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ANALYTICAL DATA PACKAGE
Metals Analysis

Versar Code OBRITOWN - 2
Control No(s) 2954
Client Obrien and Gere
Site Town of Conklin LF
Date Reported 7-25-90

Versar INC.
ENVIRONMENTAL RISK MANAGEMENT

CCC708

Versar INC.

ANALYTICAL DATA PACKAGE
Metals Analysis

Versar Code OBRITOWN - 2
Control No(s) 2954
Client Obrien and Gere
Site Town of Conklin LF
Date Reported 7-25-90

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6850 VERSAR CENTER • P.O. BOX 1549 • SPRINGFIELD, VIRGINIA 22151 • TELEPHONE: (703) 750-3000

Versar INC.

TRACE METALS SECTION
ANALYSIS NARRATIVE

Versar Code: OBRITOWN - 2
Client: Obrien and Gere
Control Number: 2954

Date: July 24, 1990
Site: Town of Conklin LF

This report contains metals analytical results for eleven water samples which were received at Versar, Inc. on June 22, 1990. The samples were analyzed for the following elements:

Antimony	Arsenic	Beryllium	Cadmium
Chromium	Copper	Lead	Mercury
Nickel	Selenium	Silver	Thallium
Zinc			

Analytical Methods

The samples were prepared and analyzed by the New York State Department of Environmental Conservation Laboratory protocol. The following is a summary of the methods:

Water Preparation	Method: ICP - 207.0, 9.3 GFAA - 200.0, 4.1.3
ICP Analysis	Method: 200.7
GFAA Analysis	Method:
Arsenic	206.2
Lead	239.2
Selenium	270.2
Thallium	279.2
Mercury - Water Preparation/Analysis	Method: 245.1

Analytical Results

The report is divided into several sections. A description of each part and any comments concerning them is provided below:

Cover Page - Cross reference list of the laboratory sample number and the field sample number.

Form I - Summary of results for each sample.

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Analytical Results (continued)

Form IIA - Initial and continuing calibration verification results. All ICP and graphite furnace atomic absorption (GFAA) recoveries were within the 10 % control limits. All cold vapor atomic absorption (CVAA) recoveries were within the 20 % control limits.

Form III - Initial and continuing calibration blanks and preparation blank results. All blanks were less than the contract required detection limit (CRDL) except for:

Initial or Continuing Blank - Sb, Be, Cu, Cr, Ni, Se, Zn

Preparation Blank - Cu, Ni, Zn

Form IV - ICP interference check sample. All recoveries were within the 20 % control limits.

Form VA - Spike sample recovery results. All spike recoveries were within the 25 % control limits for all applicable elements except for:

1 - Tl

Form VI - Duplicate results. All relative percent differences (RPD) between the sample and the duplicate were within their specified control limits except for:

1 - Be, Cr, Cu, Ni, Zn

Form IX - ICP serial dilution results. All serial dilutions agreed with the original sample results within the 10 % control limits for all applicable elements except for:

1 - Be, Cu

Form X - Holding Times. All analyses for metals were performed within their specified holding times.

Raw Data - Copies of all raw data associated with this report.

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General Discussion

The levels of all elements found in the blanks were high enough that they may be considered significant when compared to the samples. Therefore, the sample results for all elements detected in the blanks may be biased high.

The low spike recovery for thallium was probably due to matrix interference. The high RPD's for chromium and nickel can be contributed to the greater amount of variance at or near the detection limit.

If there are any questions concerning this report, p;ease contact Janet Beckman at (703) 750-3000.

Prepared by: Lisa L Lee

Reviewed by: Penelope Clayton

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VERSAR INC. - 2954

NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENTS SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS	*BNA GC/MS	*PEST PCB	*METALS	*OTHER
1	24465				X	
10	24474				X	
11	24475				X	
2	24466				X	
3	24467				X	
4	24468				X	
5	24469				X	
6	24470				X	
7	24471				X	
8	24472				X	
9	24473				X	
TRIP BLANK	24476		Not done for metals			

Comments: Analysis by NYSDEC 89-ASP, 40 CFR.

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VERSAR INC. - 2954

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE PREPARATION AND ANALYSIS FORM

INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Digestion Procedure	Matrix Modifier	Dil/Conc Factor
24465	HOH	NYSDEC 9/89			
24466	HOH				
24467	HOH				
24468	HOH				
24469	HOH				
24470	HOH				
24471	HOH				
24472	HOH				
24473	HOH				
24474	HOH				
24475	HOH				

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VERSAR INC. - 2954

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd At Lab	Date Analyzed
24465	HOH	ICP	22-JUN-90	7-10-90
24466	HOH	Be, Ag, Cd, Cr, Cu,	22-JUN-90	
24467	HOH	Ni, Sb, Zn	22-JUN-90	
24468	HOH		22-JUN-90	
24469	HOH		22-JUN-90	
24470	HOH		22-JUN-90	
24471	HOH		22-JUN-90	
24472	HOH		22-JUN-90	
24473	HOH		22-JUN-90	
24474	HOH		22-JUN-90	
24475	HOH		22-JUN-90	

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VERSAR INC. - 2954

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd At Lab	Date Analyzed
24465	HOH	GFAA	22-JUN-90	7-14-90
24466	HOH	As, Pb, Se, Tl	22-JUN-90	
24467	HOH		22-JUN-90	
24468	HOH		22-JUN-90	
24469	HOH		22-JUN-90	
24470	HOH		22-JUN-90	
24471	HOH		22-JUN-90	
24472	HOH		22-JUN-90	
24473	HOH		22-JUN-90	
24474	HOH		22-JUN-90	
24475	HOH		22-JUN-90	

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VERSAR INC. - 2954

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd At Lab	Date Analyzed
24465	HOH	Hg	22-JUN-90	6-28-90
24466	HOH		22-JUN-90	
24467	HOH		22-JUN-90	
24468	HOH		22-JUN-90	
24469	HOH		22-JUN-90	
24470	HOH		22-JUN-90	
24471	HOH		22-JUN-90	7-2-90
24472	HOH		22-JUN-90	6-28-90
24473	HOH		22-JUN-90	
24474	HOH		22-JUN-90	
24475	HOH		22-JUN-90	

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Versar Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	INDUSTRIAL HYGIENE SAMPLE
3360.00.130	TOWN OF CONKLIN, LANDFILL		Y / N

SAMPLERS: (Signature) [signature] (Printed) JAMES A. MOORE

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	UNFILTERED METALS	REMARKS
1	6/21/90	0845		X	MW-11	1	X	
MS	11	0845		X	MW-11	1	X	
MSD	11	0845		X	MW-11	1	X	
2	11	0915		X	MW-4	1	X	
3	11	0930		X	EQUIPMENT BLANK	1	X	
4	11	0940		X	MW-12	1	X	
5	11	0950		X	MW-1	1	X	
6	11	1000		X	MW-36S	1	X	
7	11	1010		X	MW-39D	1	X	
8	11	1025		X	MW-9	1	X	
9	11	1040		X	MW-8	1	X	
10	11	1100		X	MW-5	1	X	
11	11	1130		X	MW-10	1	X	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/21/90 1400				
(Printed) JAMES A. MOORE		(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [signature]	Date / Time 6/22/90 1030	Remarks	
(Printed)		(Printed)			

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

SOW No. : NYSDEC_89_____

Field Sample No.	Lab Sample ID.
1	24465
1_D	24465D
1_S	24465S
10	24474
11	24475
2	24466
3	24467
4	24468
5	24469
6	24470
7	24471
8	24472
9	24473

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Lab Manager: Penelope Clayton

Date: 7-25-90

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.: 1

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24465____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	16.7			F
7440-39-3	Barium				NR
7440-41-7	Beryllium	10.1			P
7440-43-9	Cadmium	12.1			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	15.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	27.9			P
7439-89-6	Iron				NR
7439-92-1	Lead	13.1			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	26.7			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	3.0	U		F
7440-22-4	Silver	4.5			P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	114			P
	Cyanide				NR

Color Before: BROWN_____ Clarity Before: CLOUDY Texture: _____

Color After : YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.: 10

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24474____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	4.5			F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.0	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	2.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	17.7			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	3.0	U		F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	17.2			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After : COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO. 11

Client : OBRIEN_AND_GERE Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954 Code: OBRITOWN Batch: 2

Matrix : WATER Lab Sample ID: 24475

Level (low/med): Date Received: 06/22/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	3.0	U		F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.0			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	25.2			P
7439-89-6	Iron				NR
7439-92-1	Lead	4.2			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	10.9			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	3.0	U		F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	45.0			P
	Cyanide				NR

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After : COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.

2

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24466____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	3.0	U		F
7440-39-3	Barium				NR
7440-41-7	Beryllium	3.9			P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	10.7			P
7439-89-6	Iron				NR
7439-92-1	Lead	2.0			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	11.3			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	3.0	U		F
7440-22-4	Silver	4.2			P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	18.4			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After : COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.: 3

Client : OBRIEN_AND_GERE Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954 Code: OBRITOWN Batch: 2

Matrix : WATER Lab Sample ID: 24467

Level (low/med): _____ Date Received: 06/22/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	3.0	U		F
7440-39-3	Barium				NR
7440-41-7	Beryllium	2.4			P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.0			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	7.0			P
7439-89-6	Iron				NR
7439-92-1	Lead	2.8			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	14.7			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.9			F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.5			F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	9.4			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After : COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.: 4

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24468____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum__		_		NR
7440-36-0_	Antimony__	14.0	U		P_
7440-38-2_	Arsenic___	3.0	U		F_
7440-39-3_	Barium____		_		NR
7440-41-7_	Beryllium_	1.2	_		P_
7440-43-9_	Cadmium___	3.0	U		P_
7440-70-2_	Calcium___		_		NR
7440-47-3_	Chromium__	3.0	U		P_
7440-48-4_	Cobalt____		_		NR
7440-50-8_	Copper____	4.6	_		P_
7439-89-6_	Iron______		_		NR
7439-92-1_	Lead______	2.0	U		F_
7439-95-4_	Magnesium_		_		NR
7439-96-5_	Manganese_		_		NR
7439-97-6_	Mercury___	0.20	U		CV
7440-02-0_	Nickel____	5.9	_		P_
7440-09-7_	Potassium_		_		NR
7782-49-2_	Selenium__	3.6	_		F_
7440-22-4_	Silver____	4.0	U		P_
7440-23-5_	Sodium____		_		NR
7440-28-0_	Thallium__	2.0	U		F_
7440-62-2_	Vanadium__		_		NR
7440-66-6_	Zinc______	12.9	_		P_
_____	Cyanide___		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After : COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.: 5

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24469____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum__		_		NR
7440-36-0_	Antimony__	14.0	U		P_
7440-38-2_	Arsenic___	3.0	U		F_
7440-39-3_	Barium____		_		NR
7440-41-7_	Beryllium_	1.0	U		P_
7440-43-9_	Cadmium___	3.0	U		P_
7440-70-2_	Calcium___		_		NR
7440-47-3_	Chromium__	3.0	U		P_
7440-48-4_	Cobalt____		_		NR
7440-50-8_	Copper____	4.0	U		P_
7439-89-6_	Iron______		_		NR
7439-92-1_	Lead______	2.0	U		F_
7439-95-4_	Magnesium_		_		NR
7439-96-5_	Manganese_		_		NR
7439-97-6_	Mercury___	0.20	U		CV
7440-02-0_	Nickel____	5.0	U		P_
7440-09-7_	Potassium_		_		NR
7782-49-2_	Selenium__	3.0	U		F_
7440-22-4_	Silver____	4.0	U		P_
7440-23-5_	Sodium____		_		NR
7440-28-0_	Thallium__	2.0	U		F_
7440-62-2_	Vanadium__		_		NR
7440-66-6_	Zinc______	2.4	_		P_
_____	Cyanide___		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After : COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.

6

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24470____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5_	Aluminum__		_		NR
7440-36-0_	Antimony__	14.0	U		P_
7440-38-2_	Arsenic___	3.0	U		F_
7440-39-3_	Barium____		_		NR
7440-41-7_	Beryllium_	1.0	U		P_
7440-43-9_	Cadmium___	3.0	U		P_
7440-70-2_	Calcium___		_		NR
7440-47-3_	Chromium__	3.0	U		P_
7440-48-4_	Cobalt____		_		NR
7440-50-8_	Copper____	4.0	U		P_
7439-89-6_	Iron______		_		NR
7439-92-1_	Lead______	2.3	_		F_
7439-95-4_	Magnesium_		_		NR
7439-96-5_	Manganese_		_		NR
7439-97-6_	Mercury___	0.20	U		CV
7440-02-0_	Nickel____	9.4	_		P_
7440-09-7_	Potassium_		_		NR
7782-49-2_	Selenium__	3.9	_		F_
7440-22-4_	Silver____	4.0	U		P_
7440-23-5_	Sodium____		_		NR
7440-28-0_	Thallium__	2.0	U		F_
7440-62-2_	Vanadium__		_		NR
7440-66-6_	Zinc______	15.7	_		P_
_____	Cyanide___		_		NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After : COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN

1

INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.: 7

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24471____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	8.5			F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.1			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.0	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	2.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	11.4			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	3.0	U		F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	10.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	9.0			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After : COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

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1

INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.

8

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Lab Sample ID: 24472____

Level (low/med): _____ Date Received: 06/22/90_

% Solids: ___0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	11.1			F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	37.6			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	58.1			P
7439-89-6	Iron				NR
7439-92-1	Lead	32.7			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	42.4			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	3.0	U		F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	173			P
	Cyanide				NR

Color Before: GREY_____ Clarity Before: CLOUDY Texture: _____

Color After : YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

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1

INORGANIC ANALYSES DATA SHEET

FIELD SAMPLE NO.

9

Client : OBRIEN_AND_GERE Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954 Code: OBRITOWN Batch: 2

Matrix : WATER Lab Sample ID: 24473

Level (low/med): Date Received: 06/22/90

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	14.0	U		P
7440-38-2	Arsenic	3.0	U		F
7440-39-3	Barium				NR
7440-41-7	Beryllium	3.0			P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.7			P
7439-89-6	Iron				NR
7439-92-1	Lead	2.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	15.5			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	3.0	U		F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	12.9			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After : COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Initial Calibration Source: NBS_____

Continuing Calibration Source: NBS_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									NR
Antimony	500.0	510.03	102.0	500.0	508.65	101.7	492.00	98.4	P
Arsenic									NR
Barium									NR
Beryllium	500.0	511.37	102.3	500.0	513.45	102.7	510.47	102.1	P
Cadmium	500.0	524.76	105.0	500.0	514.14	102.8	522.82	104.6	P
Calcium									NR
Chromium	500.0	526.14	105.2	500.0	531.52	106.3	528.36	105.7	P
Cobalt									NR
Copper	500.0	522.60	104.5	500.0	529.62	105.9	522.57	104.5	P
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel	500.0	521.70	104.3	500.0	532.04	106.4	515.81	103.2	P
Potassium									NR
Selenium									NR
Silver	500.0	492.62	98.5	500.0	499.03	99.8	483.27	96.7	P
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc	500.0	518.65	103.7	500.0	521.78	104.4	520.64	104.1	P
Cyanide									NR

(1) Control Limits: Mercury and Furnace AA Metals 80-120; ICP Metals 90-110;

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Initial Calibration Source: EPA-LV_____

Continuing Calibration Source: NBS_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic	47.0	54.35	115.6	50.0	52.71	105.4	50.42	100.8	F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	97.5	94.96	97.4	25.0	25.99	104.0	24.65	98.6	F
Magnesium									NR
Manganese									NR
Mercury	5.0	4.80	96.0	5.0	4.97	99.4	5.03	100.6	CV
Nickel									NR
Potassium									NR
Selenium	104.0	102.49	98.5	25.0	25.07	100.3	25.62	102.5	F
Silver									NR
Sodium									NR
Thallium	97.0	101.50	104.6	25.0	24.81	99.2	26.79	107.2	F
Vanadium									NR
Zinc									NR
Cyanide									NR

(1) Control Limits: Mercury and Furnace AA Metals 80-120; ICP Metals 90-110;

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Initial Calibration Source: EPA-LV_____

Continuing Calibration Source: NBS_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									NR
Antimony									NR
Arsenic				50.0	48.12	96.2			F
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
romium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead				25.0	23.30	93.2			F
Magnesium									NR
Manganese									NR
Mercury	5.0	4.77	95.4	5.0	4.40	88.0			CV
Nickel									NR
Potassium									NR
Selenium				25.0	22.84	91.4			F
Silver									NR
Sodium									NR
Thallium				25.0	25.94	103.8			F
Vanadium									NR
Zinc									NR
Cyanide									NR

1) Control Limits: Mercury and Furnace AA Metals 80-120; ICP Metals 90-110;

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Initial Calibration Source: EPA-LV_____

Continuing Calibration Source: NBS_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium	104.0	100.40	96.5	25.0	25.29	101.2			F
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

(1) Control Limits: Mercury and Furnace AA Metals 80-120; ICP Metals 90-110;

BLANKS

Lab Name: OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Code: VERSAR_(NC) Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Preparation Blank Matrix: WATER_____

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	25.0		14.0	U	20.9				14.0	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	F
Barium											NR
Beryllium	1.0	U	1.2		1.2				1.0	U	P
Cadmium	3.0	U	3.0	U	3.0	U			3.0	U	P
Calcium											NR
Chromium	3.0		3.0	U	3.0	U			3.0	U	F
Cobalt											NR
Copper	4.0	U	4.2		5.6				5.6		P
Iron											NR
Lead	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	F
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U	0.2	U			0.2	U	CV
Nickel	11.8		6.1		7.1				9.1		P
Potassium											NR
Selenium	3.0	U	3.4		3.0	U	3.0	U	3.0	U	F
Silver	4.0	U	4.0	U	4.0	U			4.0	U	P
Sodium											NR
Thallium	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	F
Vanadium											NR
Zinc	2.0	U	3.5		2.7				4.7		P
Cyanide											NR

BLANKS

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Preparation Blank Matrix: WATER_____

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L_

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury	0.2	U	0.2	U					0.2	U	CV
Nickel											NR
Potassium											NR
Selenium	3.0	U	3.0	U							F
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

ICP INTERFERENCE CHECK SAMPLE

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

ICP ID Number: 4-JA_1140___ ICS Source: INOR._VE

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium		500		432.4	86.5		437.1	87.4
Cadmium		1000		846.8	84.7		867.4	86.7
Calcium								
Chromium		500		486.6	97.3		496.8	99.4
Cobalt								
Copper		500		437.6	87.5		441.9	88.4
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel		1000		843.5	84.4		854.1	85.4
Potassium								
Selenium								
Silver		1000		827.8	82.8		834.3	83.4
Sodium								
Thallium								
Vanadium								
Zinc		1000		920.5	92.0		940.1	94.0
Cyanide								

5A
SPIKE SAMPLE RECOVERY

FIELD SAMPLE NO.
1 S

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Level (low/med): _____

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	3387.59		14.00	U	4000.00	84.7		P
Arsenic	75-125	61.88		16.67		50.00	90.4		F
Barium									NR
Beryllium	75-125	1755.96		10.10		2000.00	87.3		P
Cadmium	75-125	1699.34		12.07		2000.00	84.4		P
Calcium									NR
Chromium	75-125	1825.15		15.88		2000.00	90.5		P
Cobalt									NR
Copper	75-125	3601.77		27.93		4000.00	89.3		P
Iron									NR
ad	75-125	62.21		13.07		50.00	98.3		F
Magnesium									NR
Manganese									NR
Mercury	75-125	2.02		0.20	U	2.00	101.0		CV
Nickel	75-125	3390.89		26.71		4000.00	84.1		P
Potassium									NR
Selenium	75-125	43.15		3.00	U	50.00	86.3		F
Silver	75-125	1673.27		4.50		2000.00	83.4		P
Sodium									NR
Thallium	75-125	28.12		2.00	U	50.00	56.2		F
Vanadium									NR
Zinc	75-125	3394.57		113.74		4000.00	82.0		P
Cyanide									NR

Comments:

6
DUPLICATES

FIELD SAMPLE NO.

