Versar Laboratories INC. To: Rob Smith FROM: A. Sheeran

November 16, 1990

NOV 30 1990

RECEIVED
NOV 21 1990
REMEDIAL ACTION
HAZARDOUS
SECTION

Jack Ryan
Room 301
Bureau of Water Research
NYS Dept. of Environmental Conservation
50 Wolf Road
Albany, New York 12233-3502

Reference: Versar Job No. 420.05
Versar Control No. 3783
Case No. RA090
SDG No. 1023

Dear Jack:

Enclosed please find our report for the following sample numbers:

336019-1
336019-2
336019-3

The samples were received from Anthony Sheeran on October 24, 1990.

Should you have any questions concerning this report, please contact me at your earliest convenience and refer to the above report number.

Sincerely,

Janet Jaufmann

Janet Jaufmann
Program Manager
Laboratory Operations

JJ/mar

Enclosure

cc: Anthony Sheeran
NYSDEC
Room 208
50 Wolf Road
Albany, NY 12233-7010

B.E.R.A.
FOILABLE Y-N
SITE NAME
SITE CODE
SUB SECTIONS
PRO ELEMENT
OPERABLE UNIT NO. DESC.
DRAFT OR FINAL
FILE SECTION
I
II
III
IV
V
VI

6850 Versar Center • P. O. Box 1549 • Springfield, Virginia 22151 • Telephone: (703) 750-3000 • 1-800-283-7727

509892

Versar Laboratories INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME
336019	New Windsor lcl f

SAMPLERS: (Signature) Anthony R Sheeran (Printed) ANTHONY SHEERAN

INDUSTRIAL HYGIENE SAMPLE: N

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA	BNA	P/PCB	INORGANICS	CN				REMARKS
336019-1	23-10-90	1545		X	M.W #6D NW	12	4	2	2	2	2				MS/MSD SAMPLE cooler #1
336019-2	23-10-90	1400		X	M.W #102 NW	6	2	1	1	1	1				cooler #2
336019-3	23-10-90	1230		X	M.W # 108 STEWART	6	2	1	1	1	1				cooler #2
TRIP BLANK	–	–		X	N/A LAB Supplied	2	2	0	0	0	0				TRIP BLANK cooler #2

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Anthony R Sheeran	23 Oct 90	R. Monchak			
(Printed) A. SHEERAN	1758hrs	(Printed) Fed Exp STEWART	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
(Printed)		(Printed)	10-24-90 0900	SAMPLES FOR CN & INORGANICS ARE PRESERVED w/ LAB Supplied PRESERVATIVES.

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

CONTRACT LAB SAMPLE INFORMATION SHEET

Print legibly

COLLECTED BY: Anthony SHEERAN	TELEPHONE NUMBER: 518 457 1641		REGION NO: 0
CONTRACT LAB: VERSAR	COUNTY: ORANGE	SAMPLING DATE: 23OCT90	MILITARY TIME: 1230
SAMPLING POINT: ☆ Stewart Well 108 ☆	OUTFALL NUMBER	CHECK IF SAMPLING IS PART OF INSPECTION ☐	
	SPDES NUMBER	FLOW MGD	
CASE NUMBER: RA090	SDG NUMBER: 1023	SAMPLE NUMBER: 336019-3	CHECK FOR MS/MD ☐ This Sample

TYPE OF SAMPLE: ☐ Composite ☒ Grab ☐ Term _____ hrs

SAMPLE MATRIX: ☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)—SPDES

- ☐ 1. All (SPDES)—Includes 2-6
- ☐ 2. 13 PP Metals
- ☐ 3. Volatiles—USEPA 624 (GC/MS)
- ☐ 4. Acids Base/Neutrals (USEPA 625-GC/MS)
- ☐ 5. Cyanide
- ☐ 6. Pesticides/PCB's (USEPA 608-GC)
- ☐ 7. Halogenated Volatiles (USEPA 601-GC)
- ☐ 8. Aromatic Volatiles (USEPA 602-GC)
- ☐ 9. BOD
- ☐ 10. pH
- ☐ 11. COD
- ☐ 12. TSS
- ☐ 13. Settleable Solids
- ☐ 14. TKN
- ☐ 15. Ammonia
- ☐ 16. Nitrate/Nitrite
- ☐ 17. Total Phosphrous
- ☐ 18. Reactive Phosphorus
- ☐ 19. Oil/Grease
- ☐ 20. TOC
- ☐ 21. Total Phenols
- ☐ 22. Other _____
- ☐ 59. PCB's at 0.065 ug/L
- ☐ 60. PCB's congener method

CONTRACT LABORATORY PROTOCOLS

- ☒ 23. (ALL)—Water—Includes 24-28
- ☐ 24. Base/Neutral/Acid (B/N/A)—Water—GC-MS
- ☐ 25. Volatile Organic Analysis VOA—Water—GC-MS
- ☐ 26. Pesticides/PCB's—Water—GC
- ☐ 27. Metals—Water
- ☐ 28. Cyanide—Water
- ☐ 29. (ALL)— Soil/Sediments—Includes 30-34
- ☐ 30. B/N/A/—Soils/Sediment—GC-MS
- ☐ 31. VOA—Soils/Sediments—GC-MS
- ☐ 32. Pesticides/PCB's—Soils/Sediment—GC
- ☐ 33. Metals—Soil/Sediment
- ☐ 34. Cyanide—Soils/Sediment
- ☐ 35. Other _____

