

Report Date:
31-Jan-12 11:18



- Final Report
 Re-Issued Report
 Revised Report

Laboratory Report

Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

Work Order: L0073
Project : Franklin Cleaners
Project #:

Attn: Robbin Petrella

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L0073-01	EW-1	Aqueous	11-Jan-12 10:20	13-Jan-12 10:00
L0073-02	EW-2	Aqueous	11-Jan-12 10:29	13-Jan-12 10:00
L0073-03	AS	Aqueous	11-Jan-12 10:40	13-Jan-12 10:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the sample(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : Franklin Cleaners

SDG : L0073

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
EW-1	L0073-01	E624				
EW-2	L0073-02	E624				
AS	L0073-03	E624			SW6010_W	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Franklin Cleaners

SDG : L0073

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
E624					
L0073-01A	AQ	1/11/2012	1/13/2012	NA	1/13/2012
L0073-02A	AQ	1/11/2012	1/13/2012	NA	1/13/2012
L0073-03A	AQ	1/11/2012	1/13/2012	NA	1/13/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary MSVOA

Project Name : Franklin Cleaners

SDG : L0073

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
E624					
L0073-01A	AQ	E624	NA	LOW	1
L0073-02A	AQ	E624	NA	LOW	1
L0073-03A	AQ	E624	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary ME

Project Name : Franklin Cleaners

SDG : L0073

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
L0073-03B	AQ	SW6010_W	1/13/2012	1/18/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L0073

Client ID: DVIRKA_WOODBURY

Project: Franklin Cleaners

WO Name: Franklin Cleaners

Location: FRANKLIN_CLEANERS,

Comments: N/A

Case:

SDG:

PO: 130050

HC Due: 02/01/12

Fax Due:

Fax Report:

Report Level: ASP-A

Special Program:

EDD: EQUIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0073-01A	EW-1	01/11/2012 10:20	01/13/2012	Aqueous	E624	/				Y	VOA
L0073-02A	EW-2	01/11/2012 10:29	01/13/2012	Aqueous	E624	/				Y	VOA
L0073-03A	AS	01/11/2012 10:40	01/13/2012	Aqueous	E624	/				Y	VOA
L0073-03B	AS	01/11/2012 10:40	01/13/2012	Aqueous	SW6010_W	/ Fe,Mn				Y	M6

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation



SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
 Standard TAT - 7 to 10 business days
 Rush TAT - Date Needed: _____
 All TATs subject to laboratory approval.
 Min. 24-hour notification needed for rushes.
 Samples disposed of after 60 days unless otherwise instructed.

Report To: Karen Sanford
Environmental Assessment & Remediation
225 Atlantic Ave.
Patchogue, NY 11772
 Telephone #: 631-447-6400
 Project Mgr. Karen Sanford

Invoice To: State Thruway Authority
330 Crossways Park Dr.
Woodbury, NY 11797
 P.O. No.: _____ RQN: _____

Project No.: Franklin Cleanes (Oct-Hempstead)
 Site Name: Site ID 130050
 Location: Hempstead State: NY
 Sampler(s): KS

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9=Deionized Water 10= _____ 11= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
 X1= _____ X2= _____ X3= _____

List preservative code below:

2 4

QA/QC Reporting Notes:
 * additional charges may apply

MA DEP MCP CAM Report: Yes No
 CT DPH RCP Report: Yes No

QA/QC Reporting Level
 Standard No QC DQA*
 NY ASP A* NY ASP B*
 NJ Reduced* NJ Full*
 TIER II* TIER V*
 Other: Cat X

State-specific reporting standards:

Analyses:

Containers:

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Matrix

Type

Time:

Sample Id:

Lab Id:

Date:

Date:

Date:

Lab Id:

Relinquished by:

Received by:

Date:

Time:

Temp °C

Karen Stewart EAR Sample fridge 1-11-12 1330 -3.5
Ear Sample fridge William A Vigliotta 1-12-12 1305
William A Vigliotta Ear Sample fridge 1-12-12 1305 -3.5