1 D

lient : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Matrix : WATER_____ Level (low/med): _____

% Solids for Sample: __0.0 % Solids for Duplicate: __0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony		14.00	U	14.00	U			P
Arsenic		16.70		16.00		4.3		F
Barium								NR
Beryllium		10.10		1.20		157.5		P
Cadmium		12.10		3.00	U			P
Calcium								NR
Chromium		15.90		10.00		45.6		P
Cobalt								NR
Copper		27.90		9.70		96.8		P
Iron								NR
Lead		13.10		11.50		13.0		F
Magnesium								NR
Manganese								NR
Mercury		0.20	U	0.20	U			CV
Nickel		26.70		13.60		65.0		P
Potassium								NR
Selenium		3.00	U	3.00	U			F
Silver		4.50		4.00	U			P
Sodium								NR
Thallium		2.00	U	2.00	U			F
Vanadium								NR
Zinc		113.70		92.20		20.9		P
Cyanide								NR

9

ICP SERIAL DILUTION

FIELD SAMPLE NO.

1

Client : OBRIEN_AND_GERE Site: TOWN_OF_CONKLIN

Lab Name: VERSAR_INC. Control No.: 2954 Code: OBRITOWN Batch: 2

Matrix : WATER Level (low/med): _____

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Aluminum							P
Antimony	14.00	U	70.00	U			NR
Arsenic							F
Barium							P
Beryllium	10.10		5.90		41.6		P
Cadmium	12.10		15.00	U			NR
Calcium							P
Chromium	15.90		17.40		9.4		P
Cobalt							P
Copper	27.90		36.60		31.2		P
Iron							P
Lead							F
Magnesium							P
Manganese							P
Mercury							CV
Nickel	25.70		25.00	U			NR
Potassium							P
Selenium							F
Silver	4.50		20.00	U			NR
Sodium							P
Thallium							F
Vanadium							P
Zinc	113.70		119.60		5.2		P
Cyanide							AS

10
HOLDING TIMES

Client : OBRIEN_AND_GERE_____ Site: TOWN_OF_CONKLIN_____

Lab Name: VERSAR_INC. Control No.: 2954____ Code: OBRITOWN Batch: 2_____

Field Sample No.	Matrix	Date Received	Mercury Prep Date	Mercury Holding Time	Cyanide Prep Date	Cyanide Holding Time
1	WATER	06/22/90	06/28/90	6		
1_D	WATER	06/22/90	06/28/90	6		
1_S	WATER	06/22/90	06/28/90	6		
10	WATER	06/22/90	06/28/90	6		
11	WATER	06/22/90	06/28/90	6		
2	WATER	06/22/90	06/28/90	6		
3	WATER	06/22/90	06/28/90	6		
4	WATER	06/22/90	06/28/90	6		
5	WATER	06/22/90	06/28/90	6		
6	WATER	06/22/90	06/28/90	6		
7	WATER	06/22/90	07/02/90	10		
8	WATER	06/22/90	06/28/90	6		
9	WATER	06/22/90	06/28/90	6		

ICP ANALYSIS LOG

PROJECT NUMBER ORITTOWN -2 DATE 7-10-90

ANALYST PR INST. # 4 METHOD 200.7

BATCH COMMENTS cntl 2954 file 2954.4 Ag Be Cd Co Cu Ni Se Zn

BURN #	SAMPLE NUMBER	COMMENTS
QC-1	QC SET 1	CAL3, CCVC9, CCVM9, ICB
1.	ICSABF	
2.	PBW	
3.	LCSM	
4.	24465	
5.	24465L	15 SD
6.	24465D	
7.	24465S	
8.	24466	
9.	24467	
10.	24468	
QC-2	QC SET 2	
11.	24469	
12.	24470	
13.	24471	
14.	24472	
15.	24473	
16.	24474	
17.	24475	
18.	ICSABF	
19.		
20.		
QC-3	QC SET 3	
21.		
22.		
23.		
24.		
25.		
26.		
27.		
28.		
29.		
30.		
QC-4	QC SET 4	
31.		
32.		
33.		
34.		
35.		
36.		
37.		
38.		
39.		
40.		
QC-5	QC SET 5	

Standardization Rpt. Tue 07-10-90 05:22:14 PM page 1

Method: CLP1150 Standard: CAL1-S0

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00090	.00465	.0053	.00025	.00150	.00020	.00050
#1	-.00060	.00510	.0054	.00030	.00140	.00020	.00080
#2	-.00120	.00420	.0052	.00020	.00160	.00020	.00020

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00025	.00020	.00030	.00235	.00105	.19640	.00245
#1	-.00030	.00040	.00030	.00240	.00080	.20500	.00220
#2	-.00020	.00000	.00030	.00230	.00130	.18780	.00270

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.00045	.00025	.01100	-.00295	.0004	-.00600	-.0071
#1	.00060	.00030	.01120	-.00270	.0001	-.00480	-.0060
#2	.00030	.00020	.01080	-.00320	.0007	-.00720	-.0083

Elem	Tl1908	V_2924	Zn2138
Avge	-.0010	-.00070	.00310
#1	-.0014	-.00090	.00300
#2	-.0005	-.00050	.00320

PM Calibration
PR 7-10-90

Standardization Rpt. Tue 07-10-90 05:25:32 PM page 1

thod: CLP1150 Standard: CAL2-S1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.39980	.00400	.0077	-.00005	.00150	.41760	.10930
#1	.39970	.00430	.0051	.00000	.00150	.41700	.10950
#2	.39990	.00370	.0102	-.00010	.00150	.41820	.10910

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.04880	.00075	.03590	.00180	.00205	.19760	.24090
#1	.04890	.00090	.03590	.00190	.00220	.19020	.24040
#2	.04870	.00060	.03590	.00170	.00190	.20500	.24140

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.00430	.08170	.01110	-.00260	.0009	-.00620	.0007
#1	.00430	.08160	.01120	-.00310	.0009	-.00580	.0045
#2	.00430	.08180	.01100	-.00210	.0009	-.00660	-.0030

Elem	Tl1908	V_2924	Zn2138
Avge	-.0001	-.00085	.13090
#1	-.0004	-.00090	.13110
#2	.0001	-.00080	.13070

thod: CLP1150 Standard: CAL3-S2

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00160	.04290	.0059	.16275	.16910	.00380	.00090
#1	.00150	.04300	.0031	.16430	.17110	.00380	.00120
#2	.00170	.04280	.0088	.16120	.16710	.00380	.00060

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00005	.00065	.00065	.15285	.00730	.18840	.00410
#1	-.00030	.00040	.00070	.15460	.00750	.17940	.00420
#2	.00020	.00090	.00060	.15110	.00710	.19740	.00400

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.00065	.00075	.88370	.20040	.0007	.06500	-.0002
#1	.00050	.00080	.89000	.20180	.0004	.06500	-.0058
#2	.00080	.00070	.87740	.19900	.0010	.06500	.0054

Elem	Tl1908	V_2924	Zn2138
Avge	.0000	-.00160	.00450
#1	.0000	-.00160	.00470
#2	.0001	-.00160	.00430

thod: CLP1150 Standard: CAL4-S3

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00005	.00375	1.018	.00090	.00220	.00125	.00760
#1	-.00010	.00350	1.021	.00090	.00240	.00110	.00890
#2	.00020	.00400	1.016	.00090	.00200	.00140	.00630

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00025	.15770	.00050	.00180	.00120	.19150	.00215
#1	-.00010	.15810	.00060	.00210	.00170	.19460	.00230
#2	-.00040	.15730	.00040	.00150	.00070	.18840	.00200

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.00040	.00045	.01510	-.00145	.0002	-.00600	1.230
#1	.00020	.00040	.01560	-.00120	.0007	-.00580	1.235
#2	.00060	.00050	.01460	-.00170	-.0002	-.00620	1.226

Elem	Tl1908	V_2924	Zn2138
Avge	.0002	-.00105	.00335
#1	-.0002	-.00090	.00370
#2	.0005	-.00120	.00300

ethod: CLP1150 Standard: CAL7-S4

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00070	.00370	.0125	.00035	.00185	.00055	.00020
#1	-.00070	.00320	.0119	.00050	.00200	.00100	.00060
#2	-.00070	.00420	.0132	.00020	.00170	.00010	-.00020

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00035	.00085	.00030	1.5169	.06225	.19020	2.4236
#1	-.00040	.00090	.00020	1.5167	.0625	.20060	2.4252
#2	-.00030	.00080	.00040	1.5171	.06200	.17980	2.4219

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.03785	.00015	.01240	-.00305	.0004	-.00430	-.0064
#1	.03810	.00010	.01240	-.00190	.0010	-.00400	-.0048
#2	.03760	.00020	.01240	-.00420	-.0002	-.00460	-.0080

Elem	Tl1908	V_2924	Zn2138
Avge	.0008	-.00040	.00385
#1	.0007	-.00030	.00390
#2	.0009	-.00050	.00380

ethod: CLP1150 Standard: CAL8-S5

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00285	.00440	-.0005	.00040	.00170	.00135	.00105
#1	-.00270	.00450	.0019	.00040	.00170	.00140	.00060
#2	-.00300	.00430	-.0028	.00040	.00170	.00130	.00150

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00020	.00050	.00055	14.570	.60460	.19610	20.099
#1	.00000	.00070	.00040	14.493	.60130	.19180	20.025
#2	-.00040	.00030	.00070	14.646	.60790	.20040	20.173

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.36305	.00040	.01190	-.00165	.0009	-.00320	-.0883
#1	.36080	.00040	.01200	-.00090	.0010	-.00260	-.0887
#2	.36530	.00040	.01180	-.00240	.0008	-.00380	-.0880

Elem	T11908	V_2924	Zn2138
Avge	.0060	-.00050	.01045
#1	.0069	-.00050	.01060
#2	.0052	-.00050	.01030

Standardization Rpt. Tue 07-10-90 05:37:06 PM page 1

thod: CLP1150 Standard: CAL5-S6

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00115	.00445	.0072	.00020	.00205	.00530	.00025
#1	-.00060	.00390	.0080	.00010	.00210	.00500	-.00010
#2	-.00170	.00500	.0064	.00030	.00200	.00560	.00060

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00020	.00050	.00035	.07930	.00280	1.2183	.12515
#1	-.00020	.00090	.00030	.07960	.00280	1.2220	.12790
#2	-.00020	.00010	.00040	.07900	.00280	1.2146	.12240

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.00140	.00015	.01140	-.00200	.0004	-.00590	-.0017
#1	.00140	.00010	.01140	-.00200	.0005	-.00540	-.0046
#2	.00140	.00020	.01140	-.00200	.0002	-.00640	.0012

Elem	Tl1908	V_2924	Zn2138
Avge	-.0009	.17935	.00255
#1	-.0003	.17960	.00240
#2	-.0015	.17910	.00270

chod: CLP1150 Standard: CAL6-S7

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00110	.00335	.0061	.00005	.00155	.00010	-.00005
#1	-.00110	.00340	.0086	.00010	.00150	.00020	-.00040
#2	-.00110	.00330	.0036	.00000	.00160	.00000	.00030

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00020	.00050	.00045	.04295	.00315	.18860	.06725
#1	-.00020	.00050	.00050	.04500	.00330	.19700	.06970
#2	-.00020	.00050	.00040	.04090	.00300	.18020	.06480

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.00135	.00025	.01140	-.00155	.0186	-.00550	.0005
#1	.00140	.00030	.01140	-.00240	.0182	-.00640	-.0023
#2	.00130	.00020	.01140	-.00070	.0190	-.00460	.0033

Elem	Tl1908	V_2924	Zn2138
Avge	.0881	.00065	.00320
#1	.0882	.00070	.00340
#2	.0880	.00060	.00300

thod: CLP1150 Standard: CAL2-S1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.18655	.00365	.0080	-.00010	.00140	.00000	.00005
#1	.18580	.00420	.0064	-.00020	.00150	.00020	.00020
#2	.18730	.00310	.0096	.00000	.00130	-.00020	-.00010

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00025	.00020	.00020	.01300	.00130	.17560	.01975
#1	-.00030	.00030	.00020	.01300	.00200	.19080	.01960
#2	-.00020	.00010	.00020	.01300	.00060	.16040	.01990

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	.00070	.00015	.01140	-.00045	.0002	-.00690	-.0010
#1	.00070	.00030	.01140	-.00110	.0005	-.00680	-.0004
#2	.00070	.00000	.01140	.00020	-.0002	-.00700	-.0016

Elem	Tl1908	V_2924	Zn2138
Avge	.0004	-.00060	.00315
#1	.0009	-.00060	.00320
#2	.0000	-.00060	.00310

Method: CLP1150 Sample Name: CAL3 Operator: PR
Run Time: 07/10/90 17:44:34
Comment: VERSCBP -4 Soils cntl 3044
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00093	.99742	.0304	1.0178	1.0167	.02410	-.00482
#1	-.00308	.99740	.0344	1.0231	1.0173	.01930	-.00623
#2	.00122	.99744	.0264	1.0126	1.0161	.02889	-.00342

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00211	-.00159	.00291	1.0214	.87969	-.71157	.00531
#1	-.00517	-.00192	.00010	1.0196	.77994	-1.2107	.00425
#2	.00094	-.00127	.00572	1.0231	.97945	-.21247	.00637

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.36439	-.00110	50.865	1.0103	.0215	1.0126	.0414
#1	-.41974	-.00173	51.094	1.0059	.0023	1.0029	.0057
#2	-.30904	-.00047	50.636	1.0148	.0407	1.0223	.0770

Elem	Tl1908	V_2924	Zn2138
ge	.0396	-.00671	-.00114
#1	.0346	-.00838	-.00034
#2	.0446	-.00505	-.00194

file 2954.4

PR 7-10-90

Method: CLP1150 Sample Name: CCVCO Operator: PR
Run Time: 07/10/90 17:47:46
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00056	.47463	.4830	.52154	.51137	20.731	-.00080
#1	.00377	.48248	.5053	.52461	.51494	20.874	.00138
#2	-.00264	.46677	.4607	.51846	.50780	20.587	-.00298

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00418	.52615	.00428	.49532	.32880	19.569	.50041
#1	-.00316	.52932	.00007	.49830	.29604	20.205	.50208
#2	-.00520	.52297	.00849	.49235	.36155	18.933	.49874

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.46125	-.00179	20.712	.00444	-.0091	.51004	.0421
#1	-.47509	-.00303	20.912	.00396	.0020	.52947	.0451
#2	-.44742	-.00056	20.511	.00492	-.0201	.49060	.0392

Elem	Tl1908	V_2924	Zn2138
ge	.0314	-.01237	.51865
#1	.0372	-.01042	.51986
#2	.0256	-.01431	.51745

Method: CLP1150 Sample Name: CCVNO Operator: PR
Run Time: 07/10/90 17:50:12
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.49263	.00076	-.0077	.00092	.00320	.05993	.52476
#1	.48916	-.00582	.0205	.00092	.00290	.06233	.52920
#2	.49609	.00734	-.0359	.00092	.00350	.05753	.52033

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.51065	.00658	.52260	-.00518	-.14656	-.51180	-.00206
#1	.50657	.01103	.52822	-.00651	-.12117	-.90342	-.00269
#2	.51472	.00213	.51699	-.00384	-.17195	-.12017	-.00143

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.35055	.51009	.11459	.52171	1.051	.01178	2.031
#1	-.39207	.51133	.10313	.52342	1.046	-.00902	2.011
#2	-.30904	.50886	.12605	.52000	1.057	.03258	2.050

Elem	Tl1908	V_2924	Zn2138
ge	2.043	.49770	.00352
#1	2.031	.49826	.00467
#2	2.054	.49714	.00236

Method: CLP1150 Sample Name: ICB Operator: PR
Run Time: 07/10/90 17:57:09
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00215	-.03017	.0451	-.00092	.00089	.00362	-.00066
#1	-.00482	-.04850	.0343	-.00215	.00119	.00243	.00077
#2	.00053	-.01184	.0560	.00031	.00059	.00481	-.00210

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00204	.00381	.00143	-.00667	-.16370	-.33735	-.00566
#1	.00102	.00317	.00284	-.00700	-.19723	-.23450	-.00524
#2	-.00510	.00444	.00002	-.00635	-.13017	-.44020	-.00608

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.33672	-.00064	.01146	.01181	.0138	.02505	.0438
#1	-.39207	.00059	.01146	.01403	.0220	.03617	.0431
#2	-.28137	-.00186	.01146	.00959	.0055	.01394	.0445

Elem	Tl1908	V_2924	Zn2138
Avge	.0179	.00084	.00192
#1	-.0043	.00057	.00151
#2	.0402	.00112	.00233

Method: CLP1150 Sample Name: ICSABI Operator: PR
Run Time: 07/10/90 18:00:01
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.82784	476.77	-1.108	.47780	.43238	442.05	.84683
#1	.82326	475.19	-1.118	.47688	.43089	440.60	.85109
#2	.83242	478.36	-1.098	.47872	.43386	443.50	.84257

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.42365	.48656	.43763	170.43	173.74	-1.3757	216.77
#1	.42264	.48152	.44060	169.73	173.34	-1.3635	216.35
#2	.42466	.49159	.43465	171.12	174.14	-1.3878	217.19

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	465.99	.43052	.68179	.84348	4.448	.05758	.0877
#1	464.39	.42494	.66460	.83414	4.453	.06851	.0853
#2	467.60	.43611	.69898	.85282	4.444	.04665	.0900

Elem	Tl1908	V_2924	Zn2138
ge	.0565	.42662	.92052
#1	.0816	.42444	.91779
#2	.0314	.42881	.92326

Method: CLP1150 Sample Name: PBW Operator: PR
Run Time: 07/10/90 18:11:07
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00134	H.23192	.0083	-.00215	.00059	.23360	-.00095
#1	-.00053	H.20569	.0131	-.00154	.00059	.21325	-.00099
#2	.00321	H.25816	.0036	-.00277	.00059	.25396	-.00092

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00102	.00254	.00563	.08835	-.01398	-1.3603	.21931
#1	-.00510	.00000	.00844	.08299	-.01369	-2.1921	.20191
#2	.00306	.00508	.00282	.09371	-.01427	-.52853	.23672

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.11531	-.00246	.01146	.00910	-.0081	.01259	.0253
#1	-.17066	-.00184	.00000	.01057	.0001	.01121	.0512
#2	-.05996	-.00307	.02292	.00763	-.0163	.01397	-.0005

Elem	Tl1908	V_2924	Zn2138
Avge	.0226	.00250	.00467
#1	-.0728	.00222	.00623
#2	.1180	.00278	.00312

