DATE: MAY 8, 1987 (Frank Battaglia)

LOCATION: CIBA GEIGY, 180 MILL ST., CRANSTON, R.I.

PURPOSE: CONDUCT VISUAL SITE INSPECTION (VSI) WITH CONTRACTOR

ATTENDEES: FRANK BATTAGLIA (EPA), DENNIS GUISTRA (VERSAR), JIM CROWLEY (CIBA GEIGY), DOM TUTELA (TOWN CONSULTANT)

- SEE NOTES - WILL SAMPLE FOR VOLATILE ORGANICS, SEMI-VOLATILES, METALS PESTICIDES AND (DIOXINS)?

  - WILL NEED 1 BACKGROUND SURFACE SAMPLE

  - WILL DEVELOP SAMPLING PLAN WITH DENNIS GUISTRA

  - SEND LETTER TO JIM CROWLEY REQUESTING UNDER GROUND TANK DIAGRAMS.

SEMS DocID 654119

SEND NOTE TO BILL GOFF REGARDING UNDERGROUND PIPING + TANK DIAGRAM
ATT JIM CROWLEY

UNIT 2 + 3 — PAVED AREA - NO UNCOVERED EARTH

UNIT 7 — ACID RELEASE NEAR UNITS 2+3 - PAVED AREA

UNIT 11 — 300 GAL CAPACITY CONCRETE SUMP RELEASE OF TOLUENE ON PROPERTY (MILL ST) BOUNDARY ACROSS FROM CHEM-PAK. CONTINUOUS FOR 1-3 YEARS IN PPM. DETECTED IN G.W. ON MILL STREET. EXCAVATED PARTS OF MILL ST. & FOUND TOLUENE

UNIT 4 — TRASH COMPACTOR - NO UNCOVERED EARTH

UNIT 8 — BLUE SOIL EXCAVATED OUT OF GROUND DURING CONSTRUCTION OF SUMP.

SAMPLE →
- OUTFALL #1 — TREATMENT PLANT
- OUTFALL #2 — COOLING TOWER DISCHARGE
- " #3+4 — SURFACE H_2O RUNOFF
- 3 NON NUMBERED SURFACE H_2O DRAIN (CATCH BASINS)

UNIT 6 — ZINC OXIDE SOIL PILE ADJACENT TO RIVER (30') ON EXISTING SOIL ABOUT 50' LONG

UNIT 9 — WW PIPE BREAK - 20' FROM RIVER (SURFACE PIPE)

UNIT 10 — " " " @ Y-SPLICE - 100 FT FROM RIVER (UNDERGROUND PIPE)

SAMPLE @ POND SEDIMENT ?

UNIT 1 — NO UNCOVERED EARTH.

UNIT 5 — RIVER SLUDGE PILE

BACKGROUND — BACK OF CAFETERIA NEAR RESIDENT AREA
— FRONT YARD OF LAB

SAMPLE BOTH G.W. WELLS NEAR UNIT 5

7000 + 30000 → 2 FUEL OIL + GAS 1000 GAL, ISOPROPYL ALC, TOLUENE ACETONE METHANOL (8) ≈ 10,000

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

Total Metals

EPA Sample No. _____

Date _____

INORGANIC ANALYSIS DATA SHEET

LAB NAME _____ CASE NO. _____

SOW NO. _____ Lab Receipt Date _____

LAB SAMPLE ID. NO. _____ QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low _____ Medium _____

Matrix: Water _____ Soil _____ Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	13.	Magnesium
2.	Antimony	14.	Manganese
3.	Arsenic	15.	Mercury
4.	Barium	16.	Nickel
5.	Beryllium	17.	Potassium
6.	Cadmium	18.	Selenium
7.	Calcium	19.	Silver
8.	Chromium	20.	Sodium
9.	Cobalt	21.	Thallium
10.	Copper	22.	Vanadium
11.	Iron	23.	Zinc
12.	Lead		Precent Solids (%)

Cyanide _____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager _____

ronmental Protection Agency. CLP Sample Management Office.
ce 818. Alexandria, Virginia 22313 703/557-2490

Sample Number

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

AS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)

