Koscinsko Co.
Dudley res.

Complaint
Done.

PROJECT ID:04430006

SAMPLE ID: DK 28003

DESCRIPTOR: COMPLAINT RESPONSE

IDEM

Project:DK28003 / Site ID 04430006

Environmental
Health Laboratories

The Nation's Drinking Water Laboratory

110 S. Hill Street
South Bend, IN 46617
574.233.4777
800.332.4345
Fax: 574.233.8207
Division of Underwriters Laboratories Inc.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

DATE: 1/3/2005

TO: Jim Harris
Ground Water Section

THRU: James Sullivan, Section Chief
Ground Water

FROM: Mitt Denney
Ground Water Section

SUBJECT: Site ID: 04430006, IDEM Sample ID: DK28003

I have reviewed the attached results and have determined that the results are acceptable for use. The results have been evaluated for the quality criteria contained in the Ground Water Quality Assurance Program Plan and BAA 1-86. Reviews are confined to the Regulated Drinking Water Contaminants and positive detects of chemical compounds. Unless specified otherwise in this memorandum, analytical results for compounds listed on the Primary and Secondary Drinking Water Standards Lists, for the sample(s) identified in the specified analytical report, are acceptable for quantitative purposes. Any qualification for the acceptance of these results will be identified in this memorandum. This memorandum should remain attached to the original results.

QA/QC Samples

The post sample LFB (Lab ID: 1104332) for mercury was low biased. Post sample QC samples (instrument performance check, continuing calibration blank, and laboratory reagent blank) were within acceptable limits. Prior QC samples were within acceptable limits. Therefore the results for mercury are acceptable for quantitative analysis. The balance of QA/QC samples were within acceptable limits for the analyses performed.

Environmental Health Laboratories
The Nations Drinking Water Laboratory
Division of Underwriters Laboratories Inc.

110 South Hill Street
South Bend, IN 46617
Phone: (574) 233-4777
Fax: (574) 233-8207

LABORATORY REPORT

This report contains 56 pages.
(including the cover page)

If you have any questions concerning this report, please do not hesitate to call us at 1-800-332-4345 or 574-233-4777.

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IDL Environmental Services

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IDEM Water Mgmt
Drinking Water Branch

Environmental Health Laboratories
The Nation's Drinking Water Laboratory

110 S. Hill Street
South Bend, IN 46617
574.233.4777
800.332.4345
Fax: 574.233.8207
www.ehl.cc

LABORATORY REPORT

Client: IDEM
Attn: Mitt Denney
Ground Water Section, P.O. Box 6015
100 North Senate Avenue
Indianapolis, IN 46206-6015

Report: 1099985-89
Priority: Standard Written
Status: Final

Project: DK28003 / Site ID 04430006

SUMMARY OF DETECTIONS

Sample ID: 1099985 — Sample Site: DK28003

Parameter	Method	Result	Units	Run #
Chloride	300.0	2.2	mg/L	68681
Sulfate	300.0	18	mg/L	68681
Alkalinity, Total	2320 B	310	mg/L CaCO3	68773

Sample ID: 1099987 — Sample Site: DK28003

Parameter	Method	Result	Units	Run #
Barium	200.8	.290	ug/L	68917
Chromium	200.8	3.1	ug/L	68955
Copper	200.8	1.2	ug/L	68955
Nickel	200.8	6.1	ug/L	68955
Calcium	200.7	80	mg/L	68777
Iron	200.7	1.3	mg/L	68777
Magnesium	200.7	24	mg/L	68777
Potassium	200.7	1.4	mg/L	68777
Sodium	200.7	11	mg/L	68777

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Nathan Trowbridge at (574) 233-4777.

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William Reese	Section Manager	9/29/04
Reviewed By	Title	Date
[illegible]	P.M.	9-30-04
Finalized By	Title	Date

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LABORATORY REPORT

Client: IDEM
Attn: Mitt Denney
Ground Water Section, P.O. Box 6015
100 North Senate Avenue
Indianapolis, IN 46206-6015

Report #: 1099985-89

Priority: Standard Written

Status: Final

Project : DK28003

Samples Submitted: Five drinking water samples

Copies to: None

Collected: 09/09/04 By: Client Received: 09/09/04

REPORT SUMMARY

Five drinking water samples were submitted for analysis of Methods 200.7, 200.8, 245.1, 300.0, 353.2, 524.2, 525.2 and 2320B.

A summary of the detections by sample accompanies this case narrative. If a parameter is not listed in the summary of detections, it was not detected above the MRL in the sample.

Analytical results were designated as reportable based upon the associated quality control samples. Deviations from method requirements are noted below.

EPA 200.7

MS/MSD: The MS and MSD recoveries for calcium were not required. Recovery calculations are not required if the concentration of the analyte added is less than 30% of the sample background concentration.

EPA 200.8

Run 68917

There were no deviations from method requirements in this run.

Run 68955

There were no deviations from method requirements in this run.

EPA 245.1

LFB: Recovery of mercury in LFB 1104332 at 1.0 ug/L was biased low outside the acceptance limits of 85-115% recovery.

EPA 300.0

There were no deviations from method requirements in this run.

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Client: IDEM

Report #: 1099985-89

EPA 353.2

There were no deviations from method requirements in this run.

EPA 524.2

There were no deviations from method requirements in this run.

EPA 525.2

Run 68817

There were no deviations from method requirements in this run.

Run 69180

There were no deviations from method requirements in this run.

EPA 2320B

There were no deviations from method requirements in this run.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Jim Vernon at (574) 233-4777.

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William Reeves	Section Manager	9/29/04
Reviewed By	Title	Date
Jim Vernon	A.M.	9-30-04
Finalized By	Title	Date

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Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68777
PC File Name: 091404B
Order Number: 102232

Instrument: ICP-AES BX
Analyst: S. Lovick
Receipt Batch: 131324

Method(s): 200.7
Submitted By: S. Lovick
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1102493
Extracted: N/A

Type: Initial Calibration Blank
Analyzed: 09/14/2004 17:26

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0000	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0000	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0000	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0000	< 0.2	mg/L
7440-23-5	Sodium	0.1	0.0000	< 0.1	mg/L

Sample ID: 1102500
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/14/2004 17:50

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.1110	102	95-105	Pass
7439-89-6	Iron	5.0	5.1277	103	95-105	Pass
7439-95-4	Magnesium	5.0	5.0185	100	95-105	Pass
7440-09-7	Potassium	10.0	10.4249	104	95-105	Pass
7440-23-5	Sodium	5.0	4.8325	97	95-105	Pass

Sample ID: 1102502
Extracted: N/A

Type: Laboratory Reagent Blank
Analyzed: 09/14/2004 17:57

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0658	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0012	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0031	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0058	< 0.2	mg/L
7440-23-5	Sodium	0.1	0.0097	< 0.1	mg/L

Sample ID: 1102503
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 09/14/2004 18:01

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.1683	103	85-115	Pass
7439-89-6	Iron	5.0	5.1345	103	85-115	Pass
7439-95-4	Magnesium	5.0	5.0716	101	85-115	Pass
7440-09-7	Potassium	10.0	10.5099	105	85-115	Pass
7440-23-5	Sodium	5.0	4.8475	97	85-115	Pass

Sample ID: 1102506
Extracted: N/A

Type: Continuing Inst. Perf. Check
Analyzed: 09/14/2004 18:46

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.1931	104	90-110	Pass
7439-89-6	Iron	5.0	5.1593	103	90-110	Pass
7439-95-4	Magnesium	5.0	5.1052	102	90-110	Pass
7440-09-7	Potassium	10.0	10.4822	105	90-110	Pass
7440-23-5	Sodium	5.0	4.7323	95	90-110	Pass

Sample ID: 1102507
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 09/14/2004 18:50

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0637	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0036	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0033	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0043	< 0.2	mg/L
7440-23-5	Sodium	0.1	0.0092	< 0.1	mg/L

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68777
PC File Name: 091404B
Order Number: 102232

Instrument: ICP-AES BX
Analyst: S. Lovick
Receipt Batch: 131324

Method(s): 200.7
Submitted By: S. Lovick
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1099987
Extracted: N/A

Type: Field Sample
Analyzed: 09/14/2004 19:07

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	80.0603	80	mg/L
7439-89-6	Iron	0.02	1.2717	1.3	mg/L
7439-95-4	Magnesium	0.1	24.2234	24	mg/L
7440-09-7	Potassium	0.2	1.3966	1.4	mg/L
7440-23-5	Sodium	0.1	11.4452	11	mg/L

Sample ID: 1102508
Extracted: N/A

Type: Matrix Spike
Analyzed: 09/14/2004 19:10

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
7440-70-2	Calcium	5.0	83.9221	80.060	77	70-130	Pass
7439-89-6	Iron	5.0	6.1033	1.272	97	70-130	Pass
7439-95-4	Magnesium	5.0	28.7012	24.223	90	70-130	Pass
7440-09-7	Potassium	10.0	11.2285	1.397	98	70-130	Pass
7440-23-5	Sodium	5.0	16.3963	11.445	99	70-130	Pass

Sample ID: 1102509
Extracted: N/A

Type: Matrix Spike Duplicate
Analyzed: 09/14/2004 19:14

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	Parent Amt	%Rec	Limits	P/F
7440-70-2	Calcium	5.0	84.7051	80.060	93	70-130	Pass
7439-89-6	Iron	5.0	6.3681	1.272	102	70-130	Pass
7439-95-4	Magnesium	5.0	29.0377	24.223	96	70-130	Pass
7440-09-7	Potassium	10.0	11.7017	1.397	103	70-130	Pass
7440-23-5	Sodium	5.0	16.4431	11.445	100	70-130	Pass

Sample ID: 1102510
Extracted: N/A

Type: Continuing Inst. Perf. Check
Analyzed: 09/14/2004 19:21

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-70-2	Calcium	5.0	5.2195	104	90-110	Pass
7439-89-6	Iron	5.0	5.1454	103	90-110	Pass
7439-95-4	Magnesium	5.0	5.0957	102	90-110	Pass
7440-09-7	Potassium	10.0	10.5241	105	90-110	Pass
7440-23-5	Sodium	5.0	4.7463	95	90-110	Pass

Sample ID: 1102511
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 09/14/2004 19:24

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-70-2	Calcium	0.1	0.0633	< 0.1	mg/L
7439-89-6	Iron	0.02	0.0030	< 0.02	mg/L
7439-95-4	Magnesium	0.1	0.0033	< 0.1	mg/L
7440-09-7	Potassium	0.2	0.0027	< 0.2	mg/L
7440-23-5	Sodium	0.1	0.0081	< 0.1	mg/L

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68917
PC File Name: 091704F
Order Number: 102232

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 131324

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1105552
Extracted: N/A

Type: Initial Cali. Verification
Analyzed: 09/17/2004 17:25

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-39-3	Barium	50.0	48.3301	97	90-110	Pass
7440-43-9	Cadmium	50.0	49.2490	98	90-110	Pass
7439-92-1	Lead	50.0	49.0693	98	90-110	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0660	107	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0640	106	60-125	Pass

Sample ID: 1105553
Extracted: N/A

Type: Initial Calibration Blank
Analyzed: 09/17/2004 17:32

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-39-3	Barium	2.0	0.0140	< 2.0	ug/L
7440-43-9	Cadmium	1.0	0.0021	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0101	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.0760	108	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.0760	108	% Recovery

Sample ID: 1105554
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/17/2004 17:38

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-39-3	Barium	50.0	49.2989	99	90-110	Pass
7440-43-9	Cadmium	50.0	50.0335	100	90-110	Pass
7439-92-1	Lead	50.0	50.4075	101	90-110	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0770	108	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0790	108	60-125	Pass

Sample ID: 1105555
Extracted: N/A

Type: Laboratory Reagent Blank
Analyzed: 09/17/2004 17:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-39-3	Barium	2.0	0.0195	< 2.0	ug/L
7440-43-9	Cadmium	1.0	0.0018	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0064	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.0770	108	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.0850	108	% Recovery

Sample ID: 1105556
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 09/17/2004 17:52

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-39-3	Barium	100	99.7776	100	85-115	Pass
7440-43-9	Cadmium	100	100.2829	100	85-115	Pass
7439-92-1	Lead	100	100.3579	100	85-115	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.0620	106	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.0680	107	60-125	Pass

Sample ID: 1099987
Extracted: N/A

Type: Field Sample
Analyzed: 09/17/2004 18:05

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-39-3	Barium	2.0	289.4333	290	ug/L
7440-43-9	Cadmium	1.0	-0.0498	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0281	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.0490	105	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.0970	110	% Recovery

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68917
PC File Name: 091704F
Order Number: 102232