Method: CLP1150 Sample Name: LCSM Operator: PR
Run Time: 07/10/90 18:13:51
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.67986	18.885	3.700	2.0088	1.8472	19.256	1.8286
#1	.67585	18.905	3.639	2.0205	1.8484	19.155	1.8179
#2	.68387	18.866	3.760	1.9971	1.8460	19.356	1.8393

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	1.8878	1.9786	3.8141	18.880	18.769	17.074	18.471
#1	1.8837	1.9751	3.8267	18.856	18.802	16.594	18.447
#2	1.8919	1.9821	3.8014	18.903	18.735	17.554	18.494

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	18.150	3.7615	35.889	3.7157	3.757	3.6363	3.800
#1	18.178	3.7627	36.255	3.7051	3.721	3.5850	3.804
#2	18.123	3.7603	35.522	3.7263	3.793	3.6876	3.795

Elem	Tl1908	V_2924	Zn2138
ge	3.674	1.8876	3.5983
#1	3.718	1.8865	3.5688
#2	3.629	1.8888	3.6277

Method: CLP1150 Sample Name: 24465 Operator: PR
un Time: 07/10/90 18:16:45
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00450	.55989	.0101	.24548	.01011	129.32	.01207
#1	.00583	.56385	.0214	.24425	.01010	128.97	.01066
#2	.00318	.55593	-.0011	.24671	.01011	129.67	.01348

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.00932	.01589	.02794	64.938	65.503	2.1275	24.284
#1	.01034	.01559	.02936	64.610	65.321	3.1845	24.188
#2	.00830	.01619	.02652	65.265	65.686	1.0705	24.380

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	25.415	6.0716	17.108	.02671	.0657	-.00137	.1267
#1	25.180	6.0421	17.016	.02990	.0708	.00146	.0984
#2	25.650	6.1011	17.199	.02352	.0606	-.00420	.1550

Elem	Tl1908	V_2924	Zn2138
ge	.1553	.01409	.11374
#1	.3193	.01575	.11374
#2	-.0087	.01242	.11375

Method: CLP1150 Sample Name: 24465L Operator: PR
Run Time: 07/10/90 18:24:00
Comment: /5 SD OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00160	.09097	.0153	.04577	.00119	26.240	-.00213
#1	.00160	.08440	.0163	.04577	.00119	26.268	-.00489
#2	-.00481	.09754	.0143	.04577	.00119	26.213	.00063

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00221	.00347	.00731	13.353	13.220	.16399	5.1319
#1	-.00527	.00093	.00591	13.308	13.262	.19831	5.1266
#2	.00084	.00602	.00871	13.398	13.178	.12967	5.1371

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	4.7970	1.2352	3.3345	.00451	.0062	-.00331	.0358
#1	4.7555	1.2352	3.3230	.00500	.0144	.00639	.0596
#2	4.8386	1.2352	3.3459	.00401	-.0020	-.01301	.0120

Elem	Tl1908	V_2924	Zn2138
ge	.0921	.00193	.02392
#1	.0021	.00192	.02196
#2	.1822	.00193	.02588

Method: CLP1150 Sample Name: 24465D Operator: PR
Run Time: 07/10/90 18:27:14
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00172	.43428	.0044	.22887	.00118	125.34	.00068
#1	.00147	.43556	.0163	.23195	.00118	125.99	.00519
#2	.00197	.43300	-.0074	.22580	.00118	124.70	-.00383

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.00119	.00999	.00971	63.556	64.216	1.9491	23.456
#1	.00220	.00869	.00969	64.096	64.523	1.7090	23.612
#2	.00017	.01128	.00972	63.017	63.909	2.1893	23.300

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	24.557	5.8713	16.426	.01364	.0521	-.01657	.1379
#1	24.848	5.9130	16.661	.01708	.0361	-.02633	.1042
#2	24.267	5.8295	16.191	.01019	.0680	-.00682	.1715

Elem	Tl1908	V_2924	Zn2138
ge	.1913	.00577	.09222
#1	.1220	.00521	.09103
#2	.2607	.00633	.09342

Method: CLP1150 Sample Name: 24465S Operator: PR
Run Time: 07/10/90 18:29:30
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	1.6733	18.171	3.508	2.0996	1.7560	139.48	1.6993
#1	1.6738	18.105	3.548	2.0909	1.7515	139.37	1.6804
#2	1.6728	18.236	3.467	2.1082	1.7604	139.60	1.7183

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	1.7311	1.8252	3.6018	78.764	79.097	18.486	H38.462
#1	1.7301	1.8254	3.5863	78.633	78.880	18.256	H38.403
#2	1.7321	1.8249	3.6172	78.894	79.314	18.716	H38.520

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	41.356	9.1613	50.407	3.3909	3.484	3.3876	3.685
#1	41.176	9.1503	50.052	3.3909	3.459	3.3848	3.664
#2	41.536	9.1724	50.762	3.3909	3.509	3.3904	3.706

Elem	Tl1908	V_2924	Zn2138
ge	3.394	1.7439	3.3946
#1	3.311	1.7389	3.3879
#2	3.477	1.7489	3.4012

Method: CLP1150 Sample Name: 24466 Operator: PR
Run Time: 07/10/90 18:33:03
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00418	1.3759	.0106	.02030	.00387	19.392	.00147
#1	.00660	1.3641	.0101	.02060	.00416	19.355	.00056
#2	.00176	1.3877	.0111	.01999	.00358	19.429	.00237

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00105	.00753	.01069	2.0282	1.8450	-.04180	5.6850
#1	.00099	.00944	.01070	2.0071	1.9119	.83419	5.6615
#2	-.00308	.00561	.01068	2.0494	1.7781	-.91779	5.7085

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	5.3782	.07148	5.3455	.01135	.0269	.01327	.0221
#1	5.3644	.06842	5.2939	.00718	.0241	.02432	-.0230
#2	5.3921	.07454	5.3970	.01552	.0297	.00221	.0672

Elem	Tl1908	V_2924	Zn2138
Avge	.1843	.00410	.01840
#1	.2064	.00660	.01960
#2	.1622	.00160	.01719

Method: CLP1150 Sample Name: 24467 Operator: PR
Run Time: 07/10/90 18:35:40
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00107	.04453	.0375	.00154	.00239	.37018	.00029
#1	.00374	.05892	.0219	.00215	.00238	.37138	-.00285
#2	-.00160	.03015	.0530	.00092	.00239	.36898	.00343

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.00000	.00602	.00705	.13173	.01857	-1.0082	.08910
#1	-.00306	.00888	.00845	.13073	-.01390	-.85157	.08869
#2	.00306	.00316	.00565	.13274	.05104	-1.1648	.08952

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.25369	.01044	.15469	.01475	.0029	.00151	.0717
#1	-.28137	.01043	.14896	.01942	-.0053	.00294	.0706
#2	-.22602	.01044	.16042	.01008	.0112	.00009	.0728

Elem	Tl1908	V_2924	Zn2138
'ge	.1179	.00056	.00935
#1	.0619	.00223	.00855
#2	.1738	-.00111	.01015

Analysis Report Tue 07-10-90 06:42:49 PM page 1

Method: CLP1150 Sample Name: 24468 Operator: PR
Run Time: 07/10/90 18:40:40
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00656	.99577	-.0059	.03630	.00119	69.532	-.00297
#1	-.00577	.98660	-.0127	.03661	.00120	69.448	-.00294
#2	-.00735	1.0049	.0010	.03599	.00119	69.616	-.00299

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00104	.00047	.00466	1.4861	1.3795	.45246	19.533
#1	-.00104	-.00335	.00604	1.4871	1.3458	.40845	19.532
#2	-.00104	.00428	.00327	1.4851	1.4132	.49647	19.534

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	19.949	.15183	17.268	.00593	-.0028	-.00559	.0555
#1	20.060	.15428	17.314	.00371	-.0220	-.01670	.0649
#2	19.839	.14938	17.222	.00814	.0164	.00551	.0461

Elem	Tl1908	V_2924	Zn2138
ge	.1170	.00079	.01292
#1	.0386	-.00116	.01253
#2	.1954	.00273	.01332

Method: CLP1150 Sample Name: CCVC1 Operator: PR
Run Time: 07/10/90 18:43:16
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00051	.45494	.5020	.52492	.51346	21.095	-.00824
#1	.00377	.47198	.5075	.52461	.51316	21.157	-.00964
#2	-.00479	Q.43791	.4965	.52523	.51376	21.033	-.00684

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00724	.53153	.00286	.51211	.32067	19.265	Q.57065
#1	-.00724	.53248	.00287	.51784	.39550	19.090	Q.57422
#2	-.00724	.53057	.00286	.50638	.24585	19.441	Q.56708

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.33672	.00127	20.723	.00714	-.0310	.50866	.0352
#1	-.33672	.00313	20.660	.01232	-.0200	.53223	.0451
#2	-.33672	-.00058	20.786	.00197	-.0420	.48508	.0252

Elem	Tl1908	V_2924	Zn2138
Avge	.1437	-.01263	.52179
#1	.1264	-.01208	.51981
#2	.1610	-.01319	.52377

od: CLP1150 Sample Name: CCVN1
n Time: 07/10/90 18:46:05 Operator: PR
omment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.49904	-.00312	.0134	.00092	.00200	.12940	.51415
#1	.50038	-.00055	-.0129	.00154	.00170	.13420	.52571
#2	.49769	-.00570	.0397	.00031	.00231	.12461	.50259

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.51778	.00213	.52962	-.00483	-.09716	1.1028	.01786
#1	.51268	.00087	.52822	-.00382	-.07113	1.8367	.01828
#2	.52287	.00339	.53103	-.00584	-.12319	.36886	.01744

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.29520	.51194	.05156	.53204	1.049	.01733	2.049
#1	-.28137	.51502	.05729	.53229	1.046	.01872	2.041
#2	-.30904	.50887	.04583	.53180	1.051	.01594	2.057

Elem	Tl1908	V_2924	Zn2138
Avge	2.076	.49853	.00346
#1	1.963	.50103	.00151
#2	2.188	.49603	.00541

Method: CLP1150 Sample Name: CCB1 Operator: PR
Run Time: 07/10/90 18:48:59
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00293	-.00787	.0411	.00092	.00119	.06712	.00029
#1	.00160	-.00655	.0470	.00092	.00119	.06472	.00255
#2	.00426	-.00918	.0352	.00092	.00119	.06951	-.00197

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.00306	.00254	.00425	-.00365	-.12235	-.67019	.00776
#1	.00306	.00254	.00565	-.00164	-.08079	-.89026	.00608
#2	.00306	.00254	.00285	-.00565	-.16392	-.45011	.00943

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.36439	.00305	.02865	.00615	-.0109	.00840	.0381
#1	-.33672	.00183	.02292	.00419	-.0329	.00560	.0296
#2	-.39207	.00427	.03438	.00811	.0111	.01120	.0466

Elem	Tl1908	V_2924	Zn2138
Blank	.1075	.00195	.00351
#1	.2308	.00223	.00390
#2	-.0158	.00168	.00311

alysis Report Tue 07-10-90 06:53:57 PM page 1

Me od: CLP1150 Sample Name: 24469 Operator: PR
n Time: 07/10/90 18:51:49
mment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

lem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00165	.44683	.0205	.00830	.00089	32.081	-.00230
1	.00165	.46256	.0186	.01015	.00059	31.995	-.00320
w2	.00165	.43110	.0224	.00646	.00119	32.167	-.00140

lem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
vge	-.00408	.00225	-.00213	.63484	.49218	.42160	6.3858
"1	-.00306	.00003	-.00072	.63485	.46736	-.07754	6.3630
2	-.00510	.00447	-.00353	.63483	.51700	.92074	6.4087

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
vge	6.1393	.00928	7.5226	.00418	.0154	-.00362	.0715
#1	6.1116	.00805	7.4825	.00417	.0237	-.01193	.0539
2	6.1670	.01051	7.5627	.00419	.0072	.00468	.0891

Elem	T11908	V_2924	Zn2138
...e	-.0154	.00165	.00236
#1	.0016	.00220	.00314
#2	-.0324	.00109	.00157

000769

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Method: CLP1150 Sample Name: 24470 Operator: PR
Run Time: 07/10/90 18:54:15
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00406	1.2314	.0267	.02891	-.00060	8.1887	-.00254
#1	-.00405	1.2301	.0135	.02983	-.00120	8.1744	-.00295
#2	-.00406	1.2328	.0400	.02798	-.00001	8.2031	-.00213

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00004	.00190	.00271	3.0311	2.8566	-.37839	2.6535
#1	-.00514	.00285	-.00010	3.0240	2.9232	-.27047	2.6445
#2	.00506	.00095	.00552	3.0381	2.7900	-.48631	2.6625

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	2.3339	.38839	3.5751	.00941	-.0272	-.01687	.0570
#1	2.3478	.38901	3.5293	.00917	-.0273	.00252	.0960
#2	2.3201	.38776	3.6209	.00964	-.0272	-.03627	.0180

Elem	Tl1908	V_2924	Zn2138
Avge	.0383	.00187	.01567
#1	.0211	.00104	.01568
#2	.0556	.00270	.01567

Method: CLP1150 Sample Name: 24471 Operator: PR
In Time: 07/10/90 18:56:44
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00040	1.1916	.0256	.05937	-.00120	42.371	-.00156
#1	-.00039	1.1982	.0043	.06060	-.00120	42.354	-.00420
#2	-.00041	1.1850	.0469	.05814	-.00120	42.387	.00107

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00207	.00307	.00187	2.7940	2.6495	3.4475	9.2891
#1	.00098	.00148	.00468	2.7914	2.7074	3.9465	9.2722
#2	-.00513	.00465	-.00095	2.7967	2.5916	2.9485	9.3061

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	9.0867	.72967	42.323	.01139	.0120	-.00663	.0382
#1	9.1006	.72415	42.076	.00770	.0119	-.01219	.0116
#2	9.0729	.73519	42.569	.01508	.0121	-.00107	.0647

Elem	Tl1908	V_2924	Zn2138
Avge	.1507	.00247	.00900
#1	.2009	.00274	.00861
#2	.1006	.00220	.00939

Method: CLP1150 Sample Name: 24472 Operator: PR
Run Time: 07/10/90 18:59:16
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00463	22.923	-.0029	.21298	.00083	12.034	.00302
#1	-.00597	22.985	-.0245	.21421	.00053	12.020	.00268
#2	-.00329	22.862	.0187	.21175	.00113	12.047	.00337

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.01673	.03760	.05813	44.191	44.141	4.5567	8.2983
#1	.01877	.03950	.05533	44.172	44.082	4.8208	8.3021
#2	.01469	.03569	.06093	44.211	44.199	4.2926	8.2946

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	7.9935	1.0384	6.6575	.04245	.0284	-.01740	.0519
#1	7.9382	1.0384	6.6919	.03409	.0395	-.01740	.0465
#2	8.0489	1.0384	6.6231	.05081	.0174	-.01740	.0573

Elem	Tl1908	V_2924	Zn2138
Avge	.1222	.02690	.17332
#1	.1057	.02718	.17258
#2	.1386	.02661	.17407

Method: CLP1150 Sample Name: 24473 Operator: PR
Run Time: 07/10/90 20:37:49
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00155	.03572	.0252	.08028	.00298	8.8407	.00028
#1	.00155	.02918	.0227	.08028	.00298	8.8215	-.00016
#2	.00155	.04227	.0276	.08028	.00299	8.8598	.00072

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.00911	.00638	.00573	4.8146	4.5977	.78197	1.9264
#1	.01115	.00511	.00572	4.8196	4.5481	1.4278	1.9270
#2	.00707	.00764	.00573	4.8096	4.6474	.13612	1.9258

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	1.6421	2.7674	6.5773	.01549	.0236	-.00237	.0458
#1	1.6559	2.7662	6.5887	.01918	.0264	.00042	.0409
#2	1.6282	2.7686	6.5658	.01180	.0209	-.00517	.0507

Elem	Tl1908	V_2924	Zn2138
Avge	.0788	.00014	.01288
#1	.0117	.00125	.01170
#2	.1459	-.00097	.01407

M od: CLP1150 Sample Name: 24474 Operator: PR
un Time: 07/10/90 20:40:23
omment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	-.00050	.11406	.0520	.08520	.00089	9.3319	-.00258
#1	-.00050	.11009	.0307	.08643	.00119	9.3391	-.00111
#2	-.00050	.11803	.0732	.08397	.00059	9.3247	-.00405

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.01317	.00190	.00019	6.1065	5.9749	1.3305	2.0094
#1	.01113	.00317	-.00542	6.1401	6.0084	1.6633	2.0185
#2	.01521	.00063	.00581	6.0729	5.9415	.99766	2.0004

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	1.7666	3.0592	6.5601	.01775	.0329	-.00108	.0019
#1	1.7666	3.0770	6.6002	.01824	.0304	-.00244	.0354
#2	1.7666	3.0414	6.5200	.01725	.0354	.00029	-.0315

Elem	Tl1908	V_2924	Zn2138
Avge	.0648	.00095	.01722
#1	.0702	.00123	.01646
#2	.0594	.00067	.01799

Method: CLP1150 Sample Name: 24475 Operator: PR
In Time: 07/10/90 20:43:27
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00085	3.0993	-.0115	.04213	-.00001	12.132	.00172
#1	.00138	3.1019	-.0186	.04274	-.00001	12.180	-.00008
#2	.00032	3.0967	-.0044	.04151	-.00001	12.084	.00352

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.00096	.00805	.02519	4.6193	4.5167	2.0316	3.3056
#1	.00096	.00868	.02238	4.6254	4.4999	2.3152	3.3121
#2	.00096	.00742	.02799	4.6133	4.5334	1.7480	3.2991

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	3.0950	3.7042	7.3049	.01088	.0166	.01101	.0261
#1	3.0950	3.7066	7.3221	.01776	.0304	.00689	.0623
#2	3.0950	3.7017	7.2877	.00400	.0028	.01512	-.0101

Elem	Tl1908	V_2924	Zn2138
Avge	.0740	.00462	.04505
#1	.0572	.00406	.04464
#2	.0907	.00517	.04546

Me od: CLP1150 Sample Name: ICSABF Operator: PR
n Time: 07/10/90 20:47:45
mment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

lem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.83431	485.48	-.9605	.48362	.43714	450.72	.86741
1	.83860	487.34	-.9744	.48485	.43862	451.62	.87241
#2	.83002	483.62	-.9466	.48239	.43565	449.81	.86240

lem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
vge	.42666	.49677	.44195	172.84	177.00	-1.3447	218.45
"1	.42462	.49516	.44737	173.38	177.15	-2.3497	218.06
2	.42870	.49838	.43653	172.30	176.84	-.33963	218.84

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
vge	478.29	.44635	.73336	.85412	4.525	.07552	.1118
#1	479.91	.45005	.72190	.86125	4.516	.07162	.1362
2	476.67	.44264	.74481	.84699	4.535	.07942	.0874

Elem	Tl1908	V_2924	Zn2138
e	.1921	.43275	.94013
#1	.0787	.43521	.94049
#2	.3055	.43029	.93977

nalysis Report QC Standard Tue 07-10-90 08:55:53 PM page 1

Method: CLP1150 Sample Name: CCVC2 Operator: PR
Run Time: 07/10/90 20:53:30
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00191	Q.79437	.4945	.52307	.51047	20.906	-.00179
#1	.00325	Q.74716	.5363	.52400	.51435	20.977	-.00155
#2	.00058	Q.84157	.4528	.52215	.50659	20.834	-.00204