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Sample Number

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: _____ Case No: _____

Lab Sample ID No: _____ QC Report No: _____

Sample Matrix: _____ Contract No: _____

Data Release Authorized By: _____ Date Sample Received: _____

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: _____

Date Analyzed: _____

Conc/Dil Factor: _____ pH _____

Percent Moisture: _____

Percent Moisture (Decanted): _____

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1, 1-Dichloroethene	
75-34-3	1, 1-Dichloroethane	
156-60-5	Trans-1, 2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1, 2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1, 1, 1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1, 1, 2, 2-Tetrachloroethane	
78-87-5	1, 2-Dichloropropane	
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	
591-78-6	2-Hexanone	
108-10-1	4-Methyl-2-Pentanone	
127-18-4	Tetrachloroethene	
108-88-3	Toluene	
108-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes describing results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

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

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Environmental Protection Agency, CLP Sample Management Office,
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Sample Number

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: _____

Date Analyzed: _____

Conc/Dil Factor: _____

CAS Number		ug/l or ug/Kg (Circle One)
62-75-9	N-Nitrosodimethylamine	
108-95-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	
65-85-0	Benzoic Acid	
111-91-1	bis(-2-Chloroethoxy)Methane	
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	
95-95-4	2, 4, 5-Trichlorophenol	
91-58-7	2-Chloronaphthalene	
88-74-4	2-Nitroaniline	
131-11-3	Dimethyl Phthalate	
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	
51-28-5	2, 4-Dinitrophenol	
100-02-7	4-Nitrophenol	
132-64-9	Dibenzofuran	
121-14-2	2, 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	
534-52-1	4, 6-Dinitro-2-Methylphenol	
86-30-6	N-Nitrosodiphenylamine (1)	
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-5	Pentachlorophenol	
85-01-8	Phenanthrene	
120-12-7	Anthracene	
84-74-2	Di-n-Butylphthalate	
206-44-0	Fluoranthene	
92-87-5	Benzidine	
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	
91-94-1	3, 3'-Dichlorobenzidine	
56-55-3	Benzo(a)Anthracene	
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benzo(g, h, i)Perylene	

(1)-Cannot be separated from diphenylamine

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Sample Number

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: _____

Date Analyzed: _____

Conc/Dil Factor: _____

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	
319-85-7	Beta-BHC	
319-86-8	Delta-BHC	
58-89-9	Gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	
72-55-9	4, 4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4 4'-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4 4'-DDT	
72-43-5	Methoxychlor	
53494-70-5	Endrin Ketone	
57-74-9	Chlordane	
8001-35-2	Toxaphene	
12674-11-2	Aroclor-1016	
11104-28-2	Aroclor-1221	
11141-16-5	Aroclor-1232	
53469-21-9	Aroclor-1242	
12672-29-6	Aroclor-1248	
11097-69-1	Aroclor-1254	
11096-82-5	Aroclor-1260	