Ambient Ice Refrigerated Fridge temp _____ °C Freezer temp _____ °C

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

Received By: <u>Dawn Mule</u>		Page 01 of 01	
Reviewed By: <u>JTC</u>		Log-in Date 01/13/2012	
Work Order: L0073		Client Name: Dvirka & Bartilucci	
Project Name/Event: Franklin Cleaners			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			
		Preservation (pH)	
		Lab Sample ID	Soil HeadSpace or Air Bubble > or equal to 1/4"
		HNO3	H2SO4
		HCl	NaOH
		H3PO4	VOA Matrix
1. Custody Seal(s) <u>Present / Absent</u>		L0073-01	<2
<u>Intact / Broken</u>		L0073-02	<2
2. Custody Seal Nos. N/A		L0073-03	<2
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists <u>Present / Absent</u>			
4. Airbill <u>AirBill / Sticker</u>			
<u>Present / Absent</u>			
5. Airbill No. Courier N/A			
6. Sample Tags <u>Present / Absent</u>			
Sample Tag Numbers Listed /			
<u>Not Listed on Chain-of-Custody</u>			
7. Sample Condition <u>Intact / Broken / Leaking</u>			
8. Cooler Temperature Indicator Bottle <u>Present / Absent</u>			
9. Cooler Temperature 4 °C			
10. Does information on TR/COCs and sample tags agree? <u>Yes / No</u>			
11. Date Received at Laboratory 01/13/2012			
12. Time Received 10:00			
Sample Transfer			
Fraction (1) TVOA/VOA		Fraction (2) SVOA/PEST/ARO	
Area #		Area #	
By		By	
On		On	
IR Temp Gun ID: MT-1		VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M = MeOH E = Encore N = NaHSO4 F = Freeze	
Coolant Condition: ICE			
Preservative Name/Lot No:		See Sample Condition Notification/Corrective Action Form Yes / <u>No</u>	
		Rad OK <u>Yes</u> / No	



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HANIBAL TECHNOLOGY

*** Volatiles ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Dvirka & Bartilucci

Project: Franklin Cleaners

Laboratory Workorder / SDG #: L0073

EPA 624, VOC 624 by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
EPA 624

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V10
Instrument Type: GCMS-VOA
Description: HP7890A
Manufacturer: Agilent
Model: 7890A / 5975C

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.

LCS-64167 in batch 64170, recovery is below criteria for cis-1,2-Dichloroethene at 81% with criteria of (83-120).

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

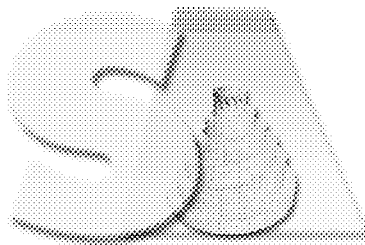
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

A handwritten signature in black ink, appearing to be 'J. H. P.', written over a horizontal line.

Signed: _____

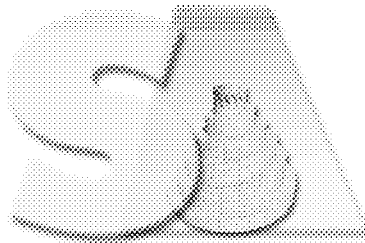
Date: _____ 1/31/2012 _____



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Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



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Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0073-01A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9175.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/13/2012
 % Moisture: not dec. Date Analyzed: 01/13/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
127-18-4	Tetrachloroethene		19	
124-48-1	Dibromochloromethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
75-25-2	Bromoform		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
110-75-8	2-Chloroethyl vinyl ether		5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0073-02A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9176.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/13/2012
 % Moisture: not dec. Date Analyzed: 01/13/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
127-18-4	Tetrachloroethene		57	
124-48-1	Dibromochloromethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
75-25-2	Bromoform		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
110-75-8	2-Chloroethyl vinyl ether		5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L0073-03A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9177.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/13/2012
 % Moisture: not dec. Date Analyzed: 01/13/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
75-09-2	Methylene chloride		5.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
127-18-4	Tetrachloroethene		5.0	U
124-48-1	Dibromochloromethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
75-25-2	Bromoform		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
110-75-8	2-Chloroethyl vinyl ether		5.0	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCS-64167