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 131324

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1105557
Extracted: N/A

Type: Continuing Cali. Verification
Analyzed: 09/17/2004 19:19

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-39-3	Barium	50.0	48.5390	97	85-115	Pass
7440-43-9	Cadmium	50.0	49.3314	99	85-115	Pass
7439-92-1	Lead	50.0	49.1353	98	85-115	Pass
7440-69-9	Bismuth (Internal Standard)	1.0	1.1200	112	60-125	Pass
7440-74-6	Indium (Internal Standard)	1.0	1.1850	118	60-125	Pass

Sample ID: 1105558
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 09/17/2004 19:26

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-39-3	Barium	2.0	0.0173	< 2.0	ug/L
7440-43-9	Cadmium	1.0	0.0144	< 1.0	ug/L
7439-92-1	Lead	1.0	0.0144	< 1.0	ug/L
7440-69-9	Bismuth (Internal Standard)	N/A	1.1350	114	% Recovery
7440-74-6	Indium (Internal Standard)	N/A	1.2010	120	% Recovery

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68955
PC File Name: 092004C
Order Number: 102232

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 131324

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1106169
Extracted: N/A

Type: Initial Cali. Verification
Analyzed: 09/20/2004 14:31

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	50.0	50.6456	101	90-110	Pass
7440-38-2	Arsenic	50.0	49.8980	100	90-110	Pass
7440-41-7	Beryllium	50.0	49.9478	100	90-110	Pass
7440-47-3	Chromium	50.0	50.3515	101	90-110	Pass
7440-50-8	Copper	50.0	49.7557	100	90-110	Pass
7440-02-0	Nickel	50.0	50.2139	100	90-110	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0230	102	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	0.9900	99	60-125	Pass

Sample ID: 1106170
Extracted: N/A

Type: Initial Calibration Blank
Analyzed: 09/20/2004 14:37

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.5421	< 1.0	ug/L
7440-38-2	Arsenic	2.0	0.2026	< 2.0	ug/L
7440-41-7	Beryllium	0.3	-0.0166	< 0.3	ug/L
7440-47-3	Chromium	2.0	-0.0003	< 2.0	ug/L
7440-50-8	Copper	1.0	0.0077	< 1.0	ug/L
7440-02-0	Nickel	1.0	-0.0119	< 1.0	ug/L
7440-20-2	Scandium (Internal Standard)	N/A	1.0300	103	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	0.9870	99	% Recovery

Sample ID: 1106171
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/20/2004 14:42

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	50.0	48.6288	97	90-110	Pass
7440-38-2	Arsenic	50.0	51.7940	104	90-110	Pass
7440-41-7	Beryllium	50.0	51.6447	103	90-110	Pass
7440-47-3	Chromium	50.0	50.8900	102	90-110	Pass
7440-50-8	Copper	50.0	50.4461	101	90-110	Pass
7440-02-0	Nickel	50.0	50.4293	101	90-110	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0210	102	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	0.9670	97	60-125	Pass

Sample ID: 1106172
Extracted: N/A

Type: Laboratory Reagent Blank
Analyzed: 09/20/2004 14:47

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.4944	< 1.0	ug/L
7440-38-2	Arsenic	2.0	0.4450	< 2.0	ug/L
7440-41-7	Beryllium	0.3	-0.0173	< 0.3	ug/L
7440-47-3	Chromium	2.0	0.0369	< 2.0	ug/L
7440-50-8	Copper	1.0	0.0127	< 1.0	ug/L
7440-02-0	Nickel	1.0	-0.0287	< 1.0	ug/L
7440-20-2	Scandium (Internal Standard)	N/A	1.0400	104	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	0.9720	97	% Recovery

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68955
PC File Name: 092004C
Order Number: 102232

Instrument: ICP-MS Y
Analyst: T. Olejnik
Receipt Batch: 131324

Method(s): 200.8
Submitted By: T. Olejnik
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1106173
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 09/20/2004 14:52

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	100	100.3621	100	85-115	Pass
7440-38-2	Arsenic	100	103.0058	103	85-115	Pass
7440-41-7	Beryllium	100	100.4781	100	85-115	Pass
7440-47-3	Chromium	100	100.3319	100	85-115	Pass
7440-50-8	Copper	100	99.1404	99	85-115	Pass
7440-02-0	Nickel	100	99.8589	100	85-115	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0290	103	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	0.9590	96	60-125	Pass

Sample ID: 1099987
Extracted: N/A

Type: Field Sample
Analyzed: 09/20/2004 15:02

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.1372	< 1.0	ug/L
7440-38-2	Arsenic	2.0	1.1762	< 2.0	ug/L
7440-41-7	Beryllium	0.3	-0.0522	< 0.3	ug/L
7440-47-3	Chromium	2.0	3.0654	3.1	ug/L
7440-50-8	Copper	1.0	1.2334	1.2	ug/L
7440-02-0	Nickel	1.0	6.0568	6.1	ug/L
7440-20-2	Scandium (Internal Standard)	N/A	1.0680	107	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	0.9470	95	% Recovery

Sample ID: 1106174
Extracted: N/A

Type: Continuing Cali. Verification
Analyzed: 09/20/2004 15:57

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7440-36-0	Antimony	50.0	50.3543	101	85-115	Pass
7440-38-2	Arsenic	50.0	50.5937	101	85-115	Pass
7440-41-7	Beryllium	50.0	53.0655	106	85-115	Pass
7440-47-3	Chromium	50.0	50.1621	100	85-115	Pass
7440-50-8	Copper	50.0	48.9315	98	85-115	Pass
7440-02-0	Nickel	50.0	49.1563	98	85-115	Pass
7440-20-2	Scandium (Internal Standard)	1.0	1.0430	104	60-125	Pass
7440-65-5	Yttrium (Internal Standard)	1.0	0.9580	96	60-125	Pass

Sample ID: 1106175
Extracted: N/A

Type: Continuing Calibration Blank
Analyzed: 09/20/2004 16:02

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7440-36-0	Antimony	1.0	0.5658	< 1.0	ug/L
7440-38-2	Arsenic	2.0	0.3534	< 2.0	ug/L
7440-41-7	Beryllium	0.3	-0.0176	< 0.3	ug/L
7440-47-3	Chromium	2.0	0.1527	< 2.0	ug/L
7440-50-8	Copper	1.0	0.0223	< 1.0	ug/L
7440-02-0	Nickel	1.0	-0.0735	< 1.0	ug/L
7440-20-2	Scandium (Internal Standard)	N/A	1.0580	106	% Recovery
7440-65-5	Yttrium (Internal Standard)	N/A	0.9620	96	% Recovery

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68853
PC File Name: 091604C
Order Number: 102232

Instrument: Hg Analyzer BY
Analyst: T. Olejnik
Receipt Batch: 131324

Method(s): 245.1
Submitted By: T. Olejnik
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1104318
Extracted: N/A
Type: Instrument Performance Check
Analyzed: 09/16/2004 12:40
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	0.9600	96	95-105	Pass

Sample ID: 1104319
Extracted: N/A
Type: Initial Calibration Blank
Analyzed: 09/16/2004 12:43
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	0.0200	< 0.1	ug/L

Sample ID: 1104320
Extracted: N/A
Type: Quality Control Sample
Analyzed: 09/16/2004 12:45
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	1.0300	103	90-110	Pass

Sample ID: 1104321
Extracted: 09/15/2004 16:50
Type: Laboratory Reagent Blank
Analyzed: 09/16/2004 12:48
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.2100	< 0.1	ug/L

Sample ID: 1104322
Extracted: 09/15/2004 16:50
Type: Laboratory Fortified Blank
Analyzed: 09/16/2004 12:51
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	0.9400	94	85-115	Pass

Sample ID: 1099987
Extracted: 09/15/2004 16:50
Type: Field Sample
Analyzed: 09/16/2004 13:02
Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.2000	< 0.1	ug/L

Sample ID: 1104325
Extracted: N/A
Type: Continuing Inst. Perf. Check
Analyzed: 09/16/2004 13:27
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	1.0000	100	90-110	Pass

Sample ID: 1104326
Extracted: N/A
Type: Continuing Calibration Blank
Analyzed: 09/16/2004 13:30
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	0.0200	< 0.1	ug/L

Sample ID: 1104331
Extracted: 09/15/2004 16:50
Type: Laboratory Reagent Blank
Analyzed: 09/16/2004 14:12
Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
7439-97-6	Mercury	0.1	-0.2100	< 0.1	ug/L

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68853
PC File Name: 091604C
Order Number: 102232

Instrument: Hg Analyzer BY
Analyst: T. Olejnik
Receipt Batch: 131324

Method(s): 245.1
Submitted By: T. Olejnik
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1104332
Extracted: 09/15/2004 16:50

Type: Laboratory Fortified Blank
Analyzed: 09/16/2004 14:14

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
7439-97-6	Mercury	1.0	0.8000	80	85-115	Fail

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68681
PC File Name: N/A
Order Number: 102232

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 131324

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1110451
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0100	< 2.0	mg/L

Sample ID: 1110453
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1110454
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	10.0	9.2200	92	90-110	Pass

Sample ID: 1110456
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	25.0	23.0300	92	90-110	Pass

Sample ID: 1110457
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.5000	98	90-110	Pass

Sample ID: 1110459
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.6600	95	90-110	Pass

Sample ID: 1110460
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0100	< 2.0	mg/L

Sample ID: 1110462
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1110463
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.7200	99	90-110	Pass

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68681
PC File Name: N/A
Order Number: 102232

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 131324

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1110465
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.8600	96	90-110	Pass

Sample ID: 1099985
Extracted: N/A

Type: Field Sample
Analyzed: 09/10/2004 16:45

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	2.1600	2.2	mg/L
14808-79-8	Sulfate	5.0	18.2500	18	mg/L

Sample ID: 1110466
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.5600	98	90-110	Pass

Sample ID: 1110468
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.8000	96	90-110	Pass

Sample ID: 1110469
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0300	< 2.0	mg/L

Sample ID: 1110471
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Sample ID: 1110472
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
16887-00-6	Chloride	20.0	19.3500	97	90-110	Pass

Sample ID: 1110474
Extracted: N/A

Type: Instrument Performance Check
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
14808-79-8	Sulfate	50.0	47.1100	94	90-110	Pass

Sample ID: 1110475
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
16887-00-6	Chloride	2.0	0.0100	< 2.0	mg/L

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68681
PC File Name: N/A
Order Number: 102232

Instrument: IC BO
Analyst: S. Lovick
Receipt Batch: 131324

Method(s): 300.0
Submitted By: N. Banaszak
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1110477
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/10/2004 16:45

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
14808-79-8	Sulfate	5.0	0.0000	< 5.0	mg/L

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 69038
PC File Name: 092104A
Order Number: 102232

Instrument: Chem Analyzer BH
Analyst: M. Collins
Receipt Batch: 131324

Method(s): 353.2
Submitted By: N. Banaszak
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1110109
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/21/2004 18:31

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0044	< 0.1	mg/L

Sample ID: 1110110
Extracted: N/A

Type: Continuing Calibration Check
Analyzed: 09/21/2004 18:32

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	4.0	3.9438	99	90-110	Pass

Sample ID: 1110111
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/21/2004 18:33

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	6.0	6.0311	101	90-110	Pass

Sample ID: 1110112
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 09/21/2004 18:34

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	8.0	7.7030	96	90-110	Pass

Sample ID: 1099986
Extracted: N/A

Type: Field Sample
Analyzed: 09/21/2004 18:38

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0020	< 0.1	mg/L

Sample ID: 1110113
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/21/2004 18:48

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Nitrate+Nitrite	0.1	0.0044	< 0.1	mg/L

Sample ID: 1110114
Extracted: N/A

Type: Continuing Calibration Check
Analyzed: 09/21/2004 18:49

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Nitrate+Nitrite	4.0	3.9341	98	90-110	Pass

Version 1.7.0.0

Environmental Health Laboratories
Extended Result Record Sheet

Run Number: 68773
PC File Name: N/A
Order Number: 102232

Instrument: Chem Analyzer BB
Analyst: T. Olejnik
Receipt Batch: 131324

Method(s): 2320 B
Submitted By: R. Siery
Today's Date: 09/28/2004

Client: IDEM / Mitt Denney

Generated By: D. Spicer

Sample ID: 1102516
Extracted: N/A

Type: Laboratory Fortified Blank
Analyzed: 09/14/2004 11:36

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Alkalinity, Total	100	104.1000	104	90-110	Pass

Sample ID: 1102519
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/14/2004 12:43

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	0.2000	< 1.0	mg/L CaCO3

Sample ID: 1102520
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/14/2004 12:48

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Alkalinity, Total	100	100.9000	101	90-110	Pass

Sample ID: 1099985
Extracted: N/A

Type: Field Sample
Analyzed: 09/14/2004 13:36

Site: DK28003
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	310.9000	310	mg/L CaCO3

Sample ID: 1102523
Extracted: N/A

Type: Laboratory Method Blank
Analyzed: 09/14/2004 13:40

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	MRL	Amount	Report	Units
N/A	Alkalinity, Total	1.0	0.3000	< 1.0	mg/L CaCO3

