====	=====	=====	=====	=====	=====	=====
gamma-BHC (Lindane)	4.00	2.87	72	3	20	41-102
Endrin	4.00	3.02	76	8	20	45-117
Heptachlor	4.00	2.68	67	6	20	43-114
Methoxychlor	4.00	3.72	93	4	20	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 4 outside limits

Spike Recovery: 0 out of 8 outside limits

COMMENTS:

FORM III PESTICIDE

000067

6561374

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level III
GC Herbicides**

000068

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
HERBICIDE - TCLP

Client Name Innovative Waste Management
Project Name Dunn Field

ETC Order # 0103-344

HOLDING TIMES

TCLP Extraction	All samples extracted within 14 days.
Sample Extraction	All TCLP leachate/filtrates extracted within 7 days.
Sample Analysis	All Non-VOC extracts analyzed within 40 days.

METHOD

Preparation: SW-846 1311
Analysis: SW-846 8151A

QUALITY CONTROL

<u>QC Batch</u>	<u>Form 4 Summary</u>
P11089	P11089LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P11089LB
P11089LB2

Target analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3
P11089LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P11089

0103-239-07	RPD	All analytes within QC limits.
DF/24-B/1066/SDC/017	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

6561376

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

HERBICIDE - TCLP

Client Name Innovative Waste Management

Project Name Dunn Field

ETC Order # 0103-344

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC

Dilutions Required Dilutions were performed on all samples to decrease matrix interferences as shown on the Sample Report Forms.



Project Manager

000070

FORM 2
WATER HERBICIDE SURROGATE RECOVERY

6561377

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

	EPA GC SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P11089LB	70								0
02	P11089LB2	82								0
03	P11089LCS	96								0
04	0103-344-1	97								0
05	0103-344-2	104								0
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S1 = 2,4,5-T

QC LIMITS
(20-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

6561378

FORM 4
HERBICIDE METHOD BLANK SUMMARY

EPA GC SAMPLE NO.

P11089LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: H203151A-03R

Lab Prep Batch: P11089

Instrument ID: PEST2A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/15/01

Level: (low/med) LOW

Time Analyzed: 1658

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	P11089LCS	1749	H203151A-05R	03/15/01
02	0103-239-7MS	1814	H203151A-06R	03/15/01
03	0103-239-7MS	1839	H203151A-07R	03/15/01
04	0103-239-7	2225	H203151A-16R	03/15/01
05	0103-344-1	2316	H203151A-18R	03/15/01
06	0103-344-2	2341	H203151A-19R	03/15/01
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COMMENTS:

FORM 4
HERBICIDE METHOD BLANK SUMMARY

6561379
EPA GC SAMPLE NO.

P11089LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: H203151A-04R

Lab Prep Batch: P11089

Instrument ID: PEST2A

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 03/15/01

Level: (low/med) LOW

Time Analyzed: 1723

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P11089LCS	1749	H203151A-05R	03/15/01
02	0103-239-7MS	1814	H203151A-06R	03/15/01
03	0103-239-7MS	1839	H203151A-07R	03/15/01
04	0103-239-7	2225	H203151A-16R	03/15/01
05	0103-344-1	2316	H203151A-18R	03/15/01
06	0103-344-2	2341	H203151A-19R	03/15/01
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COMMENTS:

6561380

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

EPA GC SAMPLE NO.

P11089LB

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix: (soil/water) WATER

Lab Prep Batch: P11089

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: H203151A-03R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted:

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/15/01

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

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

94-75-7-----2,4-D	0.0500	U
93-72-1-----Silvex	0.00500	U

FORM I HERBICIDE

000074

FORM 1
HERBICIDE ORGANICS ANALYSIS DATA SHEET

6561381
EPA GC SAMPLE NO.

P11089LB2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix: (soil/water) WATER

Lab Prep Batch: P11089

Sample wt/vol: 250.0 (g/mL) ML

Lab File ID: H203151A-04R

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 5 (mL)

Date Analyzed: 03/15/01

Injection Volume: 1.0 (uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
94-75-7-----	2,4-D	1.00	U	
93-72-1-----	Silvex	0.100	U	

FORM I HERBICIDE

000075

6561382

FORM 3
WATER HERBICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC.

Lab Prep Batch: P11089

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: P11089LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2,4-D	5.00		4.32	86	20-150
Silvex	5.00		3.56	71	20-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM III HERBICIDE

000076

FORM 3
WATER HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

6561383

Lab Name: ETC, INC.

Lab Prep Batch: P11089

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Matrix Spike - Sample No.: 0103-239-7

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
=====	=====	=====	=====	=====	=====
2,4-D	20.00	0.000	17.52	88	20-150
Silvex	20.00	0.000	15.82	79	20-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
=====	=====	=====	=====	=====	RPD	REC.
2,4-D	20.00	18.29	91	3	20	20-150
Silvex	20.00	16.49	82	4	20	20-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS:

FORM III HERBICIDE

000077

6561384

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
Metals (ICP/GFAA/CV)**

000078

Analyst : SN
Supervisor: JP

- 7560

- a. Initial Calibration Blank (STD1-Blank)
- b. Initial Calibration Standard 1 (C1) 3 Exposures at less than 3% RSD
- c. Initial Calibration Standard 2 (C2) 3 Exposures at less than 3% RSD
- d. Initial Calibration Standard 3 (C3) 3 Exposures at less than 3% RSD
- e. Initial Calibration Standard 4 (C4) 3 Exposures at less than 3% RSD
- f. Standardization Report

- ## Failures

a. Initial Calibration Standard 1 (C1)	_____	✓	_____
b. Initial Calibration Standard 2 (C2)	_____	✓	_____
c. Initial Calibration Standard 3 (C3)	_____	✓	_____
d. Initial Calibration Standard 4 (C4)	_____	✓	_____

e.	Initial Calibration Blank (ICB) – All elements below MDL/MQL	✓	B Low
f.	Initial Calibration Verification (ICV1) – (5%)	✓	Fe, Sn, Ti, Sb
g.	Low Level Check (LLC1) – (20%)	✓	
h.	Low Level Check (LLC2) – (20%)	✓	
i.	Interelement Correction Standard – Initial (ICSAB) – (20%)	✓	
j.	Interelement Correction Standard – Final (ICSAB) – (20%)	✓	

Applicable ETC Order Nos. for this sequence:

125-100-8	0103-337	0103-239		
113-50-50	282			
0103-356	287			
205	293			
203	294			
227	322			
264	325			
270	239			
202	344			
218	177			
222	210			
243	209			

6561386

AutoSampler Report

Table: PLASMA1

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page 1

Table Name: PLASMA1

Autosampler Type: TYPE TJA

Sample Positions: 42/192

QC Positions: 19/19

Sets: 1

Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	19	10
2	Sample (16mm)	Samples	0	1
3	Sample (16mm)	Samples	0	1
4	Sample (16mm)	Samples	0	1
5	Sample (16mm)	Samples	42	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No		ICPT	150	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor
No Samples Prepared.				

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...19 Not Used)						

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	V25-AQ-08 S.B.	1	-NA-	Sample
2	1	2	V13-SO-50 S.B.	1	-NA-	Sample
3	1	3	V25-AQ-08 LC.	1	-NA-	Sample
4	1	4	V13-SO-50 LC.	1	-NA-	Sample
5	1	5	0103-356-01	1	-NA-	Sample
6	1	6	0103-205-04	1	-NA-	Sample
7	1	7	0103-205-05	1	-NA-	Sample
8	1	8	0103-208-02	1	-NA-	Sample
9	1	9	0103-227-02	1	-NA-	Sample
10	1	10	0103-264-02	1	-NA-	Sample
11	1	11	CCB1	1	-NA-	Sample
12	1	12	CCV1	1	-NA-	Sample
13	2	1	0103-276-02	1	-NA-	Sample
14	2	2	0103-276-02 MS	1	-NA-	Sample
15	2	3	0103-276-02 MSD	1	-NA-	Sample
16	2	4	0103-202-01	1	-NA-	Sample
17	2	5	0103-202-02	1	-NA-	Sample
18	2	6	0103-202-03	1	-NA-	Sample
19	2	7	0103-202-04	1	-NA-	Sample
20	2	8	0103-202-05	1	-NA-	Sample
21	2	9	0103-202-06	1	-NA-	Sample

000080

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0103-202-06 MS	1	-NA-	Sample
23	2	11	CCB2	1	-NA-	Sample
24	2	12	CCV2	1	-NA-	Sample
25	3	1	0103-202-06 MSD	1	-NA-	Sample
26	3	2	0103-218-02	1	-NA-	Sample
27	3	3	0103-222-02	1	-NA-	Sample
28	3	4	0103-243-01	1	-NA-	Sample
29	3	5	0103-337-01	1	-NA-	Sample
30	3	6	0103-282-01	1	-NA-	Sample
31	3	7	0103-282-02	1	-NA-	Sample
32	3	8	0103-282-03	1	-NA-	Sample
33	3	9	0103-282-04	1	-NA-	Sample
34	3	10	0103-287-02	1	-NA-	Sample
35	3	11	CCB3	1	-NA-	Sample
36	3	12	CCV3	1	-NA-	Sample
37	4	1	0103-287-04	1	-NA-	Sample
38	4	2	0103-293-01	1	-NA-	Sample
39	4	3	0103-294-02	1	-NA-	Sample
40	4	4	0103-322-02	1	-NA-	Sample
41	4	5	0103-322-02 MS	1	-NA-	Sample
42	4	6	0103-322-02 MSD	1	-NA-	Sample
43	4	7	0103-325-02	1	-NA-	Sample
44	4	8	0103-239-01	1	-NA-	Sample
45	4	9	0103-239-02	1	-NA-	Sample
46	4	10	0103-239-03	1	-NA-	Sample
47	4	11	CCB4	1	-NA-	Sample
48	4	12	CCV4	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	0103-239-04	1	-NA-	Sample
2	1	2	0103-239-05	1	-NA-	Sample
3	1	3	0103-239-06	1	-NA-	Sample
4	1	4	0103-239-07	1	-NA-	Sample
5	1	5	0103-239-07 MS	1	-NA-	Sample
6	1	6	0103-239-07 MSD	1	-NA-	Sample
7	1	7	0103-239-08	1	-NA-	Sample
8	1	8	0103-344-01	1	-NA-	Sample
9	1	9	0103-344-02	1	-NA-	Sample
10	1	10	0103-177-01	1	-NA-	Sample
11	1	11	CCB5	1	-NA-	Sample
12	1	12	CCV5	1	-NA-	Sample
13	2	1	0103-177-01 MS	1	-NA-	Sample
14	2	2	0103-210-01	1	-NA-	Sample
15	2	3	0103-210-01 MS	1	-NA-	Sample
16	2	4	0103-210-02	1	-NA-	Sample
17	2	5	0103-210-03	1	-NA-	Sample
18	2	6	0103-210-03 MS	1	-NA-	Sample
19	2	7	0103-210-04	1	-NA-	Sample
20	2	8	0103-210-04 MS	1	-NA-	Sample
21	2	9	0103-209-01	1	-NA-	Sample

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AutoSampler Report Table: PLASMA1

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Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0103-239-01	1	-NA-	Sample
23	2	11	CCB6	1	-NA-	Sample
24	2	12	CCV6	1	-NA-	Sample
25	3	1	0103-239-02	1	-NA-	Sample
26	3	2	0103-239-03	1	-NA-	Sample
27	3	3	0103-239-04	1	-NA-	Sample
28	3	4	0103-239-05	1	-NA-	Sample
29	3	5	0103-239-06	1	-NA-	Sample
30	3	6	0103-239-07	1	-NA-	Sample
31	3	7	0103-239-08	1	-NA-	Sample
32	3	8	CCB7	1	-NA-	Sample
33	3	9	CCV7	1	-NA-	Sample
34	3	10	ICSA	1	-NA-	Sample
35	3	11	ICSAB	1	-NA-	Sample
36	3	12	(empty)	1	-NA-	-NA-
37	4	1	(empty)	1	-NA-	-NA-
38	4	2	(empty)	1	-NA-	-NA-
39	4	3	(empty)	1	-NA-	-NA-
40	4	4	(empty)	1	-NA-	-NA-
41	4	5	(empty)	1	-NA-	-NA-
42	4	6	(empty)	1	-NA-	-NA-
43	4	7	(empty)	1	-NA-	-NA-
44	4	8	(empty)	1	-NA-	-NA-
45	4	9	(empty)	1	-NA-	-NA-
46	4	10	(empty)	1	-NA-	-NA-
47	4	11	(empty)	1	-NA-	-NA-
48	4	12	(empty)	1	-NA-	-NA-

Rack #4

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	(empty)	1	-NA-	-NA-
2	1	2	(empty)	1	-NA-	-NA-
3	1	3	(empty)	1	-NA-	-NA-
4	1	4	(empty)	1	-NA-	-NA-
5	1	5	(empty)	1	-NA-	-NA-
6	1	6	(empty)	1	-NA-	-NA-
7	1	7	(empty)	1	-NA-	-NA-
8	1	8	(empty)	1	-NA-	-NA-
9	1	9	(empty)	1	-NA-	-NA-
10	1	10	(empty)	1	-NA-	-NA-
11	1	11	(empty)	1	-NA-	-NA-
12	1	12	(empty)	1	-NA-	-NA-
13	2	1	(empty)	1	-NA-	-NA-
14	2	2	(empty)	1	-NA-	-NA-
15	2	3	(empty)	1	-NA-	-NA-
16	2	4	(empty)	1	-NA-	-NA-
17	2	5	(empty)	1	-NA-	-NA-
18	2	6	(empty)	1	-NA-	-NA-
19	2	7	(empty)	1	-NA-	-NA-
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-

000082

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
ICP METALS

Lab Name Environmental Testing and Consulting, Inc
Date/Time of Sequence 03/15/01 1441 Instrument ICPT
Initial Calibration Source C1 M5-30-21 C2 M5-33-11 C3 M5-33-03 C4 M5-18-04
Continuing Calibration Source ICV/CCV M5-34-01

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV2			Continuing CCV3		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found
Silver	100	99.3	1	<5	100	99	1	<5	99	1	<5	100
Arsenic	500	488	2	<5	500	490	2	<5	484	3	<5	493
Barium	1000	1030	3	<5	1000	1040	4	<5	1030	3	<5	1050
Cadmium	100	100	0	<5	100	101	1	<5	99.2	1	<5	100
Chromium	200	200	0	<5	200	199	1	<5	197	2	<5	200
Lead	500	501	0	<5	500	506	1	<5	502	0	<5	507
Selenium	500	493	1	<5	500	493	1	<5	487	3	<5	495

Analyte	Continuing CCV4			Continuing CCV5			Continuing CCV6			Continuing CCV7		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Found
Silver	100	100	0	<5	100	100	0	<5	98	2	<5	101
Arsenic	500	487	3	<5	489	489	2	<5	480	4	<5	495
Barium	1000	1040	4	<5	1040	1040	4	<5	1020	2	<5	1040
Cadmium	100	99	1	<5	99	99	1	<5	98	2	<5	101
Chromium	200	198	1	<5	197	197	2	<5	193	4	<5	200
Lead	500	502	0	<5	501	501	0	<5	494	1	<5	511
Selenium	500	491	2	<5	491	491	2	<5	481	4	<5	494

(1) Percent difference from true value. ICP Method 6010B - 10% ICP Method 200.7 - 5%

Date 01/00/00 12:00 A

000083

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc Date/Time of Sequence 03/15/01 1441 Instrument ICPT

Analyte	Initial Calibration Blank ug/L	Continuing Calibration Blank ug/L						
		CCB1	CCB2	CCB3	CCB4	CCB5	CCB6	CCB7
Silver	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND
Barium	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	ND	ND	ND	ND	ND	ND	ND
Lead	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND

000084

FORM 4
INTERFERENCE CHECK SAMPLE
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/15/01 1441 Instrument ICPT

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	AB	Sol AB	%REC	Sol AB	%REC
Silver	200	215	108	217	109
Aluminum	250000	249000	100	252000	101
Arsenic	200	210	105	213	107
Barium	500	529	106	535	107
Calcium	250000	241000	96	237000	95
Cadmium	200	200	100	202	101
Chromium	200	189	95	190	95
Iron	100000	96800	97	97700	98
Magnesium	250000	254000	102	252000	101
Lead	200	207	104	208	104
Selenium	200	211	106	214	107

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	A	Sol A	%REC	Sol A	%REC
Silver	0	ND	0	ND	0
Aluminum	250000	251000	100	253000	101
Arsenic	0	ND	0	ND	0
Barium	0	ND	0	ND	0
Calcium	250000	249000	100	244000	98
Cadmium	0	ND	0	ND	0
Chromium	0	ND	0	ND	0
Iron	100000	95200	95	95900	96
Magnesium	250000	252000	101	250000	100
Lead	0	ND	0	ND	0
Selenium	0	ND	0	ND	0

ENVIRONMENTAL TESTING & CONSULTING, INC

ICP Metals Sequence Check List

Analyst : 3/2
Supervisor: 3/2

- T760

- Initial Calibration Blank (STD1-Blank)
- Initial Calibration Standard 1 (C1) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 2 (C2) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 3 (C3) 3 Exposures at less than 3% RSD
- Initial Calibration Standard 4 (C4) 3 Exposures at less than 3% RSD
- Standardization Report

- ## Failures

a. Initial Calibration Standard 1 (C1)	_____	✓	_____
b. Initial Calibration Standard 2 (C2)	_____	✓	_____
c. Initial Calibration Standard 3 (C3)	_____	✓	_____
d. Initial Calibration Standard 4 (C4)	_____	✓	_____

e.	Initial Calibration Blank (ICB) – All elements below MDL/MQL	✓	
f.	Initial Calibration Verification (ICV1) – (5%)	✓	ALL OK AT 10%
g.	Low Level Check (LLC1) – (20%)	✓	
h.	Low Level Check (LLC2) – (20%)	✓	
i.	Interelement Correction Standard – Initial (ICSAB) – (20%)	✓	
j.	Interelement Correction Standard – Final (ICSAB) – (20%)	✓	

Applicable ETC Order Nos. for this sequence:

VZ4-AQ-77	0103-251			
VZ5-AQ-11	220			
V13-50-50	181			
50	341			
55	343			
0103-150				
172				
244				
290				
331				
0102-809				
0103-047				

AutoSampler Report Table: PLASMA1 03/21/01 01:06:03 PM

page 1

Table Name: PLASMA1 Autosampler Type: TYPE TJA
 Sample Positions: 42/192 QC Positions: 19/19 # Sets: 1
 Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	19	10
2	Sample (16mm)	Samples	0	1
3	Sample (16mm)	Samples	0	1
4	Sample (16mm)	Samples	0	1
5	Sample (16mm)	Samples	42	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No		ICPT	150	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor

No Samples Prepared.

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...19			Not Used)			

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	V24-AQ-77 S.B.	1	-NA-	Sample
2	1	2	V25-AQ-11 S.B.	1	-NA-	Sample
3	1	3	V13-SO-50 S.B.	1	-NA-	Sample
4	1	4	V13-SO-56 S.B.	1	-NA-	Sample
5	1	5	V13-SO-55 S.B.	1	-NA-	Sample
6	1	6	V24-AQ-77 LC.	1	-NA-	Sample
7	1	7	V13-SO-55 LC.	1	-NA-	Sample
8	1	8	0103-150-01	1	-NA-	Sample
9	1	9	0103-150-02	1	-NA-	Sample
10	1	10	0103-150-03	1	-NA-	Sample
11	1	11	CCB1	1	-NA-	Sample
12	1	12	CCV1	1	-NA-	Sample
13	2	1	0103-150-06	1	-NA-	Sample
14	2	2	0103-150-07	1	-NA-	Sample
15	2	3	0103-150-10	1	-NA-	Sample
16	2	4	0103-172-06	1	-NA-	Sample
17	2	5	0103-244-02	1	-NA-	Sample
18	2	6	0103-244-02 MS	1	-NA-	Sample
19	2	7	0103-244-02 MSD	1	-NA-	Sample
20	2	8	0103-244-03	1	-NA-	Sample
21	2	9	0103-244-04	1	-NA-	Sample

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AutoSampler Report Table: PLASMA1

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page 2

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0103-244-05	1	-NA-	Sample
23	2	11	CCB2	1	-NA-	Sample
24	2	12	CCV2	1	-NA-	Sample
25	3	1	0103-244-06	1	-NA-	Sample
26	3	2	0103-290-01	1	-NA-	Sample
27	3	3	0103-290-02	1	-NA-	Sample
28	3	4	0103-290-03	1	-NA-	Sample
29	3	5	0103-290-04	1	-NA-	Sample
30	3	6	0103-331-02	1	-NA-	Sample
31	3	7	0103-331-03	1	-NA-	Sample
32	3	8	0103-331-04	1	-NA-	Sample
33	3	9	0103-331-04 MS	1	-NA-	Sample
34	3	10	0103-331-04 MSD	1	-NA-	Sample
35	3	11	CCB3	1	-NA-	Sample
36	3	12	CCV3	1	-NA-	Sample
37	4	1	0103-331-05	1	-NA-	Sample
38	4	2	0103-331-07	1	-NA-	Sample
39	4	3	0103-331-08	1	-NA-	Sample
40	4	4	0102-809-03	1	-NA-	Sample
41	4	5	0103-809-04	1	-NA-	Sample
42	4	6	0102-809-05	1	-NA-	Sample
43	4	7	0102-809-06	1	-NA-	Sample
44	4	8	0102-809-07	1	-NA-	Sample
45	4	9	0102-809-08	1	-NA-	Sample
46	4	10	0102-809-09	1	-NA-	Sample
47	4	11	CCB4	1	-NA-	Sample
48	4	12	CCV4	1	-NA-	Sample

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	0102-809-10	1	-NA-	Sample
2	1	2	0102-809-12	1	-NA-	Sample
3	1	3	0103-047-01	1	-NA-	Sample
4	1	4	0102-047-01 MS	1	-NA-	Sample
5	1	5	0103-047-01 MSD	1	-NA-	Sample
6	1	6	0103-047-02	1	-NA-	Sample
7	1	7	0103-047-03	1	-NA-	Sample
8	1	8	0103-047-04	1	-NA-	Sample
9	1	9	0103-047-05	1	-NA-	Sample
10	1	10	0103-047-06	1	-NA-	Sample
11	1	11	CCB5	1	-NA-	Sample
12	1	12	CCV5	1	-NA-	Sample
13	2	1	0103-047-07	1	-NA-	Sample
14	2	2	0103-047-08	1	-NA-	Sample
15	2	3	0103-047-09	1	-NA-	Sample
16	2	4	0103-047-10	1	-NA-	Sample
17	2	5	0103-251-01	1	-NA-	Sample
18	2	6	0103-251-06	1	-NA-	Sample
19	2	7	0103-251-08	1	-NA-	Sample
20	2	8	0103-251-11	1	-NA-	Sample
21	2	9	0103-251-14	1	-NA-	Sample

000088

Rack #3

Pos	Row	Col	Sample Name	Set #	#Used	Type
22	2	10	0103-220-01	1	-NA-	Sample
23	2	11	CCB6	1	-NA-	Sample
24	2	12	CCV6	1	-NA-	Sample
25	3	1	0103-220-02	1	-NA-	Sample
26	3	2	0103-220-03	1	-NA-	Sample
27	3	3	0103-220-04	1	-NA-	Sample
28	3	4	0103-220-05	1	-NA-	Sample
29	3	5	0103-181-02	1	-NA-	Sample
30	3	6	0103-181-04	1	-NA-	Sample
31	3	7	0103-344-01	1	-NA-	Sample
32	3	8	0103-344-02	1	-NA-	Sample
33	3	9	0103-343-04	1	-NA-	Sample
34	3	10	0103-343-12	1	-NA-	Sample
35	3	11	CCB7	1	-NA-	Sample
36	3	12	CCV7	1	-NA-	Sample
37	4	1	0103-343-12 MS	1	-NA-	Sample
38	4	2	0103-343-12 MSD	1	-NA-	Sample
39	4	3	CCB8	1	-NA-	Sample
40	4	4	CCV8	1	-NA-	Sample
41	4	5	ICSA	1	-NA-	Sample
42	4	6	ICSAB	1	-NA-	Sample
43	4	7	(empty)	1	-NA-	-NA-
44	4	8	(empty)	1	-NA-	-NA-
45	4	9	(empty)	1	-NA-	-NA-
46	4	10	(empty)	1	-NA-	-NA-
47	4	11	(empty)	1	-NA-	-NA-
48	4	12	(empty)	1	-NA-	-NA-

Rack #4

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	(empty)	1	-NA-	-NA-
2	1	2	(empty)	1	-NA-	-NA-
3	1	3	(empty)	1	-NA-	-NA-
4	1	4	(empty)	1	-NA-	-NA-
5	1	5	(empty)	1	-NA-	-NA-
6	1	6	(empty)	1	-NA-	-NA-
7	1	7	(empty)	1	-NA-	-NA-
8	1	8	(empty)	1	-NA-	-NA-
9	1	9	(empty)	1	-NA-	-NA-
10	1	10	(empty)	1	-NA-	-NA-
11	1	11	(empty)	1	-NA-	-NA-
12	1	12	(empty)	1	-NA-	-NA-
13	2	1	(empty)	1	-NA-	-NA-
14	2	2	(empty)	1	-NA-	-NA-
15	2	3	(empty)	1	-NA-	-NA-
16	2	4	(empty)	1	-NA-	-NA-
17	2	5	(empty)	1	-NA-	-NA-
18	2	6	(empty)	1	-NA-	-NA-
19	2	7	(empty)	1	-NA-	-NA-
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/20/01 1302 Instrument ICPT

Initial Calibration Source C1 M5-30-21 C2 M5-33-11 C3 M5-33-03 C4 M5-33-23

Continuing Calibration Source ICV/CCV M5-34-01

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV6			Continuing CCV7		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Flag
Arsenic	500	491	2	<5	500	488	2	<5	501	0	<5	<5

(1) Percent difference from true value. ICP Method 6010B - 10% ICP Method 200.7 - 5%

000090

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc Date/Time of Sequence 03/20/01 1302 Instrument ICPT

Analyte	Initial Calibration Blank ug/L		CCB1		CCB6		CCB7		Continuing Calibration Blank ug/L									
	ND		ND		ND		ND											
Arsenic																		

000091

6561397

6561398

FORM 4
INTERFERENCE CHECK SAMPLE
ICP METALS

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/20/01 1302 Instrument ICPT

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	AB	Sol AB	%REC	Sol AB	%REC
Aluminum	250000	249000	100	252000	101
Arsenic	200	212	106	221	111
Calcium	250000	249000	100	260000	104
Iron	100000	98700	99	106000	106
Magnesium	250000	258000	103	269000	108

Concentration Units: ug/L

Analyte	True Sol	Initial Found		Final Found	
	A	Sol A	%REC	Sol A	%REC
Aluminum	250000	251000	100	252000	101
Arsenic	0	ND	0	ND	0
Calcium	250000	258000	103	267000	107
Iron	100000	97700	98	104000	104
Magnesium	250000	258000	103	266000	106

ENVIRONMENTAL TESTING & CONSULTING, INC

Mercury Sequence Check List

Sequence ID : _____

Date/Time: 3/15/01 1437Analyst : JE

Instrument ID: CETAC M-6000A

Supervisor: ✓

1. General Maintenance Check

Action Taken

- a. Lamp Warm-up ✓
- b. Pump Winding ✓
- c. Check GLS ✓
- d. Nafion Dryer ✓

2. Sequence Check List

Initial Calibration

- a. Initial Calibration Blank (STD1-Blank)
- b. Initial Calibration Standard 1 0.20 ug/L
- c. Initial Calibration Standard 2 1.0 ug/L
- d. Initial Calibration Standard 3 2.0 ug/L
- e. Initial Calibration Standard 4 5.0 ug/L
- f. Initial Calibration Standard 5 10.0 ug/L

✓

✓

✓

✓

✓

✓

3. Regression coefficient (minimum = 0.995)

✓

✓

4. Initial Calibration Blank (ICB) – All elements below MQL

Water = 0.20 ug/L Soil = 0.02 mg/Kg

5. Initial Calibration Verification (ICV) – 2nd Source SRN: M-5-35-09

Concentration 5.0 ug/L +/- 10%

Found: 4.59 %Difference: 8

6. Continuing Calibration Blank (CCB) – All elements below MQL indicate by ✓

Metal	CCB1	CCB2	CCB3	CCB4	CCB5	CCB6	CCB7	CCB8	CCB9	CCB10	CCB11	CCB12	CCB13	CCB14	CCB15
Hg	✓	✓	✓												

7. Continuing Calibration Verification (CCV) – Range: EPA 90-110% SW-846 80-120%

All elements within QC limits indicate by ✓ (Concentration same as ICV) SRN: M-5-35-09

Metal	CCV1	CCV2	CCV3	CCV4	CCV5	CCV6	CCV7	CCV8	CCV9	CCV10	CCV11	CCV12	CCV13	CCV14	CCV15
Hg	✓	✓	✓												

Applicable ETC Order Nos. for this sequence:

0103394010339401032200103239

6561400

FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
MERCURY

Lab Name Environmental Testing and Consulting, Inc

Date/Time of Sequence 03/15/01 1437 Instrument M6000

Initial Calibration Source C1 M5-35-08

Continuing Calibration Source ICV/CCV M5-35-09

Analyte	Initial Calibration Verification			Continuing CCV1			Continuing CCV2			Continuing CCV3		
	True	Found	%Diff(1)	Flag	True	Found	%Diff(1)	Flag	Found	%Diff(1)	Flag	Flag
Mercury	5.00	4.59	8.2	<10	5.00	4.64	7.2	<20	4.55	9.0	<20	<20

000094

FORM 3
INITIAL AND CONTINUING CALIBRATION BLANKS
ICP METALS

Lab Name Environmental Testing and Consulting, Inc Date/Time of Sequence 03/15/01 1437 Instrument M6000

Analyte	MDL ug/L	Initial Cal Blank (ICB) ug/L	Continuing Calibration Blank ug/L									
			CCB1	CCB2	CCB3							
Mercury	0.06	ND	ND	ND	ND							

000095

6561401

6561402

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Volatiles**

000096

ENVIRONMENTAL TESTING & CONSULTING, INC
GC/MS VOC Method 8260B Sequence Check List (SW-846)

Sequence ID V403141Matrix: H₂ODate 3/15/01
Analyst ESM

Applicable ETC Order Nos. for this sequence:

0103-344-1,2T

Validated

1. BFB Daily 12-Hour Tune Meets Criteria. No analyses begins until criteria are met. (SOP) ☒
2. Initial Calibration Verification Criteria - Method: V403061-82601M
 - a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
 - b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ ☒
 - c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation ☒
 - d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 ☒
3. Calibration Verification - Each 12-Hour Shift
 - a. SPCC - Mean RF ≥ 0.10 (≥ 0.30 for Chlorobenzene / 1122-Tetrachloroethene) ☒
 - b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ ☒
 - c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ ☒
 - d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$
Acetonitrile, Propionitrile, Isobutyl Alcohol ☒
 - e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD ☒
 - f. Internal Standards - Areas within (-50% to +100%) from Mid-Point ICAL STD ☒
4. Method Blanks included in this sequence:

Analyze daily or for each analytical batch (20 samples): MACLW 357

List compounds identified in Method Blank w/concentration.