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	-.00418	.52837	-.00136	Q.62192	.49511	18.781	Q.82247
#1	-.00724	.53440	-.00275	Q.60780	.52870	Q17.563	Q.77549
#2	-.00113	.52234	.00003	Q.63604	.46152	19.999	Q.86944

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.08764	.00191	20.723	.00419	-.0006	.49201	.0848
#1	-.19834	.00192	20.820	.00001	-.0253	.49062	.1288
#2	.02306	.00191	20.626	.00836	.0242	.49339	.0409

Elem	Tl1908	V_2924	Zn2138
Avge	.0191	-.01099	.52064
#1	-.0765	-.01042	.52695
#2	.1147	-.01155	.51434

Method: CLP1150 Sample Name: CCVN2 Operator: PR
Run Time: 07/10/90 20:56:11
Comment: OBRITOWN -2 H2O's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.48328	.21042	.0088	.00154	.00262	.32583	.52282
#1	.48434	.23529	.0307	.00092	.00292	.37374	.53552
#2	.48222	.18556	-.0132	.00215	.00232	.27792	.51013

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.50555	.00116	.52258	.08347	-.02355	-1.6130	.22375
#1	.50046	.00021	.51976	.09691	-.00704	-.99159	.25646
#2	.51064	.00211	.52539	.07004	-.04006	-2.2343	.19105

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.12915	.50888	.11459	.51581	1.035	.00898	1.945
#1	-.08764	.51257	.12605	.50917	1.013	.00478	1.961
#2	-.17066	.50520	.10313	.52245	1.057	.01317	1.929

Elem	Tl1908	V_2924	Zn2138
Avge	1.991	.49075	.00272
#1	2.087	.48880	.00314
#2	1.896	.49269	.00231

Method: CLP1150 Sample Name: CCB2 Operator: PR
Run Time: 07/10/90 20:58:56
Comment: OBRITOWN -2 H20's cntl 2954
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	Ba4934	Be3130	Ca3179	Cd2288
Avge	.00320	.14941	.0341	.00062	.00119	.18808	-.00105
1	.00320	.16121	.0141	.00031	.00178	.18449	.00180
2	.00320	.13760	.0541	.00092	.00059	.19166	-.00390

Elem	Co2286	Cr2677	Cu3247	Fe2599	Fe2714	K_7664	Mg2795
Avge	.00713	.00285	.00563	.05511	-.09775	1.0176	.14740
#1	.00917	.00190	.00563	.05276	-.11452	1.7514	.14404
2	.00509	.00380	.00563	.05746	-.08098	.28378	.15075

Elem	Mg3822	Mn2576	Na5889	Ni2316	Pb2203	Sb2175	Se1960
Avge	-.14299	.00490	.04583	.00714	.0112	.02089	.0622
#1	-.17066	.00551	.04583	.00468	.0002	.01120	.0818
2	-.11531	.00429	.04583	.00960	.0222	.03058	.0425

Elem	Tl1908	V_2924	Zn2138
Avge	.0793	.00223	.00271
#1	.0962	.00223	.00233
#2	.0623	.00223	.00310

VERSAR, INC.
TRACE METALS SECTION
GFAA ANALYSIS LOG SHEET

ELEMENT: As DATE: 7/16/90 PAGE 1 OF 6

CODE-BATCH: OBRITOWN-2 CONTROL #: 2954

Instrument #: 8
Wavelength: 193.7 Slit: 0.7
Signal: ____ Pk.Ht. ✓ Pk.Area
Background Correction: ✓ BZ ___ BD

Standard Prep.: Date: 7/16/90
Time: 0730
Source: Inorganic Ventures

Light Source: EDL
Current/Power: 10 watts
Tube: LVP(PE) Pipet Vol.: 15 ul
Replicates: 2 Purge: 0 Ar

Matrix Modifiers: ✓ yes ___ no

FURNACE CONDITIONS

Step	1	2	3	4	5
Temp °C	120	1300	2300	2500	20
Ramp (s)	5	5	0	1	1
Hold (s)	35	15	5	3	8
BOC (s)					
Rec. (s)					

CALIBRATION CURVE

CUP	STANDARD	AV. ABS.	UNADJ. CONC.	D.F.	COMMENTS
1	CB 0ppb	-2			r= 0.9965
2	STD1 10ppb	43			CRA= 10.44
3	STD2 20ppb	80			
4	STD3 50ppb	175			
5	STD4 100ppb	309			
6	ICV# 2	177	54.35		[9954.0] 115.6%
7	ICB 0ppb	2	<3.0		

Time of Calibration: 2200

Analyst: GS

Reviewer: ____

000781

00071

VERSAR, INC. GFAA ANALYSIS LOG SHEET Page 2 of 6

ELEMENT: AS 7595 CODE-BATCH: OBRIDON-3 CONTROL #: 2954

DATE: 7/16/90 TRAY #: 1 CALIB. TIME: 2200 ~~1730~~

CUP	LAB/EPA SAMPLE #	AV. ABS.	UNADJ. CONC.	D.F.	*	COMMENTS
1	PBW+B	3	<3.0			
2	+20	67	18.3			(92)
3	24465 +B	62	16.7			
4	+20	118	35.0			(93)
5	24465 D+B	60	16.0			RPD= 4.2%
6	+20	118	35.0			(95)
7	24465 S	200	61.9			90.4%
8	LCSW	162	49.4			98.8%
9	24466 +B	6	<3.0			
10	+20	68	18.6			(93)
11	CCV1	172	53.71			105.4%
12	CCB1	-1	<3.0			
13	24467 +B	0	<3.0			
14	+20	64	17.3			(96)
15	24468 +B	-2	<3.0			
16	+20	77	21.6			(108) ~~+0.93~~
17	24469 +B	1	<3.0			
18	+20	70	19.3			(96)
19	24470 +B	10	<3.0			
20	+20	76	21.2			(106)
1	24471 +B	37	8.48			
22	+20	102	29.8			(107)
23	CCV2	465	50.42			100.8%
24	CCB2	4	<3.0			
25	24472 +B	45	11.1			
26	+20	100	29.1			(98)
27	24473 +B	15	<3.0			
28	+20	76	21.2			(106)
29	24474 +B	25	4.55			
30	+20	88	25.2			(103)
31	24475 +B	4	<3.0			
32	+20	72	19.9			(100)
33	CCV3	158	48.12			96.2%
34	CCB3	3	<3.0			
35						
36						
37						
38						
39						
40						

CCV= 25ppb NBS

ICV= ICV#4 = 104ppb

( )= % recovery of MSA

= —g/—L (— wt.)

SPIKE=(HOH) 50 ug/l

=(SOLID) — mg/kg

=(BENCH) ~~CC0779~~

ANALYST: GS ~~CCC383~~

00072

3/6
OBRIDGN-2
9S 7/16/90
calibration

AS
0.000 -0.003

MEAN= -0.001 STD.DEV.= COEF.VAR.= 99.99 %
****
0.000 AUTOZERO
****
AS 0001
0.002 -0.006

MEAN= -0.002 STD.DEV.= COEF.VAR.= 99.99 %
****
AS 0002
0.046 0.040

MEAN= 0.043 STD.DEV.= COEF.VAR.= 11.31 %
****
AS 0003
0.078 0.082

MEAN= 0.080 STD.DEV.= COEF.VAR.= 3.09 %
****
AS 0004
0.175 0.175

MEAN= 0.175 STD.DEV.= COEF.VAR.= 0.25 %
****
AS 0005
0.309 0.309

MEAN= 0.309 STD.DEV.= COEF.VAR.= 0.05 %
****
AS 0006
0.177 0.178

MEAN= 0.177 STD.DEV.= COEF.VAR.= 0.43 %
****
AS 0007
0.003 0.001

MEAN= 0.002 STD.DEV.= COEF.VAR.= 77.16 %
****

4/6
OBRIDON-2
9s 7/16/90
Hay 1

AS 0001
0.002 0.004
MEAN= 0.003 STD.DEV.= COEF.VAR.= 47.29 %

AS 0002
0.068 0.067
MEAN= 0.067 STD.DEV.= COEF.VAR.= 1.46 %

AS 0003
0.061 0.062
MEAN= 0.062 STD.DEV.= COEF.VAR.= 1.36 %

AS 0004
0.121 0.115
MEAN= 0.118 STD.DEV.= COEF.VAR.= 3.24 %

AS 0005
0.062 0.058
MEAN= 0.060 STD.DEV.= COEF.VAR.= 5.53 %

AS 0006
0.110 0.126
MEAN= 0.118 STD.DEV.= COEF.VAR.= 9.42 %

AS 0007
0.204 0.195
MEAN= 0.200 STD.DEV.= COEF.VAR.= 3.11 %

AS 0008
0.169 0.156
MEAN= 0.162 STD.DEV.= COEF.VAR.= 5.52 %

AS 0009
0.005 0.007
MEAN= 0.006 STD.DEV.= COEF.VAR.= 24.48 %

AS 0010
0.063 0.074
MEAN= 0.068 STD.DEV.= COEF.VAR.= 11.36 %

AS 0011
0.163 0.180
MEAN= 0.172 STD.DEV.= COEF.VAR.= 6.97 %

AS 0012
-0.001 -0.001
MEAN= -0.001 STD.DEV.= COEF.VAR.= 5.41 %

AS 0013
0.003 -0.004
MEAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 %

AS 0014
0.062 0.066
MEAN= 0.064 STD.DEV.= COEF.VAR.= 4.23 %

AS 0015
-0.002 -0.001

CC0784

00074

```
MEAN=    -0.002     STD.DEV.=                   COEF.VAR.=  53.55 %
************************************************************************
AS   0016
  0.078                  0.076
------------------------------------------------------------------------
MEAN=     0.077     STD.DEV.=                   COEF.VAR.=  1.76  %
************************************************************************
AS   0017
  0.000                  0.001
------------------------------------------------------------------------
MEAN=     0.001     STD.DEV.=                   COEF.VAR.=  81.62 %
************************************************************************
AS   0018
  0.074                  0.067
------------------------------------------------------------------------
MEAN=     0.070     STD.DEV.=                   COEF.VAR.=  6.66  %
************************************************************************
AS   0019
  0.012                  0.008
------------------------------------------------------------------------
MEAN=     0.010     STD.DEV.=                   COEF.VAR.=  28.85 %
************************************************************************
AS   0020
  0.078                  0.074
------------------------------------------------------------------------
MEAN=     0.076     STD.DEV.=                   COEF.VAR.=  3.14  %
************************************************************************
AS   0021
  0.036                  0.039
------------------------------------------------------------------------
MEAN=     0.037     STD.DEV.=                   COEF.VAR.=  6.11  %
************************************************************************
AS   0022
  0.101                  0.103
------------------------------------------------------------------------
MEAN=     0.102     STD.DEV.=                   COEF.VAR.=  1.24  %
************************************************************************
```

5/6
OBRFTDWN-
95 7/16/9
Tray 1

```
AS   0023
  0.16[illegible]                  0.165
------------------------------------------------------------------------
MEAN=     0.165     STD.DEV.=                   COEF.VAR.=  0.28  %
************************************************************************
AS   0024
  0.004                  0.003
------------------------------------------------------------------------
MEAN=     0.004     STD.DEV.=                   COEF.VAR.=  12.70 %
************************************************************************
AS   0025
  0.041                  0.049
------------------------------------------------------------------------
MEAN=     0.045     STD.DEV.=                   COEF.VAR.=  12.15 %
************************************************************************
AS   0026
  0.096                  0.103
------------------------------------------------------------------------
MEAN=     0.100     STD.DEV.=                   COEF.VAR.=  5.05  %
************************************************************************
AS   0027
  0.015                  0.015
------------------------------------------------------------------------
MEAN=     0.015     STD.DEV.=                   COEF.VAR.=  2.64  %
************************************************************************
AS   0028
  0.075                  0.078
------------------------------------------------------------------------
MEAN=     0.076     STD.DEV.=                   COEF.VAR.=  3.26  %
************************************************************************
AS   0029
  0.024                  0.026
------------------------------------------------------------------------
MEAN=     0.025     STD.DEV.=                   COEF.VAR.=  4.19  %
************************************************************************
AS   0030
```

6/6

OBRITOWN-2

93 7/16/90

Tray 1

0.088 0.087

MEAN= 0.088 STD.DEV.= COEF.VAR.= 0.07 %

AS 0031

0.010 -0.002

MEAN= 0.004 STD.DEV.= COEF.VAR.= 99.99 %

AS 0032

0.078 0.065

MEAN= 0.072 STD.DEV.= COEF.VAR.= 12.38 %

AS 0033

0.151 0.164

MEAN= 0.158 STD.DEV.= COEF.VAR.= 5.66 %

AS 0034

0.009 -0.003

MEAN= 0.003 STD.DEV.= COEF.VAR.= 99.99 %

VERSAR, INC.
TRACE METALS SECTION
GFAA ANALYSIS LOG SHEET

ELEMENT: Pb DATE: ~~OBRITOWN-2~~ 95 7/16/90 PAGE 1 OF 6

CODE-BATCH: OBRITOWN-2 CONTROL #: 2954
CharDC. 40 2939

Instrument #: 6 Light Source: EDL
Wavelength: 283.3 Slit: 0.7 Current/Power: 9½ 99#5
Signal: ✓ Pk. Ht. ____ Pk. Area Tube: LVP(PS) Pipet Vol.: 10 ul
Background Correction: ___ BZ ✓ BD Replicates: 2 Purge: 0 Ar

Standard Prep.: Date: 7/16/90 Matrix Modifiers: ✓ yes ____ no
Time: 0730
Source: Inorganic Ventures

FURNACE CONDITIONS

Step	1	2	3	4	5
Temp °C	120	750	1600	2300	20
Ramp (s)	5	5	0	1	2
Hold (s)	30	15	5	3	5
BOC (s)		14			
Rec. (s)					

CALIBRATION CURVE

CUP	STANDARD	AV. ABS.	UNADJ. CONC.	D.F.	COMMENTS
1	CB 0ppb	-1			r= 0.9989
2	STD1 5ppb	21			CRA= 4.99
3	STD2 10ppb	40			
4	STD3 20ppb	82			
5	STD4 50ppb	186			
6	ICV# 4	73	18.99	1:4	[97.5] 97.4 %R
7	ICB 0ppb	-1	~~95 <3.0~~ <2.0		

Time of Calibration: 1845

Analyst: 95

Reviewer: ____

000787
00077

VERSAR, INC. GFAA ANALYSIS LOG SHEET Page 2 of 6

ELEMENT: Pb CODE-BATCH: OBRITOWN-2 CONTROL #: 2954 2500

DATE: 7/16/90 TRAY #: 2 CALIB. TIME: ~~1845~~

CUP	LAB/EPA SAMPLE #	AV. ABS.	UNADJ. CONC.	D.F.	*	COMMENTS
1	PRW+B	~~453~~ 1	<2.0			
2	+10	~~9575~~ 35	8.76			(85)
3	24465 +B	51	13.0			
4	+10	~~87~~	22.4			(98)
5	24465 D+B	45	11.4			RPD = 13.1%
6	+10	78	20.3			(89)
7	24465 S	118	31.1	1:1		[50] 98.4%
8	LCSM	97	25.4	1:1		[50] 101.8%
9	24466 +B	10	2.03			
10	+10	47	12.0			(100)
11	CCV1	99	25.99			104.0%
12	CCB1	-1	<2.0			
13	24467 +B	13	2.84			
14	+~~30~~10	45	11.4			(86)
15	24468 +B	3	<2.0			
16	+10	40	10.1			(101)
17	24469 +B	-1	<2.0			
18	+10	38	9.57			(96)
19	24470 +B	11	2.30			
20	+10	47	12.0			(97)
	24471 +B	4	<2.0			
22	+10	43	10.9			(109)
23	CCV2	94	24.64			98.6%
24	CCB2	-3	<2.0			
25	24472 +B	124	32.7			
26	+10	156	41.3			(86)
27	24473 +B	5	<2.0			
28	+10	40	10.1			(101)
29	24474 +B	9	<2.0			
30	+10	44	11.2			(113)
31	24475 +B	18	4.18			
32	+10	53	13.6			(94)
33	CCV3	89	23.30			93.2%
34	CCB3	-2	<2.0			
35						
36						
37						
38						
39						
40						

CCV= 25ppb NBS

CV= ICV #4 = 97.5ppb

)= % recovery of MSA

= — g/ — L (— wt.)

SPIKE= (HOH) 50 ug/l

= (SOLID) — mg/kg

= (BENCH) —

ANALYST: QS

Char-DC-4D, OBR[illegible] Pb as 7/16/90 Calibration

	0.001	
	0.002	
0	0.002	AV
	47.14	CV
	[illegible]	[illegible]
	-0.002	
	-0.001	
1	-0.001	AV
	47.14	CV
	0.020	
	0.021	
2	0.021	AV
	3.45	CV
	0.039	
	0.042	
3	0.040	AV
	5.24	CV
	0.082	
	0.081	
4	0.082	AV
	0.67	CV
	0.188	
	0.183	
5	0.186	AV
	1.91	CV
	0.073	
	0.073	
6	0.073	AV
	0.00	CV
	-0.002	
	-0.001	
7	-0.001	AV
	47.14	CV

Char DC-40
45 7/16/90
Trial 1

	0.003	
	0.003	
1	0.003	AV
	0.00	CV
	0.094	
	0.093	
2	0.093	AV
	0.76	CV
	0.096	
	0.094	
3	0.095	AV
	1.49	CV
	0.095	
	0.095	
4	0.095	AV
	0.00	CV
	-0.002	
	0.002	
5	0.000	AV

Po OBRITOWN-2
CP 7/16/90
Tray 2

Sample	Reading 1	Reading 2	AV	CV
1	0.001	0.001	0.001	0.00
2	0.035	0.035	0.035	0.00
3	0.051	0.051	0.051	0.00
4	0.086	0.085	0.087	1.63
5	0.045	0.045	0.045	1.55
6	0.077	0.079	0.078	1.81
7	0.118	0.118	0.118	0.00
8	0.100	0.093	0.097	5.13
9	0.009	0.010	0.010	7.44
10	0.045	0.048	0.047	3.01
11	0.097	0.102	0.099	3.55
12	-0.002	-0.001	-0.001	47.14
13	0.013	0.012	0.013	5.65
14	0.044	0.046	0.045	3.14
15	0.003	0.003	0.003	0.00
16	0.042	0.038	0.040	7.07
17	-0.001	0.000	-0.001	
18	0.038	0.038	0.038	0.00
19	0.013	0.009	0.011	25.71
20	0.046	0.047	0.047	1.52
21	0.003	0.005	0.004	47.14
22	0.043	0.042	0.043	1.65
23	0.093	0.095	0.094	1.50
24	-0.004	-0.002	-0.003	47.14
25	0.124	0.124	0.124	0.00
26	0.155	0.154	0.155	1.61
27	0.005	0.005	0.005	0.00
28	0.039	0.041	0.040	3.51
29	0.007	0.010	0.009	24.96
30	0.043	0.046	0.044	4.77
31	0.013	0.017	0.015	4.04
32	0.053	0.053	0.053	0.00
33	0.087	0.090	0.089	2.40
34	-0.002	-0.003	-0.002	28.28