Sample ID: 1102524
Extracted: N/A

Type: Quality Control Sample
Analyzed: 09/14/2004 13:46

Site: N/A
Dil Factor: 1.000

CAS Number	Parameter	Target	Amount	% Rec	Limits	P/F
N/A	Alkalinity, Total	100	102.6000	103	90-110	Pass

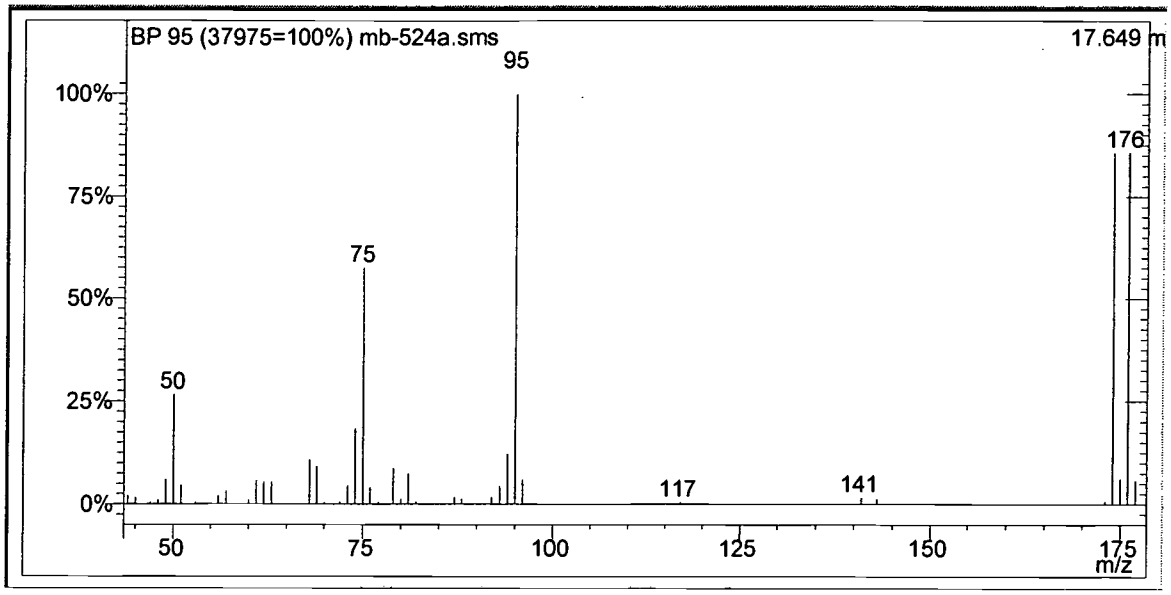
Version 1.7.0.0

Environmental Health Laboratories
Run Log

Run Id: **68826** Method: **524.2** Analyst: **conn**

Type	Sample Id	File Name	Sample Site	Matrix	Analysis Date	Analysis Time
LMB	1102231	MB-524A	Not Available	RW	09/15/2004	08:54
LFB	1102232	FB-524A	Not Available	RW	09/15/2004	09:27
CCC	1102233	C-5-13A	Not Available	RW	09/15/2004	10:01
FS	1099988	1099988	DK28003	DW	09/15/2004	12:06
CCC	1103156	C-10-13C	Not Available	RW	09/15/2004	20:52
QCS	1103161	Q-524A	Not Available	RW	09/16/2004	03:37

BFB Report



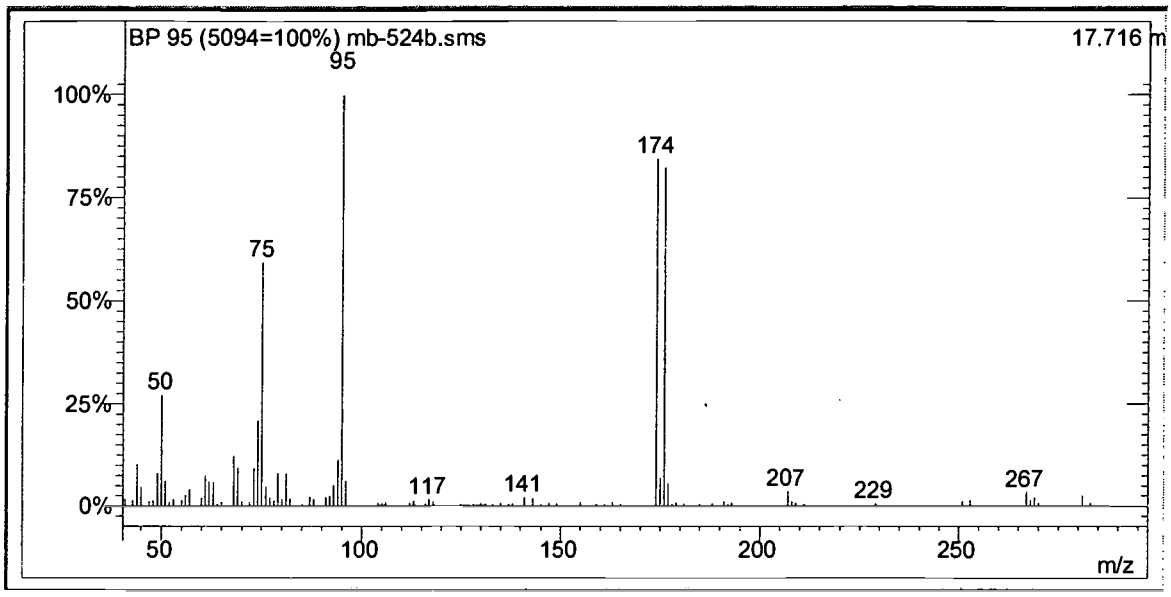
Lab File ID mb-524a.sms

Injection Date: 9/15/2004

Injection Time: 8:54

Mass	Acceptance Criterion	Value	Pass/Fail
50	15-40% of m/z 95	26.67	PASS
75	30-80% of m/z 95	57.59	PASS
95	base peak	100.00	PASS
96	5-9% of m/z 95	6.08	PASS
173	<2% of m/z 174	0.97	PASS
174	>50% of m/z 95	85.81	PASS
175	5-9% of m/z 174	7.33	PASS
176	>95% but <101% of m/z 174	100.13	PASS
177	5-9% of m/z 176	6.81	PASS

BFB Report



Lab File ID mb-524b.sms

Injection Date: 9/15/2004

Injection Time: 19:45

Mass	Acceptance Criterion	Value	Pass/Fail
50	15-40% of m/z 95	27.35	PASS
75	30-80% of m/z 95	59.42	PASS
95	base peak	100.00	PASS
96	5-9% of m/z 95	6.28	PASS
173	<2% of m/z 174	0.60	PASS
174	>50% of m/z 95	84.55	PASS
175	5-9% of m/z 174	8.47	PASS
176	>95% but <101% of m/z 174	97.49	PASS
177	5-9% of m/z 176	7.24	PASS

Environmental Health Laboratories
Laboratory Method Blank

Sample Matrix: RW
Acquisition File: Not Available
Data Directory: 091504a
Instrument: ITD - C
Extracted Date: Not Available
Sample Number: 1102231
Dilution Factor: 1
Sample Site: Not Available
Sample Location: Not Available

Method: 524.2
Calibration File: 524 2-081104C.mth
Analysis Date: 09/15/2004
Analysis Time: 08:54
Analyst: conn
Results Submitted By: conn
Run Number: 68826

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	CCC % Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	IC % Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-1,4-Difluorobenzene	319778	342280	93	70	130	PASS	Not Found	N/A	N/A	N/A	N/A

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-1,2-Dichlorobenzene-d4	10.941	ug/L	10	109	70	130	PASS
SS-1,2-Dichloroethane-d4	10.378	ug/L	10	104	70	130	PASS
SS-Bromofluorobenzene	5.429	ug/L	5.0	109	70	130	PASS
SS-Toluene-d8	10.589	ug/L	10	106	70	130	PASS

Ordered Parameter Results

Parameter	Amount	MRL	Units
1,1,1,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,1-Trichloroethane	< 0.5	0.5	ug/L
1,1,2,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,2-Trichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethylene	< 0.5	0.5	ug/L
1,1-Dichloropropylene	< 0.5	0.5	ug/L
1,2,3-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,3-Trichloropropane	< 0.5	0.5	ug/L
1,2,4-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,4-Trimethylbenzene	< 0.5	0.5	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/L
1,2-Dibromoethane (EDB)	< 0.2	0.2	ug/L
1,2-Dichlorobenzene	< 0.5	0.5	ug/L
1,2-Dichloroethane	< 0.5	0.5	ug/L
1,2-Dichloropropane	< 0.5	0.5	ug/L
1,2-Xylene	< 0.5	0.5	ug/L
1,3,5-Trimethylbenzene	< 0.5	0.5	ug/L
1,3-Dichlorobenzene	< 0.5	0.5	ug/L
1,3-Dichloropropane	< 0.5	0.5	ug/L
1,3-Xylene	< 0.5	0.5	ug/L
1,4-Dichlorobenzene	< 0.5	0.5	ug/L

1,4-Xylene	< 0.5	0.5	ug/L
2,2-Dichloropropane	< 0.5	0.5	ug/L
2-Chlorotoluene	< 0.5	0.5	ug/L
4-Chlorotoluene	< 0.5	0.5	ug/L
4-Isopropyltoluene	< 0.5	0.5	ug/L
Benzene	< 0.5	0.5	ug/L
Bromobenzene	< 0.5	0.5	ug/L
Bromochloromethane	< 0.5	0.5	ug/L
Bromodichloromethane	< 0.5	0.5	ug/L
Bromoform	< 0.5	0.5	ug/L
Bromomethane	< 0.5	0.5	ug/L
Carbon tetrachloride	< 0.5	0.5	ug/L
Chlorobenzene	< 0.5	0.5	ug/L
Chloroethane	< 0.5	0.5	ug/L
Chloroform	< 0.5	0.5	ug/L
Chloromethane	< 0.5	0.5	ug/L
Dibromochloromethane	< 0.5	0.5	ug/L
Dibromomethane	< 0.5	0.5	ug/L
Dichlorodifluoromethane	< 0.5	0.5	ug/L
Dichloromethane	< 0.5	0.5	ug/L
Ethylbenzene	< 0.5	0.5	ug/L
Hexachlorobutadiene	< 0.5	0.5	ug/L
Isopropylbenzene	< 0.5	0.5	ug/L
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	ug/L
Naphthalene	< 0.5	0.5	ug/L
Styrene	< 0.5	0.5	ug/L
Tetrachloroethylene	< 0.5	0.5	ug/L
Toluene	< 0.5	0.5	ug/L
Trichloroethylene	< 0.5	0.5	ug/L
Trichlorofluoromethane	< 0.5	0.5	ug/L
Vinyl chloride	< 0.2	0.2	ug/L
Xylenes, Total	< 0.5	0.5	ug/L
cis-1,2-Dichloroethylene	< 0.5	0.5	ug/L
cis-1,3-Dichloropropylene	< 0.5	0.5	ug/L
n-Butylbenzene	< 0.5	0.5	ug/L
n-Propylbenzene	< 0.5	0.5	ug/L
sec-Butylbenzene	< 0.5	0.5	ug/L
tert-Butylbenzene	< 0.5	0.5	ug/L
trans-1,2-Dichloroethylene	< 0.5	0.5	ug/L
trans-1,3-Dichloropropylene	< 0.5	0.5	ug/L

Additional Found Parameters

Parameter	Amount	MRL	Units

The symbol * in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.