Flag final result "B-Detected in Blank"
5. Matrix Spike/Matrix Spike Duplicates included in this sequence:

Analyze daily or for each matrix (ms/msd per 20 samples of same matrix)

List MS/MSD(s) performed with any failures: 0103-344TMS & MSD
6. Laboratory Control Samples included in this sequence:

Must contain all Target Analytes.
7. Surrogate Recoveries within QC Limits
8. All positive compounds within calibration range

Narrative/Notes:

8270C Revision 3 December 1996
Form Etc 06/01/99

FORM 5
6561404 VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: 0101003

BFB Injection Date: 03/14/01

Instrument ID: VOC4

BFB Injection Time: 1238

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	50.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	89.2
175	5.0 - 9.0% of mass 174	6.4 (7.2)1
176	95.0 - 101.0% of mass 174	85.2 (95.6)1
177	5.0 - 9.0% of mass 176	4.4 (5.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V4031411LCS		0201004LCS	03/14/01	1253
02	DCS100		0201004	03/14/01	1253
03	V4031411LB		0402006	03/14/01	1459
04	0103-344-1T		0601008	03/14/01	1602
05	0103-344-2T		0701009	03/14/01	1634
06	0103-344-1TM		1901021	03/14/01	2252
07	0103-344-1TM		2001022	03/14/01	2323
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561405

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: VOC4

Calibration Date: 03/14/01 Time: 1253

Lab File ID: 0201004

Init. Calib. Date(s): 03/06/01 03/06/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1036 1726

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Acetone	120.9	100.0	AVRG	20.9	30.0
Acetonitrile	1350	1000	AVRG	35.0	30.0
Acrolein	125.3	100.0	AVRG	25.3	30.0
Acrylonitrile	119.5	100.0	AVRG	19.5	30.0
Allyl chloride	104.0	100.0	AVRG	4.0	30.0
Benzene	107.0	100.0	AVRG	7.0	30.0
Bromobenzene	92.90	100.0	AVRG	7.1	30.0
Bromochloromethane	103.8	100.0	AVRG	3.8	30.0
Bromodichloromethane	93.42	100.0	AVRG	6.6	30.0
Bromoform	98.00	100.0	AVRG	2.0	30.0
2-Butanone	101.0	100.0	AVRG	1.0	30.0
Bromomethane	95.82	100.0	LINR	4.2	30.0
n-Butylbenzene	110.5	100.0	AVRG	10.5	30.0
sec-Butylbenzene	95.24	100.0	AVRG	4.8	30.0
tert-Butylbenzene	91.68	100.0	AVRG	8.3	30.0
Carbon Disulfide	105.8	100.0	AVRG	5.8	30.0
Carbon Tetrachloride	94.17	100.0	AVRG	5.8	30.0
Chlorobenzene	96.94	100.0	AVRG	3.1	30.0
Chlorodibromomethane	92.80	100.0	AVRG	7.2	30.0
Chloroethane	107.6	100.0	AVRG	7.6	30.0
2-Chloroethyl vinyl ether	115.8	100.0	AVRG	15.8	30.0
Chloroform	98.87	100.0	AVRG	1.1	20.0
Chloromethane	121.8	100.0	LINR	21.8	30.0
Chloroprene	95.40	100.0	AVRG	4.6	30.0
2-Chlorotoluene	106.6	100.0	AVRG	6.6	30.0
4-Chlorotoluene	94.40	100.0	AVRG	5.6	30.0
1,2-Dibromo-3-chloropropane	104.7	100.0	AVRG	4.7	30.0
1,2-Dibromoethane	101.8	100.0	AVRG	1.8	30.0
Dibromomethane	99.05	100.0	AVRG	1.0	30.0
1,2-Dichlorobenzene	102.1	100.0	AVRG	2.1	30.0
1,3-Dichlorobenzene	101.9	100.0	AVRG	1.9	30.0
1,4-Dichlorobenzene	108.5	100.0	AVRG	8.5	30.0
trans-1,4-Dichloro-2-butene	122.4	100.0	AVRG	22.4	30.0
Dichlorodifluoromethane	89.83	100.0	AVRG	10.2	30.0
1,1-Dichloroethane	102.6	100.0	AVRG	2.6	30.0
1,2-Dichloroethane	100.1	100.0	AVRG	0.1	30.0
1,1-Dichloroethene	104.0	100.0	AVRG	4.0	20.0

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6561406

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: VOC4

Calibration Date: 03/14/01 Time: 1253

Lab File ID: 0201004

Init. Calib. Date(s): 03/06/01 03/06/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1036

1726

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
cis-1,2-Dichloroethene	99.60	100.0	AVRG	0.4	30.0
trans-1,2-Dichloroethene	102.2	100.0	AVRG	2.2	30.0
1,2-Dichloropropane	99.93	100.0	AVRG	0.1	20.0
1,3-Dichloropropane	102.8	100.0	AVRG	2.8	30.0
2,2-Dichloropropane	102.5	100.0	AVRG	2.5	30.0
1,1-Dichloropropene	103.9	100.0	AVRG	3.9	30.0
cis-1,3-Dichloropropene	99.88	100.0	AVRG	0.1	30.0
trans-1,3-Dichloropropene	101.1	100.0	AVRG	1.1	30.0
Di isopropyl ether	102.7	100.0	AVRG	2.7	30.0
1,4-Dioxane	2402	2000	AVRG	20.1	30.0
Ethyl Acetate	114.5	100.0	AVRG	14.5	30.0
Ethylbenzene	99.05	100.0	AVRG	1.0	20.0
Ethyl methacrylate	217.0	200.0	AVRG	8.5	30.0
Furan	157.1	153.0	AVRG	2.7	30.0
Hexachlorobutadiene	102.1	100.0	AVRG	2.1	30.0
Hexane	109.3	117.0	AVRG	6.6	30.0
2-Hexanone	123.9	100.0	AVRG	23.9	30.0
Iodomethane	85.31	100.0	LINR	14.7	30.0
Isobutyl Alcohol	2656	2000	AVRG	32.8	30.0
Isopropylbenzene	97.67	100.0	AVRG	2.3	30.0
4-Isopropyltoluene	93.18	100.0	AVRG	6.8	30.0
Methacrylonitrile	1161	1000	AVRG	16.1	30.0
Methylene Chloride	100.7	100.0	LINR	0.7	30.0
Methyl methacrylate	220.2	200.0	AVRG	10.1	30.0
4-Methyl-2-Pentanone	116.7	100.0	AVRG	16.7	30.0
Methyl-tertbutyl-Ether	104.9	100.0	AVRG	4.9	30.0
Naphthalene	116.4	100.0	AVRG	16.4	30.0
Pentachloroethane	117.7	100.0	AVRG	17.7	30.0
Propionitrile	1342	1000	AVRG	34.2	30.0
n-Propyl Acetate	172.8	151.0	AVRG	14.4	30.0
n-Propylbenzene	99.44	100.0	AVRG	0.6	30.0
Styrene	98.30	100.0	AVRG	1.7	30.0
1,1,1,2-Tetrachloroethane	93.56	100.0	AVRG	6.4	30.0
1,1,2,2-Tetrachloroethane	128.1	100.0	AVRG	28.1	30.0
Tetrachloroethene	82.39	100.0	AVRG	17.6	30.0
Tetrahydrofuran	116.3	91.50	AVRG	27.1	30.0
1,2,3-Trichlorobenzene	114.5	100.0	AVRG	14.5	30.0

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FORM 7
VOA-GCMS CONTINUING CALIBRATION CHECK

6561407

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: VOC4

Calibration Date: 03/14/01 Time: 1253

Lab File ID: 0201004

Init. Calib. Date(s): 03/06/01 03/06/01

Heated Purge: (Y/N) Y

Init. Calib. Times: 1036 1726

GC Column:

ID: 2.00 (mm)

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Toluene	94.09	100.0	AVRG	5.9	20.0
1,1,1-Trichloroethane	96.21	100.0	AVRG	3.8	30.0
1,1,2-Trichloroethane	107.7	100.0	AVRG	7.7	30.0
1,1,2-trichloro-1,2,2-triflu	98.96	100.0	AVRG	1.0	30.0
Trichloroethene	95.74	100.0	AVRG	4.3	30.0
Trichlorofluoromethane	95.44	100.0	AVRG	4.6	30.0
1,2,3-Trichloropropane	102.4	100.0	AVRG	2.4	30.0
1,2,4-Trichlorobenzene	112.9	100.0	AVRG	12.9	30.0
1,2,4-Trimethylbenzene	97.91	100.0	AVRG	2.1	30.0
1,3,5-Trimethylbenzene	73.04	100.0	AVRG	27.0	30.0
Vinyl Acetate	121.1	100.0	AVRG	21.1	30.0
Vinyl Chloride	102.6	100.0	AVRG	2.6	20.0
Xylene-mp	194.0	200.0	AVRG	3.0	30.0
Xylene-o	95.80	100.0	AVRG	4.2	30.0
cis-1,4-Dichloro-2-butene	107.2	100.0	AVRG	7.2	30.0
=====	=====	=====	=====	=====	=====
1,2-Dichloroethane-d4	42.23	39.40	AVRG	7.2	30.0
Dibromofluoromethane	42.75	40.40	AVRG	5.8	30.0
Toluene-d8	46.83	45.40	AVRG	3.1	30.0
Bromofluorobenzene	49.60	56.60	AVRG	12.4	30.0

6561408

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID (Standard): 0201004

Date Analyzed: 03/14/01

Instrument ID: VOC4

Time Analyzed: 1253

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	103232	7.56	946977	8.16	856705	10.37
UPPER LIMIT	206464	8.06	1893954	8.66	1713410	10.87
LOWER LIMIT	51616	7.06	473489	7.66	428353	9.87
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4031411LB	104183	7.56	909895	8.16	779278	10.38
02 0103-344-1T	97354	7.56	833667	8.16	708219	10.38
03 0103-344-2T	99929	7.56	871204	8.16	738635	10.38
04 0103-344-1TM	93300	7.57	823118	8.17	852496	10.38
05 0103-344-1TM	106268	7.57	959216	8.17	882760	10.38
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Pentafluorobenzene
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 8
VOA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

6561409

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID (Standard): 0201004

Date Analyzed: 03/14/01

Instrument ID: VOC4

Time Analyzed: 1253

GC Column:

ID: 2.00 (mm)

Heated Purge: (Y/N) Y

	IS4 (DCB)					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	306060	12.25				
UPPER LIMIT	612120	12.75				
LOWER LIMIT	153030	11.75				
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4031411LB	305452	12.26				
02 0103-344-1T	277216	12.26				
03 0103-344-2T	298220	12.26				
04 0103-344-1TM	305058	12.26				
05 0103-344-1TM	316778	12.26				
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

Erna 3/8/01
ML 3/8/01

Page 1

QC REVIEWED

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\CHEM\voc4.i\403071.B\403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Calibration File Names:

Level 1: \\ETCBDC\CHEM\voc4.i\403061.B\0401005.D
 Level 2: \\ETCBDC\CHEM\voc4.i\403061.B\0501006.D
 Level 3: \\ETCBDC\CHEM\voc4.i\403061.B\0601008.D
 Level 4: \\ETCBDC\CHEM\voc4.i\403061.B\0701009.D
 Level 5: \\ETCBDC\CHEM\voc4.i\403061.B\0801010.D
 Level 6: \\ETCBDC\CHEM\voc4.i\403061.B\1601018.D
 Level 7: \\ETCBDC\CHEM\voc4.i\403061.B\1001012.D
 Level 8: \\ETCBDC\CHEM\voc4.i\403061.B\1101013.D
 Level 9: \\ETCBDC\CHEM\voc4.i\403061.B\1201014.D
 Level 10: \\ETCBDC\CHEM\voc4.i\403061.B\1301015.D

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
1 Dichlorodifluoromethane	5.06506 4.51236	5.38224 3.82914	5.76736 4.26632	5.29929 4.83923	4.55607	5.86965	AVRG	4.93867			13.35869

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\VOCA.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0 500000	1.0000	Level 2	5.0000	Level 3	20 0000	Level 4	50 0000	Level 5	100.0000	Level 6	Curve	b	Coefficients	ml	m2	RSD	or R^2
	Level 1																	
	120 0000	150.0000	170.0000	200.0000	200.0000	200.0000	200.0000	200.0000	200.0000	200.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10	Level 10	Level 10	Level 10	Level 10	Level 10	Level 10	Level 10							
2 Chloromethane	1234	2548	10975	36524	84730	84730	84730	84730	84730	84730	84730	++++						
	194779	242621	307570	36524	84730	84730	84730	84730	84730	84730	84730		0.00622	0.91230			0.99811	
3 Vinyl Chloride	3.07175	3.21952	3.08387	2.74008	2.43991	2.43991	2.43991	2.43991	2.43991	2.43991	2.43991							
	2.89895	2.62217	2.75170	3.08845	3.08845	3.08845	3.08845	3.08845	3.08845	3.08845	3.08845				2.90870		8.94913	
4 Bromomethane	1976	3660	13215	54461	165223	165223	165223	165223	165223	165223	165223							
	478498	521062	680334	843606	843606	843606	843606	843606	843606	843606	843606		0.09375	2.17421			0.99034	
5 Chloroethane	1.44950	1.23284	1.68322	1.47637	1.28277	1.28277	1.28277	1.28277	1.28277	1.28277	1.28277							
	1.67975	1.51095	1.55499	1.73036	1.73036	1.73036	1.73036	1.73036	1.73036	1.73036	1.73036				1.51904		10.93153	
6 Trichlorofluoromethane	5.75710	7.07465	7.72475	6.99094	5.98787	5.98787	5.98787	5.98787	5.98787	5.98787	5.98787							
	7.45140	6.40831	6.62690	6.63864	6.63864	6.63864	6.63864	6.63864	6.63864	6.63864	6.63864				6.75512		9.01287	

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Environmental Testing and Consulting, Inc.

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 Method file : \\ETC\BDC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients ml	m2	\$RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
7 Acetone	++++ 0.87618	++++ 0.82751	0.91233 0.85286	0.84750 ++++	0.85088	0.77291	AVRG		0.84860		5 05038
8 Furan	++++ 8.05438	++++ 7.25659	7.55033 7.43494	6 97396 7.85763	6.39153	7.40931	AVRG		7.36608		7.01938
9 1,1-Dichloroethene	2.50135 2.95755	2 60335 2.74110	2.90668 2.71078	2.59799 2.79458	2.26746	2.65897	AVRG		2 67398		7 49002
10 Acrylonitrile	++++ 0.46793	++++ 0.48356	0.47222 0.51870	0 48192 0 59042	0.43356	0.50875	AVRG		0 49463		9 41511
11 Iodomethane	2310 860290	4113 961127	27505 1185934	108818 1310647	326296	733087	LINR	0 02348	3.61781		0 99320

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
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 Method file : \\ETCDBC\CHEM\voc4.i\403071.B\403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	χ^2	RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			ml	m ²	or R ²
12 Methylene Chloride	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
	++++	27286	54110	124213	283289	542244					
	667543	779336	954772	1092936			LINR	-0.04944	2.84755		0.99590
13 1,1,2-trichloro-1,2,2-trifluoroethane	2.52691	3.00048	3.21704	2.91616	2.53519	2.88411					
	3.31948	2.97202	2.97843	2.83628			AVRG		2.91861		8.63247
14 Acetonitrile	++++	++++	0.13531	0.12900	0.13634	0.15504					
	0.16135	0.16495	0.16293	0.18332			AVRG		0.15353		12.05731
15 Allyl chloride	6.10261	4.91397	5.33177	5.21947	4.44987	5.39960					
	5.52618	5.10589	5.07178	5.18031			AVRG		5.23014		8.16129
16 Carbon Disulfide	6.40007	7.72305	7.80805	7.02476	6.24445	7.55815					
	8.16665	7.38935	7.64775	8.08335			AVRG		7.40456		8.87633

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Environmental Testing and Consulting, Inc.