VERSAR, INC.
TRACE METALS SECTION
GFAA ANALYSIS LOG SHEET

ELEMENT: Se DATE: 7/17/90 PAGE 1 OF 6

CODE-BATCH: OBRIDOWN - 2 CONTROL #: 2954

Instrument #: 10 Light Source: EDL
Wavelength: 196.0 Slit: 0.7 Current/Power: 6 watts
Signal: ____ Pk. Ht. ✓ Pk. Area Tube: QUARTZ Pipet Vol.: 25 ul
Background Correction: ✓ BZ ___ BD Replicates: 2 Purge: 0 Ar

Standard Prep.: Date: 7/17/90 Matrix Modifiers: ✓ yes ___ no
Time: 0730
Source: Inorganic Ventures

FURNACE CONDITIONS

Step	1	2	3	4	5
Temp °C	130	1000	2000	2500	20
Ramp (s)	5	5	0	1	1
Hold (s)	40	15	5	3	8
BOC (s)					
Rec. (s)					

CALIBRATION CURVE

CUP	STANDARD	AV. ABS.	UNADJ. CONC.	D.F.	COMMENTS
1	CB 0ppb	-1			r= 0.9999
2	STD1 5ppb	15			CRA= 4.76
3	STD2 10ppb	34			
4	STD3 20ppb	69			
5	STD4 50ppb	179			
6	ICV# 2	90	25.62	1:3	[104.0] 98.5%
7	ICB 0ppb	-2	<3.0		

Time of Calibration: 2215

Analyst: QS

Reviewer: HR

000792

00082

VERSAR, INC. GFAA ANALYSIS LOG SHEET

ELEMENT: Se CODE-BATCH: ORRITOWN-2 CONTROL #: 2954

DATE: 7/17/90 TRAY #: 1 CALIB. TIME: 2215

CUP	LAB/EPA SAMPLE #	AV. ABS.	UNADJ. CONC.	D.F.	*	COMMENTS
1	PBW +B	-2	<3.0			
2	+10	30	8.93			(89)
3	24465 +B	-5	<3.0 W			
4	+10	25	7.54			(75)
5	24465 D +B	4	<3.0			RPD = NC
6	+10	29	8.65			(86)
7	24465 S	153	43.1			[50] 86.2%
8	LCSM	168	47.3			[50] 94.6%
9	24466 +B	14	~~4.48~~ GS			rerun bad CV
10	+10	48	13.9			(94)
11	CCV1	~~89~~	25.07			100.3%
12	CCB1	14	~~4.48~~ GS			rerun - [illegible]
13	CCB1	10	3.37			
14	24467 +B	19	5.87			
15	+10	56	16.2			(103)
16	24468 +B	11	3.65			
17	+10	49	14.2			(106)
18	24469 +B	9	~~3.09~~ GS			rerun bad CV
19	+10	38	11.2			(81)
20	24470 +B	12	3.93			
21	+10	46	13.4			(95)
22	24471 +B	3	<3.0			
23	+10	39	11.4			(114)
24	CCV2	90	25.62			100.5%
25	CCB2	4	<3.0			
26	24472 +B	2	<3.0			
27	+10	34	10.0			(100)
28	24473 +B	3	<3.0			
29	+10	37	10.9			(109)
30	24474 +B	-2	<3.0			
31	+10	31	9.21			(92)
32	24475 +B	2	<3.0			
33	+10	33	9.77			(98)
34	~~CCV3~~ 24466 +B	-4	<3.0			
35	~~CCB3~~ +10	37	10.9			(109)
36	~~CCV3~~ CCB3	2	<3.0			
37	~~CCB3~~ CCV3	80	22.84			91.4%
38						
39						
40						

CCV= 25 ppb
ICV= —
( )= % recovery of MSA
* = — g/ — L (— wt.)

SPIKE=(HOH) 50 ug/l
=(SOLID) — mg/kg
=(BENCH) —

ANALYST: GS

000798

00083

3/6

OBRITOWN-2
AS 7/17/90
Calibration

SE
0.009 0.004

MEAN= 0.006 STD.DEV.= COEF.VAR.= 46.41 %

0.000 AUTOZERO

SE 0001
-0.003 0.001

MEAN= -0.001 STD.DEV.= COEF.VAR.= 99.99 %

SE 0002
0.012 0.019

MEAN= 0.015 STD.DEV.= COEF.VAR.= 28.79 %

SE 0003
0.033 0.036

MEAN= 0.034 STD.DEV.= COEF.VAR.= 5.49 %

SE 0004
0.067 0.070

MEAN= 0.069 STD.DEV.= COEF.VAR.= 2.88 %

SE 0005
0.181 0.175

MEAN= 0.178 STD.DEV.= COEF.VAR.= 2.08 %

SE 0006
0.088 0.092

MEAN= 0.090 STD.DEV.= COEF.VAR.= 3.81 %

SE 0007
-0.002 -0.003

MEAN= -0.002 STD.DEV.= COEF.VAR.= 44.38 %

4/6

OBRITOWN-2

4s 7/17/90

Tray 1

SE 0001

0.005 -0.010

MEAN= -0.002 STD.DEV.= COEF.VAR.= 99.99 %

SE 0002

0.031 0.030

MEAN= 0.030 STD.DEV.= COEF.VAR.= 1.36 %

SE 0003

0.000 -0.010

MEAN= -0.005 STD.DEV.= COEF.VAR.= 99.99 %

SE 0004

0.026 0.024

MEAN= 0.025 STD.DEV.= COEF.VAR.= 6.71 %

SE 0005

0.006 0.002

MEAN= 0.004 STD.DEV.= COEF.VAR.= 71.89 %

SE 0006

0.031 0.028

MEAN= 0.029 STD.DEV.= COEF.VAR.= 7.58 %

SE 0007

0.146 0.159

MEAN= 0.153 STD.DEV.= COEF.VAR.= 5.84 %

SE 0008

0.174 0.162

MEAN= 0.168 STD.DEV.= COEF.VAR.= 5.27 %

SE 0009

0.009 0.018

MEAN= 0.014 STD.DEV.= COEF.VAR.= 50.45 %

SE 0010

0.048 0.048

MEAN= 0.048 STD.DEV.= COEF.VAR.= 1.22 %

SE 0011

0.095 0.081

MEAN= 0.088 STD.DEV.= COEF.VAR.= 11.58 %

SE 0012

-0.012 0.040

MEAN= 0.014 STD.DEV.= COEF.VAR.= 99.99 %

SE 0013

0.008 0.011

MEAN= 0.010 STD.DEV.= COEF.VAR.= 21.36 %

SE 0014

0.016 0.021

5/6
OBRITOWN
95 7/17/9
Tray 1

SE 0015
0.059 0.054

MEAN= 0.056 STD.DEV.= COEF.VAR.= 6.06 %

SE 0016
0.013 0.009

MEAN= 0.011 STD.DEV.= COEF.VAR.= 20.54 %

SE 0017
0.051 0.046

MEAN= 0.049 STD.DEV.= COEF.VAR.= 6.74 %

SE 0018
0.022 -0.003

MEAN= 0.009 STD.DEV.= COEF.VAR.= 99.99 %

SE 0019
0.036 0.040

MEAN= 0.038 STD.DEV.= COEF.VAR.= 6.61 %

SE 0020
0.012 0.012

MEAN= 0.012 STD.DEV.= COEF.VAR.= 0.92 %

SE 0021
0.046 0.047

MEAN= 0.046 STD.DEV.= COEF.VAR.= 1.91 %

SE 0022
0.012 -0.007

MEAN= 0.003 STD.DEV.= COEF.VAR.= 99.99 %

SE 0023
0.035 0.044

MEAN= 0.039 STD.DEV.= COEF.VAR.= 15.29 %

SE 0024
0.096 0.084

MEAN= 0.090 STD.DEV.= COEF.VAR.= 9.58 %

SE 0025
0.008 -0.000

MEAN= 0.004 STD.DEV.= COEF.VAR.= 99.99 %

SE 0026
0.003 0.001

MEAN= 0.002 STD.DEV.= COEF.VAR.= 69.09 %

SE 0027
0.033 0.034

MEAN= 0.034 STD.DEV.= COEF.VAR.= 2.83 %

SE 0028
-0.006 0.013

MEAN= 0.003 STD.DEV.= COEF.VAR.= 99.99 %

SE 0029

00083

000796

```
MEAN=      0.037     STD.DEV.=                     COEF.VAR.=  19.58 %
**********************************************************************
SE   0030


  -0.001               -0.003
----------------------------------------------------------------------
MEAN=     -0.002     STD.DEV.=                     COEF.VAR.=  94.74 %
**********************************************************************
SE   0031
   0.033                0.030
----------------------------------------------------------------------
MEAN=      0.031     STD.DEV.=                     COEF.VAR.=  5.36  %
**********************************************************************
SE   0032
   0.005                0.000
----------------------------------------------------------------------
MEAN=      0.002     STD.DEV.=                     COEF.VAR.=  99.99 %
**********************************************************************
SE   0033
   0.034                0.032
----------------------------------------------------------------------
MEAN=      0.033     STD.DEV.=                     COEF.VAR.=  3.55  %
**********************************************************************




SE   0034
  -0.001               -0.006
----------------------------------------------------------------------
MEAN=     -0.004     STD.DEV.=                     COEF.VAR.=  91.57 %
**********************************************************************
SE   0035
   0.031                0.044
----------------------------------------------------------------------
MEAN=      0.037     STD.DEV.=                     COEF.VAR.=  25.05 %
**********************************************************************
SE   0036
   0.001                0.002
----------------------------------------------------------------------
MEAN=      0.002     STD.DEV.=                     COEF.VAR.=  69.48 %
**********************************************************************
SE   0037
   0.078                0.082
----------------------------------------------------------------------
MEAN=      0.080     STD.DEV.=                     COEF.VAR.=  3.05  %
**********************************************************************
```

6/6
OBRITOWA
93 7/17
Tray 1

VERSAR, INC.
TRACE METALS SECTION
GFAA ANALYSIS LOG SHEET

ELEMENT: Se 3 DATE: 7/18/90 PAGE 1 OF 8

CODE-BATCH: Perland-1 / OBRIDOWN-2 (cont.) CONTROL #: 3080 / 2954

Instrument #: 6
Wavelength: 196.0 Slit: 2.0
Signal: ____ Pk.Ht. ✓ Pk.Area
Background Correction: ___ BZ ✓ BD

Light Source: EDL
Current/Power: 6 watts
Tube: LVP (PE) Pipet Vol.: 25 ul
Replicates: 2 Purge: 0 Ar

Standard Prep.: Date: 7/18/90
Time: 0730
Source: Inorganic Ventures

Matrix Modifiers: ✓ yes ____ no

FURNACE CONDITIONS

Step	1	2	3	4	5
Temp °C	120	1000	2100	2500	20
Ramp (s)	5	5	0	1	1
Hold (s)	40	15	5	3	8
BOC (s)		14			
Rec. (s)					

CALIBRATION CURVE

CUP	STANDARD	AV. ABS.	UNADJ. CONC.	D.F.	COMMENTS
1	CB 0 ppb	1			r= 0.9999
2	STD1 5 ppb	27			CRA= 4.95
3	STD2 10 ppb	54			
4	STD3 20 ppb	107			
5	STD4 50 ppb	258			
6	ICV# 2	131	25.10	1:3	[104 ppb] 96.5%
7	ICB 0 ppb	6	<2.0		

Time of Calibration: 1900

Analyst: QS

Reviewer: tk

00086

000798

VERSAR, INC. GFAA ANALYSIS LOG SHEET Page 2 of 8

ELEMENT: Se 3 CODE-BATCH: OBRTOWN -2 (cont.) CONTROL #: 2954

DATE: 7/18/90 TRAY #: 1 CALIB. TIME: 1900

CUP	LAB/EPA SAMPLE #	AV. ABS.	UNADJ. CONC.	D.F.	*	COMMENTS
1	24469 +B	5	<2.0			
2	+10	56	10.5			(105)
3	CCV1	132	25.39			• 101.29
4	CCB1	6	<2.0			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
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33						
34						
35						
36						
37						
38						
39						
40						

CCV= 25ppb NBS

ICV= —

( )= % recovery of MSA

* = —g/—L (— wt.)

SPIKE=(HOH) — ug/l

=(SOLID) — mg/kg

=(BENCH) —

ANALYST: QS

5/8

OBRTOWN-2
Portland-1
QS 7/18/90
Calibration

SE OBRTOW-2, Portland-1
QS 7/18/90 Calibration

	-0.012	
	-0.012	
0	-0.012	AV
	0.00	CV
	0.000	AZ
	-0.000	
	0.001	
1	0.001	AV
	66	ER
	0.024	
	0.030	
2	0.027	AV
	15.71	CV
	0.054	
	0.054	
3	0.054	AV
	0.00	CV
	0.106	
	0.109	
4	0.107	AV
	1.32	CV
	0.257	
	0.260	
5	0.258	AV
	0.82	CV
	0.131	
	0.131	
6	0.131	AV
	0.00	CV
	0.007	
	0.006	
7	0.005	AV
	10.00	CV

000800

000800

6/8
ORRTON - 2
QS 7/18/90
Tray 1

SC ORRTON-2
QS 7/18/90
Tray 1

81 QS	0.006		
	0.005		
	0.005	AV	
	12.66	CV	
82 QS	0.057		
	0.055		
	0.056	AV	
	2.53	CV	
103 QS	0.131		
	0.133		
	0.132	AV	
	1.07	CV	
114 QS	0.008		
	0.005		
	0.006	AV	
	32.64	CV	

000801

00091

7/8
Perland-1
QS 7/18/90
tray2

Se Perland-1
QS 7/18/90 tray2

	-0.000			-0.005				
	0.004			-0.010				
1	0.002	AV	13	-0.007	AV			
	06	ER		47.14	CV			
	0.059			0.023			0.007	
	0.056			0.018			0.007	
2	0.058	AV	14	0.021	AV	25	0.007	AV
	3.69	CV		17.25	CV		0.00	CV
	0.015			-0.008			-0.028	
	-0.001			-0.012			-0.026	
3	0.007	AV	15	-0.010	AV	26	-0.027	AV
	06	ER		28.28	CV		5.24	CV
	0.033			0.022			-0.004	
	0.033			0.018			-0.002	
4	0.033	AV	16	0.020	AV	27	-0.003	AV
	0.00	CV		14.14	CV		47.14	CV
	0.006			0.084			0.027	
	0.007			0.084			0.023	
5	0.006	AV	17	0.084	AV	28	0.025	AV
	10.83	CV		0.00	CV		11.31	CV
	0.055			0.108			-0.061	
	0.053			0.108			-0.060	
6	0.054	AV	18	0.108	AV	29	-0.061	AV
	2.62	CV		0.00	CV		1.17	CV
	-0.007			-0.061			-0.037	
	-0.008			-0.065			-0.037	
7	-0.007	AV	19	-0.063	AV	30	-0.037	AV
	9.43	CV		4.49	CV		0.00	CV
	0.030			-0.032			-0.023	
	0.027			-0.033			-0.025	
8	0.029	AV	20	-0.033	AV	31	-0.024	AV
	7.44	CV		2.18	CV		5.89	CV
	-0.004			-0.047			0.006	
	-0.006			-0.051			0.004	
9	-0.005	AV	21	-0.049	AV	32	0.005	AV
	28.28	CV		5.77	CV		28.23	CV
	0.035			-0.024			-0.009	
	0.034			-0.020			-0.006	
10	0.035	AV	22	-0.022	AV	33	-0.007	
	2.05	CV		12.86	CV		28.28	
	0.119			0.103			0.01	
	0.125			0.108			0.0	
11	0.122	AV	23	0.106	AV	34	0.0	
	3.48	CV		3.35	CV		10	
	0.006			0.006		35	0	
	0.007			0.009			0	
12	0.007	AV	24	0.008	AV			
	10.88	CV		28.28	CV		0.	

00093

000802

8/8

Perland-1

QS 7/18/90

tray3

PERLAND-1 SE
QS 7/18/90
tray3

	0.006				-0.030			-0.005		
	0.007				-0.033			-0.004		
0	0.007	AV		13	-0.032	AV	25	-0.005	AV
	10.88	CV			6.73	CV		15.71	CV
	0.000	AZ			-0.031			-0.002	
	0.003				-0.035			-0.002	
	0.001			14	-0.033	AV	26	-0.002	AV
1	0.002	AV			8.57	CV		0.00	CV
	70.71	CV			-0.009			0.020	
	0.022				-0.009			0.020	
	0.018			15	-0.009	AV	27	0.020	AV
2	0.020	AV			0.00	CV		0.00	CV
	14.14	CV			-0.034			0.048	
	0.038				-0.036			0.045	
	0.038			16	-0.035	AV	28	0.046	AV
3	0.038	AV			4.04	CV		4.56	CV
	0.00	CV			-0.010			0.088	
	0.076				-0.008			0.086	
	0.076			17	-0.009	AV	29	0.087	AV
4	0.076	AV			15.71	CV		1.63	CV
	0.00	CV			0.089			0.000	
	0.184				0.094			0.000	
	0.184			18	0.091	AV	30	0.000	AV
5	0.184	AV			3.86	CV		05	ER
	0.00	CV			-0.000				
	0.094				-0.002				
	0.094			19	-0.001	AV			
6	0.094	AV			06	ER			
	0.00	CV			-0.032				
	0.002				-0.033				
	0.000			20	-0.032	AV			
7	0.001	AV			2.19	CV			
	06	ER			-0.011				
	-0.037				-0.010				
	-0.037			21	-0.011	AV			
8	-0.037	AV			6.73	CV			
	0.00	CV			-0.034				
	-0.010				-0.036				
	-0.014			22	-0.035	AV			
9	-0.012	AV			4.04	CV			
	23.57	CV			-0.006				
	-0.060				-0.010				
	-0.061			23	-0.008	AV			
10	-0.060	AV			35.36	CV			
	1.17	CV			-0.031				
	-0.036				-0.030				
	-0.039			24	-0.030	AV			
11	-0.037	AV			2.32	CV			
	5.66	CV							
	-0.057								
	-0.058								
12	-0.058	AV							
	1.23	CV							

CC0803

VERSAR, INC.
TRACE METALS SECTION
GFAA ANALYSIS LOG SHEET

ELEMENT: TRC DATE: 7-18-90 PAGE 1 OF 12

CODE-BATCH: ENGIVAN-1 cont CONTROL #: 3028
VERSLAAP-1 R 2957 R
ORBITOWN-2 HK ORBITOWN-2 ✓ 2959

Instrument #: 11
Wavelength: 276.7 Slit: 0.7
Signal: ✓Pk.Ht. ___Pk.Area
Background Correction: ✓BZ ___BD

Light Source: EDL
Current/Power: 5.5 WATTS
Tube: L.J.P. Pipet Vol.: 10 ul
Replicates: 2 Purge: 0 Ar

Standard Prep.: Date: 7-18-90
Time: 0730
Source: I.V.