Environmental Health Laboratories
Laboratory Fortified Blank

Sample Matrix: RW
Acquisition File: Not Available
Data Directory: 091504a
Today's Date: 09/28/2004
Instrument: ITD - C
Extracted Date: Not Available
Sample Number: 1102232

Method: 524.2
Calibration File: 524 2-081104C.mth
Analysis Date: 09/15/2004
Analysis Time: 09:27
Analyst: conn
Results Submitted By: conn
Run Number: 68826

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	CCC % Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	IC % Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-1,4-Difluorobenzene	380571	342280	111	70	130	PASS	424562	90	50	150	PASS

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-1,2-Dichlorobenzene-d4	10.221	ug/L	10	102	70	130	PASS
SS-1,2-Dichloroethane-d4	10.46	ug/L	10	105	70	130	PASS
SS-Bromofluorobenzene	5.331	ug/L	5.0	107	70	130	PASS
SS-Toluene-d8	10.593	ug/L	10	106	70	130	PASS

Ordered Parameter Results

Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
1,1,1,2-Tetrachloroethane	2.243	ug/L	2.0	112	70	130	PASS
1,1,1-Trichloroethane	2.169	ug/L	2.0	108	70	130	PASS
1,1,2,2-Tetrachloroethane	1.981	ug/L	2.0	99	70	130	PASS
1,1,2-Trichloroethane	2.09	ug/L	2.0	104	70	130	PASS
1,1-Dichloroethane	2.1	ug/L	2.0	105	70	130	PASS
1,1-Dichloroethylene	2.117	ug/L	2.0	106	70	130	PASS
1,1-Dichloropropylene	2.165	ug/L	2.0	108	70	130	PASS
1,2,3-Trichlorobenzene	2.035	ug/L	2.0	102	70	130	PASS
1,2,3-Trichloropropane	1.769	ug/L	2.0	88	70	130	PASS
1,2,4-Trichlorobenzene	2.039	ug/L	2.0	102	70	130	PASS
1,2,4-Trimethylbenzene	2.023	ug/L	2.0	101	70	130	PASS
2-Chlorotoluene	2.033	ug/L	2.0	102	70	130	PASS
1,2-Dibromoethane (EDB)	2.078	ug/L	2.0	104	70	130	PASS
1,2-Dibromo-3-chloropropane (DBCP)	1.957	ug/L	2.0	98	70	130	PASS
1,2-Dichlorobenzene	2.061	ug/L	2.0	103	70	130	PASS
1,2-Dichloroethane	2.183	ug/L	2.0	109	70	130	PASS
1,2-Dichloropropane	1.887	ug/L	2.0	94	70	130	PASS
1,2-Xylene	2.04	ug/L	2.0	102	70	130	PASS
1,3,5-Trimethylbenzene	2.043	ug/L	2.0	102	70	130	PASS
1,3-Dichlorobenzene	2.068	ug/L	2.0	103	70	130	PASS
1,3-Dichloropropane	2.166	ug/L	2.0	108	70	130	PASS
1,3-Xylene	4.146	ug/L	4.0	104	70	130	PASS
4-Chlorotoluene	2.039	ug/L	2.0	102	70	130	PASS

1,4-Dichlorobenzene	1.989	ug/L	2.0	99	70	130	PASS
4-Isopropyltoluene	2.006	ug/L	2.0	100	70	130	PASS
1,4-Xylene	4.146	ug/L	4.0	104	70	130	PASS
2,2-Dichloropropane	2.406	ug/L	2.0	120	70	130	PASS
Benzene	2.087	ug/L	2.0	104	70	130	PASS
Bromobenzene	2.079	ug/L	2.0	104	70	130	PASS
Bromochloromethane	2.093	ug/L	2.0	105	70	130	PASS
Bromodichloromethane	2.066	ug/L	2.0	103	70	130	PASS
Bromoform	2.117	ug/L	2.0	106	70	130	PASS
Bromomethane	2.09	ug/L	2.0	104	70	130	PASS
Carbon tetrachloride	2.116	ug/L	2.0	106	70	130	PASS
Chlorobenzene	2.086	ug/L	2.0	104	70	130	PASS
Chloroethane	2.006	ug/L	2.0	100	70	130	PASS
Chloroform	2.118	ug/L	2.0	106	70	130	PASS
Chloromethane	2.074	ug/L	2.0	104	70	130	PASS
cis-1,2-Dichloroethylene	2.125	ug/L	2.0	106	70	130	PASS
cis-1,3-Dichloropropylene	2.27	ug/L	2.0	114	70	130	PASS
Dibromochloromethane	2.094	ug/L	2.0	105	70	130	PASS
Dibromomethane	2.122	ug/L	2.0	106	70	130	PASS
Dichlorodifluoromethane	2.386	ug/L	2.0	119	70	130	PASS
Dichloromethane	2.013	ug/L	2.0	101	70	130	PASS
Ethylbenzene	2.115	ug/L	2.0	106	70	130	PASS
Hexachlorobutadiene	2.015	ug/L	2.0	101	70	130	PASS
Isopropylbenzene	2.012	ug/L	2.0	101	70	130	PASS
Methyl-t-butyl ether (MTBE)	2.184	ug/L	2.0	109	70	130	PASS
Naphthalene	1.921	ug/L	2.0	96	70	130	PASS
n-Butylbenzene	2.071	ug/L	2.0	104	70	130	PASS
n-Propylbenzene	1.988	ug/L	2.0	99	70	130	PASS
sec-Butylbenzene	1.988	ug/L	2.0	99	70	130	PASS
Styrene	1.996	ug/L	2.0	100	70	130	PASS
tert-Butylbenzene	2.044	ug/L	2.0	102	70	130	PASS
Tetrachloroethylene	2.075	ug/L	2.0	104	70	130	PASS
Toluene	2.161	ug/L	2.0	108	70	130	PASS
trans-1,2-Dichloroethylene	2.118	ug/L	2.0	106	70	130	PASS
trans-1,3-Dichloropropylene	2.169	ug/L	2.0	108	70	130	PASS
Trichloroethylene	2.118	ug/L	2.0	106	70	130	PASS
Trichlorofluoromethane	2.188	ug/L	2.0	109	70	130	PASS
Vinyl chloride	2.087	ug/L	2.0	104	70	130	PASS
Xylenes, Total	6.186	N/A	6.0	103	70	130	PASS

Environmental Health Laboratories
Continuing Calibration Check

Sample Matrix: RW
Acquisition File: Not Available
Data Directory: 091504a
Today's Date: 09/28/2004
Instrument: ITD - C
Extracted Date: Not Available
Sample Number: 1102233

Method: 524.2
Calibration File: 524 2-081104C.mth
Analysis Date: 09/15/2004
Analysis Time: 10:01
Analyst: conn
Results Submitted By: conn
Run Number: 68826

Sample Quality Control

Internal Standards		CCC		Area			IC		Area		
Parameter	Area	Area	% Resp	Limits Lwr	Limits Upr	Pass / Fail	Avg Area	% Resp	Limits Lwr	Limits Upr	Pass / Fail
IS-1,4-Difluorobenzene	342280	342280	100	70	130	PASS	424562	81	50	150	PASS

Surrogate Standards					Limits		
Parameter	Amount	Units	Target	%Rec	Lower	Upper	Pass/Fail
SS-1,2-Dichlorobenzene-d4	12.0	ug/L	10	120	70	130	PASS
SS-1,2-Dichloroethane-d4	10.129	ug/L	10	101	70	130	PASS
SS-Bromofluorobenzene	6.119	ug/L	5.0	122	70	130	PASS
SS-Toluene-d8	11.258	ug/L	10	113	70	130	PASS

Ordered Parameter Results

					Limits		
Parameter	Amount	Units	Target	%Rec	Lower	Upper	Pass/Fail
1,1,1,2-Tetrachloroethane	4.518	ug/L	5.0	90	70	130	PASS
1,1,1-Trichloroethane	5.17	ug/L	5.0	103	70	130	PASS
1,1,2,2-Tetrachloroethane	4.434	ug/L	5.0	89	70	130	PASS
1,1,2-Trichloroethane	4.931	ug/L	5.0	99	70	130	PASS
1,1-Dichloroethane	4.818	ug/L	5.0	96	70	130	PASS
1,1-Dichloroethylene	4.978	ug/L	5.0	100	70	130	PASS
1,1-Dichloropropylene	5.012	ug/L	5.0	100	70	130	PASS
1,2,3-Trichlorobenzene	5.258	ug/L	5.0	105	70	130	PASS
1,2,3-Trichloropropane	5.261	ug/L	5.0	105	70	130	PASS
1,2,4-Trichlorobenzene	5.352	ug/L	5.0	107	70	130	PASS
1,2,4-Trimethylbenzene	5.628	ug/L	5.0	113	70	130	PASS
2-Chlorotoluene	5.556	ug/L	5.0	111	70	130	PASS
1,2-Dibromoethane (EDB)	4.779	ug/L	5.0	96	70	130	PASS
1,2-Dibromo-3-chloropropane (DBCP)	4.904	ug/L	5.0	98	70	130	PASS
1,2-Dichlorobenzene	5.4	ug/L	5.0	108	70	130	PASS
1,2-Dichloroethane	4.887	ug/L	5.0	98	70	130	PASS
1,2-Dichloropropane	4.692	ug/L	5.0	94	70	130	PASS
1,2-Xylene	5.374	ug/L	5.0	107	70	130	PASS
1,3,5-Trimethylbenzene	5.584	ug/L	5.0	112	70	130	PASS
1,3-Dichlorobenzene	5.588	ug/L	5.0	112	70	130	PASS
1,3-Dichloropropane	4.754	ug/L	5.0	95	70	130	PASS
1,3-Xylene	11.239	ug/L	10	112	70	130	PASS
4-Chlorotoluene	5.514	ug/L	5.0	110	70	130	PASS

1,4-Dichlorobenzene	5.561	ug/L	5.0	111	70	130	PASS
4-Isopropyltoluene	5.504	ug/L	5.0	110	70	130	PASS
1,4-Xylene	11.239	ug/L	10	112	70	130	PASS
2,2-Dichloropropane	5.611	ug/L	5.0	112	70	130	PASS
Benzene	4.663	ug/L	5.0	93	70	130	PASS
Bromobenzene	5.506	ug/L	5.0	110	70	130	PASS
Bromochloromethane	4.741	ug/L	5.0	95	70	130	PASS
Bromodichloromethane	4.774	ug/L	5.0	95	70	130	PASS
Bromoform	4.821	ug/L	5.0	96	70	130	PASS
Bromomethane	5.046	ug/L	5.0	101	70	130	PASS
Carbon tetrachloride	4.895	ug/L	5.0	98	70	130	PASS
Chlorobenzene	5.459	ug/L	5.0	109	70	130	PASS
Chloroethane	5.321	ug/L	5.0	106	70	130	PASS
Chloroform	4.859	ug/L	5.0	97	70	130	PASS
Chloromethane	5.815	ug/L	5.0	116	70	130	PASS
cis-1,2-Dichloroethylene	4.913	ug/L	5.0	98	70	130	PASS
cis-1,3-Dichloropropylene	5.064	ug/L	5.0	101	70	130	PASS
Dibromochloromethane	4.716	ug/L	5.0	94	70	130	PASS
Dibromomethane	4.857	ug/L	5.0	97	70	130	PASS
Dichlorodifluoromethane	5.562	ug/L	5.0	111	70	130	PASS
Dichloromethane	4.458	ug/L	5.0	89	70	130	PASS
Ethylbenzene	5.437	ug/L	5.0	109	70	130	PASS
Hexachlorobutadiene	5.447	ug/L	5.0	109	70	130	PASS
Isopropylbenzene	5.482	ug/L	5.0	110	70	130	PASS
Methyl-t-butyl ether (MTBE)	4.697	ug/L	5.0	94	70	130	PASS
Naphthalene	5.286	ug/L	5.0	106	70	130	PASS
n-Butylbenzene	5.692	ug/L	5.0	114	70	130	PASS
n-Propylbenzene	5.435	ug/L	5.0	109	70	130	PASS
sec-Butylbenzene	5.562	ug/L	5.0	111	70	130	PASS
Styrene	5.223	ug/L	5.0	104	70	130	PASS
tert-Butylbenzene	5.534	ug/L	5.0	111	70	130	PASS
Tetrachloroethylene	5.131	ug/L	5.0	103	70	130	PASS
Toluene	5.273	ug/L	5.0	105	70	130	PASS
trans-1,2-Dichloroethylene	4.941	ug/L	5.0	99	70	130	PASS
trans-1,3-Dichloropropylene	4.962	ug/L	5.0	99	70	130	PASS
Trichloroethylene	4.987	ug/L	5.0	100	70	130	PASS
Trichlorofluoromethane	5.03	ug/L	5.0	101	70	130	PASS
Vinyl chloride	5.388	ug/L	5.0	108	70	130	PASS
Xylenes, Total	16.613	N/A	15	111	70	130	PASS

Environmental Health Laboratories
Sample Result Record Sheet

Sample Matrix: DW
Acquisition File: Not Available
Data Directory: 091504a
Instrument: ITD - C
Extracted Date: Not Available
Sample Number: 1099988
Dilution Factor: 1
Sample Site: DK28003
Sample Location: Not Available

Method: 524.2
Calibration File: 524 2-081104C.mth
Analysis Date: 09/15/2004
Analysis Time: 12:06
Analyst: conn
Results Submitted By: conn
Run Number: 68826

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	CCC % Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	IC % Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-1,4-Difluorobenzene	406494	412210	99	70	130	PASS	Not Found	N/A	N/A	N/A	N/A

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-1,2-Dichlorobenzene-d4	9.52	ug/L	10	95	70	130	PASS
SS-Bromofluorobenzene	5.064	ug/L	5.0	101	70	130	PASS
SS-1,2-Dichloroethane-d4	10.412	ug/L	10	104	70	130	PASS
SS-Toluene-d8	10.282	ug/L	10	103	70	130	PASS