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 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120.0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
17 trans-1,2-Dichloroethene	++++	2.70673	3.03456	2.62234	2.64846	2.99827	AVRG			2.97701		8.72156
	3.34833	3.11290	3.11125	3.21022								
18 Methyl-tertbutyl-Ether	9.45649	8.17699	8.02110	7.87003	7.88833	8.29313	AVRG			8.45302		6.32243
	8.81919	8.31035	8.57230	9.12228								
19 Propionitrile	0.17480	0.15962	0.13807	0.13424	0.17469	0.15654	AVRG			0.17081		13.41426
	0.19487	0.18733	0.19793	0.19000								
20 Chloroprene	6.78034	7.15806	7.54182	6.9256	6.09311	7.00053	AVRG			7.13363		6.56297
	7.79901	7.31437	7.26039	7.39615								
21 1,1-Dichloroethane	4.93013	5.44570	5.42720	5.08287	5.03888	5.25387	AVRG			5.48954		7.81479
	6.23867	5.73655	5.85229	5.88927								

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000 Level 1	1.0000 Level 2	5.0000 Level 3	20.0000 Level 4	50.0000 Level 5	100.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
22 Vinyl Acetate	++++ 4.10470	3.36128 3.71580	3.50479 3.79009	3.45472 4.07472	3.67695	3.82479	AVRG		3.72309		6.95802
23 2-Butanone	++++ 9.78109	++++ 8.46164	8.72005 8.68389	7.90640 9.31259	7.25643	8.52154	AVRG		8.58045		9.06256
24 Acrolein	++++ 0.23470	++++ 0.23616	0.24593 0.24178	0.22003 0.26954	0.19733	0.23919	AVRG		0.23558		8.81364
25 Hexane	++++ 3.99009	++++ 3.19420	3.34116 3.29933	2.81237 3.54317	2.38020	3.31778	AVRG		3.23479		14.77215
26 Di isopropyl ether	8.64076 10.64421	8.72304 8.87586	8.51185 9.32563	8.28203 10.04220	7.52185	8.72595	AVRG		8.92934		9.93339

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Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

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Compound	0	500000	1.0000	Level 2	5.0000	Level 3	20 0000	Level 4	50.0000	Level 5	100.0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1																
	120 0000	150.0000	Level 8	170 0000	Level 9	200.0000	Level 10										
	Level 7																
27 Methacrylonitrile	1.37304	1.37808	1.22626	1.12104	1.13499	1.27495											
	1.35759	1.26920	1.30064	1.41219											1.28480		7.83902
28 cis-1,2-Dichloroethene	3.50721	2.99843	2.99693	2.84616	2 60445	2.96970											
	3.37020	2.99140	3 07987	3.21250											3.05769		8.39979
29 Ethyl Acetate	2.61482	2.39916	1.98828	1.78457	1.78594	2.03151											
	1.92260	1.95127	2.00483	2.21910											2.07031		12.85255
30 Bromochloromethane	++++	1.48514	1.54067	1.50109	1 40064	1.49432											
	1.50950	1.44428	1.46509	1.48715											1.48088		2.72918
31 Chloroform	7.50100	7.42623	7 85527	7.31562	6.75640	7.36575											
	7 98922	7.42833	7.44224	7 54894											7.46290		4 40596

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

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Compound	0.500000		1.0000		5.0000		20.0000		50.0000		100.0000		Coefficients		m2		RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	b	m1	m2		
32 Isobutyl Alcohol	+++++	+++++	0.06384	0.06518	0.06505	0.07197	0.06980	0.07176	0.07291	0.08063	0.08063	0.08063	AVRG	0.07014			7.88337
33 2,2-Dichloropropane	6.52172	7.31364	7.68127	7.17137	6.36393	7.11527	7.61701	7.03695	6.84514	6.77949			AVRG	7.04458			6.12083
35 Tetrahydrofuran	+++++	+++++	0.55734	0.65888	0.66932	0.79072	0.74710	0.77782	0.80227	0.83883			AVRG	0.73029			12.87524
38 1,2-Dichloroethane	6.56363	5.82133	6.26727	6.06750	5.79973	6.17625	6.64351	6.18106	6.26496	6.43085			AVRG	6.22161			4.50928
39 1,1,1-Trichloroethane	5.76732	7.15858	7.83872	7.41743	6.71304	7.28654	8.39480	7.66575	7.54049	7.42440			AVRG	7.32071			9.57187

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6561418

Environmental Testing and Consulting, Inc.

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 Method file : \\ETCDBC\CHEM\voc4.i\403071.B\403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0	5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
40 1,1-Dichloropropene	3.54606	4.47437	4.81078	4.62429	4.20960	4.81594		AVRG		4.69921		11.30009
	5.44595	5.12532	4.98265	4.95715								
41 Carbon Tetrachloride	4.11441	6.18162	6.80668	6.51749	5.97836	6.40162		AVRG		6.30428		13.69877
	7.41119	6.76861	6.51815	6.34471								
42 Benzene	8.91063	8.11660	8.73207	7.88407	7.38754	8.58052		AVRG		8.69948		8.23301
	9.45235	9.05455	9.28526	9.59121								
44 1,4-Dioxane	+++++	+++++	0.00147	0.00165	0.00163	0.00192		AVRG		0.00180		10.23784
	0.00191	0.00190	0.00192	0.00196								
45 Dibromomethane	0.20494	0.22394	0.21853	0.22559	0.20583	0.21968		AVRG		0.21904		3.69491
	0.22906	0.22592	0.21825	0.21860								

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Report Date : 08-Mar-2001 09:35

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
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 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
46 1,2-Dichloropropane	0.25283	0.24219	0.23610	0.24022	0.21967	0.25064	AVRG		0.25087		6.57454
	0.27212	0.26265	0.26538	0.26711							
47 Trichloroethene	0.54593	0.55069	0.63335	0.60466	0.54177	0.59733	AVRG		0.59240		6.31855
	0.64924	0.62349	0.59480	0.58275							
48 n-Propyl Acetate	- +++++	0.39083	0.38298	0.36512	0.37771	0.40380	AVRG		0.39193		3.84296
	0.39293	0.40257	0.39633	0.41513							
49 Bromodichloromethane	0.54640	0.58868	0.65976	0.66204	0.60509	0.63671	AVRG		0.63088		6.78945
	0.69495	0.65942	0.63661	0.61916							
50 Ethyl methacrylate	0.17536	0.14919	0.14739	0.14612	0.14016	0.15906	AVRG		0.15641		6.70303
	0.15975	0.16128	0.16208	0.16367							

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Environmental Testing and Consulting, Inc.

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 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	ml	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
51 Methyl methacrylate	0.13962	0.12516	0.13152	0.12967	0.12716	0.14253	AVRG		0.13605		5.23068
	0.13721	0.14083	0.14119	0.14562							
52 2-Chloroethyl vinyl ether	0.10979	0.07908	0.09338	0.10797	0.10875	0.12379	AVRG		0.11239		14.33641
	0.12126	0.12531	0.12554	0.12906							
53 4-Methyl-2-Pentanone	+++++	+++++	0.23747	0.23118	0.22837	0.24875	AVRG		0.24207		3.94044
	0.24010	0.24932	0.24523	0.25615							
54 trans-1,3-Dichloropropene	0.48347	0.53898	0.56714	0.56350	0.52130	0.56981	AVRG		0.55956		6.41104
	0.60648	0.58639	0.58313	0.57536							
55 cis-1,3-Dichloropropene	0.51863	0.52873	0.55166	0.55035	0.52388	0.56352	AVRG		0.55385		4.52424
	0.60094	0.57122	0.56721	0.56240							

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 Cal Date : 08-Mar-2001 08:43 erica

Compound	0	500000	1.0000	5.0000	20 0000	50.0000	100.0000	Curve	b	Coefficients	m2	%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						or R^2
56 1,1,2-Trichloroethane	0.15573	0.14692	0.18726	0.18826	0.17777	0.19248		AVRG		0.18478		10.40625
58 Toluene	0.75204	0.84736	0.77310	0.74782	0.66606	0.77511		AVRG		0.78323		7.37606
59 1,3-Dichloropropane	0.42535	0.41532	0.42717	0.42021	0.38484	0.42933		AVRG		0.42439		3.94861
60 2-Hexanone	0.17409	0.17787	0.16945	0.17975	0.16248	0.17780		AVRG		0.17085		4.51251
61 Chlorodibromomethane	0.34778	0.38470	0.42303	0.42031	0.40298	0.42126		AVRG		0.41358		7.48027

6561421

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 Cal Date : 08-Mar-2001 08:43 erica

Compound	0 500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	VRSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1		
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
62 1,2-Dibromoethane	0.23787	0.23984	0.28068	0.29146	0.27823	0.29584	AVRG		0.28339		8.98808
	0.31227	0.30276	0.29982	0.29509							
63 Tetrachloroethene	++++	0.32475	0.36192	0.36682	0.32510	0.36679	AVRG		0.37287		9.53101
	0.43083	0.41346	0.39007	0.37605							
64 1,1,1,2-Tetrachloroethane	0.31910	0.46165	0.44041	0.43995	0.40256	0.40659	AVRG		0.41908		10.74327
	0.44551	0.41910	0.47410	0.38180							
66 Chlorobenzene	0.94977	1.09785	1.12457	1.02403	0.91949	0.95751	AVRG		1.01297		8.27768
	1.03739	0.99765	1.12657	0.89484							
67 Ethylbenzene	1.77716	1.90550	1.97169	1.80692	1.61830	1.75914	AVRG		1.81073		7.36405
	1.86699	1.80103	2.00132	1.59926							

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0 500000		1.0000		5.0000		20.0000		50.0000		100.0000		Curve		Coefficients		b		m1		m2		RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Level 13	Level 14	Level 15	Level 16	Level 17	Level 18	Level 19	Level 20	Level 21	Level 22	Level 23	Level 24
68 Xylene-mp	0 59297	0 75721	0 73459	0 65625	0 58697	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158	0 63158
69 cis-1,4-Dichloro-2-butene	0 13351	0 14977	0 14247	0 13114	0 13048	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381	0 13381
70 Bromoform	0 21300	0 27455	0 26691	0 25478	0 25347	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416	0 25416
71 Styrene	1 12338	1 15323	1 06264	1 01383	0 90957	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210	0 95210
72 Xylene-o	0 72200	0 72465	0 68083	0 61673	0 53726	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298	0 56298

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\CHEM\VOIC4.i\403071.B\403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.5000000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	120.0000	150.0000	170.0000	200.0000								
	Level 7	Level 8	Level 9	Level 10								
73 1,1,2,2-Tetrachloroethane	0.53386	0.59133	0.62503	0.60919	0.59959	0.67593	AVRG			0.64179		9.08964
	0.68365	0.70210	0.68638	0.71082								
74 1,2,3-Trichloropropane	0.10957	0.09362	0.11435	0.11504	0.10134	0.10087	AVRG			0.10322		8.16587
	0.09835	0.09623	0.11025	0.09262								
75 trans-1,4-Dichloro-2-butene	++++	0.07549	0.09177	0.08703	0.08641	0.09214	AVRG			0.08826		7.67673
	0.08726	0.08536	0.10100	0.08785								
76 Isopropylbenzene	++++	1.96505	2.07329	1.90451	1.67832	1.77134	AVRG			1.82535		9.16020
	1.85035	1.75421	1.91811	1.51297								
78 Bromobenzene	++++	0.49811	0.46695	0.42929	0.37573	0.38196	AVRG					11.94594
	0.40759	0.37860	0.42741	0.34100						0.41185		

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\VOCA.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RSR
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					or R^2
79 n-Propylbenzene	2.20011	2.24152	2.33230	2.15101	1.90558	2.04738	AVRG		2.10767		8.09409
	2.14451	2.03349	2.24794	1.77283							
80 2-Chlorotoluene	1.28766	1.46588	1.41413	1.39758	1.27850	1.24104	AVRG		1.30716		7.64227
	1.27604	1.26695	1.32757	1.11630							
81 4-Chlorotoluene	1.82658	1.75473	1.66942	1.59573	1.35920	1.45035	AVRG		1.53569		11.76617
	1.50142	1.40471	1.54691	1.24782							
82 1,3,5-Trimethylbenzene	2.18800	2.22020	2.18126	2.06791	1.76491	1.86139	AVRG		1.95353		11.15261
	1.92545	1.80456	1.97858	1.54305							
83 Pentachloroethane	0.54103	0.53242	0.64928	0.60251	0.57088	0.64422	AVRG		0.59125		8.04091
	0.63541	0.62882	0.58132	0.52657							

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000		1.0000		5.0000		20.0000		50.0000		100.0000		Curve		b		Coefficients		m2		%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Level 13	Level 14	Level 15	Level 16	Level 17	Level 18	Level 19	Level 20	Level 21	Level 22
84 tert-Butylbenzene	1.38511	1.43946	1.50194	1.57772	1.67900	1.79601	1.93601	2.10601	2.30601	2.53601	2.79601	3.08601	3.40601	3.75601	4.13601	4.54601	4.98601	5.45601	5.95601	6.48601	7.04601	7.63601
85 1,2,4-Trimethylbenzene	1.84747	1.75522	1.91909	1.51131	1.67901	1.77110	1.82107	1.88964	1.95514	2.02107	2.08964	2.15514	2.22107	2.28964	2.35514	2.42107	2.48964	2.55514	2.62107	2.68964	2.75514	2.82107
86 sec-Butylbenzene	2.18870	2.22020	2.18088	2.06976	1.76711	1.86395	1.93394	2.00199	2.07020	2.13870	2.20720	2.27566	2.34411	2.41256	2.48101	2.54946	2.61791	2.68636	2.75481	2.82326	2.89171	2.96016
87 1,3-Dichlorobenzene	2.01199	2.01060	1.93398	1.87461	1.66165	1.95394	2.04536	2.13678	2.22820	2.31961	2.41103	2.50245	2.59387	2.68529	2.77671	2.86813	2.95955	3.05097	3.14239	3.23381	3.32523	3.41665
88 4-Isopropyltoluene	1.55176	1.75764	1.78912	1.55331	1.39144	1.45454	1.51761	1.57946	1.64131	1.70316	1.76501	1.82686	1.88871	1.95056	2.01241	2.07426	2.13611	2.19796	2.25981	2.32166	2.38351	2.44536

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\CHEM\VOIC4.i\403071.B\403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m2	RRSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
90 1,4-Dichlorobenzene	2.12468	2.30595	2.15942	1.93886	1.62338	1.94436	AVRG		1.93534		11.84757
	2.05881	1.82348	1.71442	1.66007							
91 n-Butylbenzene	++++	3.71644	3.74220	3.63632	3.13069	3.88778	AVRG		3.67694		7.21215
	3.97560	3.91505	3.66897	3.41941							
92 1,2-Dichlorobenzene	1.70441	1.55809	1.63990	1.62547	1.41259	1.61746	AVRG		1.59392		5.90285
	1.69912	1.65760	1.56612	1.46845							
93 1,2-Dibromo-3-chloropropane	0.16919	0.24192	0.20053	0.17938	0.16258	0.17926	AVRG		0.18842		11.51857
	0.18656	0.19104	0.18931	0.18446							
94 1,2,4-Trichlorobenzene	1.18490	1.06233	0.96442	0.98584	0.82839	1.20092	AVRG				12.68074
	1.23716	1.24529	1.21047	1.12368					1.10434		