Matrix Modifiers: ___yes ✓no

FURNACE CONDITIONS

Step	1	2	3	4	5
Temp °C	120	600	1400	2500	20
Ramp (s)	5	5	0	1	2
Hold (s)	25	15	5	3	6
BOC (s)					
Rec. (s)					

CALIBRATION CURVE

CUP	STANDARD	AV. ABS.	UNADJ. CONC.	D.F.	COMMENTS
1	CB 0ppb	0			r= 0.9996
2	STD1 10	39			CRA= 10.38
3	STD2 20	75			
4	STD3 50	178			
5	STD4 —	—			
6	ICV# 4	92	25.37	1:3	[97.0] 104.6%
7	ICB 0ppb	0	<2.0		

Time of Calibration: 1735

Analyst: HK

Reviewer:

000804

0009

VERSAR, INC. GFAA ANALYSIS LOG SHEET Page 2 of 10

ELEMENT: Tl CODE-BATCH: 0BRTOWN-2 CONTROL #: 2954

DATE: 7-18-90 TRAY #: 1 CALIB. TIME: 1935

CUP	LAB/EPA SAMPLE #		AV. ABS.	UNADJ. CONC.	D.F.	*	COMMENTS
1	PBW	TB	0	<2.0			
2		T20	65	17.7			(88.5)
3	LCSW		89	22.5	1:1		90.2%
4	24465	TB	0	<2.0 W			
5		T20	40	10.7			(53.5)
6	24465 D	TB	1	<2.0 W			RPD = NC
7		T20	39	10.4			(52.0)
8	24465 S		52	14.1	1:1		56.2%
9	24466	TB	-1	<2.0			
10		T20	51	13.8			(69.0)
11	CCV1		90	24.81			99.2% rec
12	CCB1		0	<2.0			
13	24467	TB	11	2.46			
14		T20	79	21.7			(96.2)
15	24468	TB	1	<2.0 W			
16		T20	32	8.40			(42.0)
17	24469	TB	0	<2.0 W			
18		T20	50	13.5			(67.5)
19	24470	TB	0	<2.0 W			
20		T20	53	14.3			(71.5)
21	24471	TB	1	—			Dilution 1:4
22		T20	28	7.27			(36.4)
23	CCV2		97	26.79			107.2% rec
24	CCB2		0	<2.0			
25	24472	TB	1	<2.0 W			
26		T20	60	16.3			(81.5)
27	24473	TB	0	<2.0 W			
28		T20	51	13.8			(69.0)
29	24474	TB	0	<2.0 W			
30		T20	51	~~13.8~~ 13.8			(69.0)
31	24475	TB	0	<2.0 W			
32		T20	49	13.2			(66.0)
33	~~24471~~ 24471	TB	0	<2.0 W	1:4		
34		T20	42	11.2			(56.0)
35	CCV3		94	25.94			103.8% rec
36	CCB3		0	<2.0			
37							
38							
39							
40							

CCV= NBS @ 25ppb

ICV=

( )= % recovery of MSA

= g/ L (wt.)

SPIKE=(HOH) 50 ug/l

=(SOLID) mg/kg

=(BENCH)

ANALYST: JK

00095

000805

TL 0001
0.000 -0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 70.71 %

TL 0002
0.039 0.038

MEAN= 0.039 STD.DEV.= COEF.VAR.= 2.19 %

TL 0003
0.077 0.074

MEAN= 0.075 STD.DEV.= COEF.VAR.= 3.00 %

TL 0004
0.179 0.176

MEAN= 0.178 STD.DEV.= COEF.VAR.= 1.43 %

TL 0005
0.093 0.091

MEAN= 0.092 STD.DEV.= COEF.VAR.= 0.92 %

TL 0006
0.000 0.000

MEAN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %

3/10

1755

1759

7-18-90

Calibration
for
ENSIVAN-1 3028
VERSCHAP-1R 2957
ORBITOWN-2 2954

TL 0001
0.001 -0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 %

TL 0002
0.029 0.025

MEAN= 0.027 STD.DEV.= COEF.VAR.= 11.44 %

TL 0003
0.000 0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 %

TL 0004
0.052 0.054

MEAN= 0.053 STD.DEV.= COEF.VAR.= 2.68 %

TL 0005
0.000 -0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 70.71 %

TL 0006
0.058 0.060

MEAN= 0.059 STD.DEV.= COEF.VAR.= 2.39 %

TL 0007
-0.001 -0.001

MEAN= -0.001 STD.DEV.= COEF.VAR.= 0.00 %

TL 0008
0.057 0.062

MEAN= 0.060 STD.DEV.= COEF.VAR.= 3.17 %

TL 0009
093 0.094

MEAN= 0.094 STD.DEV.= COEF.VAR.= 0.80 % 1831

TL 0010
-0.001 -0.001

MEAN= -0.001 STD.DEV.= COEF.VAR.= 0.00 % 1834

TL 0011
0.001 -0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %

TRAY 1
ENGIUAN-1
HK
7-18-90

TL 0012
0.058 0.056

MEAN= 0.055 STD.DEV.= COEF.VAR.= 0.00 %

TL 0013
0.078 0.074

MEAN= 0.076 STD.DEV.= COEF.VAR.= 3.85 % 0007

TL 0014
0.093 0.093

MEAN= 0.093 STD.DEV.= COEF.VAR.= 0.61 % 1844 000807

TL 0015
0.000 0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 %

7/2 6/10

TRAV

ENGIVAN-1

HK

7-18-90

6/10

0001
0.000 0.001
MEAN= 0.001 STD.DEV.= COEF.VAR.= 94.28 %
****
0002
0.079 0.077
: 0.078 STD.DEV.= COEF.VAR.= 1.82 %
****
0003
0.047 0.045
MEAN= 0.046 STD.DEV.= COEF.VAR.= 2.45 %
****
0004
0.096 0.090
MEAN= 0.093 STD.DEV.= COEF.VAR.= 4.26 %
****
0005
0.096 0.090
AN= 0.093 STD.DEV.= COEF.VAR.= 4.26 %
****
0006
0.001 0.002
AN= 0.001 STD.DEV.= COEF.VAR.= 70.71 %
****
0007
0.063 0.055
AN= 0.059 STD.DEV.= COEF.VAR.= 9.14 %
****
0008
0.000 -0.001
EAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 %
****
0009
.056 0.057
AN= 0.056 STD.DEV.= COEF.VAR.= 0.50 % 1925
****
0010
0.087 0.089
MEAN= 0.088 STD.DEV.= COEF.VAR.= 2.25 % 1929
****
0011
-0.001 0.000
AN= 0.000 STD.DEV.= COEF.VAR.= 70.71 %
****
0012
0.071 0.073
AN= 0.072 STD.DEV.= COEF.VAR.= 0.79 %
****

TROY 1
Verslaap - 1R
7-18-90
HK

0013
0.001 0.001
ME : 0.001 STD.DEV.= COEF.VAR.= 0.00 %
****
0014
0.058 0.052 0039
MEAN= 0.055 STD.DEV.= COEF.VAR.= 7.74 %
****
0015
0.084 0.092 000809

MEAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 % 1945
****

7/10

TRAg?

Verslaap - 1 R

7-18-90

ttt

000810

8/10

0001
0.001 -0.001
MEAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 %
0002
0.064 0.066
MEAN= 0.065 STD.DEV.= COEF.VAR.= 2.17 %
0003
0.079 0.086
MEAN= 0.082 STD.DEV.= COEF.VAR.= 6.88 %
0004
0.000 0.001
MEAN= 0.000 STD.DEV.= COEF.VAR.= 70.71 %
0005
0.043 0.038
MEAN= 0.040 STD.DEV.= COEF.VAR.= 7.70 %
0006
0.001 0.001
MEAN= 0.001 STD.DEV.= COEF.VAR.= 56.57 %
0007
0.040 0.037
MEAN= 0.039 STD.DEV.= COEF.VAR.= 4.40 %
0008
0.051 0.052
MEAN= 0.052 STD.DEV.= COEF.VAR.= 1.09 %
0009
.000 -0.001
MEAN= -0.001 STD.DEV.= COEF.VAR.= 94.28 %
0010
0.052 0.051
MEAN= 0.051 STD.DEV.= COEF.VAR.= 2.20 %
0011
0.092 0.088
MEAN= 0.090 STD.DEV.= COEF.VAR.= 3.15 %

OBRITOWN - 2

KAJ
7-18-90
HK

0012
0.000 0.000
MEAN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %
0013
0.011 0.011
0.011 STD.DEV.= COEF.VAR.= 0.00 %
0014
0.077 0.081
MEAN= 0.079 STD.DEV.= COEF.VAR.= 3.93 %
0015
0.002 0.001

00101

000811

AN= 0.001 STD.DEV.= COEF.VAR.= 80.81 %

L 0016
0.034 0.030

AN= 0.032 STD.DEV.= COEF.VAR.= 8.89 %

0017
.000 0.000

AN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %

TL 0018
0.049 0.051

AN= 0.050 STD.DEV.= COEF.VAR.= 3.38 %

TL 0019
0.000 -0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 99.99 %

L 0020
0.055 0.050

EAN= 0.053 STD.DEV.= COEF.VAR.= 7.53 %

L 0021
0.001 0.001

MEAN= 0.001 STD.DEV.= COEF.VAR.= 0.00 %

L 0022
0.027 0.029

AN= 0.028 STD.DEV.= COEF.VAR.= 4.07 %

OBRITOWN -2

TRAY 1

7-18-90

dk

L 0023
0.097 0.097

MEAN= 0.097 STD.DEV.= COEF.VAR.= 0.29 %

L 0024
0.000 0.000

MEAN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %

L 0025
0.001 0.001

AN= 0.001 STD.DEV.= COEF.VAR.= 0.00 %

TL 0026
0.059 0.061

AN= 0.060 STD.DEV.= COEF.VAR.= 2.34 %

TL 0027
-0.001 0.001

AN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %

0028
.051 0.052

AN= 0.051 STD.DEV.= COEF.VAR.= 2.20 %

TL 0029
0.000 0.000

MEAN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %

10/10

0.052 0.051

MEAN= 0.051 STD.DEV.= COEF.VAR.= 1.10 %

TL 0031

0.000 0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 70.71 %

TL 0032

0.048 0.050

MEAN= 0.049 STD.DEV.= COEF.VAR.= 2.87 %

TL 0033

0.000 0.000

MEAN= 0.000 STD.DEV.= COEF.VAR.= 0.00 %

TL 0034

0.043 0.042

MEAN= 0.042 STD.DEV.= COEF.VAR.= 2.00 %

TL 0035

0.091 0.097

MEAN= 0.094 STD.DEV.= COEF.VAR.= 4.53 %

TL 0036

0.000 0.001

MEAN= 0.000 STD.DEV.= COEF.VAR.= 70.71 %

OBRITONN-2
7-18-90
TRAY 1
HR

Versar INC.

VERSAR, INC.
MERCURY ANALYSIS SHEET

Date: 06/28/90

Code-Batch:	OBRITOWN-2R	Ctrl No.:	2954	Method Code:	HGW
Code-Batch:	_____	Ctrl No.:	_____	Method Code:	_____
Code-Batch:	_____	Ctrl No.:	_____	Method Code:	_____
Code-Batch:	_____	Ctrl No.:	_____	Method Code:	_____
Code-Batch:	_____	Ctrl No.:	_____	Method Code:	_____
Code-Batch:	_____	Ctrl No.:	_____	Method Code:	_____

Calib Time: 13:48 Analyst: JH Matrix: H2O

INSTRUMENT SPECIFICS

Inst. No.: 2 Air Flow: 3 LPM Wavelength: 254.7 NM
Lamp Type: HCL

STANDARD INFORMATION

Initial Calibration Verification (ICV):
Source: EPA-LV Prep Date: 06/28/90 Conc. (ug/L): 5

Continuing Calibration Verification (CCV):
Source: NBS Prep Date: 06/28/90 Conc. (ug/L): 5

Laboratory Control Solution (LCS):
Source: EPA-LV Prep Date: 06/28/90 Conc. (ug/L):

Pre-digestion spike (S):
Source: INORG. VENTS. Prep Date: 06/28/90 Conc. (ug/L): 2

Post-digestion spike (P):
Source: INORG. VENTS. Prep Date: 06/28/90 Conc. (ug/L):

Calibration Stds (ug/L):	Signal: Peak Ht.
S0 0	1
S1 0.5	11
S2 2	39
S3 5	87
S4 10	175

Correlation: 0.99978

Name of file: HG2954R On disk: 1
Name of file: _____ On disk: _____
Name of file: _____ On disk: _____
Name of file: _____ On disk: _____
Name of file: _____ On disk: _____
Name of file: _____ On disk: _____

No.	Time	Sample/ EPA ID No.	Signal	Unadj. Conc.	D.F.	True Value	Comments & % Rec
1	13:53	ICV0489	85	4.798550	1	5	96.0
2#	13:54	ICB	2	-0.01304	1	_____	_____
3#	13:54	PBW	2	-0.01304	1	_____	_____

The initial calibration blank and the preparation blank are the same.

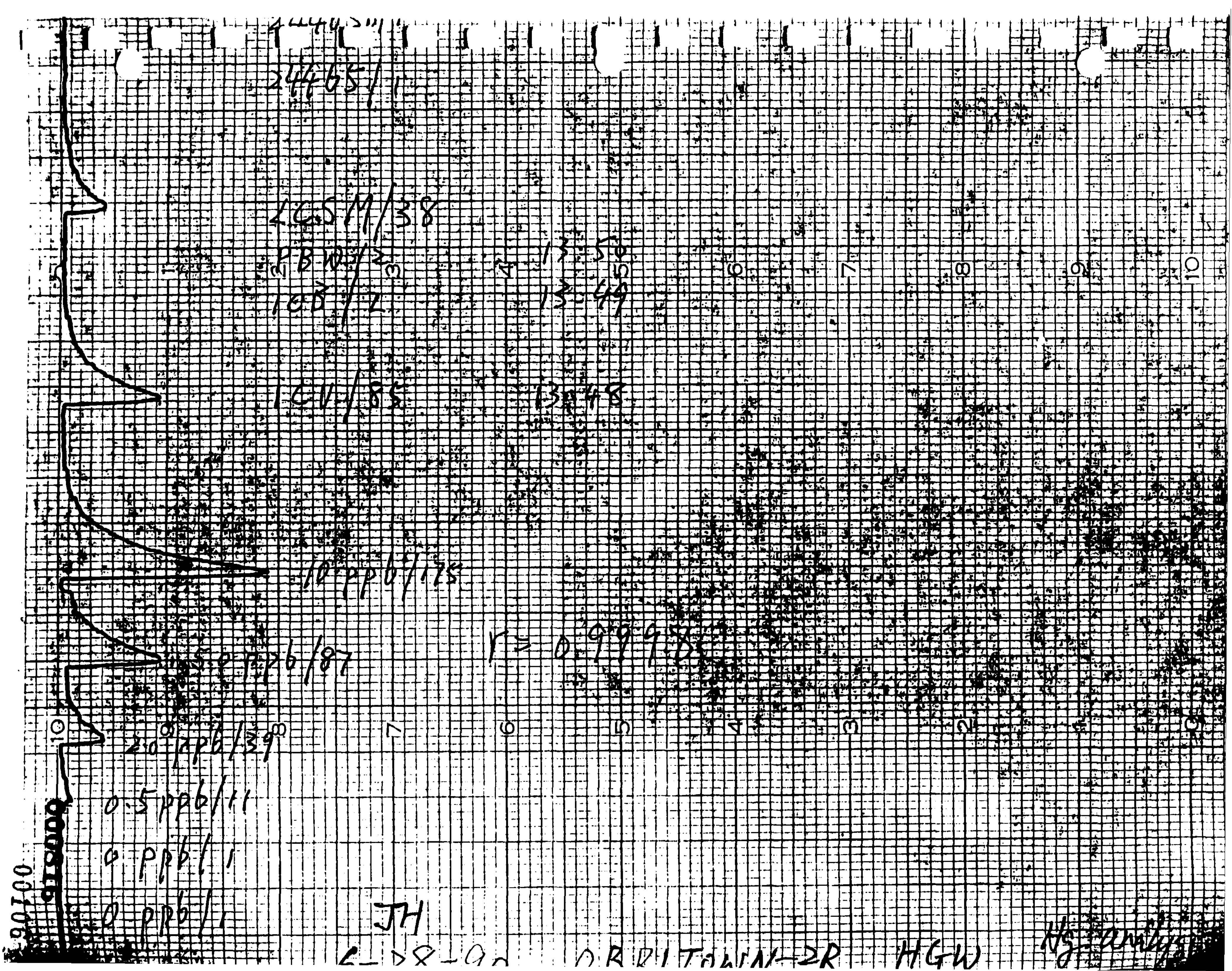
000814
00104

Versar

CODE-BATCH: NOWN-2R Ctrl No.: 2954 PAGE TWO

No.	Time	Sample/ EPA ID No.	Signal	Unadj. Conc.	D.F.	True Value	% Rec
1	13:55	LCSM	38	2.073913	1	2	103.7
2	13:56	24465	1	-0.07101	1		
3	13:57	24465D	1	-0.07101	1		
4	13:58	24465S	37	2.015942	1	2	100.8
5	13:59	24466	2	-0.01304	1		
6	14:00	24467	3	0.044927	1		
7	14:01	24468	2	-0.01304	1		
8	14:02	24469	1	-0.07101	1		
9	14:03	24470	3	0.044927	1		
10	14:04	24471	Rerun ← exceeds 10 bum rule PKC 7-24-90 ~~2~~	~~-0.01304~~	1		
11	14:05	CCV-1	88	4.972463	1	5	99.4
12	14:06	CCB-1	2	-0.01304	1		
13	14:07	24472	2	-0.01304	1		
14	14:08	24473	2	-0.01304	1		
15	14:09	24474	2	-0.01304	1		
16	14:10	24475	3	0.044927	1		
17	14:11	CCV-2	89	5.030434	1	5	100.6
18	14:12	CCB-2	2	-0.01304	1		
19	14:13			-0.12898	1		
20	14:14			-0.12898	1		
21	14:15			-0.12898	1		
22	14:16			-0.12898	1		
23	14:17			-0.12898	1		
24	14:18			-0.12898	1		
25	14:19			-0.12898	1		
26	14:20			-0.12898	1		
27	14:21			-0.12898	1		
28	14:22			-0.12898	1		
29	14:23			-0.12898	1		
30	14:24			-0.12898	1		
31	14:25			-0.12898	1		
32	14:26			-0.12898	1		
33	14:27			-0.12898	1		
34	14:28			-0.12898	1		
35	14:29			-0.12898	1		
36	14:30			-0.12898	1		
37	14:31			-0.12898	1		
38	14:32			-0.12898	1		
39	14:33			-0.12898	1		
40	14:34			-0.12898	1		
41	14:35			-0.12898	1		
42	14:36			-0.12898	1		
43	14:37			-0.12898	1		
44	14:38			-0.12898	1		
45	14:39			-0.12898	1		
46	14:40			-0.12898	1		
47	14:41			-0.12898	1		
48	14:42			-0.12898	1		
49	14:43			-0.12898	1		
50	14:44			-0.12898	1		

000815 ~~00105~~


24465/1
LCSM/38
PB10/2
10B/2
13:56
13:49
ICV/85
13:48
10 ppb/175
r = 0.9998
5.0 ppb/87
2.0 ppb/39
0.5 ppb/11
0 ppb/1
0 ppb/1
JH
HGW