Ordered Parameter Results

Parameter	Amount	MRL	Units
1,1,1,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,1-Trichloroethane	< 0.5	0.5	ug/L
1,1,2,2-Tetrachloroethane	< 0.5	0.5	ug/L
1,1,2-Trichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethane	< 0.5	0.5	ug/L
1,1-Dichloroethylene	< 0.5	0.5	ug/L
1,1-Dichloropropylene	< 0.5	0.5	ug/L
1,2,3-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,3-Trichloropropane	< 0.5	0.5	ug/L
1,2,4-Trichlorobenzene	< 0.5	0.5	ug/L
1,2,4-Trimethylbenzene	< 0.5	0.5	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	< 0.2	0.2	ug/L
1,2-Dibromoethane (EDB)	< 0.2	0.2	ug/L
1,2-Dichlorobenzene	< 0.5	0.5	ug/L
1,2-Dichloroethane	< 0.5	0.5	ug/L
1,2-Dichloropropane	< 0.5	0.5	ug/L
1,2-Xylene	< 0.5	0.5	ug/L
1,3,5-Trimethylbenzene	< 0.5	0.5	ug/L
1,3-Dichlorobenzene	< 0.5	0.5	ug/L
1,3-Dichloropropane	< 0.5	0.5	ug/L
1,3-Xylene	< 0.5	0.5	ug/L
1,4-Dichlorobenzene	< 0.5	0.5	ug/L

1,4-Xylene	< 0.5	0.5	ug/L
2,2-Dichloropropane	< 0.5	0.5	ug/L
2-Chlorotoluene	< 0.5	0.5	ug/L
4-Chlorotoluene	< 0.5	0.5	ug/L
4-Isopropyltoluene	< 0.5	0.5	ug/L
Benzene	< 0.5	0.5	ug/L
Bromobenzene	< 0.5	0.5	ug/L
Bromochloromethane	< 0.5	0.5	ug/L
Bromodichloromethane	< 0.5	0.5	ug/L
Bromoform	< 0.5	0.5	ug/L
Bromomethane	< 0.5	0.5	ug/L
Carbon tetrachloride	< 0.5	0.5	ug/L
Chlorobenzene	< 0.5	0.5	ug/L
Chloroethane	< 0.5	0.5	ug/L
Chloroform	< 0.5	0.5	ug/L
Chloromethane	< 0.5	0.5	ug/L
Dibromochloromethane	< 0.5	0.5	ug/L
Dibromomethane	< 0.5	0.5	ug/L
Dichlorodifluoromethane	< 0.5	0.5	ug/L
Dichloromethane	< 0.5	0.5	ug/L
Ethylbenzene	< 0.5	0.5	ug/L
Hexachlorobutadiene	< 0.5	0.5	ug/L
Isopropylbenzene	< 0.5	0.5	ug/L
Methyl-t-butyl ether (MTBE)	< 0.5	0.5	ug/L
Naphthalene	< 0.5	0.5	ug/L
Styrene	< 0.5	0.5	ug/L
Tetrachloroethylene	< 0.5	0.5	ug/L
Toluene	< 0.5	0.5	ug/L
Trichloroethylene	< 0.5	0.5	ug/L
Trichlorofluoromethane	< 0.5	0.5	ug/L
Vinyl chloride	< 0.2	0.2	ug/L
Xylenes, Total	< 0.5	0.5	ug/L
cis-1,2-Dichloroethylene	< 0.5	0.5	ug/L
cis-1,3-Dichloropropylene	< 0.5	0.5	ug/L
n-Butylbenzene	< 0.5	0.5	ug/L
n-Propylbenzene	< 0.5	0.5	ug/L
sec-Butylbenzene	< 0.5	0.5	ug/L
tert-Butylbenzene	< 0.5	0.5	ug/L
trans-1,2-Dichloroethylene	< 0.5	0.5	ug/L
trans-1,3-Dichloropropylene	< 0.5	0.5	ug/L

Additional Found Parameters

Parameter	Amount	MRL	Units

The symbol * in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.

VOLATILE ORGANIC CHEMICALS
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Environmental Health Laboratories
Contract: ORGANLY-02
Project: IDEM / DK28003
Column: J&W DB-624 75m x 0.53mm ID

Lab ID: unknown
Task: n/a
Case: n/a
Method: 524.2

Acq. File: C/091504A
Data Directory: C\091504A
Initial Cali File: C\081104
Instrument ID: ITD - C
Date Received: 09/09/04
Date Analyzed: 09/15/04

Sample Description	Compound	CAS #	Estimated Concentration	Units	Retention Time(mins.)	Q
DK28003	0		----	---	----	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.
0 = None found
Comments:

Environmental Health Laboratories
Continuing Calibration Check

Sample Matrix: RW
Acquisition File: Not Available
Data Directory: 091504a
Today's Date: 09/28/2004
Instrument: ITD - C
Extracted Date: Not Available
Sample Number: 1103156

Method: 524.2
Calibration File: 524 2-081104C.mth
Analysis Date: 09/15/2004
Analysis Time: 20:52
Analyst: conn
Results Submitted By: conn
Run Number: 68826

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	% Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	% Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-1,4-Difluorobenzene	396838	412210	96	70	130	PASS	424562	93	50	150	PASS

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-1,2-Dichlorobenzene-d4	10.715	ug/L	10	107	70	130	PASS
SS-1,2-Dichloroethane-d4	9.87	ug/L	10	99	70	130	PASS
SS-Bromofluorobenzene	5.711	ug/L	5.0	114	70	130	PASS
SS-Toluene-d8	10.485	ug/L	10	105	70	130	PASS

Ordered Parameter Results

Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
1,1,1,2-Tetrachloroethane	9.727	ug/L	10	97	70	130	PASS
1,1,1-Trichloroethane	10.636	ug/L	10	106	70	130	PASS
1,1,2,2-Tetrachloroethane	8.532	ug/L	10	85	70	130	PASS
1,1,2-Trichloroethane	9.416	ug/L	10	94	70	130	PASS
1,1-Dichloroethane	9.738	ug/L	10	97	70	130	PASS
1,1-Dichloroethylene	10.559	ug/L	10	106	70	130	PASS
1,1-Dichloropropylene	10.507	ug/L	10	105	70	130	PASS
1,2,3-Trichlorobenzene	9.182	ug/L	10	92	70	130	PASS
1,2,3-Trichloropropane	8.039	ug/L	10	80	70	130	PASS
1,2,4-Trichlorobenzene	8.941	ug/L	10	89	70	130	PASS
1,2,4-Trimethylbenzene	9.706	ug/L	10	97	70	130	PASS
2-Chlorotoluene	9.956	ug/L	10	100	70	130	PASS
1,2-Dibromoethane (EDB)	9.68	ug/L	10	97	70	130	PASS
1,2-Dibromo-3-chloropropane (DBCP)	9.003	ug/L	10	90	70	130	PASS
1,2-Dichlorobenzene	9.5	ug/L	10	95	70	130	PASS
1,2-Dichloroethane	9.442	ug/L	10	94	70	130	PASS
1,2-Dichloropropane	9.423	ug/L	10	94	70	130	PASS
1,2-Xylene	9.284	ug/L	10	93	70	130	PASS
1,3,5-Trimethylbenzene	9.607	ug/L	10	96	70	130	PASS
1,3-Dichlorobenzene	9.599	ug/L	10	96	70	130	PASS
1,3-Dichloropropane	9.217	ug/L	10	92	70	130	PASS
1,3-Xylene	19.69	ug/L	20	98	70	130	PASS
4-Chlorotoluene	9.848	ug/L	10	98	70	130	PASS

1,4-Dichlorobenzene	9.483	ug/L	10	95	70	130	PASS
4-Isopropyltoluene	9.581	ug/L	10	96	70	130	PASS
1,4-Xylene	19.69	ug/L	20	98	70	130	PASS
2,2-Dichloropropane	10.323	ug/L	10	103	70	130	PASS
Benzene	9.76	ug/L	10	98	70	130	PASS
Bromobenzene	9.964	ug/L	10	100	70	130	PASS
Bromochloromethane	9.462	ug/L	10	95	70	130	PASS
Bromodichloromethane	9.789	ug/L	10	98	70	130	PASS
Bromoform	9.907	ug/L	10	99	70	130	PASS
Bromomethane	10.632	ug/L	10	106	70	130	PASS
Carbon tetrachloride	10.101	ug/L	10	101	70	130	PASS
Chlorobenzene	9.986	ug/L	10	100	70	130	PASS
Chloroethane	11.969	ug/L	10	120	70	130	PASS
Chloroform	9.873	ug/L	10	99	70	130	PASS
Chloromethane	11.729	ug/L	10	117	70	130	PASS
cis-1,2-Dichloroethylene	9.992	ug/L	10	100	70	130	PASS
cis-1,3-Dichloropropylene	9.652	ug/L	10	97	70	130	PASS
Dibromochloromethane	9.265	ug/L	10	93	70	130	PASS
Dibromomethane	9.38	ug/L	10	94	70	130	PASS
Dichlorodifluoromethane	11.556	ug/L	10	116	70	130	PASS
Dichloromethane	9.637	ug/L	10	96	70	130	PASS
Ethylbenzene	10.192	ug/L	10	102	70	130	PASS
Hexachlorobutadiene	9.501	ug/L	10	95	70	130	PASS
Isopropylbenzene	9.976	ug/L	10	100	70	130	PASS
Methyl-t-butyl ether (MTBE)	9.335	ug/L	10	93	70	130	PASS
Naphthalene	8.929	ug/L	10	89	70	130	PASS
n-Butylbenzene	9.668	ug/L	10	97	70	130	PASS
n-Propylbenzene	9.782	ug/L	10	98	70	130	PASS
sec-Butylbenzene	9.881	ug/L	10	99	70	130	PASS
Styrene	9.319	ug/L	10	93	70	130	PASS
tert-Butylbenzene	9.9	ug/L	10	99	70	130	PASS
Tetrachloroethylene	10.336	ug/L	10	103	70	130	PASS
Toluene	10.118	ug/L	10	101	70	130	PASS
trans-1,2-Dichloroethylene	9.931	ug/L	10	99	70	130	PASS
trans-1,3-Dichloropropylene	9.58	ug/L	10	96	70	130	PASS
Trichloroethylene	9.89	ug/L	10	99	70	130	PASS
Trichlorofluoromethane	10.525	ug/L	10	105	70	130	PASS
Vinyl chloride	12.231	ug/L	10	122	70	130	PASS
Xylenes, Total	28.974	N/A	30	97	70	130	PASS

Environmental Health Laboratories
Quality Control Sample

Sample Matrix: RW
Acquisition File: Not Available
Data Directory: 091504a
Today's Date: 09/28/2004
Instrument: ITD - C
Extracted Date: Not Available
Sample Number: 1103161

Method: 524.2
Calibration File: 524 2-081104C.mth
Analysis Date: 09/16/2004
Analysis Time: 03:37
Analyst: conn
Results Submitted By: conn
Run Number: 68826

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	CCC % Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	IC % Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-1,4-Difluorobenzene	331070	396838	83	70	130	PASS	424562	78	50	150	PASS

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-1,2-Dichlorobenzene-d4	11.837	ug/L	10	118	70	130	PASS
SS-1,2-Dichloroethane-d4	9.574	ug/L	10	96	70	130	PASS
SS-Bromofluorobenzene	6.228	ug/L	5.0	125	70	130	PASS
SS-Toluene-d8	10.752	ug/L	10	108	70	130	PASS

Ordered Parameter Results

Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
1,1,1,2-Tetrachloroethane	No Result	N/A	10	N/A	70	130	N/A
1,1,1-Trichloroethane	No Result	N/A	10	N/A	70	130	N/A
1,1,2,2-Tetrachloroethane	No Result	N/A	10	N/A	70	130	N/A
1,1,2-Trichloroethane	No Result	N/A	10	N/A	70	130	N/A
1,1-Dichloroethane	No Result	N/A	10	N/A	70	130	N/A
1,1-Dichloroethylene	No Result	N/A	10	N/A	70	130	N/A
1,1-Dichloropropylene	No Result	N/A	10	N/A	70	130	N/A
1,2,3-Trichlorobenzene	No Result	N/A	10	N/A	70	130	N/A
1,2,3-Trichloropropane	No Result	N/A	10	N/A	70	130	N/A
1,2,4-Trichlorobenzene	No Result	N/A	10	N/A	70	130	N/A
1,2,4-Trimethylbenzene	No Result	N/A	10	N/A	70	130	N/A
2-Chlorotoluene	No Result	N/A	10	N/A	70	130	N/A
1,2-Dibromoethane (EDB)	No Result	N/A	10	N/A	70	130	N/A
1,2-Dibromo-3-chloropropane (DBCP)	No Result	N/A	10	N/A	70	130	N/A
1,2-Dichlorobenzene	No Result	N/A	10	N/A	70	130	N/A
1,2-Dichloroethane	9.29	ug/L	10	93	70	130	PASS
1,2-Dichloropropane	No Result	N/A	10	N/A	70	130	N/A
1,2-Xylene	No Result	N/A	10	N/A	70	130	N/A
1,3,5-Trimethylbenzene	No Result	N/A	10	N/A	70	130	N/A
1,3-Dichlorobenzene	No Result	N/A	10	N/A	70	130	N/A
1,3-Dichloropropane	No Result	N/A	10	N/A	70	130	N/A
1,3-Xylene	No Result	N/A	20	N/A	70	130	N/A
4-Chlorotoluene	No Result	N/A	10	N/A	70	130	N/A