Report Date : 08-Mar-2001 09:35

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
120 0000	150.0000	170 0000	200 0000									
Level 7	Level 8	Level 9	Level 10									
95 Naphthalene	++++	2.25550	1.83146	1.81654	1.57206	2.09582						
	2.29391	2.32800	2.28195	2.13209			AVRG			2.06748		12.90600
96 Hexachlorobutadiene	0.72277	0.70477	0.72481	0.80502	0.65667	0.90222						
	0.94973	0.95473	0.92519	0.87780			AVRG			0.82237		13.73250
97 1,2,3-Trichlorobenzene	- 0.88688	0.85034	0.79575	0.78866	0.65805	0.95357						
	1.00879	1.01593	0.99646	0.94009			AVRG			0.88945		13.11065
\$ 34 Dibromofluoromethane	4.14201	4.08118	4.04390	3.79306	3.47373	4.00071						
	4.02489	4.00667	3.88784	4.01043			AVRG			3.94644		4.87511
\$ 37 1,2-Dichloroethane-d4	5.35701	5.18685	5.38415	4.93298	4.85235	5.38727						
	5.55354	5.36934	5.41103	5.58097			AVRG			5.30155		4.56085

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-MAR-2001 10:36
 End Cal Date : 06-MAR-2001 17:26
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\CHEM\voc4.i\V403071.B\V403061.8260.m
 Cal Date : 08-Mar-2001 08:43 erica

Compound	0.500000	1.0000	5.0000	20.0000	50.0000	100.0000	Curve	b	ml	m2	MSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	120.0000	150.0000	170.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
\$ 57 Toluene-d8	1.13575	1.06443	1.14234	1.00599	1.04314	1.16014	AVRG		1.15779		8.63002
	1.21916	1.31592	1.25084	1.24016							
\$ 77 Bromofluorobenzene	0.53702	0.49693	0.52329	0.39862	0.45307	0.46452	AVRG		0.47419		9.12520
	0.43751	0.47578	0.51191	0.44328							

Curve	Formula	Units
Averaged	Ant = Resp/ml	Response
Linear	Ant = b + Resp/ml	Response

6561430

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC/MS Semi-Volatiles**

000124

ENVIRONMENTAL TESTING & CONSULTING, INC

GC/MS BNA Sequence Check List (SW-846)

Sequence ID B2031601.bDate 3/16/01System ID BN42Analyst [Signature]

Applicable ETC Order Nos. for this sequence:

0102-7760103-2390103-298

Validated

1. DFTPP Daily 12-Hour Tune Meets Criteria. No analysis begins until criteria are met. (SOP) /2. Degradation/Peak Tailing Check (may be combined with DFTPP Tune): /a. DDT to DDE/DDD $\leq 20\%$ Benzidine/PCP - Normal Response with no visible peak tailing. /2. Initial Calibration Verification Criteria - Method : B2030901.ma. SPCC - Mean RF ≥ 0.050 /b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ /c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation /d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 /

3. Calibration Verification - Each 12-Hour Shift

a. SPCC - RF ≥ 0.050 /b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ /c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ /d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ /e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD /f. Internal Standards - Areas within (-50% to +100%) from Mid-Point ICAL STD /

3. Method Blanks included in this sequence :

Analyze for each analytical batch (20 samples): /

List compounds identified in Method Blank w/concentration.

Flag final result "B-Detected in Blank"

P06081CB

-----4. Matrix Spike/Matrix Spike Duplicates included in this sequence:-----

Analyze for each analytical batch (20 samples). List MS/MSD(s) performed with any failures : /0103-239-7MS/MSD

5. Laboratory Control Samples included in this sequence :

Must contain all Target Analytes.

P06081LC/MSD6. Surrogate Recoveries within QC Limits /7. All positive compounds within calibration range /

Narrative/Notes :

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	48.64		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	74.08		PASS
70	Less than 2% of mass 69	0.28	(0.37)	PASS
127	40 - 60% of mass 198	53.87		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.66		PASS
275	10 - 30% of mass 198	16.88		PASS
365	Greater than 1% of mass 198	1.33		PASS
441	Present, but less than mass 443	6.41	(75.11)	PASS
442	Greater than 40% of mass 198	42.55		PASS
443	17 - 23% of mass 442	8.54	(20.07)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7337278	5.000	PASS
Benzidine	1.2675159	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	224782			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	0	0.0	15.0	PASS
4,4-DDD + DDE	0	0.0	15.0	PASS

Tuning Sample, //ETCBDC/DD/chem/bna2.i/B2031601.B/0101001.D/0101001.D, *** PASSED **

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

6561433

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: 0101001

DFTPP Injection Date: 03/16/01

Instrument ID: BNA2

DFTPP Injection Time: 1035

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	48.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	74.1
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	40.0 - 60.0% of mass 198	53.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	16.9
365	Greater than 1.0% of mass 198	1.33
441	Present, but less than mass 443	6.4
442	Greater than 40.0% of mass 198	42.5
443	17.0 - 23.0% of mass 442	8.5 (20.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WS 50.0 NG/U		0201002	03/16/01	1051
02	P06081LB		1201012	03/16/01	1631
03	P06081LCS		1301013	03/16/01	1703
04	P06081LCSD		1401014	03/16/01	1736
05	0103-239-7		2101021	03/16/01	2121
06	0103-239-7MS		2301023	03/16/01	2225
07	0103-239-7MS		2401024	03/16/01	2257
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

6561434

FORM 7
BNA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: BNA2

Calibration Date: 03/16/01 Time: 1051

Lab File ID: 0201002

Init. Calib. Date(s): 03/09/01 03/09/01

Init. Calib. Times: 1547 2037

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	48.70	50.00	AVRG	2.6	20.0
2,4-Dinitrotoluene	43.86	50.00	AVRG	12.3	30.0
Hexachlorobenzene	50.69	50.00	AVRG	1.4	30.0
Hexachlorobutadiene	50.75	50.00	AVRG	1.5	20.0
Hexachloroethane	47.59	50.00	AVRG	4.8	30.0
2-Methylphenol	50.62	50.00	AVRG	1.2	30.0
3&4-Methylphenol	51.50	50.00	AVRG	3.0	30.0
Nitrobenzene	51.39	50.00	AVRG	2.8	30.0
Pentachlorophenol	52.19	50.00	AVRG	4.4	20.0
Pyridine	50.73	50.00	LINR	1.5	30.0
2,4,5-Trichlorophenol	51.02	50.00	AVRG	2.0	30.0
2,4,6-Trichlorophenol	51.76	50.00	AVRG	3.5	20.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	49.38	50.00	AVRG	1.2	30.0
2-Fluorobiphenyl	50.49	50.00	AVRG	1.0	30.0
Terphenyl-d14	64.00	50.00	AVRG	28.0	30.0
Phenol-d6	51.18	50.00	AVRG	2.4	30.0
2,4,6-Tribromophenol	51.16	50.00	AVRG	2.3	30.0
2-Fluorophenol	49.77	50.00	AVRG	0.4	30.0

FORM VII BNA-GCMS

000128

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

6561435

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID (Standard): 0201002

Date Analyzed: 03/16/01

Instrument ID: BNA2

Time Analyzed: 1051

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	379083	5.18	1515362	6.36	836016	8.78
UPPER LIMIT	758166	5.68	3030724	6.86	1672032	9.28
LOWER LIMIT	189542	4.68	757681	5.86	418008	8.28
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06081LB	366553	5.17	1482905	6.35	728658	8.76
02 P06081LCS	362856	5.17	1423520	6.36	786823	8.78
03 P06081LCSD	258874	5.17	1018111	6.35	552051	8.76
04 0103-239-7	306664	5.17	1184859	6.34	589330	8.76
05 0103-239-7MS	367767	5.17	1507964	6.34	831151	8.76
06 0103-239-7MS	356589	5.17	1489274	6.34	737100	8.76
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

6561436

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID (Standard): 0201002

Date Analyzed: 03/16/01

Instrument ID: BNA2

Time Analyzed: 1051

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	1247341	11.44	182426	16.60	59393	19.22
UPPER LIMIT	2494682	11.94	364852	17.10	118786	19.72
LOWER LIMIT	623671	10.94	91213	16.10	29697	18.72
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 P06081LB	1269121	11.42	575083*	16.59	173093*	19.21
02 P06081LCS	1819107	11.44	195923	16.59	122001*	19.22
03 P06081LCSD	1207078	11.44	176222	16.59	93162	19.21
04 0103-239-7	1147176	11.42	446115*	16.59	159365*	19.21
05 0103-239-7MS	1662450	11.42	484510*	16.59	145491*	19.20
06 0103-239-7MS	1445906	11.42	407177*	16.58	120905*	19.21
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

ENVIRONMENTAL TESTING & CONSULTING, INC

GC/MS BNA Sequence Check List (SW-846)

Sequence ID B2032001.bDate 3/20/01System ID BNA2Analyst PF

Applicable ETC Order Nos. for this sequence:

0103-269 0103-360 0103-301 0103-305
0103-344 0103-388 0103-304 0103-300
0103-298

Validated

1. DFTPP Daily 12-Hour Tune Meets Criteria. No analysis begins until criteria are met. (SOP) /2. Degradation/Peak Tailing Check (may be combined with DFTPP Tune): /a. DDT to DDE/DDD $\leq 20\%$ Benzidine/PCP - Normal Response with no visible peak tailing. /2. Initial Calibration Verification Criteria - Method : B2030901.ma. SPCC - Mean RF ≥ 0.050 /b. CCC - RSD of RF for CCCs and Target Analytes MUST BE $\leq 30\%$ /c. RSD of analytes $\leq 15\%$ may use Average RF for quantitation /d. Analytes w/RSD $> 15\%$ use Linear Regression - correlation coefficient ≥ 0.99 /

3. Calibration Verification - Each 12-Hour Shift

a. SPCC - RF ≥ 0.050 /b. CCC - % Difference for Average RF Calibration - $\leq 20\%$ /c. CCC - % Drift for Linear Regression Calibration - $\leq 20\%$ /d. % Difference/% Drift for all other Target Analytes - $\leq 30\%$ /e. Internal Standards - Retention Times within ± 30 seconds from Mid-Point ICAL STD /f. Internal Standards - Areas within (-50% to +100%) from Mid-Point ICAL STD /

3. Method Blanks included in this sequence :

Analyze for each analytical batch (20 samples): /

List compounds identified in Method Blank w/concentration.

Flag final result "B-Detected in Blank" P06078LB4. Matrix Spike/Matrix Spike Duplicates included in this sequence: NAAnalyze for each analytical batch (20 samples) . List MS/MSD(s) performed with any failures : NA5. Laboratory Control Samples included in this sequence : /Must contain all Target Analytes P06078LCS/D 6/1666. Surrogate Recoveries within QC Limits /7. All positive compounds within calibration range /

Narrative/Notes :

000131

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	54.19		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	79.25		PASS
70	Less than 2% of mass 69	0.41	(0.52)	PASS
127	40 - 60% of mass 198	55.87		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.82		PASS
275	10 - 30% of mass 198	16.23		PASS
365	Greater than 1% of mass 198	1.51		PASS
441	Present, but less than mass 443	6.47	(77.15)	PASS
442	Greater than 40% of mass 198	41.65		PASS
443	17 - 23% of mass 442	8.38	(20.13)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.0652850	5.000	PASS
Benzidine	1.9622642	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	153479			N/A
4,4-DDE	0	0.0	15.0	PASS
4,4-DDD	0	0.0	15.0	PASS
4,4-DDD + DDE	0	0.0	15.0	PASS

Tuning Sample, //ETCBDC/DD/chem/bna2.i/B2032001.B/0101001.D/0101001.D, *** PASSED **

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

6561439

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID: 0101001

DFTPP Injection Date: 03/20/01

Instrument ID: BNA2

DFTPP Injection Time: 1420

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	54.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	79.2
70	Less than 2.0% of mass 69	0.4 (0.5)1
127	40.0 - 60.0% of mass 198	55.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	16.2
365	Greater than 1.0% of mass 198	1.51
441	Present, but less than mass 443	6.5
442	Greater than 40.0% of mass 198	41.6
443	17.0 - 23.0% of mass 442	8.4 (20.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WS 50.0 NG/U		0201002	03/20/01	1437
02	0103-344-1		0901009	03/20/01	1818
03	0103-344-2		1001010	03/20/01	1850
04					
05					
06					
07					
08					
09					
10					
11					
12					
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14					
15					
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18					
19					
20					
21					
22					

6561440

FORM 7
BNA-GCMS CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: BNA2

Calibration Date: 03/20/01 Time: 1437

Lab File ID: 0201002

Init. Calib. Date(s): 03/09/01 03/09/01

Init. Calib. Times: 1547 2037

GC Column: DB-5MS ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL50 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	48.86	50.00	AVRG	2.3	20.0
2,4-Dinitrotoluene	48.42	50.00	AVRG	3.2	30.0
Hexachlorobenzene	49.32	50.00	AVRG	1.4	30.0
Hexachlorobutadiene	50.43	50.00	AVRG	0.9	20.0
Hexachloroethane	49.39	50.00	AVRG	1.2	30.0
2-Methylphenol	50.69	50.00	AVRG	1.4	30.0
3&4-Methylphenol	51.42	50.00	AVRG	2.8	30.0
Nitrobenzene	52.09	50.00	AVRG	4.2	30.0
Pentachlorophenol	51.37	50.00	AVRG	2.7	20.0
Pyridine	52.45	50.00	LINR	4.9	30.0
2,4,5-Trichlorophenol	51.54	50.00	AVRG	3.1	30.0
2,4,6-Trichlorophenol	54.56	50.00	AVRG	9.1	20.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	49.42	50.00	AVRG	1.2	30.0
2-Fluorobiphenyl	50.74	50.00	AVRG	1.5	30.0
Terphenyl-d14	58.37	50.00	AVRG	16.7	30.0
Phenol-d6	51.31	50.00	AVRG	2.6	30.0
2,4,6-Tribromophenol	50.40	50.00	AVRG	0.8	30.0
2-Fluorophenol	51.01	50.00	AVRG	2.0	30.0

FORM VII BNA-GCMS

000134

FORM 8
BNA-GCMS INTERNAL STANDARD AREA AND RT SUMMARY

6561441

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID (Standard): 0201002

Date Analyzed: 03/20/01

Instrument ID: BNA2

Time Analyzed: 1437

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	384671	5.12	1536097	6.29	828916	8.69
UPPER LIMIT	769342	5.62	3072194	6.79	1657832	9.19
LOWER LIMIT	192336	4.62	768049	5.79	414458	8.19
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 0103-344-1	481432	5.12	1838509	6.28	902469	8.68
02 0103-344-2	403719	5.12	1576161	6.28	749303	8.68
03						
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15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Lab File ID (Standard): 0201002

Date Analyzed: 03/20/01

Instrument ID: BNA2

Time Analyzed: 1437

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	=====	=====	=====	=====	=====	=====	=====
	12 HOUR STD	1366285	11.35	223372	16.49	87056	19.10
	UPPER LIMIT	2732570	11.85	446744	16.99	174112	19.60
	LOWER LIMIT	683143	10.85	111686	15.99	43528	18.60
	=====	=====	=====	=====	=====	=====	=====
	CLIENT SAMPLE NO.						
	=====	=====	=====	=====	=====	=====	=====
01	0103-344-1	1553877	11.33	646738*	16.49	178367*	19.10
02	0103-344-2	1350474	11.33	659090*	16.50	234517*	19.11
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