CCB-2/2 14:13

CCV02
~~CCV2~~/89 14:12

24475/3

24474/2

24473/2

24472/2

CCB1/2 14:06

CCV01
~~CCV1~~/88 14:05

24471/2 — not used, replaced [illegible] samples between [illegible] rerun

24470/3

24469/

24468/2

24467/3

24466/2

24465/37

VERSAR, INC.
MERCURY ANALYSIS SHEET

Date: 07/02/90

Code-Batch:	NUSWES-11	Ctrl No.:	2691	Method Code:	HGW
Code-Batch:	SAICBDAT-7	Ctrl No.:	2992	Method Code:	HGW
Code-Batch:	OBRITOWN-2R	Ctrl No.:	2954	Method Code:	HGW
Code-Batch:	VERSENVI-1	Ctrl No.:	3003	Method Code:	HGWC
Code-Batch:	_____	Ctrl No.:	_____	Method Code:	_____
Code-Batch:	_____	Ctrl No.:	_____	Method Code:	_____

Calib Time: 14:22 Analyst: JH Matrix: H2O

INSTRUMENT SPECIFICS

Inst. No.: 2 Air Flow: 3 LPM Wavelength: 254.7 NM
Lamp Current: 6 MAS Lamp Type: HCL

STANDARD INFORMATION

Initial Calibration Verification (ICV):
Source: EPA-LV Prep Date: 07/02/90 Conc. (ug/L): 5

Continuing Calibration Verification (CCV):
Source: NBS Prep Date: 07/02/90 Conc. (ug/L): 5

Laboratory Control Solution (LCS):
Source: EPA-LV Prep Date: 07/02/90 Conc. (ug/L): 5

Pre-digestion spike (S):
Source: INORG. VENTS. Prep Date: 07/02/90 Conc. (ug/L): HGW-2, HGWC-1

Post-digestion spike (P):
Source: INORG. VENTS. Prep Date: 07/02/90 Conc. (ug/L):

Calibration: Stds (ug/L):	Signal: Peak Ht.
S0 0	2
S1 0.5	11
S2 2	40
S3 5	99
S4 10	189
Correlation:	0.9998

Disk:	1	File Name:	HG2691		
Disk:	1	File Name:	HG2992		
Disk:	1	File Name:	HG2954		
Disk:	1	File Name:	HG3003		
Disk:	_____	File Name:	_____		
Disk:	_____	File Name:	_____		

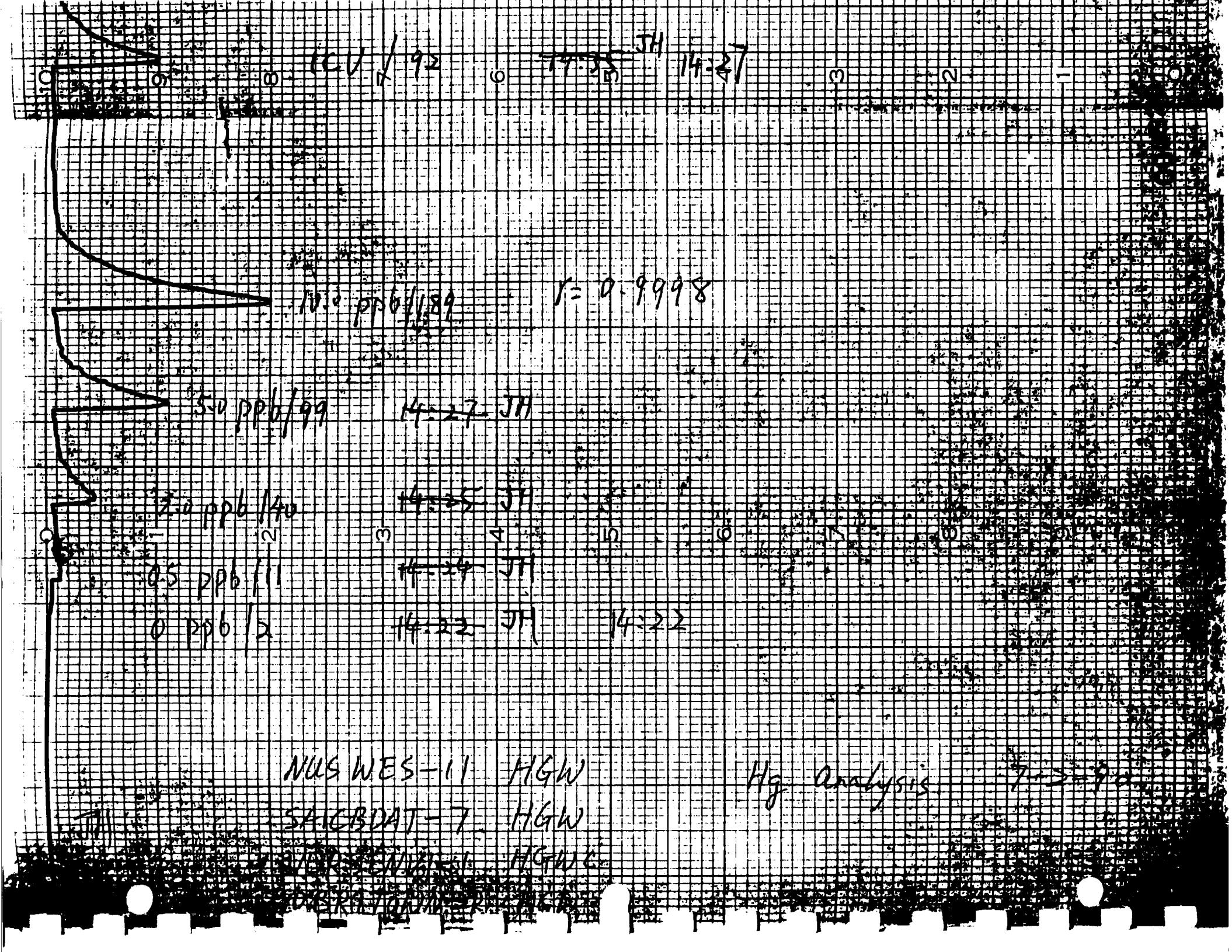
No.	Time	Sample/ EPA ID No.	Signal	Unadj. Conc.	D.F.	True Value	Comments & % Rec
1	14:27	ICV0489	92	4.767345	1	5	95.3
2#	14:29	ICB	3	0.028112	1	_____	_____*
3#	14:29	PBW	3	0.028112	1	_____	_____*

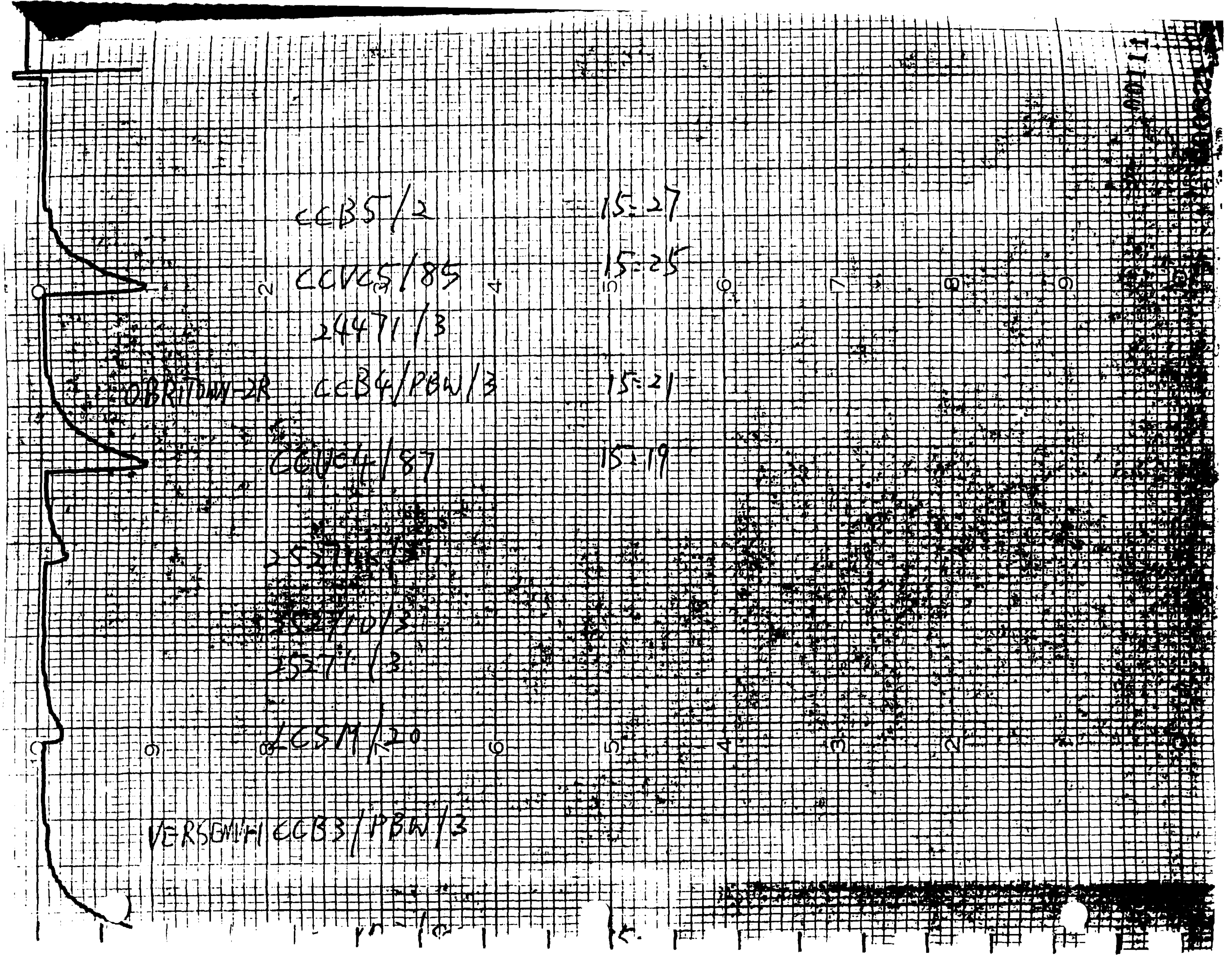
The initial calibration blank (ICB) and the preparation blank (PB) are the same analysis.

000818
00108

CODE-BATCH: OBRITOWN-2R CTRL No.: 2954 PAGE TWO
ANALYST: JH DATE: 07/02/90

No.	Time	Sample/ EPA ID No.	Signal	Unadj. Conc.	D.F.	True Value	% Rec
1	15:23	24471	3	0.028112	1		*
2	15:25	CCVC1	85	4.394596	1	5	87.9
3	15:27	CCB1	2	-0.02513	1		*
4	15:29			-0.13163	1		*
5	15:31			-0.13163	1		*
6	15:33			-0.13163	1		*
7	15:35			-0.13163	1		*
8	15:37			-0.13163	1		*
9	15:39			-0.13163	1		*
10	15:41			-0.13163	1		*
11	15:43			-0.13163	1		*
12	15:45			-0.13163	1		*
13	15:47			-0.13163	1		*
14	15:49			-0.13163	1		*
15	15:51			-0.13163	1		*
16	15:53			-0.13163	1		*
17	15:55			-0.13163	1		*
18	15:57			-0.13163	1		*
19	15:59			-0.13163	1		*
20	16:01			-0.13163	1		*
21	16:03			-0.13163	1		*
22	16:05			-0.13163	1		*
23	16:07			-0.13163	1		*
24	16:09			-0.13163	1		*
25	16:11			-0.13163	1		*
26	16:13			-0.13163	1		*
27	16:15			-0.13163	1		*
28	16:17			-0.13163	1		*
29	16:19			-0.13163	1		*
30	16:21			-0.13163	1		*
31	16:23			-0.13163	1		*
32	16:25			-0.13163	1		*
33	16:27			-0.13163	1		*
34	16:29			-0.13163	1		*
35	16:31			-0.13163	1		*
36	16:33			-0.13163	1		*
37	16:35			-0.13163	1		*
38	16:37			-0.13163	1		*
39	16:39			-0.13163	1		*
40	16:41			-0.13163	1		*
41	16:43			-0.13163	1		*
42	16:45			-0.13163	1		*
43	16:47			-0.13163	1		*
44	16:49			-0.13163	1		*
45	16:51			-0.13163	1		*
46	16:53			-0.13163	1		*
47	16:55			-0.13163	1		*
48	16:57			-0.13163	1		*


CCV 1/92 14:35 JH 14:27
10.0 ppb/89 r = 0.9998
5.0 ppb/99 14:27 JH
2.0 ppb/Hg 14:25 JH
0.5 ppb/11 14:24 JH
0 ppb/2 14:22 JH 14:22
NUS WES-11 HGW Hg analysis 2-5-96
SAICBDAT-7 HGW


CCB5/2
15:27
CCVC5/85
15:25
24471/3
OBRITON-2R
CCB4/PBW/3
15:21
CCVC4/87
15:19
25271/3
CCSM/20
VERSEMI-1
CCB3/PBW/3

VERSAR, INC.
METALS LABORATORY
DIGESTION LOG

Code-Batch: OBRITOWN-2 Date: 7/5/90

Control No.: 2954 Method Code: ~~DHW3~~ DHW4 / (DIW3) / D

Reference: MCAWW, MAR, 1983

Digestion Type: HGA/ICP Method: 200

Sample/EPA ID Number		Mtrx.	Init. W/V	Final Vol.	Description * Before	After	F
PBW		W	50mL	50mL	clear, colorless	clear, colorless	
LCSW							
24465					brown, cloudy	yellow, clear	
24465(D)							
24465(S)							
24466					clear, colorless	clear, colorless	
24467							
24468							
24469							
24470							
24471							
24472					gray, cloudy	yellow, clear	
24473					clear, colorless	clear, colorless	
24474							
24475					brown, cloudy		

Comments:

* Description of colors: red, blue, yellow, green, orange, violet, white, colorless, brown, grey, black.
* Description of clarity: clear, cloudy, opaque.
* Description of texture: fine, medium, coarse.
* Description of artifacts: yes or no and describe.

000822
00112

Preparer TM SB

VERSAR, INC.
METALS LABORATORY
SPIKE LOG

Code-Batch: OBR/TOWN-2 Date: 7/5/90
Control No.: 2954 Method code: DIW3

*** CLP SPIKING ***

☐ HGA WATER: spike = 0.25ml of HGA spiking solution / 50ml

HGA SPIKING SOLUTION: 8ppm As - 4ppm Pb - 10ppm Tl - 1ppm Cd - 2ppm Se - 200ppm Y Sol'n prep date:_____

☐ ICP WATER: spike = 2.5ml of ICP water spiking solution / 50ml
0.25ml 100ppm Sb & 10ppm Ag / 50ml
0.1ml 100ppm Cr / 50ml

ICP SPIKING SOLUTION: 5ppm Cu - 40 ppm Ba, Al, As, Se, Tl - 20ppm Fe - 10ppm Mn, Ni, Zn, Co, Pb, V - 1ppm Be, Cd
Sol'n prep date:_____ Sb prep:_____ Ag prep:_____ Cr prep:_____

☐ HGA SOIL: spike = 1ml of HGA spiking solution / 200ml

HGA SPIKING SOLUTION: 8ppm As - 4ppm Pb - 10ppm Tl - 1ppm Cd - 2ppm Se - 200ppm Y Soln prep date:_____

☐ ICP SOIL: spike = 10ml of ICP Soil Spike Solution / 200ml
1ml 100ppm Sb & 10ppm Ag / 200ml
0.4ml 100ppm Cr / 200ml

ICP SPIKING SOLUTION: 40ppm Ba, As, Se, Tl, - 10ppm Co, Pb, Mn, Ni, V, Zn - 5ppm Cu - 1ppm Be, Cd
Sol'n prep date:_____ Sb prep:_____ Ag prep:_____ Cr prep:_____

*** NON-CLP SPIKING ***

HGA SPIKE = _____ ml of HGA NON-CLP spiking solution / _____ ml

SPIKING SOLUTION: 10 ppm As, Se, Tl, Pb, 200 ppm Y Sol'n prep date:_____

P SPIKE = 2.5 ml of Solution #1 / 50 ml
SPIKING SOLUTION #1: 40 ppm Ba, Be, Cd, Co, Li, Mo, Sr, V - 80 ppm Cu, Pb, Mn, Ni, Se, Tl - 200 ppm Si - 328 ppm Na
Sol'n prep date: 7/3/90

P SPIKE = 2.5 ml of Solution #2 / 50 ml
SPIKING SOLUTION #2: 40 ppm B, Cr, Y - 80 ppm As, Sb, Sn, Ti, Zn - 400 ppm Al, Ca, Fe, K, Mg, Na
Sol'n prep date: 7/2/90

ICP SPIKE = 2.5 ml of Solution #3 / 50 ml
SPIKING SOLUTION #3: 40 ppm Ag Sol'n prep date: 6/6/90

COMMENTS: _____

Preparer TM Reviewer SB

VERSAR, INC.
METALS LABORATORY
DIGESTION LOG

Page 1 of 4

Code-Batch: OBRITOWN-2 ~~[illegible]~~

Control No.: ~~3023~~ in 2954

Date: 7/5/90

Method Code: DHW3 / DHW4 / DIW3 / DI

Reference: MCAWW, MAR, 1983

Digestion Type: HGA/ICP Method: 200.

Sample/EPA ID Number		Mtrx.	Init. W/V	Final Vol.	Description * Before	After	pH
PBW		H_2O	50mL	50mL	clear, colorless	clear, colorless	—
hCsmn		↓	↓	↓	↓	↓	—
24465		↓	↓	↓	brown, cloudy ✓	↓	<2
24465(D)		↓	↓	↓	↓	↓	↓
24465(S)		↓	↓	↓	↓	↓	↓
24466		↓	↓	↓	clear, colorless	↓	↓
24467		↓	↓	↓	↓	↓	↓
24468		↓	↓	↓	↓	↓	↓
24469		↓	↓	↓	↓	↓	↓
24470		↓	↓	↓	↓	↓	↓
24471		↓	↓	↓	↓	↓	↓
24471		↓	↓	↓	[illegible]	↓	↓
24473		↓	↓	↓	clear, colorless	↓	↓
24474		↓	↓	↓	↓	↓	↓
24475		↓	↓	↓	brown, cloudy ✓	↓	↓

Comments: _____

* Description of colors: red, blue, yellow, green, orange, violet, white, colorless, brown, grey, black.
* Description of clarity: clear, cloudy, opaque.
* Description of texture: fine, medium, coarse.
* Description of artifacts: yes or no and describe.