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-64167
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9167.D
 Level: (TRACE/LOW/MED) LOW Date Received: _____
 % Moisture: not dec. Date Analyzed: 01/13/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		33	
74-87-3	Chloromethane		36	
75-01-4	Vinyl chloride		41	
74-83-9	Bromomethane		45	
75-00-3	Chloroethane		49	
75-69-4	Trichlorofluoromethane		50	
75-35-4	1,1-Dichloroethene		39	
75-09-2	Methylene chloride		41	
156-60-5	trans-1,2-Dichloroethene		40	
75-34-3	1,1-Dichloroethane		43	
156-59-2	cis-1,2-Dichloroethene		40	
67-66-3	Chloroform		40	
71-55-6	1,1,1-Trichloroethane		42	
56-23-5	Carbon tetrachloride		43	
107-06-2	1,2-Dichloroethane		44	
79-01-6	Trichloroethene		39	
78-87-5	1,2-Dichloropropane		43	
75-27-4	Bromodichloromethane		41	
10061-01-5	cis-1,3-Dichloropropene		42	
10061-02-6	trans-1,3-Dichloropropene		42	
79-00-5	1,1,2-Trichloroethane		40	
127-18-4	Tetrachloroethene		48	
124-48-1	Dibromochloromethane		49	
108-90-7	Chlorobenzene		49	
75-25-2	Bromoform		45	
79-34-5	1,1,2,2-Tetrachloroethane		47	
541-73-1	1,3-Dichlorobenzene		47	
106-46-7	1,4-Dichlorobenzene		47	
95-50-1	1,2-Dichlorobenzene		47	
110-75-8	2-Chloroethyl vinyl ether		30	

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-64167

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-64167
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8A9159.D
 Level: (TRACE/LOW/MED) LOW Date Received: _____
 % Moisture: not dec. Date Analyzed: 01/13/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
75-09-2	Methylene chloride		1.0	U
156-60-5	trans-1,2-Dichloroethene		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon tetrachloride		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
127-18-4	Tetrachloroethene		5.0	U
124-48-1	Dibromochloromethane		5.0	U
108-90-7	Chlorobenzene		1.0	U
75-25-2	Bromoform		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		1.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
110-75-8	2-Chloroethyl vinyl ether		5.0	U

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	MB-64167	96	94	118	97				0
02	LCS-64167	96	96	113	101				0
03	EW-1	95	96	115	98				0
04	EW-2	95	96	116	98				0
05	AS	94	95	116	97				0

VDMC1 (DBFM) Dibromofluoromethane
VDMC2 (DCE) = 1,2-Dichloroethane-d4
VDMC3 (TOL) = Toluene-d8
VDMC4 (BFB) = Bromofluorobenzene

QC LIMITS
(85-115)
(70-120)
(85-120)
(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som111.10.27.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-64167

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073
Lab Sample ID: LCS-64167 LCS Lot No.: _____
Date Extracted: 01/13/2012 Date Analyzed (1): 01/13/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	33.0897	66		48 - 135
Chloromethane	50.0000	0.0000	36.0336	72		1 - 273
Vinyl chloride	50.0000	0.0000	41.2908	83		1 - 251
Bromomethane	50.0000	0.0000	45.1220	90		1 - 242
Chloroethane	50.0000	0.0000	49.4173	99		14 - 230
Trichlorofluoromethane	50.0000	0.0000	50.0476	100		17 - 181
1,1-Dichloroethene	50.0000	0.0000	39.3782	79		1 - 234
Methylene chloride	50.0000	0.0000	40.9492	82		1 - 221
trans-1,2-Dichloroethene	50.0000	0.0000	40.0698	80		54 - 156
1,1-Dichloroethane	50.0000	0.0000	42.7460	85		59 - 155
cis-1,2-Dichloroethene	50.0000	0.0000	40.3868	81	*	83 - 120
Chloroform	50.0000	0.0000	40.3774	81		51 - 138
1,1,1-Trichloroethane	50.0000	0.0000	42.1910	84		52 - 162
Carbon tetrachloride	50.0000	0.0000	42.7062	85		70 - 140
1,2-Dichloroethane	50.0000	0.0000	43.7614	88		49 - 155
Trichloroethene	50.0000	0.0000	39.1916	78		71 - 157
1,2-Dichloropropane	50.0000	0.0000	42.9673	86		1 - 210
Bromodichloromethane	50.0000	0.0000	41.4706	83		35 - 155
cis-1,3-Dichloropropene	50.0000	0.0000	41.5249	83		1 - 227
trans-1,3-Dichloropropene	50.0000	0.0000	41.7617	84		17 - 183
1,1,2-Trichloroethane	50.0000	0.0000	40.1132	80		52 - 150
Tetrachloroethene	50.0000	0.0000	47.5773	95		64 - 148
Dibromochloromethane	50.0000	0.0000	48.5219	97		53 - 149
Chlorobenzene	50.0000	0.0000	48.6672	97		37 - 150
Bromoform	50.0000	0.0000	45.0590	90		45 - 169
1,1,2,2-Tetrachloroethane	50.0000	0.0000	47.4406	95		46 - 157
1,3-Dichlorobenzene	50.0000	0.0000	47.3663	95		59 - 156
1,4-Dichlorobenzene	50.0000	0.0000	46.8491	94		18 - 190
1,2-Dichlorobenzene	50.0000	0.0000	47.2663	95		18 - 190
2-Chloroethyl vinyl ether	50.0000	0.0000	30.0402	60		1 - 305