3/12/01 pf
md 3/12/01

Report Date : 12-Mar-2001 09:36

Page 1

QC REVIEWED

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

```

Start Cal Date      : 09-MAR-2001 15:47
End Cal Date       : 09-MAR-2001 20:37
Quant Method       : ISTD
Target Version     : 4.00
Integrator        : HP RTE
Method file       : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
Cal Date          : 12-Mar-2001 09:11 target3

```

Calibration File Names:

Level	1:	2:	3:	4:	5:	6:	7:	8:	9:
Level 1:	ETCBDC/DD/chem/bna2.i/B2030901.B/0301004.D	ETCBDC/DD/chem/bna2.i/B2030901.B/0401005.D	ETCBDC/DD/chem/bna2.i/B2030901.B/0501006.D	ETCBDC/DD/chem/bna2.i/B2030901.B/0601007.D	ETCBDC/DD/chem/bna2.i/B2030901.B/0201002.D	ETCBDC/DD/chem/bna2.i/B2030901.B/0701008.D	ETCBDC/DD/chem/bna2.i/B2030901.B/0801009.D	ETCBDC/DD/chem/bna2.i/B2030901.B/0901010.D	ETCBDC/DD/chem/bna2.i/B2030901.B/1001011.D

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	\$RSD or R^2
1 N-Nitrosodimethylamine	6361	24881	77320	181648	443402	733081					
	828962	1192700	1609037				LINEAR	0.05474	1.16947		0.99964

000137

6561443

Report Date : 12-Mar-2001 09:24

Page 2

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
2 Pyridine	8927 1272713	46988 ++++	130836 ++++	329719	634981	1127399	LINR	0.02314	1.73078		0.99746
3 Methyl methanesulfonate	1.25525 1.38865	1.22819 1.42913	1.36590 1.35167	1.42627	1.41509	1.42007	AVRG		1.36458		5.49659
5 N-Nitrosodiethylamine	0.66952 0.73789	0.71471 0.75886	0.76984 0.73450	0.73698	0.76046	0.71103	AVRG		0.73264		4.22556
6 Ethyl methanesulfonate	1.43097 1.53159	1.42209 1.50932	1.52224 1.53698	1.56337	1.56054	1.52221	AVRG		1.52215		3.98298
8 Phenol	1.86017 2.02323	1.82411 2.12764	1.97387 2.08192	1.98225	2.07999	2.01310	AVRG		1.99625		5.05531

000138

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5 0000 Level 2	10 0000 Level 3	20 0000 Level 4	50 0000 Level 5	80 0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
9 Aniline	100 0000 Level 7	120 0000 Level 8	160 0000 Level 9								
	2.07722 2.05408	2.02779 2.16785	2.08778 2.15670	2.13700	2.18872	2 05335	AVRG		2.10561		2.75617
10 Bis(2-chloroethyl)ether	1.69316 1.54198	1 55327 1 66864	1.62483 1 51418	1.63030	1.57430	1.51638	AVRG		1.59078		4 14173
11 2-Chlorophenol	1 53264 1.45425	1.50746 1.51855	1 48432 1 45963	1.53473	1.49391	1.45680	AVRG				
12 1,3-Dichlorobenzene	1.63863 1.52995	1 51318 1.58812	1.58793 1.49186	1.64153	1 57760	1.49829	AVRG		1.49359		2 14014
14 1,4-Dichlorobenzene ccc	1.61648 1 52869	1 56239 1.57308	1.56378 1.49555	1.62815	1.56726	1.50920	AVRG		1.56052		2.84599

Report Date : 12-Mar-2001 09:24

Page 4

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
15 Benzyl alcohol	0.67225	0.73186	0.84001	0.84792	0.97485	0.86478	AVRG		0.84799		11.09622
16 1,2-Dichlorobenzene	1.52307	1.42856	1.45130	1.51253	1.44024	1.36440	AVRG		1.45104		3.28622
17 2-Methylphenol	1.10697	1.03855	1.12576	1.11944	1.14144	1.10866	AVRG		1.11292		3.60977
18 Bis(2-chloroisopropyl) ether	2.22783	2.16864	2.26356	2.29458	2.13521	2.06836	AVRG		2.16596		3.84985
19 3,4-Methylphenol	1.24359	1.22463	1.23941	1.23281	1.38452	1.24923	AVRG		1.28603		5.21527

200140

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5.0000 Level 2	10.0000 Level 3	20 0000 Level 4	50 0000 Level 5	80 0000 Level 6	Curve	b	Coefficients ml	m2	SRSD or R^2
20 Acetophenone	0.51799 0.49631	0.52246 0.52075	0.54576 0.50196	0.53600	0.51454	0.48885	AVRG		0.51607		3.54537
21 N-Nitrosodi-n-propylamine SAC	0.31084 0.28177	0.28834 0.30126	0.30431 0.27275	0.30526	0.29137	0.28277	AVRG		0.29319		4.39692
22 Hexachloroethane	0.20157 0.18177	0.21055 0.18950	0.20854 0.17946	0.21963	0.18067	0.18959	AVRG		0.19570		7.56241
24 Nitrobenzene	0.46225 0.43881	0.44513 0.45578	0.47661 0.44102	0.48634	0.44588	0.44141	AVRG		0.45480		3.74783
25 Isophorone	0.80386 0.83924	0.81224 0.91917	0.84638 0.86091	0.86548	0.90698	0.80524	AVRG		0.85106		4.92711

000141

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
26 2-Nitrophenol ccc	0.20914 0.21510	0.20689 0.23121	0.21376 0.22802	0.22864	0.22626	0.21686	AVRG		0.21954		4.15159
27 2,4-Dimethyphenol	0.40540 0.37965	0.38954 0.41570	0.39601 0.39715	0.41283	0.40555	0.38629	AVRG		0.39868		3.06007
28 Bis(2-chloroethoxy)methane	0.45038 0.43703	0.45742 0.47921	0.47829 0.44503	0.47108	0.45862	0.43489	AVRG		0.45688		3.64842
29 Benzoic acid	6977 885048	23202 1499274	64280 1941640	163131	542676	775733	LINR	0.12655	0.35440		0.99031
30 2,4-Dichlorophenol ccc	0.28361 0.26916	0.28095 0.29865	0.28294 0.28627	0.28501	0.29352	0.27181	AVRG		0.28355		3.27197

000142

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	SRSD or R^2
31 1,2,4-Trichlorobenzene	0.29657 0.27177	0.29805 0.28113	0.30008 0.26637	0.30738	0.28472	0.27225	AVRG		0.28648		5.10641
33 Naphthalene	1.01792 0.92848	0.99995 0.98542	1.02625 0.92568	1.02568	0.98067	0.92621	AVRG		0.97958		4.35934
34 4-Chloroaniline	-0.43631 0.40605	0.39207 0.47093	0.41249 0.44948	0.42327	0.44683	0.39908	AVRG		0.42628		6.19171
35 2,6-Dichlorophenol	0.26556 0.26380	0.26738 0.29737	0.28070 0.28682	0.28136	0.29426	0.26622	AVRG		0.27827		4.61554
36 Hexachlorobutadiene ACC	0.16460 0.14632	0.16762 0.14758	0.16468 0.13860	0.17176	0.15368	0.14956	AVRG		0.15604		7.33221

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
37 N-Nitrosodibutylamine	0.27883 0.30583	0.28057 0.31889	0.28629 0.30832	0.30338	0.33559	0.28230	AVRG		0.30000		6.52459
38 4-Chloro-3-methylphenol ccc	0.32653 0.35285	0.32641 0.41150	0.33628 0.38840	0.35827	0.39438	0.34776	AVRG		0.36026		8.58624
39 2-Methylnaphthalene	0.64549 0.62663	0.63438 0.71991	0.66145 0.67831	0.66285	0.70278	0.62468	AVRG		0.66183		5.05749
40 Hexachlorocyclopentadiene SPCC	0.32618 0.31126	0.30242 0.32277	0.36001 0.30655	0.34760	0.32225	0.32633	AVRG		0.32504		5.74645
41 1,2,4,5-Tetrachlorobenzene	0.55117 0.47144	0.51760 0.49203	0.54098 0.47226	0.53878	0.50591	0.47653	AVRG		0.50741		6.17430

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Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	BRSD or R ²
42 2,4,6-Trichlorophenol <i>ccc</i>	0.36057 0.37233	0.34451 0.39874	0.37961 0.37985	0.38306	0.38580	0.36990	AVRG		0.37493		4.17559
43 2,4,5-Trichlorophenol	0.40749 0.39274	0.37273 0.40317	0.41436 0.37870	0.39500	0.41331	0.39447	AVRG		0.39688		3.63784
45 2-Chloronaphthalene	1.14537 1.00507	1.05961 1.07286	1.12685 1.04612	1.07906	1.05854	1.01662	AVRG		1.06779		4.29610
46 2-Nitroaniline	0.45383 0.51165	0.45232 0.52580	0.49731 0.49236	0.53727	0.50866	0.54020	AVRG		0.50214		6.41915
47 Dimethyl phthalate	1.47560 1.44529	1.46608 1.40997	1.49647 1.33926	1.60459	1.47215	1.46956	AVRG		1.46433		4.82193

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\bn2.1\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	RSD or R^2
48 2,6-Dinitrotoluene	0.30241 0.35119	0.33351 0.33128	0.34174 0.31251	0.38168	0.35465	0.36705	AVRG		0.34178		7.36525
49 Acenaphthylene	1.84408 1.71661	1.81164 1.79730	1.87057 1.75388	1.87539	1.81490	1.73202	AVRG		1.80182		3.20296
50 3-Nitroaniline	0.39032 0.41945	0.41682 0.38986	0.43643 0.33502	0.48214	0.42312	0.46950	AVRG		0.41807		10.55567
52 Acenaphthene pec	1.11701 1.03784	1.07638 1.12254	1.10808 1.06516	1.12004	1.10214	1.03029	AVRG		1.08661		3.27805
53 2,4-Dinitrophenol spec	3680 423322	12811 ++++	30451 ++++	85849	253603	386082	LINR	0.04345	0.26235		0.99239

*PF = 0.210

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5 0000 Level 2	10.0000 Level 3	20 0000 Level 4	50 0000 Level 5	80 0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
54 4-Nitrophenol <i>spec</i>	0.28624 0.31218	0.35649 ++++	0.39351 ++++	0.43491	0.33971	0.37226	AVRG		0.35647		14 00270
55 Dibenzofuran	1.60759 1.53787	1.59993 1.64209	1.61112 1.53420	1.67063	1.60095	1.57063	AVRG		1.59722		2.79348
56 2,4-Dinitrotoluene	0.41230 0.42219	0.44622 0.34555	0.49216 ++++	0.54006	0.43067	0.47328	AVRG		0.44531		13 07918
57 2,3,4,6-Tetrachlorophenol	0.25102 0.30086	0.28101 0.29275	0.29213 0.26935	0.33190	0.30529	0.32304	AVRG		0.29415		8.56897
58 Diethyl phthalate	1.58980 1.51019	1.66322 1.34957	1.64078 1.22584	1.79512	1.51844	1.63461	AVRG		1.54751		11 13791

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000		5. 0000		10. 0000		20. 0000		50. 0000		80. 0000		Curve	b	Coefficients		m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12			m1			
59 Fluorene	1.31554	1.35263	1.34247	1.42508	1.32337	1 29885							AVRG		1.30775			5 27790
60 4-Chlorophenyl phenyl ether	0.65378	0.61391	0.64693	0 65788	0 63648	0.60336							AVRG		0 61736			5 46791
61 4-Nitroaniline	0.37652	0.42169	0.46942	0.48941	0.35607	0.39786							AVRG		0 40499			14.73955
62 4,6-Dinitro-2-methylphenol	0.10015	0.12605	0.15482	0.16617	0 16535	0.15663							AVRG		0.14541			14 48703
63 N-Nitrosodiphenylamine	0.49210	0.49393	0.49571	0.53685	0 57871	0.52127							AVRG		0 55965			13 35342
ccc	0.55717	0 67299	0.68810															

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	RSD or R ²
64 1,2-Diphenylhydrazine/Azobenzene	1.01357 1.07512	0.96487 1.38537	0.98513 ++++	1.01726	1.12217	0.98296	AVRG		1.06831		12.95029
66 Phenacetin	25882 726668	67323 709514	137207 764041	306522	540972	742813	QUAD	0.08343	0.60926	5.38297	0.99826
67 4-Bromophenyl phenyl ether	-0.18024 0.19027	0.16585 0.23538	0.16982 0.23885	0.17805	0.20079	0.17696	AVRG		0.19291		14.05952
68 Hexachlorobenzene	0.20611 0.19797	0.19359 0.22312	0.19394 0.22318	0.19803	0.20905	0.18645	AVRG		0.20349		6.38412
69 Pentachlorophenol ACC	++++ 0.14218	0.13260 0.15103	0.14816 0.13838	0.15690	0.15525	0.14850	AVRG		0.14663		5.70418

Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
70 Pentachloronitrobenzene	100.0000 Level 7	120.0000 Level 8	160.0000 Level 9								
	0.07823	0.08242	0.08687	0.08797	0.08193	0.07318	AVRG		0.07819		9.05800
	0.07224	0.07347	0.06743								
72 Phenanthrene	1.03031	0.98673	1.01114	1.00811	0.95216	0.91361	AVRG		0.96548		4.88050
	0.90063	0.96728	0.91934								
73 Anthracene	0.99795	1.00117	1.02299	1.00802	0.95045	0.89649	AVRG		0.95104		6.15341
	0.87992	0.92629	0.87611								
74 Carbazole	63729	149172	293231	640521	1212788	1703561	QUAD	0.00825	0.90988	0.49775	0.99908
	1738862	1818544	1970778								
75 Di-n-butyl phthalate	93789	228705	451819	996495	1864067	2741429	QUAD	0.02645	0.52093	0.22969	0.99913
	2729503	2756159	3051271								

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients ml	m2	SRSD or R^2
76 Fluoranthene <i>ccc</i>	70123 1419274	158237 ++++	320968 ++++	622666	1100842	1465054	QUAD	0.05915	0.23236	0.00290	0.99947
77 Benzidine	0.67586 0.61815	0.72453 0.62301	0.84483 0.54513	0.86789	0.69266	0.68601	AVRG		0.69756		14.96302
78 Pyrene	68766 1258348	152548 1331750	309659 ++++	583445	993699	1289206	LNLR	0.00516	3.27906		0.99637
80 Chlorobenzilate	++++ 0.60221	0.46077 0.58247	0.56946 0.53681	0.65238	0.69181	0.59992	AVRG		0.58698		11.94968
81 3,3-Dimethylbenzidine	0.60466 0.46243	0.58637 0.48864	0.64566 0.46265	0.59621	0.46859	0.46703	AVRG		0.53136		14.12169

* %SRSD = 22.8

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bn2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5.0000 Level 2	10 0000 Level 3	20.0000 Level 4	50 0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
82 Butyl benzyl phthalate	0.99023 0.96022	1.00037 0.97868	1.13384 0.93320	1.16673	1.07564	0.96421	AVRG		1.02257		8 08824
83 Benz(a)Anthracene	1.23720 1.12450	1.14644 1.17890	1.19663 1.13887	1.20704	1.13965	1.12166	AVRG		1.16565		3.50561
85 3,3'-Dichlorobenzidine	0.26994 0.33411	0.28021 0.37419	0.29114 0.36947	0.30584	0.30107	0.32691	AVRG		0.31699		11.71389
86 Chrysene	1.09669 0.99203	0.99177 1.05760	1.06713 1.03854	1.04422	1.02228	0.98301	AVRG		1.03259		3.74654
87 Bis(2-ethylhexyl)phthalate	++++ 1.17570	1.41379 1.19322	1.33613 1.16725	1.45248	1.20628	1.19053	AVRG		1.26692		9.14646