000824

Preparer Th

Reviewer SB

001

VERSAR, INC.
METALS LABORATORY
SPIKE LOG

Code-Batch: OBRITOWN-2 Date: 7/5/90
Control No.: 2954 Method code: DHW3

*** CLP SPIKING ***

HGA WATER: spike = 0.25ml of HGA spiking solution / 50ml

HGA SPIKING SOLUTION: 8ppm As - 4ppm Pb - 10ppm Tl - 1ppm Cd - 2ppm Se - 200ppm Y Sol'n prep date:_____

ICP WATER: spike = 2.5ml of ICP water spiking solution / 50ml
0.25ml 100ppm Sb & 10ppm Ag / 50ml
0.1ml 100ppm Cr / 50ml

ICP SPIKING SOLUTION: 5ppm Cu - 40 ppm Ba, Al, As, Se, Tl - 20ppm Fe - 10ppm Mn, Ni, Zn, Co, Pb, V - 1ppm Be, Cd
Sol'n prep date:_____ Sb prep:_____ Ag prep:_____ Cr prep:_____

HGA SOIL: spike = 1ml of HGA spiking solution / 200ml

HGA SPIKING SOLUTION: 8ppm As - 4ppm Pb - 10ppm Tl - 1ppm Cd - 2ppm Se - 200ppm Y Soln prep date:_____

ICP SOIL: spike = 10ml of ICP Soil Spike Solution / 200ml
1ml 100ppm Sb & 10ppm Ag / 200ml
0.4ml 100ppm Cr / 200ml

ICP SPIKING SOLUTION: 40ppm Ba, As, Se, Tl, - 10ppm Co, Pb, Mn, Ni, V, Zn - 5ppm Cu - 1ppm Be, Cd
Sol'n prep date:_____ Sb prep:_____ Ag prep:_____ Cr prep:_____

*** NON-CLP SPIKING ***

HGA SPIKE = .25 ml of HGA NON-CLP spiking solution / 50 ml

SPIKING SOLUTION: 10 ppm As, Se, Tl, Pb, 200 ppm Y Sol'n prep date: 7/2/90

ICP SPIKE = _____ ml of Solution #1 / _____ ml
SPIKING SOLUTION #1: 40 ppm Ba, Be, Cd, Co, Li, Mo, Sr, V - 80 ppm Cu, Pb, Mn, Ni, Se, Tl - 200 ppm Si - 328 ppm Na
Sol'n prep date:_____

ICP SPIKE = _____ ml of Solution #2 / _____ ml
SPIKING SOLUTION #2: 40 ppm B, Cr, Y - 80 ppm As, Sb, Sn, Ti, Zn - 400 ppm Al, Ca, Fe, K, Mg, Na
Sol'n prep date:_____

ICP SPIKE = _____ ml of Solution #3 / _____ ml
SPIKING SOLUTION #3: 40 ppm Ag Sol'n prep date:_____

COMMENTS:_____

00115

Preparer TM Reviewer SG

000825

VERSAR, INC.
METALS LABORATORY
MERCURY DIGESTION LOG

Project-Batch: OBRITOWN-2R
Control No.: 2954
No. of Samples: 11

Date: 6-28-90
Method Code: (HGW) or HGS
Reference: SW846 3rd Ed
Method No: (7470) or 7471

Sample / EPA ID Number		Matrix	Initial Wt./Vol.	Final Vol.	Comments
PBW		H_2O	100 ml	100 ml	
LCSM					
24465					
24465D					
24465S					
24466					
24467					
24468					
24469					
24470					
24471					
24472					
24473					
24474					
24475		V	V	V	

SPIKE = 2 ml x 0.1ppm Hg / 100ml = 2 ppb.
CCV = 0.50 ml x 1.0ppm Hg / 100ml = 5.0 ppb.
(CV)LCS = 1 ml x ICV #5 / 100ml = 5.0 ppb. LCS Series No.: 0689

STANDARD source: Inorganic Ventures Prep Date: 6-28-90 Prep Time: 10:00

0.5ppb = 5ml x 0.01ppm / 100ml.
2.0ppb = 2ml x 0.1ppm / 100ml.
5.0ppb = 5ml x 0.1ppm / 100ml.
10.0ppb = 10ml x 0.1ppm / 100ml.

000826

Preparer JH Reviewer HK

VERSAR, INC.
METALS LABORATORY
MERCURY DIGESTION LOG

Project-Batch: OBRITOWN-2R
Control No.: 2954
No. of Samples: 1

Date: 7-2-90
Method Code: (HGW) or HGS
Reference: SW846 3rd Ed
Method No: (7470) or 7471

Sample / EPA ID Number		Matrix	Initial Wt./Vol.	Final Vol.	Comments
PBW		H_2O	100 mL	100 mL	
24471		↓	↓	↓	

SPIKE = 2 ml x 0.1ppm Hg / 100ml = 2 ppb.
CCV = 0.50 ml x 1.0ppm Hg / 100ml = 5.0 ppb.
ICV/LCS = 1 ml x ICV #5 / 100ml = 5.0 ppb. LCS Series No.: 0689

STANDARD source: Inorganic Venture Prep Date: 7-2-90 Prep Time: 11:00

0.5ppb = 5ml x 0.01ppm / 100ml.
2.0ppb = 2ml x 0.1ppm / 100ml.
5.0ppb = 5ml x 0.1ppm / 100ml.
10.0ppb = 10ml x 0.1ppm / 100ml.

00117

000827

Preparer JH Reviewer

VERSAR INC.
ENVIRONMENTAL RISK MANAGEMENT

Headquarters: 6850 Versar Center • Springfield, Virginia 22151 • 703/750-3000

Offices: Phoenix, AZ • San Francisco, Sacramento, CA • Greeley, Grand Junction, CO • Atlanta, GA • Chicago, IL • Columbia, Germantown, Gaithersburg, MD • Binghamton, NY • Pottstown, PA Provo, Ogden, UT • Springfield, Sterling, Chantilly, VA • Riverton, WY

VOLATILE ANALYSIS
DATA SUMMARY PACKAGE

CLIENT : OBRIEN AND GERE
SITE : TOWN OF CONKLIN LF
PROJECT: 420.66.0 B#1
CONTROL: 2941
DATE : 07/19/90

VERSAR INC.
ENVIRONMENTAL RISK MANAGEMENT

Versar INC.

VOLATILE ANALYSIS
DATA SUMMARY PACKAGE

CLIENT : OBRIEN AND GERE
SITE : TOWN OF CONKLIN LF
PROJECT: 420.66.0 B#1
CONTROL: 2941
DATE : 07/19/90

Versar INC.

July 19, 1990

Narrative
O'BRIEN & GERE - TOWN OF CONKLIN LF
Volatile Organic Analysis - NYS DEC 1989 ASP
Versar Project 420.66 - Batch 1/Control 2941

This report contains the data from the analysis of twelve water samples which were received at Versar on June 21, 1990. The samples listed below were analyzed for volatile organic compounds following NY DEP 1989 ASP procedures using purge and trap techniques with GC/MS instrumentation.

SAMPLE LIST

1	7
2	8
3	9
4	10
5	11
6	TRIP BLANK

////////////////////////////////////

GC/MS instrument calibrations using BFB met method requirements for volatile organic analyses. Initial analyses for volatile organic compounds were performed within specified sample holding times and occurred during the period that followed daily instrument calibration. SPCC and CCC linearity and percent deviation criteria were met for the initial standard calibration curves and continuing calibration standards.

Volatile organic surrogate compounds spiked into the water samples met recovery criteria with the exception of 1,2-dichloroethane-d4 in samples 7, 8, 9, and 10. Following method protocol, each sample was reanalyzed (RE). Both sets of data are included in this report. Internal standard area abundance values and associated relative retention times met specified criteria for all volatile organic analyses.

One set of volatile matrix spike and matrix spike duplicate (MS/MSD) QC analyses were performed for the water matrix. All recovery and relative percent difference values met specified QC limits.

Few volatile organic compounds were detected in the water samples. Sample 4 contained xylene and chlorinated solvent target analytes. Mass spectra of target analytes that did not meet all mass spectral identification criteria have been flagged with an "X". Coeluting ions not characteristic of the compound or missing ions result in the use of this flag. Nontarget compounds have been tentatively identified using the EPA/NBS Mass Spectral Database Library. The samples did not require dilution prior to instrumental analysis.

Versar INC.

The required holding blank was inadvertently not prepared at time of sample receipt and therefore, no holding blank analysis is included in this report.

Additional data qualifier flags used on the individual sample summary pages are defined in the listing which immediately follows this case narrative.

Please contact Janet Beckman, Laboratory Project Manager, should you have any questions or require additional information pertaining to the analysis of these samples for volatile organic compounds.

Data Release Approved By:

Lawrence P. Pollack
GC/MS Quality Assurance Manager
Laboratory Operations

Narrative Reviewed By:

Linda E. Bock
GC/MS Data Quality Manager

VERSAR INC. - 2941
NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENTS SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS	*BNA GC/MS	*PEST PCB	*METALS	*OTHER
1	24271	X				
10	24280	X				
11	24281	X				
2	24272	X				
3	24273	X				
4	24274	X				
5	24275	X				
6	24276	X				
7	24277	X				
8	24278	X				
9	24279	X				
TRIP BLANK	24284	X				

Comments: Analysis by NYSDEC 89-ASP.

000833

100006

VERSAR INC. - 2941
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOA
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd At Lab	Low Level Medium Level	Date Analyzed
24271	HOH	20-JUN-90	21-JUN-90	Low	6/27/90
24272	HOH	20-JUN-90	21-JUN-90	Low	6/27/90
24273	HOH	20-JUN-90	21-JUN-90	Low	6/28/90
24274	HOH	20-JUN-90	21-JUN-90	Low	6/27/90
24275	HOH	20-JUN-90	21-JUN-90	Low	6/27/90
24276	HOH	20-JUN-90	21-JUN-90	Low	6/27/90
24277	HOH	20-JUN-90	21-JUN-90	Low	6/28/90
24278	HOH	20-JUN-90	21-JUN-90	Low	6/28/90
24279	HOH	20-JUN-90	21-JUN-90	Low	6/28/90
24280	HOH	20-JUN-90	21-JUN-90	Low	6/28/90
24281	HOH	20-JUN-90	21-JUN-90	Low	6/28/90
24284	HOH	20-JUN-90	21-JUN-90	Low	6/28/90

000834

100007

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME
330.001.130	TOWN OF CONKLIN LANDFILL

SAMPLERS: (Signature) _____ (Printed) JAMES A. MOORE

PARAMETERS: NO. OF CONTAINERS; VOA; 8270 ASP

INDUSTRIAL HYGIENE SAMPLE Y / N

REMARKS

000835

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA	8270 ASP
1	6/20/90	8:30		X	MW-1	2	X	
2	11	0915		X	MW-12	2	X	
3	11	0920		X	EQUIPMENT BLANK	2	X	
4	11	0945		X	MW-11	2	X	
5	11	1015		X	MW-4	2	X	
6	11	1050		X	MW-38D	2	X	
7	11	1120		X	MW-38S	2	X	
8	11	1230		X	MW-10	2	X	
9	11	1255		X	MW-9	2	X	
10	11	1357		X	MW-8	2	X	
MS	11	0945		X	MW-11	2	X	
MSD	11	0945		X	MW-11	2	X	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(Printed) JAMES A. MOORE	6/20/90	(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
(Printed)		(Printed)	6/21/90 0900	

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

800001

VERSAR INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	INDUSTRIAL HYGIENE SAMPLE
3360.001.130	TOWN OF CONKLIN LANDFILL		Y / N

SAMPLERS: (Signature) [signature] (Printed) JAMES A. MOORE

000836

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA 8240-ASP	REMARKS
11	6/20/90	1445		X	MW-5	2	X	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/20/90				
(Printed) JAMES A. MOORE		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		[signature]	6/21/90 0940	
(Printed)		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

6380011

Versar INC.

Data Qualifier Flags

J — For Target Compounds: This flag is used when mass spectral data indicates the presence of a compound but the result is less than the specified detection limit but still greater than zero.

For Non Target Compounds: This flag indicates that the concentration is an estimated value, assuming a 1 to 1 response with the internal standard.

B — This flag is used when the analyte is found in the blank as well as in the sample. It indicates possible/probable contamination and warns the data user to take appropriate action.

u — This flag states that the compound was analyzed for but was not detected. The number is the minimum attainable detection limit for the sample.

X or T — This flag states that the mass spectrum does not meet EPA CLP criteria for confirmation, but compound presence is strongly suspected.

E — This flag is used to indicate that the quantitation of the analyte is outside the linear calibration of the curve and that dilution was required in order to properly quantitate.

D — This flag is used to indicate the value for the target analyte was calculated from a dilution (see "E" flag above).

Y — This flag is used when a matrix spike compound is also confirmed present in the unspiked sample.

Flags excerpted from and established by the US EPA Contract Lab Program (CLP) protocol.

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	1	96	98	89	0	0
02	10	93	94	71 *	0	1
03	10RE	102	100	75 *	0	1
04	11	103	94	99	0	0
05	2	94	96	87	0	0
06	3	96	96	78	0	0
07	4	91	94	83	0	0
08	5	89	94	81	0	0
09	6	90	93	80	0	0
10	7	94	93	75 *	0	1
11	7RE	99	100	77	0	0
12	8	95	94	74 *	0	1
13	8RE	101	102	77	0	0
14	9	95	93	73 *	0	1
15	9RE	104	104	76	0	0
16	TRIP_BLK	99	92	99	0	0
17	4MS	95	96	77	0	0
18	4MSD	94	95	77	0	0
19	VBLK84	97	96	95	0	0
20	VBLK01	98	97	83	0	0
21	VBLK36	100	91	94	0	0
22	VBLK23	100	99	82	0	0

	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix Spike - EPA Sample No.: 4

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	45.3	91	61-145
Trichloroethene	50.0	0	53.4	107	71-120
Benzene	50.0	0	44.0	88	76-127
Toluene	50.0	0	46.5	93	76-125
Chlorobenzene	50.0	0	50.0	100	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	41.9	84	8	14	61-145
Trichloroethene	50.0	51.4	103	4	14	71-120
Benzene	50.0	42.2	84	5	11	76-127
Toluene	50.0	44.0	88	6	13	76-125
Chlorobenzene	50.0	48.0	96	4	13	75-130

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP,OBRITOWN,2941,4,L,W,24274,V,,420.66,1,5ML,
INSTW : SP1000COLUMN : 45C (3MIN) TO 225C @8C/MIN

C00839

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Lab File ID: W2784 Lab Sample ID: VBLK84

Date Analyzed: 06/27/90 Time Analyzed: 1628

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: W

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1	24271	W2785	1744
02	2	24272	W2786	1826
03	4	24274	W2788	1948
04	5	24275	W2789	2030
05	6	24276	W2790	2111

COMMENTS: CLP,,,VBLK84,L,W,VBLK84,V,BLANK,,,5ML,
INSTW : SP1000COLUMN : 45C (3MIN) TO 225C @8C/MIN

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Lab File ID: W2801 Lab Sample ID: VBLK01

Date Analyzed: 06/28/90 Time Analyzed: 1406

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: W

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	10	24280	W2808	1920
02	3	24273	W2802	1505
03	7	24277	W2805	1712
04	8	24278	W2806	1755
05	9	24279	W2807	1837
06	4MS	29274MS	W2803	1547
07	4MSD	29274MSD	W2804	1630

COMMENTS: CLP,,,VBLK01,L,W,VBLK01,V,BLANK,,,5ML,
INSTW : SP1000COLUMN : 45C (3MIN) TO 225C @8C/MIN

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Lab File ID: W2823 Lab Sample ID: VBLK23

Date Analyzed: 06/29/90 Time Analyzed: 1626

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: W

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	10RE	24280	W2827	1944
02	7RE	24277RE	W2824	1736
03	8RE	24278	W2825	1819
04	9RE	24279	W2826	1901

COMMENTS: CLP,,,VBLK23,L,W,VBLK23,V,BLANK,,,5ML,
INSTW : SP1000COLUMN : 45C (3MIN) TO 225C @8C/MIN

000842

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Lab File ID: Y2136 Lab Sample ID: VBLK36

Date Analyzed: 06/28/90 Time Analyzed: 1747

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: Y

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	11	24281	Y2138	1854
02	TRIP_BLK	24284	Y2137	1823

COMMENTS: CLP,,,VBLK36,L,W,VBLK36,V,,,5ML
INST Y:RTXVOA 10C(1MIN)-80C/20C/MIN-140C/6C/MIN-180C/5C/MIN

000843

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: 1

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24271

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2785

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. Date Analyzed: 06/27/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	B
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 1

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24271

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2785

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. _____ Date Analyzed: 06/27/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.05	5.0	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

2

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24272

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2786

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. Date Analyzed: 06/27/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 2

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24272

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2786

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/27/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.75	11	J

000847

108035

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24273

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2802

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. _____ Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	16	B
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 3

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24273

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2802

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/28/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

4

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24274

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2788

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/27/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	68	
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	4	JX
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	9	X
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	7	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 4

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24274

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2788

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. _____ Date Analyzed: 06/27/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

5

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24275

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2789

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/27/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 5

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24275

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2789

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. ____ Date Analyzed: 06/27/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE (ACN)	3.08	5.0	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

6

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24276

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2790

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/27/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 6

Name: VERSAR INC. Contract: _____

ab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24276

ample wt/vol: 5.0 (g/mL) ML Lab File ID: W2790

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/27/90

olumn (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

7

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24277

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2805

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 7

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24277

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2805

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/28/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

7RE

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24277RE

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2824

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. _____ Date Analyzed: 06/29/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

7RE

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24277RE

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2824

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/29/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

8

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24278

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2806

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. ____ Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	9	BJ
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

8

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24278

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2806

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. ____ Date Analyzed: 06/28/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000859

100116

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

8RE

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24278

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2825

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/29/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	11	
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

8RE

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24278

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2825

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. ____ Date Analyzed: 06/29/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.63	3.0	J

000861

100127

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

9

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24279

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2807

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. _____ Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	14	B
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 9

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24279

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2807

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. ____ Date Analyzed: 06/28/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

9RE

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24279

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2826

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. Date Analyzed: 06/29/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	3	J
67-64-1	Acetone	13	
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

9RE

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24279

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2826

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. _____ Date Analyzed: 06/29/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.13	7.0	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24280

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2808

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 10

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24280

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2808

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. _____ Date Analyzed: 06/28/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10RE

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24280

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2827

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/29/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 10RE

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24280

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2827

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. ____ Date Analyzed: 06/29/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.13	7.0	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24281

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y2138

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/28/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 11

Lab Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24281

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y2138

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. ____ Date Analyzed: 06/28/90

Column (pack/cap) CAP Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP_BLK

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24284

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y2137

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/28/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	19	
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: TRIP_BLK

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 24284

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y2137

Level: (low/med) LOW Date Received: 06/21/90

Moisture: not dec. ____ Date Analyzed: 06/28/90

Column (pack/cap) CAP Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK84

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK84

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2784

Level: (low/med) LOW Date Received: _____

Moisture: not dec. _____ Date Analyzed: 06/27/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK84

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK84

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2784

Level: (low/med) LOW Date Received: _____

Moisture: not dec. _____ Date Analyzed: 06/27/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000875

100301

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2801

Level: (low/med) LOW Date Received: _____

Moisture: not dec. _____ Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	3	J
67-64-1	Acetone	8	J
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	7	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2801

Level: (low/med) LOW Date Received: _____

Moisture: not dec. _____ Date Analyzed: 06/28/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK23

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK23

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2823

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/29/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK23

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK23

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2823

Level: (low/med) LOW Date Received: _____

Moisture: not dec. ____ Date Analyzed: 06/29/90

Column (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK36

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK36

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y2136

Level: (low/med) LOW Date Received:

Moisture: not dec. Date Analyzed: 06/28/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	6	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	5	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK36

Name: VERSAR INC. Contract: _____

Lab Code: VERSAR Case No.: 2941 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: VBLK36

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: Y2136

Level: (low/med) LOW Date Received: _____

Moisture: not dec. _____ Date Analyzed: 06/28/90

Column (pack/cap) CAP Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

4MS

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 29274MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2803

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	78	
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	8	BJ
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	3	J
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	7	
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	7	X

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

4MSD

Name: VERSAR INC. Contract:

Lab Code: VERSAR Case No.: 2941 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 29274MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2804

Level: (low/med) LOW Date Received: 06/21/90

% Moisture: not dec. Date Analyzed: 06/28/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	78	
75-09-2	Methylene chloride	5	U
67-64-1	Acetone	12	B
75-15-0	Carbon disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	3	J
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
108-05-4	Vinyl acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	7	
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total xylenes	7	X