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

* Values outside of QC limits

Spike Recovery: 1 out of 30 outside limits

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-64167

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L0073 Mod. Ref No.: _____ SDG No.: SL0073
 Lab File ID: V8A9159.D Lab Sample ID: MB-64167
 Instrument ID: V10
 Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 01/13/2012
 Level: (TRACE or LOW/MED) LOW Time Analyzed: 14:11
 GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-64167	LCS-64167	V8A9167.D	17:40
02	EW-1	L0073-01A	V8A9175.D	21:08
03	EW-2	L0073-02A	V8A9176.D	21:34
04	AS	L0073-03A	V8A9177.D	22:00

COMMENTS: _____



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Dvirka & Bartilucci

Project: Franklin Cleaners

Laboratory Workorder / SDG #: L0073

SW846 6010C

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 6010C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A

V. INSTRUMENTATION

The following instrumentation was used to perform analysis:

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

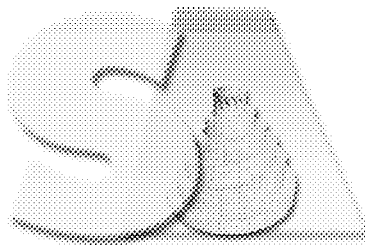
G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:  _____

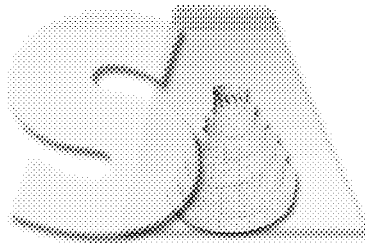
Date: 01/30/12



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S.EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Spectrum Analytical, Inc. Contract: 130050
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0073
SOW No.: SW846

EPA Sample No.
AS

Lab Sample ID
L0073-03

Were ICP interelement corrections applied? Yes/No Yes
Were background corrections applied? Yes/No Yes
If yes-were raw data generated before application of background corrections? Yes/No No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature: *Daune E. Smart* Name: *Daune E. Smart*
Date: *1/30/12* Title: _____

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

AS

Lab Name: Spectrum Analytical, Inc. Contract: 130050

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0073

Matrix (soil/water): WATER Lab Sample ID: L0073-03

Level (low/med): MED Date Received: 01/13/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	39.3	B		P
7439-96-5	Manganese	14.1	B		P

Comments:

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 130050

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0073

Preparation Blank Matrix (soil/water): WATER Method Blank ID: _____

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L **MB-64192**

OPTIMA3_120118A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	01/18/12 9:58	C	01/18/12 10:35	C	01/18/12 11:17	C		C	
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 130050

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0073

Solid LCS Source: _____

LCS(D) ID:

Aqueous LCS Source: _____

LCS-64192

Analyte	Aqueous (ug/L)			Solid (mg/Kg)				
	True	Found	%R	True	Found	C	Limits	%R
Iron	4550.0	4706.09	103.4					
Manganese	2270.0	2259.78	99.5					

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 130050

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL0073

Solid LCS Source: _____

LCS(D) ID:

Aqueous LCS Source: _____

LCSD-64192

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Iron	4550.0	4602.11	101.1						
Manganese	2270.0	2269.34	100.0						

Last Page of Data Report