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCBDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
88 Di-n-octyl phthalate ccc	39610 574165	87214 695249	156904 848433	233348	365094	571794	LINR	-0.13551	2.90042		0.99438
89 Benzo(b)fluoranthene	1.94579 1.51167	1.68127 1.58961	1.88498 1.54967	1.75464	1.63520	1.47810	AVRG		1.67010		9.78421
90 Benzo(k)fluoranthene	1.75581 1.45630	1.77072 1.51172	1.85447 1.47323	1.77364	1.72150	1.52387	AVRG		1.64903		9.38881
91 Benzo(a)pyrene ccc	1.34280 1.36662	1.32984 1.44374	1.43246 1.40687	1.44341	1.46908	1.37058	AVRG		1.40060		3.55578
93 Indeno(1,2,3-cd)pyrene	7817 246088	18246 304068	30547 388747	55909	124269	226686	QUAD	0.04741	0.81781	-0.01664	0.99959

* %RSD = 17.4

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2.0000 Level 1	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	50.0000 Level 5	80.0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
94 Dibenz(a,h)anthracene	7413 228639	16279 282572	27650 359818	53262	112123	212973	QUAD	0.05028	0.87722	-0.01843	0.99976
95 Benzo(ghi)perylene	8328 248996	17675 314012	29861 390147	56140	128829	232054	QUAD	0.05623	0.78443	-0.01178	0.99914
\$ 4 2-Fluorophenol	1.32538 1.39784	1.36664 1.52633	1.40618 1.41847	1.47635	1.42857	1.35938	AVRG		1.41168		4.34445
\$ 7 Phenol-d6	1.72993 1.81245	1.74586 1.90478	1.86437 1.81437	1.85501	1.86726	1.74679	AVRG		1.81565		3.45607
\$ 23 Nitrobenzene-d5	0.47135 0.45616	0.46106 0.48201	0.49416 0.44423	0.50535	0.45646	0.45527	AVRG		0.46956		4.33421

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Report Date : 12-Mar-2001 09:24

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Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETCDBC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Compound	2 0000 Level 1	5.0000 Level 2	10 0000 Level 3	20 0000 Level 4	50.0000 Level 5	80 0000 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100.0000	120.0000	160.0000								
	Level 7	Level 8	Level 9								
\$ 44 2-Fluorobiphenyl	1 24036 1.07321	1.14270 1.12956	1.26591 1.06900	1.19944	1.12519	1 07023	AVRG		1.14618		6.45708
\$ 65 2,4,6-Tribromophenol	0.10764 0.11345	0.09325 0.13368	0.09782 0.13168	0 11032	0.12103	0.10945	AVRG		0 11315		12 14292
\$ 79 Terphenyl-d14	1.18083 1.66665	1.24640 1.58492	1 41862 1 41248	1 74102	1 72051	1.63547	AVRG		1.51188		13.62066

Environmental Testing and Consulting, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAR-2001 15:47
 End Cal Date : 09-MAR-2001 20:37
 Quant Method : ISTD
 Target Version : 4.00
 Integrator : HP RTE
 Method file : \\ETC\BDC\DD\chem\bna2.i\B2030901.B\B2030901.M
 Cal Date : 12-Mar-2001 09:11 target3

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Pesticides**

6561464

ENVIRONMENTAL TESTING & CONSULTING, INC

GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: P303201 System ID: 3 Date: 3/20/01 Analyst: LB

Column ID: Primary / Confirmation Column Description: RTKCLPZ Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0103239 0103403
0103344

- Initial Calibration P3032001A.m
RSD of analytes $\leq 20\%$ may use average RF.
RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)
- Endrin/DDT Breakdown – Breakdown for each should not exceed 15%.
- Calibration Verification – Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/ File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptachlor	Hept Epoxide	Methoxychlor	DCB	TMX	Average
1A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	4.1
1B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	4.6
2A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	200	/	/	/	/	/	/	/	4.6
2B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	170	160	/	/	/	/	/	/	6.0
3A																								
3B																								

- Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank			
P08025LB			
P08025LBZ DCBP high			

- Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD			
P08025LCS OK			

- Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103239-7MS,MSD OK

- Notes

\\SERVER\ETC_SOP\Organics\gcsvol\PestPCBHerbs\8081\GC Pesticides 8081A Check List 032900.doc

000158

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3A

Calibration Date: 03/20/01 Time: 2200

Lab File ID: P303201A-21R Init. Calib. Date(s): 03/20/01 03/20/01

Init. Calib. Times: 1344 1657

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0202	0.0200	AVRG	1.0	15.0
alpha-BHC	0.0203	0.0200	AVRG	1.5	15.0
beta-BHC	0.0210	0.0200	AVRG	5.0	15.0
delta-BHC	0.0202	0.0200	AVRG	1.0	15.0
gamma-BHC (Lindane)	0.0200	0.0200	AVRG	0.0	15.0
alpha-chlordane	0.0202	0.0200	AVRG	1.0	15.0
gamma-chlordane	0.0200	0.0200	AVRG	0.0	15.0
Chlorpyrifos	0.0165	0.0200	LINR	17.5	15.0
4,4'-DDD	0.0204	0.0200	AVRG	2.0	15.0
4,4'-DDE	0.0206	0.0200	AVRG	3.0	15.0
4,4'-DDT	0.0200	0.0200	AVRG	0.0	15.0
Dieldrin	0.0210	0.0200	AVRG	5.0	15.0
Endosulfan I	0.0195	0.0200	AVRG	2.5	15.0
Endosulfan II	0.0205	0.0200	AVRG	2.5	15.0
Endosulfan sulfate	0.0206	0.0200	AVRG	3.0	15.0
Endrin	0.0175	0.0200	AVRG	12.5	15.0
Endrin aldehyde	0.0219	0.0200	AVRG	9.5	15.0
Endrin ketone	0.0220	0.0200	AVRG	10.0	15.0
Heptachlor	0.0184	0.0200	AVRG	8.0	15.0
Heptachlor epoxide	0.0204	0.0200	AVRG	2.0	15.0
Methoxychlor	0.0212	0.0200	AVRG	6.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0199	0.0200	AVRG	0.5	15.0
Tetrachloro-m-xylene	0.0202	0.0200	AVRG	1.0	15.0

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PESTICIDE CONTINUING CALIBRATION CHECK

6561466

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3A

Calibration Date: 03/21/01

Time: 0616

Lab File ID: P303201A-39R

Init. Calib. Date(s): 03/20/01 03/20/01

Init. Calib. Times: 1344

1657

GC Column: RTX-CLP2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0205	0.0200	AVRG	2.5	15.0
alpha-BHC	0.0204	0.0200	AVRG	2.0	15.0
beta-BHC	0.0209	0.0200	AVRG	4.5	15.0
delta-BHC	0.0204	0.0200	AVRG	2.0	15.0
gamma-BHC (Lindane)	0.0207	0.0200	AVRG	3.5	15.0
alpha-chlordane	0.0205	0.0200	AVRG	2.5	15.0
gamma-chlordane	0.0204	0.0200	AVRG	2.0	15.0
Chlorpyrifos	0.0173	0.0200	LINR	13.5	15.0
4,4'-DDD	0.0210	0.0200	AVRG	5.0	15.0
4,4'-DDE	0.0210	0.0200	AVRG	5.0	15.0
4,4'-DDT	0.0205	0.0200	AVRG	2.5	15.0
Dieldrin	0.0214	0.0200	AVRG	7.0	15.0
Endosulfan I	0.0204	0.0200	AVRG	2.0	15.0
Endosulfan II	0.0206	0.0200	AVRG	3.0	15.0
Endosulfan sulfate	0.0210	0.0200	AVRG	5.0	15.0
Endrin	0.0166	0.0200	AVRG	17.0	15.0 <-
Endrin aldehyde	0.0232	0.0200	AVRG	16.0	15.0 <-
Endrin ketone	0.0230	0.0200	AVRG	15.0	15.0
Heptachlor	0.0218	0.0200	AVRG	9.0	15.0
Heptachlor epoxide	0.0209	0.0200	AVRG	4.5	15.0
Methoxychlor	0.0219	0.0200	AVRG	9.5	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0210	0.0200	AVRG	5.0	15.0
Tetrachloro-m-xylene	0.0204	0.0200	AVRG	2.0	15.0

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561467

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3A

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1344 1847

LAB FILE ID: RF0.0004: P303201A RF0.004: P303201A-RF0.01: P303201A-1
RF0.02: P303201A-0 RF0.03: P303201A-0

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		16911500	13758000	15066650	14466233
alpha-BHC		544250.00	468500.00	532250.00	522633.33
beta-BHC		256500.00	200900.00	225150.00	209500.00
delta-BHC		16735750	13955800	16021150	15510033
gamma-BHC (Lindane)		522250.00	445300.00	497100.00	486400.00
alpha-chlordane		15885250	12937500	13983600	13395167
gamma-chlordane		16135250	13031600	14182250	13611267
Chlordane			16605.000		
(2)			23185.000		
(3)			18750.000		
(4)			46830.000		
(5)			40030.000		
Chlorpyrifos		223250.00	173100.00	136150.00	149833.33
4,4'-DDD		11853500	9426500.0	10460450	9999900.0
4,4'-DDE		15342500	12494500	13575600	12961500
4,4'-DDT		388250.00	324500.00	345200.00	335233.33
Dieldrin		15323000	12437200	13983300	13043367
Endosulfan I		438750.00	365800.00	395650.00	395100.00
Endosulfan II		427500.00	347200.00	382300.00	365166.67
Endosulfan sulfate		14626750	11430700	12225450	11681800
Endrin		14403750	11480700	12636500	12043500
Endrin aldehyde		323500.00	266500.00	289150.00	269866.67
Endrin ketone		456750.00	377600.00	414950.00	383266.67
Heptachlor		443000.00	362400.00	394950.00	369200.00
Heptachlor epoxide		464000.00	384900.00	424150.00	399133.33
Methoxychlor		230000.00	174800.00	189800.00	178500.00
Toxaphene			13266.000		
(2)			12713.000		
(3)			9849.000		
(4)			8962.000		
(5)			15011.000		
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		387000.00	295200.00	302450.00	296966.67
Tetrachloro-m-xylene		335000.00	268600.00	283650.00	270133.33

FORM VI PESTICIDE

000161

6561468

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3A

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1344 1847

LAB FILE ID: RF0.04: P303201A-ORF0.06: P303201A-ORF0.4: P303201A-10

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	13809350	13240050	14638170
alpha-BHC	505950.00	496333.33	605727.50
beta-BHC	196125.00	189283.33	202022.50
delta-BHC	14966075	14574150	17453668
gamma-BHC (Lindane)	470150.00	455600.00	553900.00
alpha-chlordane	12679175	12096900	13506263
gamma-chlordane	12951650	12415400	14173155
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	143025.00	144000.00	125067.50
4,4'-DDD	9539500.0	9122216.7	10148978
4,4'-DDE	12180725	11651150	12175228
4,4'-DDT	319025.00	307116.67	339305.00
Dieldrin	12440450	11944800	13087170
Endosulfan I	363800.00	358883.33	418515.00
Endosulfan II	338775.00	325466.67	333897.50
Endosulfan sulfate	11080500	10379650	11049675
Endrin	11431900	10820433	11515773
Endrin aldehyde	260425.00	247500.00	252070.00
Endrin ketone	367550.00	344633.33	347775.00
Heptachlor	349700.00	335150.00	380542.50
Heptachlor epoxide	384925.00	361100.00	387102.50
Methoxychlor	168250.00	146650.00	142367.50
Toxaphene			
(2)			
(3)			
(4)			
(5)			
=====	=====	=====	=====
Decachlorobiphenyl	283500.00	262433.33	285212.50
Tetrachloro-m-xylene	259375.00	246116.67	278097.50

FORM VI PESTICIDE

000162

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561469

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3A

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP2 ID: 0.32 (mm)

Calibration Time(s): 1344 1847

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
=====				
Aldrin	AVRG		14555707.6	8.3
alpha-BHC	AVRG		525092.024	8.3
beta-BHC	AVRG		211354.405	10.8
delta-BHC	AVRG		15602375.1	7.9
gamma-BHC (Lindane)	AVRG		490100.000	7.8
alpha-chlordane	AVRG		13497693.5	9.0
gamma-chlordane	AVRG		13785796.0	8.9
Chlordane	LINR	0.00000000	6.022e-005	1.000
(2)	LINR	0.00000000	4.313e-005	1.000
(3)	LINR	0.00000000	5.333e-005	1.000
(4)	LINR	0.00000000	2.135e-005	1.000
(5)	LINR	0.00000000	2.498e-005	1.000
Chlorpyrifos	LINR	-5.14e-003	8.082e-006	1.000
4,4'-DDD	AVRG		10078720.6	9.0
4,4'-DDE	AVRG		12911600.4	9.6
4,4'-DDT	AVRG		336947.143	7.7
Dieldrin	AVRG		13179898.1	8.7
Endosulfan I	AVRG		390928.333	7.7
Endosulfan II	AVRG		360043.690	9.9
Endosulfan sulfate	AVRG		11782075.0	11.7
Endrin	AVRG		12047508.0	9.8
Endrin aldehyde	AVRG		272715.952	9.6
Endrin ketone	AVRG		384646.429	10.3
Heptachlor	AVRG		376420.357	9.4
Heptachlor epoxide	AVRG		400758.690	8.4
Methoxychlor	AVRG		175766.786	16.7
Toxaphene	LINR	0.00000000	7.538e-005	1.000
(2)	LINR	0.00000000	7.866e-005	1.000
(3)	LINR	0.00000000	1.015e-004	1.000
(4)	LINR	0.00000000	1.116e-004	1.000
(5)	LINR	0.00000000	6.662e-005	1.000
=====				
Decachlorobiphenyl	AVRG		301823.214	13.2
Tetrachloro-m-xylene	AVRG		277281.786	10.2

FORM VI PESTICIDE

000163

6561470

ENVIRONMENTAL TESTING & CONSULTING, INC

GC Pesticides Method 8081A Sequence Check List (SW-846)

Sequence ID: P320 P303201 System ID: 3 Date: 3/20/01 Analyst: KC

Column ID: Primary / Confirmation Column Description: RTCLP Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0103239 0103403
0103344

1. Initial Calibration P3032001b.m
RSD of analytes $\leq 20\%$ may use average RF.
RSD of analytes $> 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)

2. Endrin/DDT Breakdown – Breakdown for each should not exceed 15%.

3. Calibration Verification – 215 Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	Alpha-chlor	Gamma-chlor	Chlorpyrifos	4,4'-DDD	4,4'-DDE	4,4'-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sul	Endrin	Endrin Ald	Endrin Ket	Heptach, or	Hept Epoxide	Methoxychlor	DCB	TMX	Average
1A	/	/	/	/	/	/	/	17.5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	4.3
1B	/	/	/	/	/	/	/	16.5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	6.2
2A	6.5	/	/	/	/	/	/	16.0	/	/	/	/	/	/	/	/	/	/	15.5	/	/	/	/	6.5
2B	/	/	/	/	/	/	/	11.0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	6.1
3A																								
3B																								

4. Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank			
P08025LB OK			
P08025LB2 DCBP high			

5. Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD			
P08025LCS OK			

6. Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103239 - TMS, MSD 0 to RPD out for gamma chlordane

7. Notes

\\SERVER\ETC_SOP\Organics\gcsvo\PEstPCBHerbs\8081\GC Pesticides 8081A Check List 032900.doc