1,4-Dichlorobenzene	No Result	N/A	10	N/A	70	130	N/A
4-Isopropyltoluene	No Result	N/A	10	N/A	70	130	N/A
1,4-Xylene	No Result	N/A	20	N/A	70	130	N/A
2,2-Dichloropropane	No Result	N/A	10	N/A	70	130	N/A
Benzene	No Result	N/A	10	N/A	70	130	N/A
Bromobenzene	No Result	N/A	10	N/A	70	130	N/A
Bromochloromethane	No Result	N/A	10	N/A	70	130	N/A
Bromodichloromethane	9.231	ug/L	10	92	70	130	PASS
Bromoform	9.286	ug/L	10	93	70	130	PASS
Bromomethane	No Result	N/A	10	N/A	70	130	N/A
Carbon tetrachloride	No Result	N/A	10	N/A	70	130	N/A
Chlorobenzene	No Result	N/A	10	N/A	70	130	N/A
Chloroethane	No Result	N/A	10	N/A	70	130	N/A
Chloroform	9.457	ug/L	10	95	70	130	PASS
Chloromethane	No Result	N/A	10	N/A	70	130	N/A
cis-1,2-Dichloroethylene	No Result	N/A	10	N/A	70	130	N/A
cis-1,3-Dichloropropylene	No Result	N/A	10	N/A	70	130	N/A
Dibromochloromethane	8.993	ug/L	10	90	70	130	PASS
Dibromomethane	No Result	N/A	10	N/A	70	130	N/A
Dichlorodifluoromethane	No Result	N/A	10	N/A	70	130	N/A
Dichloromethane	No Result	N/A	10	N/A	70	130	N/A
Ethylbenzene	No Result	N/A	10	N/A	70	130	N/A
Hexachlorobutadiene	No Result	N/A	10	N/A	70	130	N/A
Isopropylbenzene	No Result	N/A	10	N/A	70	130	N/A
Methyl-t-butyl ether (MTBE)	No Result	N/A	10	N/A	70	130	N/A
Naphthalene	No Result	N/A	10	N/A	70	130	N/A
n-Butylbenzene	No Result	N/A	10	N/A	70	130	N/A
n-Propylbenzene	No Result	N/A	10	N/A	70	130	N/A
sec-Butylbenzene	No Result	N/A	10	N/A	70	130	N/A
Styrene	No Result	N/A	10	N/A	70	130	N/A
tert-Butylbenzene	No Result	N/A	10	N/A	70	130	N/A
Tetrachloroethylene	No Result	N/A	10	N/A	70	130	N/A
Toluene	No Result	N/A	10	N/A	70	130	N/A
trans-1,2-Dichloroethylene	No Result	N/A	10	N/A	70	130	N/A
trans-1,3-Dichloropropylene	No Result	N/A	10	N/A	70	130	N/A
Trichloroethylene	No Result	N/A	10	N/A	70	130	N/A
Trichlorofluoromethane	No Result	N/A	10	N/A	70	130	N/A
Vinyl chloride	No Result	N/A	10	N/A	70	130	N/A
Xylenes, Total	No Result	N/A	30	N/A	70	130	N/A

Environmental Health Laboratories
Volatile Organic Chemicals
Internal Standard Area Summary

	IS1 Area
CCC (1102233)	342280
Upper Limit	444964
Lower Limit	239596
IC AVG AREA (524 2-081104C.mth)	424562
Upper Limit	636843
Lower Limit	212281

Method: 524.2

Sample No.	Filename	IS1 Area	Q
1102231 / LMB	MB-524A	319778	
1102232 / LFB	FB-524A	380571	
1099988 / FS	1099988	406494	
1103156 / CCC	C-10-13C	396838	

IS1 = IS-1,4-Difluorobenzene
Q : B = IS Area out of range compared to the previous CCC IS Area and the Initial Calibration IS Average Area
Q : C = IS Area out of range compared to the previous CCC IS Area
Q : I = IS Area out of range compared to the Initial Calibration IS Average Area

Environmental Health Laboratories
Volatile Organic Chemicals
Internal Standard Area Summary

	IS1 Area
CCC (1103156)	396838
Upper Limit	515889
Lower Limit	277787
IC AVG AREA (524 2-081104C.mth)	424562
Upper Limit	636843
Lower Limit	212281

Method: 524.2

Sample No.	Filename	IS1 Area	Q
1103161 / QCS	Q-524A	331070	

IS1 = IS-1,4-Difluorobenzene
Q : B = IS Area out of range compared to the previous CCC IS Area and the Initial Calibration IS Average Area
Q : C = IS Area out of range compared to the previous CCC IS Area
Q : I = IS Area out of range compared to the Initial Calibration IS Average Area

Environmental Health Laboratories
Volatile Organic Chemicals
Surrogate Percent Recovery

	SS1	SS2	SS3	SS4
Upper Limit	130	130	130	130
Lower Limit	70	70	70	70

Method: 524.2

Sample No.	Filename	SS1	Target	%Rec	Q	SS2	Target	%Rec	Q	SS3	Target	%Rec	Q	SS4	Target	%Rec	Q
1102231 / LMB	MB-524A	10.941	10.0	109		10.378	10.0	104		5.429	5.0	109		10.589	10.0	106	
1102232 / LFB	FB-524A	10.221	10.0	102		10.46	10.0	105		5.331	5.0	107		10.593	10.0	106	
1102233 / CCC	C-5-13A	12.0	10.0	120		10.129	10.0	101		6.119	5.0	122		11.258	10.0	113	
1099988 / FS	1099988	9.52	10.0	95		10.412	10.0	104		5.064	5.0	101		10.282	10.0	103	
1103156 / CCC	C-10-13C	10.715	10.0	107		9.87	10.0	99		5.711	5.0	114		10.485	10.0	105	
1103161 / QCS	Q-524A	11.837	10.0	118		9.574	10.0	96		6.228	5.0	125		10.752	10.0	108	

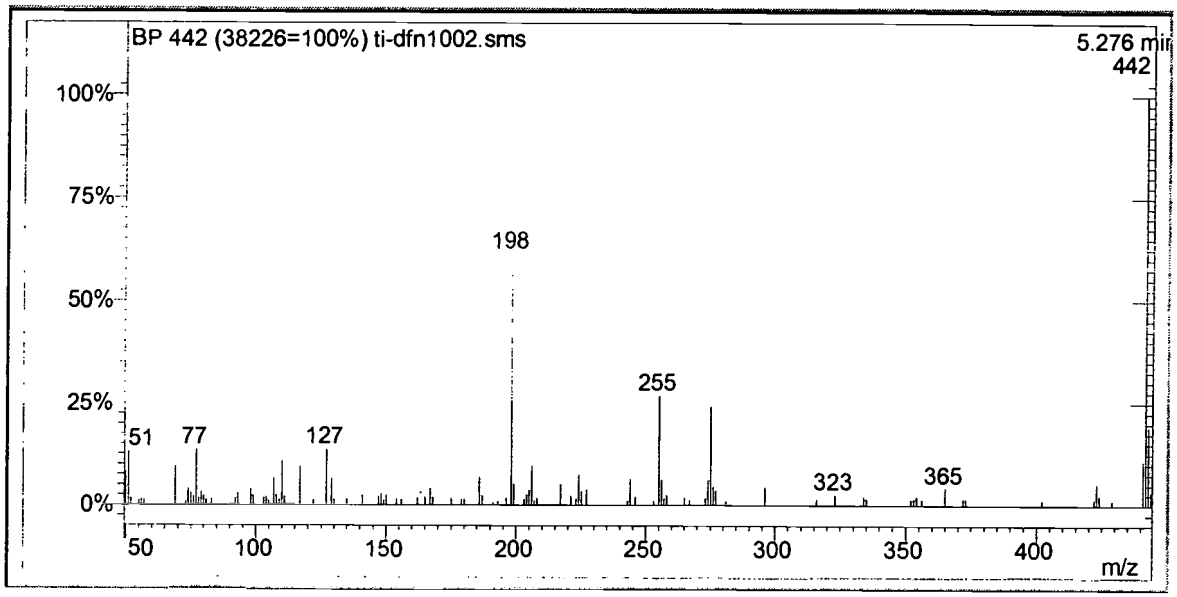
SS1 = SS-1,2-Dichlorobenzene-d4
SS2 = SS-1,2-Dichloroethane-d4
SS3 = SS-Bromofluorobenzene
SS4 = SS-Toluene-d8
Q = Out of Range

Environmental Health Laboratories
Run Log

Run Id: **68817** Method: **525.2** Analyst: **jawillia**

Type	Sample Id	File Name	Sample Site	Matrix	Analysis Date	Analysis Time
LFB	1101866	FB-525A	Not Available	RW	09/14/2004	19:26
LMB	1101865	MB-525A	Not Available	RW	09/14/2004	20:47

DFTPP Report



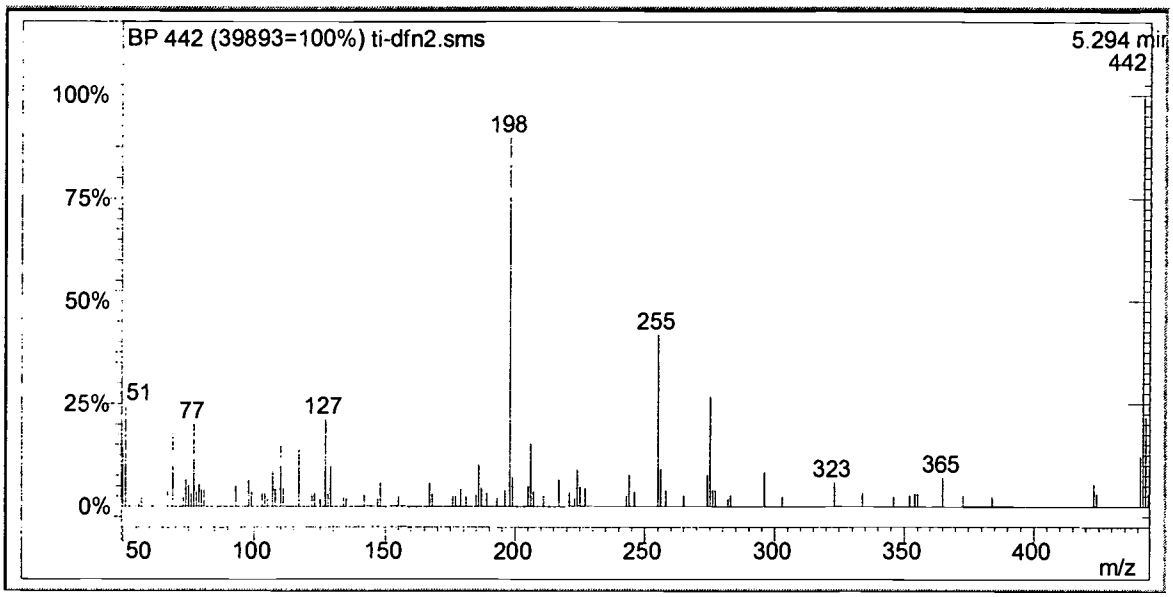
Lab File ID ti-dfn1002.sms

Injection Date: 9/14/04

Injection Time: 17:51

Mass	Acceptance Criterion	Value	Pass/Fail
51	10-80% of base peak	13.16	PASS
68	less than 2% of m/z 69	0.00	PASS
69	present	9.59	PASS
70	less than 2% of m/z 69	0.00	PASS
127	10 to 80% of base peak	13.66	PASS
197	<2% of m/z 198	0.00	PASS
198	base peak or >50% of m/z442	61.53	PASS
199	5 - 9% of m/z 198	8.93	PASS
275	10-60% of base peak	24.29	PASS
365	>1% of base peak	4.34	PASS
441	present and <m/z 443	56.84	PASS
442	base peak or >50% of m/z 198	100.00	PASS
443	15-24% of m/z 442	19.34	PASS

DFTPP Report



Lab File ID ti-dfn2.sms

Injection Date: 9/15/04

Injection Time: 4:18

Mass	Acceptance Criterion	Value	Pass/Fail
51	10-80% of base peak	24.41	PASS
68	less than 2% of m/z 69	0.00	PASS
69	present	18.48	PASS
70	less than 2% of m/z 69	0.00	PASS
127	10 to 80% of base peak	21.29	PASS
197	<2% of m/z 198	0.00	PASS
198	base peak or >50% of m/z442	89.90	PASS
199	5 - 9% of m/z 198	7.99	PASS
275	10-60% of base peak	26.82	PASS
365	>1% of base peak	7.17	PASS
441	present and <m/z 443	56.61	PASS
442	base peak or >50% of m/z 198	100.00	PASS
443	15-24% of m/z 442	21.85	PASS