HAZARDOUS WASTES/RCRA ANALYSIS SW-846

- ☐ 36. EP Toxicity
- ☐ 37. EP Toxicity (Metals Only)
- ☐ 38. Ignitability
- ☐ 39. Corrosivity
- ☐ 40. VOA—(USEPA 8240)
- ☐ 41. BNA—(USEPA 8270)
- ☐ 42. Pesticides/PCB's (USEPA 8080)
- ☐ 43. TCLP
- ☐ 44. TCLP (Metals Only)
- ☐ 45. Reactivity
- ☐ 46. Dioxin (USEPA 8280)
- ☐ 47. Appendix IX
- ☐ 48. Other _____

MUNICIPAL SLUDGE

- ☐ 49. RSGB-01
- ☐ 50. RSSR-01
- ☐ 51. RSGR-01
- ☐ 52. RSRB-01
- ☐ 53. RSRI-01 (EP Toxicity-Metals only + RSRR-01)
- ☐ 54. RSRO-01
- ☐ 55. RSSB-01
- ☐ 56. RSRR-01
- ☐ 57. RSRR-02
- ☐ 58. Other _____

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3360193 108

L Name: VERSAR INC. Contract: C002164

Lab Code: VERSAR Case No.: RA090 SAS No.: _____ SDG No.: 1023

Matrix: (soil/water) WATER Lab Sample ID: 34906

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: U5940

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. ____ Date Analyzed: 10/31/90

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.

3360193

I Name: VERSAR INC. Contract: C002164

Lab Code: VERSAR Case No.: RA090 SAS No.: _____ SDG No.: 1023

Matrix: (soil/water) WATER Lab Sample ID: 34906

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: U5940

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. ____ Date Analyzed: 10/31/90

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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3360193

Lab Name: VERSAR INC. Contract: C002164

Lab Code: VERSAR Case No.: RA090 SAS No.: _____ SDG No.: 1023

Matrix: (soil/water) WATER Lab Sample ID: 34919

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T4894

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

200050

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3360193

Lab Name: VERSAR INC. Contract: C002164

Lab Code: VERSAR Case No.: RA090 SAS No.: _____ SDG No.: 1023

Matrix: (soil/water) WATER Lab Sample ID: 34919

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T4894

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

3360193

Lab Name: VERSAR INC. Contract: C002164

Lab Code: VERSAR Case No.: RA090 SAS No.: _____ SDG No.: 1023

Matrix: (soil/water) WATER Lab Sample ID: 34919

Sample wt/vol: 1000 (g/mL) ML Lab File ID: T4894

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.62	34	BJ
2.	UNKNOWN	2.95	84	J
3.	UNKNOWN	3.43	8.0	J
4.	UNKNOWN	7.00	12	J
5.	UNKNOWN	10.65	6.0	J
6.	UNKNOWN	12.57	8.0	J

PESTICIDE ORGANICS ANALYSIS DATA SHEET

3360193

Lab Name: VERSAR, INC. Contract: C002164

Lab Code: VERSAR Case No.: RA090 SAS No.: SDG No.: 1023

Matrix: (soil/water) WATER Lab Sample ID: 34916

Sample wt/vol: 1000 (g/ml) ML Lab File ID: ____

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/06/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor Epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin Ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

K. 11/06/90

NYSDEC - CLP

1

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

336019-3
108

Lab Name: VERSAR_LABORATORIES_ Contract: X408_____

Lab Code: VERSAR___ Case No.: RA090_____ SAS No.: 3783_ SDG No.: 1023__

Matrix (soil/water): WATER_ Lab Sample ID: 34910____

Level (low/med): LOW_____ Date Received: 10/24/90_

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1450			P	1.45
7440-36-0	Antimony	14.0	U		P	0.140
7440-38-2	Arsenic	3.0	U		F	0.030
7440-39-3	Barium	86.8	B		P	0.08
7440-41-7	Beryllium	1.0	U		P	
7440-43-9	Cadmium	3.0	U		P	
7440-70-2	Calcium	207000			P	207 ppm Calcium
7440-47-3	Chromium	3.0	U		P	
7440-48-4	Cobalt	3.5	B		P	
7440-50-8	Copper	11.4	B		P	
7439-89-6	Iron	2590			P	2.5 ppm Iron
7439-92-1	Lead	2.3	B		F	
7439-95-4	Magnesium	24700			P	24.7 ppm Magnesium
7439-96-5	Manganese	3960			P	3.9 ppm Manganese
7439-97-6	Mercury	0.20	U		CV	
7440-02-0	Nickel	14.0	B		P	
7440-09-7	Potassium	2800	B		P	2.8 ppm Potassium
7782-49-2	Selenium	3.0	U	N	F	
7440-22-4	Silver	4.0	U		P	
7440-23-5	Sodium	110000			P	110.0 ppm Sodium
7440-28-0	Thallium	10.0	U	EN	F	
7440-62-2	Vanadium	3.0	U		P	
7440-66-6	Zinc	20.5		E	P	
	Cyanide	10.0	U		AS	

Color Before: GREY_____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

__CYANIDE_LAB_SAMPLE_ID_NUMBER_IS_34913.

__THALLIUM_WAS_RUN_AT_A_10_FOLD_DILUTION_AND_FLAGGED_WITH_AN_"E"_DUE__
__TO_CHEMICAL_INTERFERENCE.

FORM I - IN