000164

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

6561471

Lab Name: ETC, INC.,

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3B

Calibration Date: 03/20/01 Time: 2200

Lab File ID: P303201B-21R

Init. Calib. Date(s): 03/20/01 03/20/01

Init. Calib. Times: 1344 1657

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
Aldrin	0.0180	0.0200	AVRG	10.0	15.0
alpha-BHC	0.0188	0.0200	2ORDR	6.0	15.0
Endosulfan I	0.0191	0.0200	AVRG	4.5	15.0
beta-BHC	0.0192	0.0200	AVRG	4.0	15.0
delta-BHC	0.0190	0.0200	2ORDR	5.0	15.0
gamma-BHC (Lindane)	0.0189	0.0200	2ORDR	5.5	15.0
alpha-chlordane	0.0189	0.0200	AVRG	5.5	15.0
gamma-chlordane	0.0189	0.0200	AVRG	5.5	15.0
Chlorpyrifos	0.0165	0.0200	AVRG	17.5	15.0
4,4'-DDD	0.0188	0.0200	AVRG	6.0	15.0
4,4'-DDE	0.0186	0.0200	AVRG	7.0	15.0
4,4'-DDT	0.0197	0.0200	AVRG	1.5	15.0
Dieldrin	0.0196	0.0200	AVRG	2.0	15.0
Endosulfan II	0.0199	0.0200	AVRG	0.5	15.0
Endosulfan sulfate	0.0202	0.0200	AVRG	1.0	15.0
Endrin	0.0193	0.0200	AVRG	3.5	15.0
Endrin aldehyde	0.0203	0.0200	AVRG	1.5	15.0
Endrin ketone	0.0200	0.0200	AVRG	0.0	15.0
Heptachlor	0.0185	0.0200	AVRG	7.5	15.0
Heptachlor epoxide	0.0189	0.0200	AVRG	5.5	15.0
Methoxychlor	0.0206	0.0200	AVRG	3.0	15.0
Decachlorobiphenyl	0.0203	0.0200	AVRG	1.5	15.0
Tetrachloro-m-xylene	0.0186	0.0200	AVRG	7.0	15.0

<-

FORM VII PESTICIDE

000165

6561472

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3B

Calibration Date: 03/21/01

Time: 0616

Lab File ID: P303201B-39R

Init. Calib. Date(s): 03/20/01

03/20/01

Init. Calib. Times: 1344

1657

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	0.02 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
Aldrin	0.0177	0.0200	AVRG	11.5	15.0
alpha-BHC	0.0187	0.0200	2ORDR	6.5	15.0
Endosulfan I	0.0187	0.0200	AVRG	6.5	15.0
beta-BHC	0.0188	0.0200	AVRG	6.0	15.0
delta-BHC	0.0186	0.0200	2ORDR	7.0	15.0
gamma-BHC (Lindane)	0.0187	0.0200	2ORDR	6.5	15.0
alpha-chlordane	0.0185	0.0200	AVRG	7.5	15.0
gamma-chlordane	0.0186	0.0200	AVRG	7.0	15.0
Chlorpyrifos	0.0166	0.0200	AVRG	17.0	15.0
4,4'-DDD	0.0184	0.0200	AVRG	8.0	15.0
4,4'-DDE	0.0180	0.0200	AVRG	10.0	15.0
4,4'-DDT	0.0189	0.0200	AVRG	5.5	15.0
Dieldrin	0.0192	0.0200	AVRG	4.0	15.0
Endosulfan II	0.0195	0.0200	AVRG	2.5	15.0
Endosulfan sulfate	0.0201	0.0200	AVRG	0.5	15.0
Endrin	0.0179	0.0200	AVRG	10.5	15.0
Endrin aldehyde	0.0202	0.0200	AVRG	1.0	15.0
Endrin ketone	0.0201	0.0200	AVRG	0.5	15.0
Heptachlor	0.0183	0.0200	AVRG	8.5	15.0
Heptachlor epoxide	0.0188	0.0200	AVRG	6.0	15.0
Methoxychlor	0.0202	0.0200	AVRG	1.0	15.0
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl	0.0199	0.0200	AVRG	0.5	15.0
Tetrachloro-m-xylene	0.0183	0.0200	AVRG	8.5	15.0

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FORM VII PESTICIDE

000166

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561473

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3B

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP

ID: 0.32 (mm)

Calibration Time(s): 1344

1847

LAB FILE ID: RF0.0004: P303201BRF0.004: P303201B-RF0.01: P303201B-1
RF0.02: P303201B-ORF0.03: P303201B-0

COMPOUND	RF0.0004	RF0.004	RF0.01	RF0.02	RF0.03
=====	=====	=====	=====	=====	=====
Aldrin		473750.00	400900.00	430650.00	441700.00
alpha-BHC		505500.00	444000.00	504900.00	537466.67
Endosulfan I		430250.00	357900.00	370300.00	375866.67
beta-BHC		327750.00	276900.00	286650.00	283066.67
delta-BHC		432250.00	376400.00	427300.00	454400.00
gamma-BHC (Lindane)		500000.00	449300.00	479750.00	511333.33
alpha-chlordane		469750.00	383600.00	406600.00	401033.33
gamma-chlordane		16725000	13682500	14145100	14118833
Chlordane			18225.000		
(2)			30910.000		
(3)			23265.000		
(4)			43485.000		
(5)			50400.000		
Chlorpyrifos		8496000.0	7438200.0	5369200.0	6538100.0
4,4'-DDD		7687000.0	6514200.0	6942800.0	7090300.0
4,4'-DDE		360000.00	304000.00	330950.00	326766.67
4,4'-DDT		9510500.0	7665900.0	8230550.0	8532433.3
Dieldrin		337750.00	283300.00	317300.00	300800.00
toxaphene			766300.00		
(2)			843900.00		
(3)			1212300.0		
(4)			729300.00		
(5)			560400.00		
Endosulfan II		301250.00	247200.00	261450.00	260400.00
Endosulfan sulfate		270750.00	222200.00	229250.00	227933.33
Endrin		291750.00	240000.00	251950.00	254066.67
Endrin aldehyde		250750.00	195600.00	212250.00	206733.33
Endrin ketone		9581250.0	7969600.0	8322600.0	7926566.7
Heptachlor		570750.00	472300.00	511650.00	517666.67
Heptachlor epoxide		464500.00	391900.00	416500.00	410033.33
Methoxychlor		133000.00	105600.00	110000.00	112766.67
=====	=====	=====	=====	=====	=====
Decachlorobiphenyl		330250.00	243400.00	238550.00	235800.00
Tetrachloro-m-xylene		471500.00	396300.00	405150.00	414133.33

FORM VI PESTICIDE

000167

6561474

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3B

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1344 1847

LAB FILE ID: RF0.04: P303201B-ORF0.06: P303201B-ORF0.4: P303201B-10

COMPOUND	RF0.04	RF0.06	RF0.4
=====	=====	=====	=====
Aldrin	417775.00	423616.67	591492.50
alpha-BHC	543150.00	559150.00	911382.50
Endosulfan I	362525.00	341916.67	431772.50
beta-BHC	272050.00	263000.00	311855.00
delta-BHC	446000.00	453500.00	724517.50
gamma-BHC (Lindane)	504400.00	515200.00	773620.00
alpha-chlordane	387175.00	362950.00	459470.00
gamma-chlordane	13524650	12727067	16159700
Chlordane			
(2)			
(3)			
(4)			
(5)			
Chlorpyrifos	6398150.0	6324450.0	6217065.0
4,4'-DDD	6771200.0	6216666.7	8767655.0
4,4'-DDE	316475.00	305583.33	435735.00
4,4'-DDT	7954775.0	7193283.3	9629922.5
Dieldrin	297375.00	275900.00	382117.50
toxaphene			
(2)			
(3)			
(4)			
(5)			
Endosulfan II	249175.00	223300.00	278732.50
Endosulfan sulfate	215900.00	190900.00	224187.50
Endrin	244250.00	226850.00	307567.50
Endrin aldehyde	190900.00	170650.00	199620.00
Endrin ketone	7524650.0	6850250.0	7912380.0
Heptachlor	496650.00	492666.67	642895.00
Heptachlor epoxide	386975.00	371000.00	451962.50
Methoxychlor	105750.00	92933.333	100225.00
=====	=====	=====	=====
Decachlorobiphenyl	219325.00	195233.33	188522.50
Tetrachloro-m-xylene	402650.00	396183.33	503017.50

FORM VI PESTICIDE

000168

FORM 6
PESTICIDE INITIAL CALIBRATION DATA

6561475

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST3B

Calibration Date(s): 03/20/01 03/20/01

Column: RTX-CLP ID: 0.32 (mm)

Calibration Time(s): 1344 1847

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Aldrin	AVRG		454269.167		14.2
alpha-BHC	2ORDR	1.271e-003	1.823e-006	-2.e-012	1.000
Endosulfan I	AVRG		381504.405		9.3
beta-BHC	AVRG		288753.095		8.0
delta-BHC	2ORDR	6.888e-004	2.254e-006	-3.02e-012	1.000
gamma-BHC (Lindane)	2ORDR	5.896e-004	1.992e-006	-2.27e-012	1.000
alpha-chlordane	AVRG		410082.619		9.7
gamma-chlordane	AVRG		14440407.1		10.1
Chlordane	LINR	0.00000000	5.487e-005		1.000
(2)	LINR	0.00000000	3.235e-005		1.000
(3)	LINR	0.00000000	4.298e-005		1.000
(4)	LINR	0.00000000	2.3e-005		1.000
(5)	LINR	0.00000000	1.984e-005		1.000
Chlorpyrifos	AVRG		6683023.57		15.0
4,4'-DDD	AVRG		7141403.10		12.0
4,4'-DDE	AVRG		339930.000		13.6
4,4'-DDT	AVRG		8388194.88		10.9
Dieldrin	AVRG		313506.071		11.7
toxaphene	LINR	0.00000000	1.305e-006		1.000
(2)	LINR	0.00000000	1.185e-006		1.000
(3)	LINR	0.00000000	8.249e-007		1.000
(4)	LINR	0.00000000	1.371e-006		1.000
(5)	LINR	0.00000000	1.784e-006		1.000
Endosulfan II	AVRG		260215.357		9.5
Endosulfan sulfate	AVRG		225874.405		10.5
Endrin	AVRG		259490.595		11.2
Endrin aldehyde	AVRG		203786.190		12.1
Endrin ketone	AVRG		8012470.95		10.4
Heptachlor	AVRG		529225.476		11.1
Heptachlor epoxide	AVRG		413267.262		8.3
Methoxychlor	AVRG		108610.714		11.6
Decachlorobiphenyl	AVRG		235868.690		19.8
Tetrachloro-m-xylene	AVRG		426990.595		10.0

FORM VI PESTICIDE

000169

6561476

Environmental Testing & Consulting, Inc.

**Quality Control Reports
Level IV
GC Herbicides**

000170

ENVIRONMENTAL TESTING & CONSULTING, INC

GC Herbicides Method 8151B/6640 Sequence Check List

Sequence ID: H203151 System ID: 2 Date: 3/15/01 Analyst: LC

Column ID: Primary Confirmation Column Description: 2B-5 Supervisor: _____

Applicable ETC Order Nos. for this sequence:

0103239 0103344

1. Initial Calibration 42031401 a.m

RSD of analytes $\leq 20\%$ may use average RF.

RSD of analytes $\geq 20\%$ or analyst discretion, use linear regression ($r^2 \geq 0.99$)

2. Calibration Verification – Beginning/Every 20th Sample / Ending. Note only those %D that affect data.
%Difference $< 15\%$ or Average %Difference of All Analytes $< 15\%$.

CV w/File #	Dalapon	MCP	Dicamba	MCPA	Dichloroprop	2,4-D	Silvex	2,4,5-T	Dinoseb	2,4-DB	DCAA	Average
1A	TCLP OK											
1B												
2A	TCLP OK											
2B												
3A	TCLP OK											
3B												

3. Method Blanks – Note results for positive results. Flag final results as B – Detected in Blank.
1 per 20 samples per matrix.

Method Blank				
P110891B OK				
P110891B2 OK				

4. Laboratory Control Samples – Note failures only. 1 per 20 samples per matrix. Duplicate LCS when no MS/MSD available.

LCS/LCSD				
P110891LCS OK				

5. Matrix Spike/Matrix Spike Duplicate – 1 per 20 samples per matrix.

0103239-7MS, MSD OK

6. Notes

6561478

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST2A

Calibration Date: 03/15/01

Time: 0848

Lab File ID: H203151A-01R

Init. Calib. Date(s): 03/14/01 03/14/01

Init. Calib. Times: 1134

1405

GC Column: ZB-5

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.0879	0.100	2ORDR	12.1	15.0
Silvex	0.00923	0.0100	LINR	7.7	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.00902	0.0100	LINR	9.8	15.0

FORM VII HERBICIDE

000172

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

6561479

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST2A

Calibration Date: 03/15/01 Time: 1904

Lab File ID: H203151A-08R

Init. Calib. Date(s): 03/14/01 03/14/01

Init. Calib. Times: 1134 1405

GC Column: ZB-5

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.0987	0.100	2ORDR	1.3	15.0
Silvex	0.00980	0.0100	LINR	2.0	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.00969	0.0100	LINR	3.1	15.0

FORM VII HERBICIDE

000173

6561480

FORM 7
HERBICIDE CONTINUING CALIBRATION CHECK

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST2A

Calibration Date: 03/16/01

Time: 0006

Lab File ID: H203151A-20R

Init. Calib. Date(s): 03/14/01

03/14/01

Init. Calib. Times: 1134

1405

GC Column: ZB-5

ID: 0.25 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.1 AMOUNT	CURVE	%D	MAX %d
=====	=====	=====	=====	=====	=====
2,4-D	0.0989	0.100	2ORDR	1.1	15.0
Silvex	0.0101	0.0100	LINR	1.0	15.0
=====	=====	=====	=====	=====	=====
2,4,5-T	0.0104	0.0100	LINR	4.0	15.0

FORM VII HERBICIDE

000174

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST2A

Calibration Date(s): 03/14/01 03/14/01

Column: ZB-5

ID: 0.25 (mm)

Calibration Time(s): 1134 1405

LAB FILE ID: RF0.01: H203141A-0 RF0.02: H203141A-0 RF0.04: H203141A-0
 RF0.1: H203141A-04 RF0.25: H203141A-0

COMPOUND	RF0.01	RF0.02	RF0.04	RF0.1	RF0.25
=====	=====	=====	=====	=====	=====
2,4-D	1713500.0	973733.33	898600.00	665670.00	660250.00
Silvex	5453000.0	3212000.0	3237000.0	2543200.0	2707450.0
=====	=====	=====	=====	=====	=====
2,4,5-T	4036000.0	2649333.3	2668600.0	2166500.0	2292550.0
=====	=====	=====	=====	=====	=====

FORM VI HERBICIDE

6561482

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST2A

Calibration Date(s): 03/14/01 03/14/01

Column: ZB-5

ID: 0.25 (mm)

Calibration Time(s): 1134

1405

LAB FILE ID:

RF0.35: H203141A-0RF0: H203141A-07R

COMPOUND	RF0.35	RF0
=====	=====	=====
2,4-D	590808.00	477314.00
Silvex	2754920.0	
=====	=====	=====
2,4,5-T	2311620.0	1898010.0

FORM VI HERBICIDE

000176

FORM 6
HERBICIDE INITIAL CALIBRATION DATA

6561483

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0103-344

Instrument ID: PEST2A

Calibration Date(s): 03/14/01 03/14/01

Column: ZB-5

ID: 0.25 (mm)

Calibration Time(s): 1134 1405

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
2,4-D	2ORDR	-2.46e-003	1.191e-006	1.886e-012	0.999
Silvex	LINR	-4.2e-004	3.681e-007		0.999
2,4,5-T	LINR	-2.32e-003	5.154e-007		0.990

FORM VI HERBICIDE

000177

FINAL PAGE

PART II

ADMINISTRATIVE RECORD

PART II

FINAL PAGE