Environmental Health Laboratories
Laboratory Method Blank

Sample Matrix: RW
Acquisition File: Not Available
2-060204up1.mth
Data Directory: 091404a
Instrument: GC/MS - BV
Extracted Date: 09/14/2004
Sample Number: 1101865
Dilution Factor: 0.976
Sample Site: Not Available
Sample Location: Not Available

Method: 525.2
Calibration File: 525 2-BV-C1

Analysis Date: 09/14/2004
Analysis Time: 20:47
Analyst: jawillia
Results Submitted By: jawillia
Run Number: 68817

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	% Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	% Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-Chrysene-d12	325262	336144	97	70	130	PASS	Not Found	N/A	N/A	N/A	N/A
IS-Phenanthrene-d10	568169	635465	89	70	130	PASS	Not Found	N/A	N/A	N/A	N/A
IS-Pyrene-d10	517174	536579	96	70	130	PASS	Not Found	N/A	N/A	N/A	N/A

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-2,4,5,6-Tetrachloro-m-xylene	4.346	ug/L	5.0	89	70	130	PASS
SS-4,4'-Dichlorobiphenyl	5.133	ug/L	5.0	105	70	130	PASS
SS-Triphenylphosphate	4.711	ug/L	5.0	97	70	130	PASS

Ordered Parameter Results

Parameter	Amount	MRL	Units
Alachlor	< 0.1	0.1	ug/L
Aldrin	< 0.1	0.1	ug/L
Atrazine	< 0.1	0.1	ug/L
Benzo[a]pyrene	< 0.02	0.02	ug/L
Butachlor	< 0.1	0.1	ug/L
Di(2-ethylhexyl)adipate	< 0.6	0.6	ug/L
Di(2-ethylhexyl)phthalate	< 0.6	0.6	ug/L
Dieldrin	< 0.1	0.1	ug/L
Endrin	< 0.01	0.01	ug/L
Heptachlor	< 0.04	0.04	ug/L
Heptachlor epoxide	< 0.02	0.02	ug/L
Hexachlorobenzene	< 0.1	0.1	ug/L
Hexachlorocyclopentadiene	< 0.1	0.1	ug/L
Methoxychlor	< 0.1	0.1	ug/L
Metolachlor	< 0.1	0.1	ug/L
Metribuzin	< 0.1	0.1	ug/L
Propachlor	< 0.1	0.1	ug/L
Simazine	< 0.07	0.07	ug/L
gamma-BHC (Lindane)	< 0.02	0.02	ug/L

Additional Found Parameters

Parameter	Amount	MRL	Units

The symbol * in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.

Environmental Health Laboratories
Laboratory Fortified Blank

Sample Matrix: RW
Acquisition File: Not Available
Data Directory: 091404a
Today's Date: 09/28/2004
Instrument: GC/MS - BV
Extracted Date: 09/14/2004
Sample Number: 1101866

Method: 525.2
Calibration File: 525 2-BV-C1 2-060204up1.mth
Analysis Date: 09/14/2004
Analysis Time: 19:26
Analyst: jawillia
Results Submitted By: jawillia
Run Number: 68817

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	% Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	% Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-Chrysene-d12	293239	336144	87	70	130	PASS	Not Found	N/A	N/A	N/A	N/A
IS-Phenanthrene-d10	549544	635465	86	70	130	PASS	Not Found	N/A	N/A	N/A	N/A
IS-Pyrene-d10	553748	536579	103	70	130	PASS	Not Found	N/A	N/A	N/A	N/A

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-2,4,5,6-Tetrachloro-m-xylene	4.75	ug/L	5.0	95	70	130	PASS
SS-4,4'-Dichlorobiphenyl	5.436	ug/L	5.0	109	70	130	PASS
SS-Triphenylphosphate	5.05	ug/L	5.0	101	70	130	PASS

Ordered Parameter Results

Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
Alachlor	2.227	ug/L	2.0	111	70	130	PASS
Aldrin	2.164	ug/L	2.0	108	70	130	PASS
Atrazine	2.3	ug/L	2.0	115	70	130	PASS
Benzo[a]pyrene	1.944	ug/L	2.0	97	70	130	PASS
Butachlor	2.35	ug/L	2.0	118	70	130	PASS
Di(2-ethylhexyl)adipate	1.853	ug/L	2.0	93	70	130	PASS
Di(2-ethylhexyl)phthalate	2.098	ug/L	2.0	105	70	130	PASS
Dieldrin	1.764	ug/L	2.0	88	70	130	PASS
Endrin	2.016	ug/L	2.0	101	70	130	PASS
gamma-BHC (Lindane)	2.199	ug/L	2.0	110	70	130	PASS
Heptachlor	2.037	ug/L	2.0	102	70	130	PASS
Heptachlor epoxide	2.083	ug/L	2.0	104	70	130	PASS
Hexachlorobenzene	2.072	ug/L	2.0	104	70	130	PASS
Hexachlorocyclopentadiene	2.183	ug/L	2.0	109	70	130	PASS
Methoxychlor	2.187	ug/L	2.0	109	70	130	PASS
Metolachlor	2.245	ug/L	2.0	112	70	130	PASS
Metribuzin	2.309	ug/L	2.0	115	70	130	PASS
Propachlor	2.284	ug/L	2.0	114	70	130	PASS
Simazine	2.182	ug/L	2.0	109	70	130	PASS

Environmental Health Laboratories
Run Log

Run Id: **69180** Method: **525.2** Analyst: **clear**

Type	Sample Id	File Name	Sample Site	Matrix	Analysis Date	Analysis Time
CCC	1108393	C-2-C1B	Not Available	OS	09/27/2004	13:28
FS	1099989	1099989	DK28003	DW	09/27/2004	14:53
CCC	1109626	C-2-C1C	Not Available	OS	09/27/2004	15:33

SEMI-VOLATILE ORGANIC CHEMICALS
LABORATORY PERFORMANCE CHECK

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	BV/092704A
Contract:	n/a	Task:	n/a	Data Directory:	BV\092704A
Project:	IDEM / DK28003 / Site ID 04430006	Case:	n/a	Initial Cali File:	BV\060204
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - BV
Data File:	S-525A				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Phenanthrene / Anthracene		2.0 2.0	Separated by baseline? Y/N	Y	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde & Endrin Ketone	2.0	< 20% Endrin Aldehyde & Endrin Ketone	< 20 %	Pass	
Benzo(a)anthracene Chrysene		2.0 2.0	Valley height < 25% height of peaks? Y/N	Y	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE	2.0	< 20% 4,4'-DDD & 4,4'-DDE	< 20 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

Environmental Health Laboratories
Continuing Calibration Check

Sample Matrix: OS
Acquisition File: Not Available
Data Directory: 092704a
Today's Date: 09/28/2004
Instrument: GC/MS - BV
Extracted Date: Not Available
Sample Number: 1108393

Method: 525.2
Calibration File: 525 2-BV-C1 2-060204up1.mth
Analysis Date: 09/27/2004
Analysis Time: 13:28
Analyst: clear
Results Submitted By: clear
Run Number: 69180

Sample Quality Control

Internal Standards		CCC					IC				
				Area					Area		
Parameter	Area	CCC Area	% Resp	Limits Lwr	Limits Upr	Pass / Fail	IC Avg Area	% Resp	Limits Lwr	Limits Upr	Pass / Fail
IS-Pyrene-d10	593770	613776	97	70	130	PASS	481444	123	50	150	PASS
IS-Phenanthrene-d10	687781	735585	94	70	130	PASS	674943	102	50	150	PASS
IS-Chrysene-d12	346098	351972	98	70	130	PASS	363890	95	50	150	PASS

Surrogate Standards					Limits		
Parameter	Amount	Units	Target	%Rec	Lower	Upper	Pass/Fail
SS-4,4'-Dichlorobiphenyl	5.644	ug/L	5.0	113	70	130	PASS
SS-2,4,5,6-Tetrachloro-m-xylene	5.208	ug/L	5.0	104	70	130	PASS
SS-Triphenylphosphate	5.051	ug/L	5.0	101	70	130	PASS

Ordered Parameter Results

					Limits		
Parameter	Amount	Units	Target	%Rec	Lower	Upper	Pass/Fail
Aldrin	2.377	ug/L	2.0	119	70	130	PASS
gamma-BHC (Lindane)	2.274	ug/L	2.0	114	70	130	PASS
Butachlor	2.264	ug/L	2.0	113	70	130	PASS
Atrazine	2.246	ug/L	2.0	112	70	130	PASS
Propachlor	2.237	ug/L	2.0	112	70	130	PASS
Metolachlor	2.228	ug/L	2.0	111	70	130	PASS
Alachlor	2.222	ug/L	2.0	111	70	130	PASS
Methoxychlor	2.192	ug/L	2.0	110	70	130	PASS
Heptachlor	2.186	ug/L	2.0	109	70	130	PASS
Heptachlor epoxide	2.152	ug/L	2.0	108	70	130	PASS
Di(2-ethylhexyl)adipate	2.116	ug/L	2.0	106	70	130	PASS
Di(2-ethylhexyl)phthalate	2.11	ug/L	2.0	106	70	130	PASS
Endrin	2.101	ug/L	2.0	105	70	130	PASS
Hexachlorobenzene	2.046	ug/L	2.0	102	70	130	PASS
Simazine	1.987	ug/L	2.0	99	70	130	PASS
Metribuzin	1.844	ug/L	2.0	92	70	130	PASS
Dieldrin	1.844	ug/L	2.0	92	70	130	PASS
Hexachlorocyclopentadiene	1.685	ug/L	2.0	84	70	130	PASS
Benzo[a]pyrene	1.441	ug/L	2.0	72	70	130	PASS

Environmental Health Laboratories
Sample Result Record Sheet

Sample Matrix: DW
Acquisition File: Not Available
2-060204up1.mth
Data Directory: 092704a
Instrument: GC/MS - BV
Extracted Date: 09/14/2004
Sample Number: 1099989
Dilution Factor: 0.971
Sample Site: DK28003
Sample Location: Not Available

Method: 525.2
Calibration File: 525 2-BV-C1

Analysis Date: 09/27/2004
Analysis Time: 14:53
Analyst: clear
Results Submitted By: clear
Run Number: 69180

Sample Quality Control

Internal Standards Parameter	Area	CCC Area	CCC % Resp	CCC Area Limits Lwr	CCC Area Limits Upr	CCC Pass / Fail	IC Avg Area	IC % Resp	IC Area Limits Lwr	IC Area Limits Upr	IC Pass / Fail
IS-Chrysene-d12	338646	346098	98	70	130	PASS	Not Found	N/A	N/A	N/A	N/A
IS-Phenanthrene-d10	619872	687781	90	70	130	PASS	Not Found	N/A	N/A	N/A	N/A
IS-Pyrene-d10	582090	593770	98	70	130	PASS	Not Found	N/A	N/A	N/A	N/A

Surrogate Standards Parameter	Amount	Units	Target	%Rec	Limits Lower	Limits Upper	Pass/Fail
SS-2,4,5,6-Tetrachloro-m-xylene	4.948	ug/L	5.0	102	70	130	PASS
SS-4,4'-Dichlorobiphenyl	5.693	ug/L	5.0	117	70	130	PASS
SS-Triphenylphosphate	5.385	ug/L	5.0	111	70	130	PASS

Ordered Parameter Results

Parameter	Amount	MRL	Units
Alachlor	< 0.1	0.1	ug/L
Aldrin	< 0.1	0.1	ug/L
Atrazine	< 0.1	0.1	ug/L
Benzo[a]pyrene	< 0.02	0.02	ug/L
Butachlor	< 0.1	0.1	ug/L
Di(2-ethylhexyl)adipate	< 0.6	0.6	ug/L
Di(2-ethylhexyl)phthalate	< 0.6	0.6	ug/L
Dieldrin	< 0.1	0.1	ug/L
Endrin	< 0.01	0.01	ug/L
Heptachlor	< 0.04	0.04	ug/L
Heptachlor epoxide	< 0.02	0.02	ug/L
Hexachlorobenzene	< 0.1	0.1	ug/L
Hexachlorocyclopentadiene	< 0.1	0.1	ug/L
Methoxychlor	< 0.1	0.1	ug/L
Metolachlor	< 0.1	0.1	ug/L
Metribuzin	< 0.1	0.1	ug/L
Propachlor	< 0.1	0.1	ug/L
Simazine	< 0.07	0.07	ug/L
gamma-BHC (Lindane)	< 0.02	0.02	ug/L

Additional Found Parameters

Parameter	Amount	MRL	Units

The symbol * in the Amount column above indicates that the sample was re-analyzed for that parameter and the results are presented on another page.