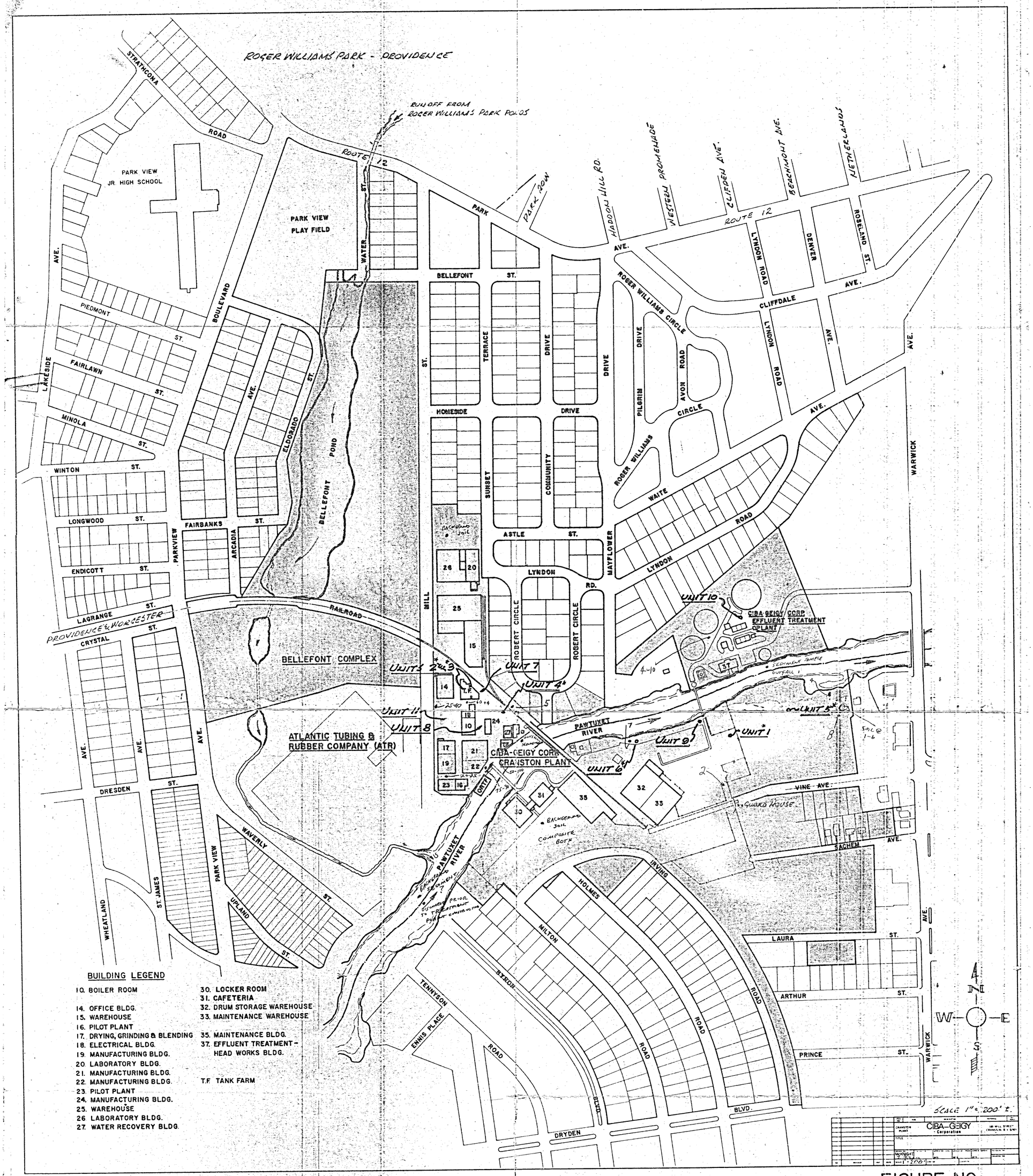
V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s _____ V_t _____ V_i _____



BUILDING LEGEND

10. BOILER ROOM
14. OFFICE BLDG.
15. WAREHOUSE
16. PILOT PLANT
17. DRYING, GRINDING & BLENDING
18. ELECTRICAL BLDG.
19. MANUFACTURING BLDG.
20. LABORATORY BLDG.
21. MANUFACTURING BLDG.
22. MANUFACTURING BLDG.
23. PILOT PLANT
24. MANUFACTURING BLDG.
25. WAREHOUSE
26. LABORATORY BLDG.
27. WATER RECOVERY BLDG.
30. LOCKER ROOM
31. CAFETERIA
32. DRUM STORAGE WAREHOUSE
33. MAINTENANCE WAREHOUSE
35. MAINTENANCE BLDG.
37. EFFLUENT TREATMENT - HEAD WORKS BLDG.

T.F. TANK FARM

FIGURE NO.

SOLID WASTE MANAGEMENT UNITS \ CHEMICAL RELEASES

NONE * UNIT 1 - 1981 - HAZARDOUS WASTE STORAGE AREA (DRUMS) - 2500 SQ. FT.

SUBSURFACE SOIL - 2 * UNIT 2 - - 6000 GAL. - 90 DAY ACCUMULATION TANK.

* UNIT 3 - 1985 - 7500 GAL. HAZARDOUS WASTE STORAGE TANK (FLAMMABLE LIQUID)

NONE * UNIT 4 - 1972 - TRASH COMPACTOR - 55 CU. YDS.

COMPOSITE SURFACE SOIL * UNIT 5 - 1971 - SITE OF FORMER SILT PILE FROM RIVER DREDGING.

NONE * UNIT 6 - 60'S - SITE OF PILE OF SOIL CONTAINING ZINC OXIDE. - 30 CU. FT.

UNIT 7 - 1961 - SITE OF FORMER SPILL OF CHLOROSULFONIC ACID - 500 GALS.

UNIT 8 - 1956 - SITE OF FORMER SPILL OF FERROCYANIDE

UNIT 9 - 1983 - WASTE WATER PIPE LINE BREAK 9-7-81

UNIT 10 - 1982 - WASTE WATER PIPE LINE BREAK 1-14-82

UNIT 11 - 1983 - SITE OF FORMER BUILDING 11 (TOLUENE)