SEMI-VOLATILE ORGANIC CHEMICALS
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	BV/092704A
Contract:	ORGANLY-02	Task:	n/a	Data Directory:	BV\092704A
Project:	IDEM / DK28003	Case:	n/a	Initial Cali File:	BV\060204
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - BV
				Date Received:	09/09/04
				Date Analyzed:	09/27/04

Sample Description	Compound	CAS #	Estimated Concentration	Units	Retention Time(mins.)	Q
DK28003	0		----	----	----	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

0 = None found

Comments:

Environmental Health Laboratories
Continuing Calibration Check

Sample Matrix: OS
Acquisition File: Not Available
Data Directory: 092704a
Today's Date: 09/28/2004
Instrument: GC/MS - BV
Extracted Date: Not Available
Sample Number: 1109626

Method: 525.2
Calibration File: 525 2-BV-C1 2-060204up1.mth
Analysis Date: 09/27/2004
Analysis Time: 15:33
Analyst: clear
Results Submitted By: clear
Run Number: 69180

Sample Quality Control

Internal Standards		CCC					IC				
				Area					Area		
Parameter	Area	CCC Area	% Resp	Limits Lwr	Limits Upr	Pass / Fail	IC Avg Area	% Resp	Limits Lwr	Limits Upr	Pass / Fail
IS-Chrysene-d12	343119	346098	99	70	130	PASS	363890	94	50	150	PASS
IS-Phenanthrene-d10	681109	687781	99	70	130	PASS	674943	101	50	150	PASS
IS-Pyrene-d10	587647	593770	99	70	130	PASS	481444	122	50	150	PASS

Surrogate Standards					Limits		
Parameter	Amount	Units	Target	%Rec	Lower	Upper	Pass/Fail
SS-2,4,5,6-Tetrachloro-m-xylene	5.12	ug/L	5.0	102	70	130	PASS
SS-4,4'-Dichlorobiphenyl	5.392	ug/L	5.0	108	70	130	PASS
SS-Triphenylphosphate	5.081	ug/L	5.0	102	70	130	PASS

Ordered Parameter Results

					Limits		
Parameter	Amount	Units	Target	%Rec	Lower	Upper	Pass/Fail
Alachlor	2.202	ug/L	2.0	110	70	130	PASS
Aldrin	2.398	ug/L	2.0	120	70	130	PASS
Atrazine	2.216	ug/L	2.0	111	70	130	PASS
Benzo[a]pyrene	1.476	ug/L	2.0	74	70	130	PASS
Butachlor	2.262	ug/L	2.0	113	70	130	PASS
Di(2-ethylhexyl)adipate	2.055	ug/L	2.0	103	70	130	PASS
Di(2-ethylhexyl)phthalate	2.048	ug/L	2.0	102	70	130	PASS
Dieldrin	1.849	ug/L	2.0	92	70	130	PASS
Endrin	2.069	ug/L	2.0	103	70	130	PASS
gamma-BHC (Lindane)	2.205	ug/L	2.0	110	70	130	PASS
Heptachlor	2.137	ug/L	2.0	107	70	130	PASS
Heptachlor epoxide	2.096	ug/L	2.0	105	70	130	PASS
Hexachlorobenzene	2.092	ug/L	2.0	105	70	130	PASS
Hexachlorocyclopentadiene	2.001	ug/L	2.0	100	70	130	PASS
Methoxychlor	2.194	ug/L	2.0	110	70	130	PASS
Metolachlor	2.202	ug/L	2.0	110	70	130	PASS
Metribuzin	1.862	ug/L	2.0	93	70	130	PASS
Propachlor	2.201	ug/L	2.0	110	70	130	PASS
Simazine	1.932	ug/L	2.0	97	70	130	PASS

Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary

	IS1 Area	IS2 Area	IS3 Area
CCC (1108393)	346098	687781	593770
Upper Limit	449927	894115	771901
Lower Limit	242269	481447	415639
IC AVG AREA (525 2-BV-C1 2-060204up1.mth)	363890	674943	481444
Upper Limit	545835	1012414	722166
Lower Limit	181945	337472	240722

Method: 525.2

Sample No.	Filename	IS1 Area	Q	IS2 Area	Q	IS3 Area	Q
1099989 / FS	1099989	338646		619872		582090	
1109626 / CCC	C-2-C1C	343119		681109		587647	

IS1 = IS-Chrysene-d12
IS2 = IS-Phenanthrene-d10
IS3 = IS-Pyrene-d10
Q : B = IS Area out of range compared to the previous CCC IS Area and the Initial Calibration IS Average Area
Q : C = IS Area out of range compared to the previous CCC IS Area
Q : I = IS Area out of range compared to the Initial Calibration IS Average Area

Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Internal Standard Area Summary

	IS1 Area	IS2 Area	IS3 Area
CCC (1109626)	343119	681109	587647
Upper Limit	446055	885442	763941
Lower Limit	240183	476776	411353
IC AVG AREA (525 2-BV-C1 2-060204up1.mth)	363890	674943	481444
Upper Limit	545835	1012414	722166
Lower Limit	181945	337472	240722

Method: 525.2

Sample No.	Filename	IS1 Area	Q	IS2 Area	Q	IS3 Area	Q

IS1 = IS-Chrysene-d12
IS2 = IS-Phenanthrene-d10
IS3 = IS-Pyrene-d10
Q : B = IS Area out of range compared to the previous CCC IS Area and the Initial Calibration IS Average Area
Q : C = IS Area out of range compared to the previous CCC IS Area
Q : I = IS Area out of range compared to the Initial Calibration IS Average Area

Environmental Health Laboratories
Semi-Volatile Organic Chemicals
Surrogate Percent Recovery

	SS1	SS2	SS3
Upper Limit	130	130	130
Lower Limit	70	70	70

Method: 525.2

Sample No.	Filename	SS1	Target	%Rec	Q	SS2	Target	%Rec	Q	SS3	Target	%Rec	Q
1108393 / CCC	C-2-C1B	5.208	5.0	104		5.644	5.0	113		5.051	5.0	101	
1099989 / FS	1099989	4.948	5.0	102		5.693	5.0	117		5.385	5.0	111	
1109626 / CCC	C-2-C1C	5.12	5.0	102		5.392	5.0	108		5.081	5.0	102	

SS1 = SS-2,4,5,6-Tetrachloro-m-xylene
SS2 = SS-4,4'-Dichlorobiphenyl
SS3 = SS-Triphenylphosphate
Q = Out of Range

102232

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

☐ OWM ☐ OSHWM ☐ OER ☐ OAM

CHAIN OF CUSTODY

I Certify that the sample(s) listed below was/were collected by me or in my presence. Date: / / P.O. #:

Signature: James L. Harris Section: Ground Water

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	CONSISTING OF THE INDICATED NUMBER OF BOTTLES											DATE AND TIME COLLECTED
		2000 ml P, N. M.	1000 ml P, N. M.	1000 ml G, N. M.	500 ml G,W. M.	250 ml G,W. M.	125 ml G,W. M.	40 ml VIAL	120 ml P,(B.O.)	500 ml P, N. M.	250 ml P, N. M.		
	DK28003		1	2				2		1	1		9 19 104 11:45 AM/PM
			pH<2 SO4							pH>12 NaOH			/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
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													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM

P-Plastic G-Glass N.M.-Narrow Mouth W.M.-Wide Mouth B. O.- Bacti. Only

CARRIERS

Should samples be iced? Y N

I certify that I received the above sample(s)

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: James Harris	9 19 104	Y	N	Wet Ice
RECEIVED BY: S Gregson	1:00 AM/PM			
RELINQUISHED BY:	/ /	Y	N	CLIENT PROVIDED
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	SAMPLE CONTAINER
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

Lab Custodian

I certify that I received the above sample(s) and is/are recorded in the official record book. The same samples will be in custody of competent laboratory personnel at all time or locked in a secure area.

Signature: S Gregson Date: 9 19 04 Time: 1300 AM/PM

Lab: EHL Address: 110 S Hill South Bend, IN

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER/GROUND WATER SECTION
BAA 1-86 SAMPLE TASK SHEET

Site ID: 04430006 IDEM Sample #s: DK 28003 To DK _____ Project Date: ~~7/18/04~~ 9-9-04

Sampler: Harris Assigned Lab: UL [x] HLI [ ]

TASK 1 - METALS							
Antimony	X	Barium	X	Aluminum			
Arsenic	X	Calcium	X	Boron			
Beryllium	X	Iron	X	Cobalt			
Cadmium	X	Magnesium	X	Manganese			
Chromium	X	Potassium	X	Selenium			
Copper	X	Sodium	X	Silver			
Lead	X			Titanium			
Mercury	X			Thallium			
Nickle	X			Zinc			

TASK 2 – GENERAL INORGANICS, MICROBIOLOGIC, NUTRIENTS & ORGANICS					
Alkalinity	X	Total Coliforms,		Phosphorous (Applicable to All Forms)	
BOD5		Cyanide, Total		Solids, Filterable Residue (TDS)	
BOD, Ultimate		Cyanide, Amenable		Solids, Non-Filterable Residue (TSS)	
Bromide		Fluoride		Solids, % (Solid Waste Matrices)	
Chemical Oxygen Demand		Hardness as CaC03		Solids, Settleable Residue	
Chloride	X	Nitrogen, Kjeldahl (TKN)		Specific Conductanc	
Chlorine, Free & Total		Nitrogen, Nitrate		Sulfate	X
Chlorine, Free		Nitrogen, Nitrite		Total Organic carbon (TOC)	
Chromium, Hexavalent		Nitrogen, Nitrate-Nitrite	X	Turbidity	
Coliforms, E.coli		pH (Lab)			
Coliforms, Fecal		Phosphorous, ortho			

TASK 3 - ORGANICS					
524.2 – Volatile Organics	X	504.1 - EDB & DBCP		513 -TCDD (2,3,7,8-TCDD)	
524.2E – Volatile Organics Extended		505 - Organohalides & PCB's		515.1 - Chlorinated Acids - ECD	
525.2 – Semivolatile Organics	X	507 - Nitrogen/Phosphorous NPD		515.3 - Chlorinated Acids - ECD	
525.2E – Semivolatile Organics Extended		508.1 - Chlorinated Acids- ECD		531.1 - Carbamates	

SAS											
Worst Case Approximation	<10ppb	X	1-10ppm		10-100ppm		100-1000ppm		>1000ppm	
REPORTING TIME (Days)	30	X	14		2					

COMMENTS

Mailed Reports	Hand Delivered Reports	Contact Information
Mitt Denney IDEM Ground Water Section, 66-33 100 N Senate Ave Indianapolis, IN 46204	Mitt Denney IDEM Ground Water Section, 66-33 2525 N Shadeland Ave Indianapolis, IN 46219	(317) 308-3324 (317) 308-3339, fax mldenny@dem.state.in.us

Environmental Health Laboratories
The Nation's Drinking Water Laboratory
110 S. Hill Street
South Bend, IN 46617
(800) 332-4345
Fax (574) 233-8207
www.ehl.cc

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See back for example document.

ORDER # 102232

STAPLE AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE _____ OF _____

CLIENT/COMPANY ORDERING TEST	SAMPLER (Signature)	STATE (of Sample Origin)	PWS ID#	PROJECT NAME	PO#
IDEM		POPULATION SERVED:	SOURCE WATER:		
COMPLIANCE MONITORING? YES NO					

EHL LAB#	COLLECTION DATE	COLLECTION TIME	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	Chlorinated Yes	Chlorinated No	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
1099985	9/9	1145 AM PM	DK28003	SO4, Cl, TAK				1		
1099986	↓	↓ AM PM	↓	NO3	pH<2			1		
1099987		AM PM		Sb, As, Ba, Be, Ca, Cd, Cr, Cu, Fe, Pb, Mg, Hg, Ni, K, Na	pH>2			1		
1099988		AM PM		524.2				2		
1099989	↓	↓ AM PM	↓	525.2				2		
		AM PM								
		AM PM								
		AM PM								
		AM PM								
		AM PM								
		AM PM								
		AM PM								
		AM PM								

CLIENT PROVIDED SAMPLE CONTAINER

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
		AM PM			AM PM
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
		AM PM			AM PM
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
		AM PM	SGyson	09-04	1300 AM PM

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

LAB COMMENTS In House COC

CONDITIONS UPON RECEIPT: (Check One) Wet ☒ Iced ☐ Ambient or _____ °C Upon Receipt

MATRIX CODES:

TURN-AROUND TIME (TAT) - SURCHARGES

SW = STANDARD WRITTEN (15 WORKING DAYS) **0%**
RV* = RUSH (5 WORKING DAYS) VERBAL **50%**
RW* = RUSH (5 WORKING DAYS) WRITTEN **75%**
*-Please Call, Expedited services not available for all services.

IV* = IMMEDIATE (3 WORKING DAYS) VERBAL **100%**
IW* = IMMEDIATE (3 WORKING DAYS) WRITTEN **125%**
SP* = WEEKEND, HOLIDAY **Call**

STAT* = LESS THAN 48 HOURS **Call**
Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges.