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BULK STORAGE TANKS T-5 AND T-6 CLOSURE PLAN INFORMATION AND DATA SUMMARY OF SAMPLING AND ANALYSIS JUNE 1993

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DOE-FN/OEPA
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REPORT

ENCLOSURE 1

ENCLOSURE

BULK STORAGE TANKS T-5 AND T-6

CLOSURE PLAN INFORMATION AND DATA

SUMMARY

OF

SAMPLING AND ANALYSES

June 1993

Fernald Office
U. S. Department of Energy
Fernald Environmental Management Project
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TABLE 1: TARGETED ORGANIC COMPOUNDS COMPARED TO COMPOUNDS REPORTED

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TARGET COMPOUNDS LISTED IN CPID	COMPOUNDS REPORTED BY IT LAB	COMPOUNDS REPORTED BY CHEM NUCLEAR
	ACETONE	ACETONE
BENZENE	BENZENE	BENZENE
	CARBON DISULFIDE	CARBON DISULFIDE
CARBON TETRACHLORIDE	CARBON TETRACHLORIDE	CARBON TETRACHLORIDE
CHLORINATED FLUOROCARBONS		CHLORINATED FLUOROCARBONS
CHLOROBENZENE	CHLOROBENZENE	CHLOROBENZENE
	CHLOROETHANE	
CHLOROFORM		
CHLOROMETHANE	CHLOROMETHANE	
CRESOL (TOTAL)	2-METHYLPHENOL	o-CRESOL
	3-METHYLPHENOL	m,p-CRESOL
	4-METHYLPHENOL	"
		CYCLOHEXANONE
1,1-DICHLOROETHANE		
1,2-DICHLOROETHANE	(SURROGATE)	
1,1-DICHLOROETHYLENE	1,1-DICHLOROETHENE	
	trans-1,2-DICHLOROETHENE	
1,2-DICHLOROBENZENE		
1,4-DICHLOROBENZENE	1,4-DICHLOROBENZENE	
2,4-DINITROTOLUENE	2,4-DINITROTOLUENE	2,4-DINITROTOLUENE
		ETHYL ACETATE
	ETHYLBENZENE	ETHYLBENZENE
		ETHYL ETHER
HEXACHLOROBENZENE	HEXACHLOROBENZENE	HEXACHLOROBENZENE
HEXACHLORO-1,3-BUTADIENE	HEXACHLORO-1,3-BUTADIENE	HEXACHLOROBUTADIENE
HEXACHLOROETHANE	HEXACHLOROETHANE	HEXACHLOROETHANE
METHYL ETHYL KETONE	2-BUTANONE	2-BUTANONE (MEK)
		METHYL ISOBUTYL KETONE
METHYLENE CHLORIDE	METHYLENE CHLORIDE	METHYLENE CHLORIDE
	4-METHYL-2-PENTANONE	
NITROBENZENE	NITROBENZENE	NITROBENZENE
	2-NITROPROPANE	
PENTACHLOROPHENOL	PENTACHLOROPHENOL	PENTACHLOROPHENOL
PYRIDINE	PYRIDINE	PYRIDINE
TETRACHLOROETHYLENE	TETRACHLOROETHYLENE	TETRACHLOROETHYLENE
	TOLUENE	TOLUENE
1,1,1-TRICHLOROETHANE	1,1,1-TRICHLOROETHANE	1,1,1-TRICHLOROETHANE
1,1,2-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE
TRICHLOROETHYLENE	TRICHLOROETHENE	TRICHLOROETHYLENE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	
TRICHLOROFLUOROMETHANE	TRICHLOROFLUOROMETHANE	TRICHLOROFLUOROMETHANE
VINYL CHLORIDE	VINYL CHLORIDE	
	XYLENES (TOTAL)	m,p-XYLENES & o-XYLENE
	2,4,5-TRICHLOROPHENOL	2,4,5-TRICHLOROPHENOL
	2,4,6-TRICHLOROPHENOL	2,4,6-TRICHLOROPHENOL

- ANALYSIS OF COMPOUNDS LISTED IN CLOSURE PLAN WAS NOT CONDUCTED

TABLE 2: CLOSURE DATA – DECONTAMINATION VERIFICATION SAMPLE RESULTS

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COMPONENT BEING EVALUATED TANK T-6

Sample No. Description ANALIS No. CNLSI NO. Matrix	4135 T6-R3 920423-64 924567 Liquid	4136 R3(DUP) 920423-65 924567 Liquid	CPID LISTED DECONTAMINATION VERIFICATION LIMIT	OHIO EPA LIMITS IN CLOSURE PLAN REVIEW GIUIDANCE
VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/L)
TRICHLOROFLUROROMETHANE	0.17 U	0.17 U	1.0	1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.17 U	0.17 U	1.0	1.0
ACETONE	0.42 U	0.42 U	NA	NA
CARBON DISULFIDE	0.12 U	0.12 U	NA	NA
METHYLENE CHLORIDE	0.10 U	0.10 U	1.0	1.0
2-BUTANONE (MEK)	0.25 U	0.25 U	1.0	1.0
1,1,1-TRICHLOROETHANE	0.20 U	0.20 U	1.0	1.0
CARBON TETRACHLORIDE	0.15 U	0.15 U	0.05	0.75
BENZENE	0.08 U	0.08 U	0.005	0.075
TRICHLOROETHYLENE	0.22 U	0.22 U	1.0	1.0
METHYL ISOBUTYL KETONE	0.17 U	0.17 U	NA	NA
TOLUENE	0.17 U	0.17 U	NA	NA
CHLOROBENZENE	0.18 U	0.18 U	0.10	1.0
1,1,2-TRICHLOROETHANE	0.10 U	0.10 U	0.005	0.075
TETRATCHLOROETHYLENE	0.47 U	0.47 U	0.20	1.0
ETHYLBENZENE	0.08 U	0.08 U	NA	NA
m,p-XYLENES	0.10 U	0.10 U	NA	NA
o-XYLENE	0.07 U	0.07 U	NA	NA
o-DICHLOROBENZENE	0.23 U	0.23 U	0.75	1.0
2-NITROPROPANE	ND	ND	NA	NA
CYCLOHEXANONE	ND	ND	NA	NA
ETHYL ACETATE	ND	ND	NA	NA
ETHYL ETHER	ND	ND	NA	NA
PYRIDINE	ND	ND	1.0	1.0
CHLORINATED FLUOROCARBONS	ND	ND	1.0	1.0
SEMI-VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/L)
PYRIDINE	0.2 U	0.2 U	1.0	1.0
o-CRESOL	0.1 U	0.1 U	1.0	1.0
HEXACHLOROETHANE	0.1 U	0.1 U	1.0	1.0
m,p-CRESOL	0.1 U	0.1 U	1.0	1.0
NITROBENZENE	0.1 U	0.1 U	1.0	1.0
HEXACHLOROBUTADIENE	0.1 U	0.1 U	1.0	1.0
2,4,6-TRICHLOROPHENOL	0.1 U	0.1 U	NA	NA
2,4,5-TRICHLOROPHENOL	0.1 U	0.1 U	NA	NA
2,4-DINITROTOLUENE	0.1 U	0.1 U	1.0	1.0
HEXACHLOROBENZENE	0.1 U	0.1 U	1.0	1.0
PENTACHLOROPHENOL	0.1 U	0.1 U	1.0	1.0
METALS	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	NR	NR	0.002	0.03
BARIUM	NR	NR	1.0	1.0
CADMIUM	NR	NR	0.01	0.15
CHROMIUM	NR	NR	0.05	0.75
LEAD	NR	NR	0.05	0.75
MERCURY	NR	NR	0.002	0.03
SELENIUM	NR	NR	0.01	0.15
SILVER	NR	NR	0.05	0.75
RADIOLOGICAL	(pCi/L)	(pCi/L)	NA	NA
Gross Alpha	NR	NR	NA	NA
Gross Beta	NR	NR	NA	NA

(U) Analyte Was Not Detected at Listed Detection Limit
(ND) Not detected; detection limit not reported by lab
(NR) Not Reported
(NA) Not Applicable (Not a CPID Target Analyte)

Highlighted Data Indicates Concentrations Reported are Above CPID Decontamination Verification Limits

TABLE 2: CLOSURE DATA – DECONTAMINATION VERIFICATION SAMPLE RESULTS

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COMPONENT BEING EVALUATED PAD PAD DRAIN PIPE TANK T-5

Sample No.	4200	92-138A-4072	4219	CPID LISTED DECONTAMINATION VERIFICATION LIMIT	OHIO EPA LIMITS IN CLOSURE PLAN REVIEW GIUIDANCE
Description	Pad Rinse 3	PAD DRAIN PIPE	T5-R4 (Tank 5)		
NALIS No.	920430-056	920415-082	920501-010		
TAS ID	2018-005	1990-005	2018-004		
Matrix	Water	Liquid	Water		
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(ug/L)	(ug/L)
CHLOROMETHANE	10 U	10 U	10 U	100.0	100.0
VINYL CHLORIDE	10 U (1)	10 U (1)	10 U (1)	2.00	30.00
CHLOROETHANE	10 U	10 U	10 U	NA	NA
TRICHLOROFLUOROMETHANE	10 U	10 U	10 U	100.0	100.0
METHYLENE CHLORIDE	5 U	10 U	5 U	100.0	100.0
ACETONE	10 U	10 U	10 U	NA	NA
CARBON DISULFIDE	5 U	5 U	5 U	NA	NA
1,1-DICHLOROETHENE	5 U	5 U	3 J	100.0	100.0
trans-1,2-DICHLOROETHENE	5 U	5 U	5 U	NA	NA
1,2-DICHLOROETHANE	5 U	5 U	3 J	7.0	105.0
2-BUTANONE	10 U	10 U	10 U	NA	NA
1,1,1-TRICHLOROETHANE	5 U	5 U	1200	100.0	100.0
CARBON TETRACHLORIDE	5 U	5 U	5 U	5.00	75.00
TRICHLOROETHENE	5 U	5 U	3 J	100.0	100.0
1,1,2-TRICHLOROETHANE	5 U	5 U	43	5.00	75.00
BENZENE	5 U	5 U	5 U	5.00	75.00
4-METHYL-2-PENTANONE	10 U	10 U	1 J	NA	NA
TERTACHLOROETHYLENE	5 U	5 U	13	200.00	1000.00
TOLUENE	5 U	5 U	70	NA	NA
CHLOROBENZENE	5 U	2 J	5 U	100.00	1000.00
ETHYLBENZENE	5 U	5 U	27	NA	NA
XYLENES (TOTAL)	5 U	5 U	190	NA	NA
SEMI-VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	10 U	10 U	10 U	1000.00	1000.00
3-METHYLPHENOL	10 U	10 U	10 U	1000.00	1000.00
4-METHYLPHENOL	10 U	10 U	10 U	1000.00	1000.00
1,4-DICHLOROBENZENE	10 U	10 U	10 U	1000.00	1000.00
2,4-DINITROTOLUENE	10 U	10 U	10 U	1000.00	1000.00
HEXACHLOROBENZENE	10 U	10 U	10 U	1000.00	1000.00
HEXACHLORO-1,3-BUTADIENE	10 U	10 U	10 U	1000.00	1000.00
HEXACHLOROETHANE	10 U	10 U	10 U	1000.00	1000.00
NITROBENZENE	10 U	10 U	10 U	1000.00	1000.00
PENTACHLOROPHENOL	52 U	52 U	51 U	1000.00	1000.00
PYRIDINE	10 U	10 U	10 U	1000.00	1000.00
2,4,5-TRICHLOROPHENOL	10 U	10 U	10 U	NA	NA
2,4,6-TRICHLOROPHENOL	10 U	10 U	10 U	NA	NA
METALS (Totals)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	0.50 U (1)	0.50 U (1)	0.50 U (1)	0.002	0.03
BARIUM	0.09 R	0.01 U	0.01 U	1.0	1.0
CADMIUM	0.01 U	0.01 U	0.01 U	0.01	0.15
CHROMIUM	0.039	0.025 U	0.03 U	0.05	0.75
LEAD	0.109	0.10 U	0.10 U	0.05	0.75
MERCURY	0.00 U	0.00 U	0.00 U	0.002	0.03
SELENIUM	0.50 U (1)	0.50 U (1)	0.50 U (1)	0.01	0.15
SILVER	0.02 U	0.02 U	0.02 U	0.05	0.75
RADIOLOGICAL	(pCi/mL)	(pCi/mL)	(pCi/mL)	NA	NA
Gross Alpha	0.03 J	0.08 J	0.13 J	NA	NA
Gross Beta	1.23 J	0.18 J	1.13 J	NA	NA

(J) Estimated value
(NR) Not Reported
(R) Rejected
(U) Not detected at concentration listed
(NA) Not Applicable (Not a CPID Target Analyte)

(1) Clean determination based on non-detection is qualified because the detection limit reported was greater than the limit set in closure plan.

Highlighted Data Indicates Concentrations Reported are Above CPID Decontamination Verification Limits

TABLE 2: CLOSURE DATA – DECONTAMINATION VERIFICATION SAMPLE RESULTS

COMPONENT BEING EVALUATED — TANK T-3 — PUMP

Sample No.	92-138A-4068	92-138A-4069	92-138A-4070	92-138A-4071	CPID LISTED DECONTAMINATION VERIFICATION LIMIT	OHIO EPA LIMITS IN CLOSURE PLAN REVIEW GIUIDANCE
Description	T3 INLET	T3 OUTLET	T3 OUT-DUP	TRANS. PUMP		
ANALIS No.	920415-078	920415-079	920415-080	920415-081		
ITAS ID	1990-001	1990-002	1990-003	1990-004		
Matrix	Liquid	Liquid	Liquid	Liquid		
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(ug/L)	(ug/L)
CHLOROMETHANE	10 U	10 U	10 U	100 U	100.0	100.0
VINYL CHLORIDE	10 U (1)	10 U (1)	10 U (1)	100 U (1)	2.00	30.00
CHLOROETHANE	10 U	10 U	10 U	100 U	NA	NA
TRICHLOROFLUOROMETHANE	10 U	10 U	10 U	100 U	100.0	100.0
METHYLENE CHLORIDE	10 U	10 U	10 U	100 U	100.0	100.0
ACETONE	10 U	10 U	16 U	210 U	NA	NA
CARBON DISULFIDE	5 U	5 U	5 U	50 U	NA	NA
1,1-DICHLOROETHENE	5 U	5 U	5 U	50 U	100.0	100.0
trans-1,2-DICHLOROETHENE	5 U	5 U	5 U	50 U	NA	NA
1,2-DICHLOROETHANE	5 U	5 U	5 U	50 U (1)	7.0	105.0
2-BUTANONE	10 U	10 U	11 U	100 U	NA	NA
1,1,1-TRICHLOROETHANE	5 U	5 U	5 U	620 U (1)	100.0	100.0
CARBON TETRACHLORIDE	5 U	5 U	5 U	50 U (1)	5.00	75.00
TRICHLOROETHENE	5 U	5 U	5 U	50 U	100.0	100.0
1,1,2-TRICHLOROETHANE	5 U	5 U	5 U	50 U (1)	5.00	75.00
BENZENE	5 U	5 U	5 U	50 U (1)	5.00	75.00
4-METHYL-2-PENTANONE	10 U	10 U	10 U	100 U	NA	NA
TERTACHLOROETHYLENE	5 U	5 U	5 U	50 U	200.00	1000.00
TOLUENE	5 U	5 U	5 U	50 U	NA	NA
CHLOROBENZENE	2 J	1 J	1 J	50 U	100.00	1000.00
ETHYLBENZENE	5 U	5 U	5 U	50 U	NA	NA
XYLENES (TOTAL)	5 U	5 U	5 U	50 U	NA	NA
SEMI-VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	10 U	10 U	10 U	NR	1000.00	1000.00
3-METHYLPHENOL	10 U	10 U	10 U	NR	1000.00	1000.00
4-METHYLPHENOL	10 U	10 U	10 U	NR	1000.00	1000.00
1,4-DICHLOROBENZENE	10 U	10 U	10 U	NR	1000.00	1000.00
2,4-DINITROTOLUENE	10 U	10 U	10 U	NR	1000.00	1000.00
HEXACHLOROBENZENE	10 U	10 U	10 U	NR	1000.00	1000.00
HEXACHLORO-1,3-BUTADIENE	10 U	10 U	10 U	NR	1000.00	1000.00
HEXACHLOROETHANE	10 U	10 U	10 U	NR	1000.00	1000.00
NITROBENZENE	10 U	10 U	10 U	NR	1000.00	1000.00
PENTACHLOROPHENOL	52 U	52 U	52 U	NR	1000.00	1000.00
PYRIDINE	10 U	10 U	10 U	NR	1000.00	1000.00
2,4,5-TRICHLOROPHENOL	10 U	10 U	10 U	NR	NA	NA
2,4,6-TRICHLOROPHENOL	10 U	10 U	10 U	NR	NA	NA
METALS (Totals)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	0.50 U (1)	0.50 U (1)	0.50 U (1)	0.50 U (1)	0.002	0.03
BARIUM	0.01 U	0.01 U	0.01 U	2.36	1.0	1.0
CADMIUM	0.01 U	0.01 U	0.01 U	0.03	0.01	0.15
CHROMIUM	0.025 U	0.025 U	0.025 U	109.00	0.05	0.75
LEAD	0.10 U (1)	0.10 U (1)	0.10 U (1)	0.10 U (1)	0.05	0.75
MERCURY	0.0002 U	0.00024	0.00025	0.015	0.002	0.03
SELENIUM	0.50 U (1)	0.50 U (1)	0.50 U (1)	4.02	0.01	0.15
SILVER	0.02 U	0.02 U	0.02 U	0.02 U	0.05	0.75
RADIOLOGICAL	NR	NR	NR	NR	NA	NA
Gross Alpha	NR	NR	NR	NR	NA	NA
Gross Beta	NR	NR	NR	NR	NA	NA

(J) Estimated value
(NR) Not Reported
(U) Not detected at concentration listed
(NA) Not Applicable (Not a CPID Target Analyte)

(1) Clean determination based on non-detection is qualified because the detection limit reported was greater then the limit set in the closure plan.

Highlighted Data Indicates Concentrations Reported are Above CPID Decontamination Verification Limits

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TABLE 3: CLOSURE DATA – SOIL SAMPLE LOCATIONS 1, 2, AND 3 ADJACENT TO TANKS T-5 AND T-6
(SEE SAMPLE LOCATIONS ON FIGURE 1)

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Sample No.	3460	3461	3463	3467	3466	3468
Description	SP 1-1	SP 1-2	SP 2-1	SP 3-1	SP 3-4	SP 3-2
ANALIS No.	920107-86	920107-087	920107-088	920107-089	920107-090	920107-091
CNLSI NO.	923734	923735	923736	923737	923738	923739
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TRICHLOROFLUOROMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
ACETONE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
CARBON DISULFIDE	0.40 U	0.30 U	1.10 U	0.30 U	0.30 U	0.30 U
METHYLENE CHLORIDE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-BUTANONE (MEK)	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
1,1,1-TRICHLOROETHANE	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
CARBON TETRACHLORIDE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
BENZENE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
TRICHLOROETHYLENE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
METHYL ISOBUTYL KETONE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
TOLUENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
CHLOROBENZENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,1,2-TRICHLOROETHANE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRATCHLOROETHYLENE	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U	1.20 U
ETHYLBENZENE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
m,p-XYLENES	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
o-XYLENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
o-DICHLOROBENZENE	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
2-NITROPROPANE	ND	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND	ND
* ETHYL ACETATE	ND	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND	ND
SEMI-VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
PYRIDINE	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
o-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROETHANE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
m,p-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
NITROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBUTADIENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,6-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,5-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4-DINITROTOLUENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
PENTACHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
METALS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
ARSENIC	6.84	5.72	20.60	4.73	3.56	4.58
BARIUM	18.20	189.00	75.90	245.00	298.00	102.00
CADMIUM	0.690 U	7.51	0.600 U	0.700 U	0.710 U	0.620 U
CHROMIUM	5.56	29.40	16.10	75.40	60.80	26.40
LEAD	32.00	17.40	21.10	88.00	82.70	23.50
MERCURY	0.112 U	0.128 U	0.128 U	0.528 U	0.363 U	0.121 U
SELENIUM	0.740 U	0.830 U	1.83	0.760 U	0.710 U	0.850 U
SILVER	2.290 U	2.460 U	2.000 U	3.60	2.350 U	2.050 U
RADIOLOGICAL	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
Gross Alpha	NR	NR	NR	NR	NR	NR
Gross Beta	NR	NR	NR	NR	NR	NR

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

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TABLE 3: CLOSURE DATA – SOIL SAMPLE LOCATIONS 4 AND 5 ADJACENT TO TANKS T-5 AND T-6
(SEE SAMPLE LOCATIONS ON FIGURE 1)

-4587

Sample No.	3470	3473	3471	3472	3474
Description	SP 4-1	SP 4-4	SP 4-2	SP 4-3	SP 5-1
ANALIS No.	920107-092	920107-093	920107-094	920107-095	920107-096
CNLSI NO.	923740	923741	923742	923743	923744
Matrix	Soil	Soil	Soil	Soil	Soil
VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TRICHLOROFLUOROMETHANE	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
ACETONE	1.00 U	10.00 U	1.00 U	4.60 U	1.00 U
CARBON DISULFIDE	0.30 U	2.90 U	0.30 U	2.00 U	1.10 U
METHYLENE CHLORIDE	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
2-BUTANONE (MEK)	0.63 U	6.30 U	0.63 U	4.20 U	0.63 U
1,1,1-TRICHLOROETHANE	0.50 U	5.00 U	0.50 U	3.30 U	0.50 U
CARBON TETRACHLORIDE	0.38 U	3.80 U	0.38 U	2.50 U	0.38 U
BENZENE	0.21 U	2.10 U	0.21 U	1.40 U	0.21 U
TRICHLOROETHYLENE	0.54 U	5.40 U	0.54 U	3.60 U	0.54 U
METHYL ISOBUTYL KETONE	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
TOLUENE	0.42 U	0.42 U	0.42 U	2.80 U	0.42 U
CHLOROBENZENE	0.46 U	4.60 U	0.46 U	3.10 U	0.46 U
1,1,2-TRICHLOROETHANE	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
TETRATCHLOROETHYLENE	1.20 U	37.00 U	1.20 U	30.50 U	1.20 U
ETHYLBENZENE	0.21 U	2.10 U	0.21 U	1.40 U	0.21 U
m,p-XYLENES	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
o-XYLENE	0.17 U	1.70 U	0.17 U	1.10 U	0.17 U
o-DICHLOROBENZENE	0.58 U	5.80 U	0.58 U	3.90 U	0.58 U
2-NITROPROPANE	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND
ETHYL ACETATE	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND
SEMI-VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
PYRIDINE	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
o-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROETHANE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
m,p-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
NITROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBUTADIENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,6-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,5-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4-DINITROTOLUENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
PENTACHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
METALS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
ARSENIC	3.30	4.47	7.55	4.86	29.10
BARIUM	53.20	66.30	82.60	73.50	37.00
CADMIUM	0.690 U	0.710 U	0.720 U	0.720 U	0.640 U
CHROMIUM	19.40	12.80	12.70	16.30	6.94
LEAD	41.20	12.30	24.10	13.40	43.90
MERCURY	0.16	0.114 U	0.127 U	0.109 U	0.450 U
SELENIUM	0.900 U	0.670 U	1.56	0.870 U	0.900 U
SILVER	2.260 U	5.03	2.390 U	2.370 U	2.120 U
RADIOLOGICAL	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
Gross Alpha	NR	NR	NR	NR	NR
Gross Beta	NR	NR	NR	NR	NR

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

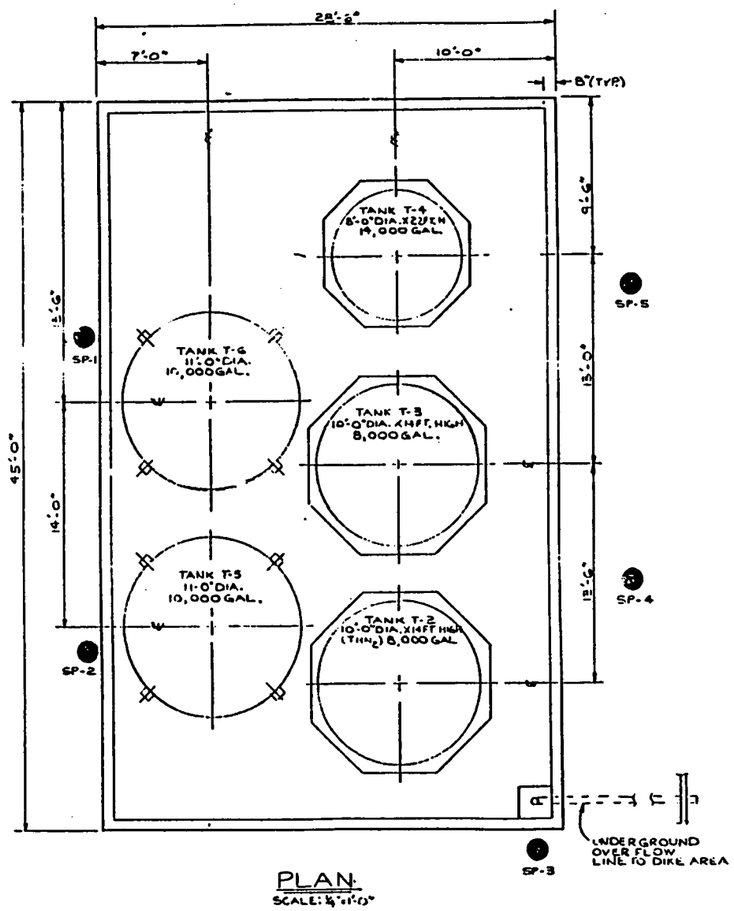
TABLE 4: COMPARISON OF METALS IN SOILS ADJACENT TO TANKS T-5 AND T-6

RCRA METALS (TOTALS)	T-5 /T-6 Area Soil Average Concentration (mg/kg)	Background Soil Average Concentration (mg/kg)	Mann-Whitney U Probability Statistic (no units)	Statistically Significant (Yes or No)
ARSENIC	9.611	4.942	0.205	No
BARIUM	99.931	69.990	0.271	No
CADMIUM	1.135	0.352	0.007	Yes
CHROMIUM	22.128	10.737	0.034	Yes
LEAD	33.489	17.173	0.005	Yes
MERCURY	0.106	0.071	0.578	No
SELENIUM	0.686	0.386	0.120	No
SILVER	1.604	1.258	0.223	No

TABLE 5: CERCLA RESPONSE ACTION SCHEDULES AND STATUS

CERCLA RESPONSE ACTION	CURRENT STATUS/SCHEDULE
Removal Action No. 12 "Safe Shutdown"	Safe Shutdown Activities are scheduled to begin in the area in August 1994.
Removal Action No. 17 "Improved Management of Soils and Debris"	Approved by both OEPA and USEPA in Dec. 1992. Procedure is in-place and will be used for this CPID.
Operable Unit 3 Interim Record of Decision	Estimated date of Draft Proposed Plan to OEPA and USEPA Aug. 1993. Estimated date of Draft Interim ROD to OEPA and USEPA Sept. 1994.
Operable Unit 5 Final Record of Decision	Proposed draft ROD is due OEPA and USEPA July 3, 1995.
Operable Unit 3 Final Record of Decision	Proposed draft ROD is due OEPA and USEPA May 2, 1997.

1 V 0 4 5 8 2



PLAN
SCALE: 1/8" = 1'-0"

● = SOIL SAMPLING LOCATION

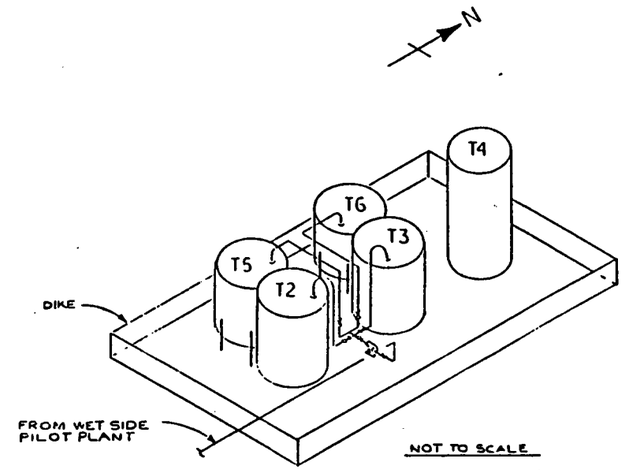


FIGURE - 1
TANK T5 AND T6 LAYOUT & PIPING DIAGRAM

FIGURE-1

NO	REVISIONS	DATE	DWN	BY	APPD	NO	REVISIONS	DATE	DWN	BY	APPD	REF DWG NO	DESCRIPTION
							PROPOSED SAMPLING LOCATIONS						

APPROVALS: CHEMICAL, CIVIL & STR, ELECTRICAL, ENGINEER, INSTRUMENT, MECHANICAL, CHECKED, APPROVED; IRS & T, MAINTENANCE, IND. SAFETY, Q.A., PRODUCTION, FIRE & SAFETY, WASTE MANAGE, DOE SECURITY

WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY

PILOT PLANT — OUTSIDE TANK AREA
THORIUM HOLD TANK
RETENTION DIKE
PLAN

13X	5500	M	00769	1

ENCLOSURE 2

RCRA CLOSURE SAMPLE INDEX
Tanks T-5 & T-6

RELEASE #	DATE	ANALYSIS #	SAMPLE # (92-138A-)	TYPE	DESCRIPTION
1082	1/7/92	920107-083	3478	Liquid	Trip Blank
		920107-084	3479	Liquid	Field Blank
		920107-085	3480	Liquid	Rinseate
		920107-086	3460	Soil	SP 1-1
		920107-087	3461	Soil	SP 1-2
		920107-088	3463	Soil	SP 2-1
		920107-089	3467	Soil	SP 3-1
		920107-090	3466	Soil	SP 3-4 Dup. of 3-1
		920107-091	3468	Soil	SP 3-2
		920107-092	3470	Soil	SP 4-1
		920107-093	3473	Soil	SP 4-4 Dup. of 4-3
		920107-094	3471	Soil	SP 4-2
		920107-095	3472	Soil	SP 4-3
1368	4/15/92	920415-078	4068	Liquid	T-3 1" Inlet Pipe
		920415-079	4069	Liquid	T-3 2" Outlet Pipe
		920415-080	4070	Liquid	Sample #4069 Dup.
		920415-081	4071	Liquid	Transfer Pump
		920415-082	4072	Liquid	Containment Pad Drain Line
		920415-083	4078	Liquid	Field Blank
1386	4/23/92	920423-059	4137	Liquid	Trip Blank
		920423-060	4138	Liquid	Field Blank
		920423-061	4139	Liquid	Water Blank Equip. Blank #2
		920423-062	4130	Liquid	T-6 Rinse #1
		920423-063	4131	Liquid	T-6 Rinse #2
		920423-064	4135	Liquid	T-6 Rinse #3
		920423-065	4136	Liquid	T-6 Rinse #3 Dup.
1388	4/24/92	920424-025	4147	Liquid	Trip Blank
		920424-026	4148	Liquid	Field Blank
		920424-027	4149	Liquid	T-5 Rinse #1
		920424-028	4150	Liquid	T-5 Rinse #2
		920424-029	4153	Liquid	T-5 Rinse #2 Dup.
		920424-030	4151	Liquid	T-5 Rinse #3

RCRA CLOSURE SAMPLE INDEX
Tanks T-5 & T-6

RELEASE #	DATE	ANALYSIS #	SAMPLE # (92-138A-)	TYPE	DESCRIPTION
1396	4/30/92	920430-028	4196	Liquid	Trip Blank
		920430-029	4198	Liquid	Equipment Blank
		920430-054	4197	Liquid	Field Blank
		920430-055	4199	Liquid	Containment Pad Rinse #1
		920430-056	4200	Liquid	Containment Pad Rinse #3
		920430-057	4201	Liquid	Containment Pad Rinse #2 Dup.
		920430-058	4202	Liquid	Containment Pad Rinse #2
		920501-010	4219	Liquid	T-5 Rinse #4

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3478	3479	3480	3460	3461	3463	3467
Description	Trip Blank	Field Blank	Rinseate	SP 1-1	SP 1-2	SP 2-1	SP 3-1
ANALIS No.	920107-83	920107-84	920107-85	920107-86	920107-087	920107-088	920107-089
CNLSI NO.	923731	923732	923733	923734	923735	923736	923737
Matrix	Liquid	Liquid	Liquid	Soil	Soil	Soil	Soil
VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TRICHLOROFLUROROMETHANE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
ACETONE	0.42 U	0.42 U	0.42 U	1.00 U	1.00 U	1.00 U	1.00 U
CARBON DISULFIDE	0.12 U	0.12 U	0.12 U	0.40 U	0.30 U	1.10 U	0.30 U
METHYLENE CHLORIDE	0.10 U	0.10 U	0.10 U	0.25 U	0.25 U	0.25 U	0.25 U
2-BUTANONE (MEK)	0.25 U	0.25 U	0.25 U	0.63 U	0.63 U	0.63 U	0.63 U
1,1,1-TRICHLOROETHANE	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	0.50 U
CARBON TETRACHLORIDE	0.15 U	0.15 U	0.15 U	0.38 U	0.38 U	0.38 U	0.38 U
BENZENE	0.08 U	0.08 U	0.08 U	0.21 U	0.21 U	0.21 U	0.21 U
TRICHLOROETHYLENE	0.22 U	0.22 U	0.22 U	0.54 U	0.54 U	0.54 U	0.54 U
METHYL ISOBUTYL KETONE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
TOLUENE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
CHLOROBENZENE	0.18 U	0.18 U	0.18 U	0.46 U	0.46 U	0.46 U	0.46 U
1,1,2-TRICHLOROETHANE	0.10 U	0.10 U	0.10 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRATCHLOROETHYLENE	0.47 U	0.47 U	0.47 U	1.20 U	1.20 U	1.20 U	1.20 U
ETHYLBENZENE	0.08 U	0.08 U	0.08 U	0.21 U	0.21 U	0.21 U	0.21 U
m,p-XYLENES	0.10 U	0.10 U	0.10 U	0.25 U	0.25 U	0.25 U	0.25 U
o-XYLENE	0.07 U	0.07 U	0.07 U	0.17 U	0.17 U	0.17 U	0.17 U
o-DICHLOROBENZENE	0.23 U	0.23 U	0.23 U	0.58 U	0.58 U	0.58 U	0.58 U
2-NITROPROPANE	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND	ND	ND
ETHYL ACETATE	ND	ND	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND	ND	ND

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

C13

-4582

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3466	3468	3470	3473	3471	3472	3474
Description	SP 3-4	SP 3-2	SP 4-1	SP 4-4	SP 4-2	SP 4-3	SP 5-1
ANALIS No.	920107-090	920107-091	920107-092	920107-093	920107-094	920107-095	920107-096
CNLSI NO.	923738	923739	923740	923741	923742	923743	923744
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TRICHLOROFLUROROMETHANE	0.42 U	0.42 U	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.42 U	0.42 U	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
ACETONE	1.00 U	1.00 U	1.00 U	10.00 U	1.00 U	4.60 U	1.00 U
CARBON DISULFIDE	0.30 U	0.30 U	0.30 U	2.90 U	0.30 U	2.00 U	1.10 U
METHYLENE CHLORIDE	0.25 U	0.25 U	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
2-BUTANONE (MEK)	0.63 U	0.63 U	0.63 U	6.30 U	0.63 U	4.20 U	0.63 U
1,1,1-TRICHLOROETHANE	0.50 U	0.50 U	0.50 U	5.00 U	0.50 U	3.30 U	0.50 U
CARBON TETRACHLORIDE	0.38 U	0.38 U	0.38 U	3.80 U	0.38 U	2.50 U	0.38 U
BENZENE	0.21 U	0.21 U	0.21 U	2.10 U	0.21 U	1.40 U	0.21 U
TRICHLOROETHYLENE	0.54 U	0.54 U	0.54 U	5.40 U	0.54 U	3.60 U	0.54 U
METHYL ISOBUTYL KETONE	0.42 U	0.42 U	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
TOLUENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	2.80 U	0.42 U
CHLOROBENZENE	0.46 U	0.46 U	0.46 U	4.60 U	0.46 U	3.10 U	0.46 U
1,1,2-TRICHLOROETHANE	0.25 U	0.25 U	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
TETRATCHLOROETHYLENE	1.20 U	1.20 U	1.20 U	37.00 U	1.20 U	30.50 U	1.20 U
ETHYLBENZENE	0.21 U	0.21 U	0.21 U	2.10 U	0.21 U	1.40 U	0.21 U
m,p-XYLENES	0.25 U	0.25 U	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
o-XYLENE	0.17 U	0.17 U	0.17 U	1.70 U	0.17 U	1.10 U	0.17 U
o-DICHLOROBENZENE	0.58 U	0.58 U	0.58 U	5.80 U	0.58 U	3.90 U	0.58 U
2-NITROPROPANE	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND	ND	ND
ETHYL ACETATE	ND	ND	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND	ND	ND

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

014

4582

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3478	3479	3480	3460	3461	3463	3467
Description	Trip Blank	Field Blank	Rinseate	SP 1-1	SP 1-2	SP 2-1	SP 3-1
ANALIS No.	920107-83	920107-84	920107-85	920107-86	920107-087	920107-088	920107-089
CNLSI NO.	923731	923732	923733	923734	923735	923736	923737
Matrix	Liquid	Liquid	Liquid	Soil	Soil	Soil	Soil
SEMI-VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
PYRIDINE	0.02 U	0.02 U	0.02 U	2.00 U	2.00 U	2.00 U	2.00 U
o-CRESOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROETHANE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
m,p-CRESOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
NITROBENZENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBUTADIENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,6-TRICHLOROPHENOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,5-TRICHLOROPHENOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4-DINITROTOLUENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBENZENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
PENTACHLOROPHENOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
METALS	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
ARSENIC	0.02 U	0.0200 U	0.0200 U	6.8400	5.7200	20.6000	4.7300
BARIUM	0.20 U	0.2000 U	0.2000 U	18.2000	189.000	75.9000	245.00
CADMIUM	0.02 U	0.0200 U	0.0200 U	0.6900 U	7.5100	0.6000 U	0.7000 U
CHROMIUM	0.05 U	0.0500 U	0.0500 U	5.5600	29.4000	16.1000	75.4000
LEAD	0.08 U	0.0800 U	0.0800 U	32.0000	17.4000	21.1000	88.0000
MERCURY	0.00 U	0.0030 U	0.0030 U	0.1120 U	0.1280 U	0.1280 U	0.5280 U
SELENIUM	0.01 U	0.0100 U	0.0100 U	0.7400 U	0.8300 U	1.8300	0.7600 U
SILVER	0.05 U	0.0500 U	0.0500 U	2.2900 U	2.4600 U	2.0000 U	3.6000
RADIOLOGICAL	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
Gross Alpha	NR	NR	NR	NR	NR	NR	NR
Gross Beta	NR	NR	NR	NR	NR	NR	NR

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

015

F-4587

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3466	3468	3470	3473	3471	3472	3474
Description	SP 3-4	SP 3-2	SP 4-1	SP 4-4	SP 4-2	SP 4-3	SP 5-1
ANALIS No.	920107-090	920107-091	920107-092	920107-093	920107-094	920107-095	920107-096
CNLSI NO.	923738	923739	923740	923741	923742	923743	923744
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
SEMI-VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
PYRIDINE	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
o-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROETHANE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
m,p-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
NITROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXZCHLOROBUTADIENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,6-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,5-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4-DINITROTOLUENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
PENTACHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
METALS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
ARSENIC	3.56	4.58	3.30	4.47	7.55	4.86	29.10
BARIUM	298.00	102.00	53.20	66.30	82.60	73.50	37.00
CADMIUM	0.71 U	0.62 U	0.69 U	0.71 U	0.72 U	0.72 U	0.64 U
CHROMIUM	60.80	26.40	19.40	12.80	12.70	16.30	6.94
LEAD	82.70	23.50	41.20	12.30	24.10	13.40	43.90
MERCURY	0.36 U	0.12 U	0.16	0.11 U	0.13 U	0.11 U	0.45 U
SELENIUM	0.71 U	0.85 U	0.90 U	0.67 U	1.56	0.87 U	0.90 U
SILVER	2.35 U	2.05 U	2.26 U	5.03	2.39 U	2.37 U	2.12 U
RADIOLOGICAL	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
Gross Alpha	NR	NR	NR	NR	NR	NR	NR
Gross Beta	NR	NR	NR	NR	NR	NR	NR

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

016

4582

TABULATED RESULTS FROM T3 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1368)

Sample No.	92-138A-4068	92-138A-4069	92-138A-4070	92-138A-4071	92-138A-4072	92-138A-4078
Description	T3 INLET	T3 OUTLET	T3 OUT-DUP	TRANS. PUMP	PAD DRAIN PIPE	TRIP BLANK
WEMCO ID.	920415-078	920415-079	920415-080	920415-081	920415-082	920415-083
ITAS ID	1990-001	1990-002	1990-003	1990-004	1990-005	1990-006
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
CHLOROMETHANE	10 U	10 U	10 U	100 U	10 U	10 U
VINYL CHLORIDE	10 U	10 U	10 U	100 U	10 U	10 U
CHLOROETHANE	10 U	10 U	10 U	100 U	10 U	10 U
TRICHLOROFLUOROMETHANE	10 U	10 U	10 U	100 U	10 U	10 U
METHYLENE CHLORIDE	10 U	10 U	10 U	100 U	10 U	4 J
ACETONE	10 U	10 U	16 U	210 U	10 U	15 U
CARBON DISULFIDE	5 U	5 U	5 U	50 U	5 U	5 U
1,1-DICHLOROETHENE	5 U	5 U	5 U	50 U	5 U	5 U
trans-1,2-DICHLOROETHENE	5 U	5 U	5 U	50 U	5 U	5 U
1,2-DICHLOROETHANE	5 U	5 U	5 U	50 U	5 U	5 U
2-BUTANONE	10 U	10 U	11 U	100 U	10 U	16 U
1,1,1-TRICHLOROETHANE	5 U	5 U	5 U	620 U	5 U	5 U
CARBON TETRACHLORIDE	5 U	5 U	5 U	50 U	5 U	5 U
TRICHLOROETHENE	5 U	5 U	5 U	50 U	5 U	5 U
1,1,2-TRICHLOROETHANE	5 U	5 U	5 U	50 U	5 U	5 U
BENZENE	5 U	5 U	5 U	50 U	5 U	5 U
4-METHYL-2-PENTANONE	10 U	10 U	10 U	100 U	10 U	10 U
TETRACHLOROETHYLENE	5 U	5 U	5 U	50 U	5 U	5 U
TOLUENE	5 U	5 U	5 U	50 U	5 U	2 J
CHLOROBENZENE	2 J	1 J	1 J	50 U	2 J	5 U
ETHYLBENZENE	5 U	5 U	5 U	50 U	5 U	5 U
XYLENES (TOTAL)	5 U	5 U	5 U	50 U	5 U	5 U

(B) Analyte detected in control blanl
(J) Estimated value
(NR) Not Reported
(R) Rejected
(U) Not detected at concentration listed

017

TABULATED RESULTS FROM T3 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1368)

Sample No.	92-138A-4068	92-138A-4069	92-138A-4070	92-138A-4071	92-138A-4072	92-138A-4078
Description	T3 INLET	T3 OUTLET	T3 OUT-DUP	TRANS. PUMP	PAD DRAIN PIPE	TRIP BLANK
WEMCO ID.	920415-078	920415-079	920415-080	920415-081	920415-082	920415-083
ITAS ID	1990-001	1990-002	1990-003	1990-004	1990-005	1990-006
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
SEMI-VOLATILE ORGANICS:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	10 U	10 U	10 U	NR	10 U	10 U
3-METHYLPHENOL	10 U	10 U	10 U	NR	10 U	10 U
4-METHYLPHENOL	10 U	10 U	10 U	NR	10 U	10 U
1,4-DICHLOROBENZENE	10 U	10 U	10 U	NR	10 U	10 U
2,4-DINITROTOLUENE	10 U	10 U	10 U	NR	10 U	10 U
HEXACHLOROBENZENE	10 U	10 U	10 U	NR	10 U	10 U
HEXACHLORO-1,3-BUTADIENE	10 U	10 U	10 U	NR	10 U	10 U
HEXACHLOROETHANE	10 U	10 U	10 U	NR	10 U	10 U
NITROBENZENE	10 U	10 U	10 U	NR	10 U	10 U
PENTACHLOROPHENOL	52 U	52 U	52 U	NR	52 U	52 U
PYRIDINE	10 U	10 U	10 U	NR	10 U	10 U
2,4,5-TRICHLOROPHENOL	10 U	10 U	10 U	NR	10 U	10 U
2,4,6-TRICHLOROPHENOL	10 U	10 U	10 U	NR	10 U	10 U
METALS (TOTAL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U
BARIUM	0.01000 U	0.01000 U	0.01000 U	2.36000	0.01000 U	0.01000 U
CADMIUM	0.01000 U	0.01000 U	0.01000 U	0.03000	0.01000 U	0.01000 U
CHROMIUM	0.02500 U	0.02500 U	0.02500 U	109.000	0.02500 U	0.02500 U
LEAD	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10000 U
MERCURY	0.00020 U	0.00024	0.00025	0.01500	0.00020 U	0.00020 U
SELENIUM	0.50000 U	0.50000 U	0.50000 U	4.02000	0.50000 U	0.50000 U
SILVER	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U

(B) Analyte detected in control blank
(J) Estimated value
(NR) Not Reported
(R) Rejected
(U) Not detected at concentration listed

TABULATED RESULTS FROM T3 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1368)

Sample No.	92-138A-4068		92-138A-4069		92-138A-4070		92-138A-4071		92-138A-4072		92-138A-4078	
Description	T3 INLET		T3 OUTLET		T3 OUT-DUP		TRANS. PUMP		PAD DRAIN PIPE		TRIP BLANK	
WEMCO ID.	920415-078		920415-079		920415-080		920415-081		920415-082		920415-083	
ITAS ID	1990-001		1990-002		1990-003		1990-004		1990-005		1990-006	
Matrix	Liquid		Liquid		Liquid		Liquid		Liquid		Liquid	
METALS (TCLP)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
ARSENIC	0.50000	U	0.50000	U	0.50000	U	0.50000	U	0.50000	U	0.50000	U
BARIUM	0.36100	R	0.60600	R	0.46100	R	1.95600		0.81200		0.01600	R
CADMIUM	0.01000	U	0.01000	U	0.01000	U	0.01600		0.01000	U	0.01000	U
CHROMIUM	0.02500	U	3.62000		3.63700		67.0300		0.02500	U	0.02500	U
LEAD	0.10000	U	0.10000	U	0.10000	U	0.10000	U	0.10000	U	0.10000	U
MERCURY	0.00020	U	0.00020	U	0.00020	U	0.00740		0.00020	U	0.00020	U
SELENIUM	0.50000	U	0.50000	U	0.50000	U	2.53000		0.50000	U	0.50000	U
SILVER	0.02000	U	0.02000	U	0.02000	U	0.02000	U	0.02000	U	0.02000	U
RADIOLOGICAL	(pCi/mL)		(pCi/mL)		(pCi/mL)		(pCi/mL)		(pCi/mL)		(pCi/mL)	
Gross Alpha	1.28		1125.00		1093.00		2184.00		0.08	J	0.06	
Gross Beta	0.92		769.40		764.90		2033.00		0.18	J	0.15	

(B) Analyte detected in control blank
(J) Estimated value
(NR) Not Reported
(R) Rejected
(U) Not detected at concentration listed

019

TABULATED RESULTS FROM TANK T6 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1386)

Sample No. 92-138A-	4137	4138	4139	4130	4131	4135	4136
Description	Trip Blank	Field Blank	Blank-WBE	T6 R-1	T6-R2	T6-R3	R3(DUP)
ANALIS No.	920423-59	920423-60	920423-61	920423-62	920423-63	920423-64	920423-65
CNLSI NO.	924567	924568	924569	924570	924567	924567	924567
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
TRICHLOROFLUROROMETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
ACETONE	0.42 U	0.42 U	0.42 U	0.53 U	0.72	0.42 U	0.42 U
CARBON DISULFIDE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
METHYLENE CHLORIDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
2-BUTANONE (MEK)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,1-TRICHLOROETHANE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
CARBON TETRACHLORIDE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BENZENE	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TRICHLOROETHYLENE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
METHYL ISOBUTYL KETONE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
TOLUENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
CHLOROBENZENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
TETRATCHLOROETHYLENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
ETHYL BENZENE	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
m,p-XYLENES	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
o-XYLENE	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
o-DICHLOROBENZENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
2-NITROPROPANE	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND	ND	ND
ETHYL ACETATE	ND	ND	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND	ND	ND

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected In Control Blank
(U) Analyte Was Not Detected At Listed Detection Limit

020

TABULATED RESULTS FROM TANK T6 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1386)

Sample No. 92-138A-	4137	4138	4139	4130	4131	4135	4136
Description	Trip Blank	Field Blank	Blank-WBE	T6 R-1	T6-R2	T6-R3	R3(DUP)
ANALIS No.	920423-59	920423-60	920423-61	920423-62	920423-63	920423-64	920423-65
CNLSI NO.	924567	924568	924569	924570	924567	924567	924567
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
SEMI-VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
PYRIDINE	NR	0.02 U	0.02 U	0.4 U	0.2 U	0.2 U	0.2 U
o-CRESOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
HEXACHLOROETHANE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
m,p-CRESOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
NITROBENZENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
HEXACHLOROBUTADIENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
2,4,6-TRICHLOROPHENOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
2,4,5-TRICHLOROPHENOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
2,4-DINITROTOLUENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
HEXACHLOROBENZENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
PENTACHLOROPHENOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(ND) Analyte Was Not Detected (Laboratory Qualifier = U)

021

-4587

TABULATED RESULTS FROM TANK T5 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1388)

Sample No.	4147	4148	4149	4150	4153	4151
Description	Trip Blank	Field Blank	T5-R1	T5-R2	T5-R2d	T5-R3
ANALIS No.	920424-025	920424-026	920424-027	920424-028	920424-029	920424-030
ITAS ID	2004-001	2004-002	2004-003	2004-004	2004-005	2004-006
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
CHLOROMETHANE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
VINYL CHLORIDE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
CHLOROETHANE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
TRICHLOROFLUOROMETHANE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
METHYLENE CHLORIDE	2 J	1 J	1000 U J	2000 U J	2000 U J	2500 U J
ACETONE	22 J	7 J	1000 U J	2000 U J	2000 U J	2500 U J
CARBON DISULFIDE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
1,1-DICHLOROETHENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
trans-1,2-DICHLOROETHENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
1,2-DICHLOROETHANE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
2-BUTANONE	10 U J	20 U J	1000 U J	2000 U J	1030 J	2500 U J
1,1,1-TRICHLOROETHANE	5 U J	5 U J	16000 J	32000 J	29000 J	44000 J
CARBON TETRACHLORIDE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
TRICHLOROETHENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
1,1,2-TRICHLOROETHANE	5 U J	5 U J	250 J	350 J	330 J	410 J
BENZENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
4-METHYL-2-PENTANONE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
TERTACHLOROETHYLENE	5 U J	5 U J	290 J	460 J	360 J	500 J
TOLUENE	5 U J	1 J	670 J	1000 U J	1000 U J	1200 J
CHLOROBENZENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
ETHYLBENZENE	5 U J	5 U J	400 J	620 J	480 J	670 J
XYLENES (TOTAL)	5 U J	5 U J	2800 J	4000 J	3300 J	4500 J

(B) Analyte Detected in Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitation limit

022

-4587

TABULATED RESULTS FROM TANK T5 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1388)

Sample No.	4147	4148	4149	4150	4153	4151
Description	Trip Blank	Field Blank	T5-R1	T5-R2	T5-R2d	T5-R3
ANALIS No.	920424-025	920424-026	920424-027	920424-028	920424-029	920424-030
ITAS ID	2004-001	2004-002	2004-003	2004-004	2004-005	2004-006
Matrix	Liquid	Liquid	Liquid	0.00	Liquid	Liquid
SEMI-VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
3-METHYLPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
4-METHYLPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	19.63 J	20.56 J
1,4-DICHLOROBENZENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
2,4-DINITROTOLUENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
HEXACHLOROBENZENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
HEXACHLORO-1,3-BUTADIENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
HEXACHLOROETHANE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
NITROBENZENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
PENTACHLOROPHENOL	NR	54.00 U J	54.00 U J	53.00 U J	52.00 U J	52.00 U J
PYRIDINE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
2,4,5-TRICHLOROPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
2,4,6-TRICHLOROPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
METALS (Totals)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U
BARIUM	NR	0.01000 U	1.34100	0.17100	0.17100	0.20800
CADMIUM	NR	0.01000 U	0.35100	0.12900	0.13900	0.09800
CHROMIUM	NR	0.02500 U	1.97200	0.50300	0.51100	0.40500
LEAD	NR	0.10000 U	6.15600	0.31600	0.23800	0.27900
MERCURY	NR	0.00020 U	0.00034	0.00020 U	0.00020 U	0.00020 U
SELENIUM	NR	0.50000 U	0.78000	0.50000 U	0.50000 U	0.50000 U
SILVER	NR	0.02000 U	0.10000	0.02000 U	0.02000 U	0.02000 U
METALS (TCLP)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U
BARIUM	NR	NR	0.47400 R	0.33500 R	0.44800 R	0.76000 R
CADMIUM	NR	NR	0.33100	0.13100	0.13400	0.10100
CHROMIUM	NR	NR	0.94600	0.45800	0.48500	0.40200
LEAD	NR	NR	0.15300	0.09300	0.08800	0.06800
MERCURY	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U
SELENIUM	NR	NR	0.07400	0.50000 U	0.50000 U	0.50000 U
SILVER	NR	NR	0.02800	0.02000 U	0.00800	0.02000 U

023

458 2

TABULATED RESULTS FROM TANK T5 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1388)

Sample No.	4147	4148	4149	4150	4153	4151
Description	Trip Blank	Field Blank	T5-R1	T5-R2	T5-R2d	T5-R3
ANALIS No.	920424-025	920424-026	920424-027	920424-028	920424-029	920424-030
ITAS ID	2004-001	2004-002	2004-003	2004-004	2004-005	2004-006
Matrix	Liquid	Liquid	Liquid	0.00	Liquid	Liquid
RADIOLOGICAL	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)
Gross Alpha	0.06	0.12	29.25	23.50	25.90	23.63
Gross Beta	0.20	0.22	79.87	58.45	59.17	54.63

(B) Analyte Detected in Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitation limit

024

4582

TABULATED RESULTS FROM CONTAINMENT PAD RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1396)

Sample No.	4197	4198	4199	4219	4200	4201	4202	4196
Description	Field Blank	Equip. Blank	Pad Rinse 1	T5-R4 (Tank 5)	Pad Rinse 3	Pad Rinse 2d	Pad Rinse 2	Trip Blank
ANALIS No.	920430-054	920430-029	920430-055	920501-010	920430-056	920430-057	920430-058	920430-028
ITAS ID	2018-001	2018-002	2018-003	2018-004	2018-005	2018-006	2018-007	2018-008
Matrix	Water	Water	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
CHLOROMETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
VINYL CHLORIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
CHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
TRICHLOROFLUOROMETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
METHYLENE CHLORIDE	6 U	6 U	5 U	5 U	5 U	5 U	5 U	7
ACETONE	2 J	1 J	10 U	10 U	10 U	10 U	10 U	2 J
CARBON DISULFIDE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-DICHLOROETHENE	5 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U
trans-1,2-DICHLOROETHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-DICHLOROETHANE	5 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U
2-BUTANONE	8 J	2 J	10 U	10 U	10 U	10 U	10 U	12 U
1,1,1-TRICHLOROETHANE	5 U	5 U	5 U	1200	5 U	1 J	1 J	5 U
CARBON TETRACHLORIDE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
TRICHLOROETHENE	5 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U
1,1,2-TRICHLOROETHANE	5 U	5 U	5 U	43	5 U	5 U	5 U	5 U
BENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	10 U	10 U	10 U	1 J	10 U	10 U	10 U	10 U
TERTACHLOROETHYLENE	5 U	5 U	5 U	13	5 U	5 U	5 U	5 U
TOLUENE	5 U	5 U	5 U	70	5 U	5 U	5 U	1 J
CHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ETHYLBENZENE	5 U	5 U	5 U	27	5 U	5 U	5 U	5 U
XYLENES (TOTAL)	5 U	5 U	5 U	190	5 U	5 U	5 U	5 U

(B) Analyte Detected in Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitative limit

025

-4582

TABULATED RESULTS FROM CONTAINMENT PAD RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1396)

Sample No.	4197	4198	4199	4219	4200	4201	4202	4196
Description	Field Blank	Equip. Blank	Pad Rinse 1	T5-R4 (Tank 5)	Pad Rinse 3	Pad Rinse 2d	Pad Rinse 2	Trip Blank
ANALIS No.	920430-054	920430-029	920430-055	920501-010	920430-056	920430-057	920430-058	920430-028
ITAS ID	2018-001	2018-002	2018-003	2018-004	2018-005	2018-006	2018-007	2018-008
Matrix	Water	Water	Water	Water	Water	Water	Water	Water
SEMI-VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
3-METHYLPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
4-METHYLPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
1,4-DICHLOROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
2,4-DINITROTOLUENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
HEXACHLOROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
HEXACHLORO-1,3-BUTADIENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
HEXACHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
NITROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
PENTACHLOROPHENOL	50 U	50 U	51 U	51 U	52 U	55 U	50 U	NR
PYRIDINE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
2,4,5-TRICHLOROPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
2,4,6-TRICHLOROPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
METALS (Totals)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
BARIUM	0.01000 U	0.01200	0.04500 R	0.01000 U	0.09000 R	0.03400 R	0.04700 R	NR
CADMIUM	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	NR
CHROMIUM	0.02500 U	0.02500 U	0.02500 U	0.02500 U	0.03900	0.02500 U	0.02500 U	NR
LEAD	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10900	0.10000 U	0.10000 U	NR
MERCURY	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NR
SELENIUM	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
SILVER	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	NR
METALS (TCLP)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
BARIUM	NR	NR	0.22100 R	0.25600 R	0.15800 R	0.18300 R	0.20400 R	NR
CADMIUM	NR	NR	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	NR
CHROMIUM	NR	NR	0.02500 U	0.02500 U	0.02500 U	0.02500 U	0.02500 U	NR
LEAD	NR	NR	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10000 U	NR
MERCURY	NR	NR	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NR
SELENIUM	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
SILVER	NR	NR	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	NR
RADIOLOGICAL	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)
Gross Alpha	0.06	0.06	0.13 J	0.13 J	0.03 J	0.07 J	7.21	0.01
Gross Beta	0.18	0.18	1.10 J	1.13 J	1.23 J	0.93 J	4.29	0.18

(B) Analyte Detected In Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitative limit

026

0 45882

Release #1082

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3478	3479	3480	3460	3461	3463	3467
Description	Trip Blank	Field Blank	Rinseate	SP 1-1	SP 1-2	SP 2-1	SP 3-1
ANALIS No.	920107-83	920107-84	920107-85	920107-86	920107-087	920107-088	920107-089
CNLSI NO.	923731	923732	923733	923734	923735	923736	923737
Matrix	Liquid	Liquid	Liquid	Soil	Soil	Soil	Soil
VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TRICHLOROFLUROROMETHANE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
ACETONE	0.42 U	0.42 U	0.42 U	1.00 U	1.00 U	1.00 U	1.00 U
CARBON DISULFIDE	0.12 U	0.12 U	0.12 U	0.40 U	0.30 U	1.10 U	0.30 U
METHYLENE CHLORIDE	0.10 U	0.10 U	0.10 U	0.25 U	0.25 U	0.25 U	0.25 U
2-BUTANONE (MEK)	0.25 U	0.25 U	0.25 U	0.63 U	0.63 U	0.63 U	0.63 U
1,1,1-TRICHLOROETHANE	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	0.50 U
CARBON TETRACHLORIDE	0.15 U	0.15 U	0.15 U	0.38 U	0.38 U	0.38 U	0.38 U
BENZENE	0.08 U	0.08 U	0.08 U	0.21 U	0.21 U	0.21 U	0.21 U
TRICHLOROETHYLENE	0.22 U	0.22 U	0.22 U	0.54 U	0.54 U	0.54 U	0.54 U
METHYL ISOBUTYL KETONE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
TOLUENE	0.17 U	0.17 U	0.17 U	0.42 U	0.42 U	0.42 U	0.42 U
CHLOROBENZENE	0.18 U	0.18 U	0.18 U	0.46 U	0.46 U	0.46 U	0.46 U
1,1,2-TRICHLOROETHANE	0.10 U	0.10 U	0.10 U	0.25 U	0.25 U	0.25 U	0.25 U
TETRATCHLOROETHYLENE	0.47 U	0.47 U	0.47 U	1.20 U	1.20 U	1.20 U	1.20 U
ETHYLBENZENE	0.08 U	0.08 U	0.08 U	0.21 U	0.21 U	0.21 U	0.21 U
m,p-XYLENES	0.10 U	0.10 U	0.10 U	0.25 U	0.25 U	0.25 U	0.25 U
o-XYLENE	0.07 U	0.07 U	0.07 U	0.17 U	0.17 U	0.17 U	0.17 U
o-DICHLOROBENZENE	0.23 U	0.23 U	0.23 U	0.58 U	0.58 U	0.58 U	0.58 U
2-NITROPROPANE	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND	ND	ND
ETHYL ACETATE	ND	ND	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND	ND	ND

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected In Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

027

1-4587

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3466	3468	3470	3473	3471	3472	3474
Description	SP 3-4	SP 3-2	SP 4-1	SP 4-4	SP 4-2	SP 4-3	SP 5-1
ANALIS No.	920107-090	920107-091	920107-092	920107-093	920107-094	920107-095	920107-096
CNLSI NO.	923738	923739	923740	923741	923742	923743	923744
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
TRICHLOROFLUROROMETHANE	0.42 U	0.42 U	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.42 U	0.42 U	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
ACETONE	1.00 U	1.00 U	1.00 U	10.00 U	1.00 U	4.60 U	1.00 U
CARBON DISULFIDE	0.30 U	0.30 U	0.30 U	2.90 U	0.30 U	2.00 U	1.10 U
METHYLENE CHLORIDE	0.25 U	0.25 U	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
2-BUTANONE (MEK)	0.63 U	0.63 U	0.63 U	6.30 U	0.63 U	4.20 U	0.63 U
1,1,1-TRICHLOROETHANE	0.50 U	0.50 U	0.50 U	5.00 U	0.50 U	3.30 U	0.50 U
CARBON TETRACHLORIDE	0.38 U	0.38 U	0.38 U	3.80 U	0.38 U	2.50 U	0.38 U
BENZENE	0.21 U	0.21 U	0.21 U	2.10 U	0.21 U	1.40 U	0.21 U
TRICHLOROETHYLENE	0.54 U	0.54 U	0.54 U	5.40 U	0.54 U	3.60 U	0.54 U
METHYL ISOBUTYL KETONE	0.42 U	0.42 U	0.42 U	4.20 U	0.42 U	2.80 U	0.42 U
TOLUENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	2.80 U	0.42 U
CHLOROBENZENE	0.46 U	0.46 U	0.46 U	4.60 U	0.46 U	3.10 U	0.46 U
1,1,2-TRICHLOROETHANE	0.25 U	0.25 U	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
TETRATCHLOROETHYLENE	1.20 U	1.20 U	1.20 U	37.00 U	1.20 U	30.50 U	1.20 U
ETHYLBENZENE	0.21 U	0.21 U	0.21 U	2.10 U	0.21 U	1.40 U	0.21 U
m,p-XYLENES	0.25 U	0.25 U	0.25 U	2.50 U	0.25 U	1.70 U	0.25 U
o-XYLENE	0.17 U	0.17 U	0.17 U	1.70 U	0.17 U	1.10 U	0.17 U
o-DICHLOROBENZENE	0.58 U	0.58 U	0.58 U	5.80 U	0.58 U	3.90 U	0.58 U
2-NITROPROPANE	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND	ND	ND
ETHYL ACETATE	ND	ND	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND	ND	ND

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected In Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

028

-4582

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3478	3479	3480	3460	3461	3463	3467
Description	Trip Blank	Field Blank	Rinseate	SP 1-1	SP 1-2	SP 2-1	SP 3-1
ANALIS No.	920107-83	920107-84	920107-85	920107-86	920107-087	920107-088	920107-089
CNLSI NO.	923731	923732	923733	923734	923735	923736	923737
Matrix	Liquid	Liquid	Liquid	Soil	Soil	Soil	Soil
SEMI-VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
PYRIDINE	0.02 U	0.02 U	0.02 U	2.00 U	2.00 U	2.00 U	2.00 U
o-CRESOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROETHANE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
m,p-CRESOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
NITROBENZENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBUTADIENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,6-TRICHLOROPHENOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,5-TRICHLOROPHENOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4-DINITROTOLUENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBENZENE	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
PENTACHLOROPHENOL	0.01 U	0.01 U	0.01 U	1.00 U	1.00 U	1.00 U	1.00 U
METALS	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
ARSENIC	0.02 U	0.0200 U	0.0200 U	6.8400	5.7200	20.6000	4.7300
BARIUM	0.20 U	0.2000 U	0.2000 U	18.2000	189.000	75.9000	245.00
CADMIUM	0.02 U	0.0200 U	0.0200 U	0.6900 U	7.5100	0.6000 U	0.7000 U
CHROMIUM	0.05 U	0.0500 U	0.0500 U	5.5600	29.4000	16.1000	75.4000
LEAD	0.08 U	0.0800 U	0.0800 U	32.0000	17.4000	21.1000	88.0000
MERCURY	0.00 U	0.0030 U	0.0030 U	0.1120 U	0.1280 U	0.1280 U	0.5280 U
SELENIUM	0.01 U	0.0100 U	0.0100 U	0.7400 U	0.8300 U	1.8300	0.7600 U
SILVER	0.05 U	0.0500 U	0.0500 U	2.2900 U	2.4600 U	2.0000 U	3.6000
RADIOLOGICAL	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
Gross Alpha	NR	NR	NR	NR	NR	NR	NR
Gross Beta	NR	NR	NR	NR	NR	NR	NR

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

029

- 4582

TABULATED RESULTS FROM SOIL SAMPLING FOR T5/T6 CLOSURE (RELEASE 1082)

Sample No.	3466	3468	3470	3473	3471	3472	3474
Description	SP 3-4	SP 3-2	SP 4-1	SP 4-4	SP 4-2	SP 4-3	SP 5-1
ANALIS No.	920107-090	920107-091	920107-092	920107-093	920107-094	920107-095	920107-096
CNLSI NO.	923738	923739	923740	923741	923742	923743	923744
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
SEMI-VOLATILE ORGANICS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
PYRIDINE	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
o-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROETHANE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
m,p-CRESOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
NITROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXZCHLOROBUTADIENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,6-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4,5-TRICHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,4-DINITROTOLUENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
HEXACHLOROBENZENE	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
PENTACHLOROPHENOL	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
METALS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
ARSENIC	3.56	4.58	3.30	4.47	7.55	4.86	29.10
BARIUM	298.00	102.00	53.20	66.30	82.60	73.50	37.00
CADMIUM	0.71 U	0.62 U	0.69 U	0.71 U	0.72 U	0.72 U	0.64 U
CHROMIUM	60.80	26.40	19.40	12.80	12.70	16.30	6.94
LEAD	82.70	23.50	41.20	12.30	24.10	13.40	43.90
MERCURY	0.36 U	0.12 U	0.16	0.11 U	0.13 U	0.11 U	0.45 U
SELENIUM	0.71 U	0.85 U	0.90 U	0.67 U	1.56	0.87 U	0.90 U
SILVER	2.35 U	2.05 U	2.26 U	5.03	2.39 U	2.37 U	2.12 U
RADIOLOGICAL	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
Gross Alpha	NR	NR	NR	NR	NR	NR	NR
Gross Beta	NR	NR	NR	NR	NR	NR	NR

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected In Control Blank
(U) Analyte Was Not Detected at Listed Detection Limit

030

OFFSITE DATA REVIEW CHECKLIST

REVIEWER'S NAME: Larry Evans **RELEASE NO:** 1082 **DATE REVIEWED:** 2/3/92

YES	NO	N/A	
X			A) Holding times were met. If no, explain:
X			B) All samples are included in release. If no, explain:
X			C) All determinations are included in release. If no, explain:
X			D) Results have been checked for reasonableness. The data has been found to be reasonable. If no, explain:
X			E) Samples are included in QC lot tables. If no, explain:
X			F) Blanks were analyzed and results are within acceptable limits. If no, explain: A slight amount of Barium in the TCLP prep blank.
			G) Internal QC check standards (reference standards, ICS, etc) were analyzed and are within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1082

YES	NO	N/A	
	X		H) Matrix spikes were analyzed and are within acceptable limits. If no, explain: The Silver spike recovery on sample 923694 is outside QC limits. The Arsenic, Barium, Chromium and Lead spike recoveries on CNLS sample 923736 were outside control limits. The Arsenic post digestion spike recoveries of 920107-086, 920107-093 and 920107-096 were outside control limits. The Selenium post digestion spike recovery on 920107-086, -087,-089,-090,-091,-092,-093,-095,and 920107-096 were outside QC acceptance limits.
X			I) Matrix spike duplicates were analyzed (organics) and are within acceptable limits. If no, explain:
	X		J) Surrogates were analyzed for all VOA/BNA samples and the results are within acceptable limits. If no, explain: Surrogates diluted out of recovery range on the volatile analysis of sample # 920107-093 and # 920107-095.
	X		K) Duplicates were analyzed (inorganics) and are within acceptable limits. If no, explain: The RPD for Arsenic, Barium, Chromium and Lead duplicate analyses for CNLS # 92376 exceeded the 20% upper control limit.
		X	L) Blind Quality Control samples were analyzed with the release and all results were within acceptable limits. (For long term tracking purposes only.)
		X	Results are attached.
		X	M) The Calculated Precision Terms of controls is within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1082

___ ___ X N) The Calculated Accuracy Terms of controls is within acceptable limits.
If no, explain: _____

X ___ ___ O) Overall Quality Control of release is acceptable.
If no, explain course of action taken: _____

P) Sample numbers included in release:

920107-083	920107-084	920107-085	920107-086	920107-087
920107-088	920107-089	920107-090	920107-091	920107-092
920107-093	920107-094	920107-095	920107-096	

Q) Copies of results are to be sent to:
L. Love and 2 copies to Sallie Lund

R) Project Name:
"RCRA Closure Plan T5/T6 Sample Plan 92-138"

SIGNATURE OF DATA REVIEWER: Lorry Evans
DATE OF FINAL REVIEW: 2/7/92

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT COMPANY OF OHIO
Analytical Laboratories
Sample and Data Management

REQUEST FOR ANALYSES/OFF-SITE CUSTODY TRANSFER RECORD

Receiving Laboratory: CNLS
25 Woods Lake Road
Greenville, SC 29607

Release #: 1082
Purchase Order #: 4-13910
Page 1 of 3

Sample Type: Depleted Contaminated Liquid and Soil

ITEM #	CODE	PHASE	WMCO LAB NO.	ANALYSIS REQUESTED	DATE SAMPLED	NO. OF CONTAINERS
923731 01.	J	L	920107-083	TOTAL Metals	1-7-1992	1-1qt Jar
02.				TOTAL Semi VOA	"	1-1gal Jar
03.				TOTAL VOA	"	3-40ml Vials
-732 04.	J	L	-084	TOTAL Metals	"	1-1qt Jar
05.				TOTAL Semi VOA	"	1-1gal Jar
06.				TOTAL VOA	"	3-40ml Vials
-733 07.	J	L	-085	TOTAL Metals	"	1-1qt Jar
08.				TOTAL Semi VOA	"	1-1gal Jar
09.				TOTAL VOA	"	3-40mL Vials
-734 10.	S	O	-086	TOTAL Metals	"	1-1pt Jar
11.				TOTAL Semi VOA	"	
12.				TOTAL VOA	"	2-4oz Jars
-735 13.	S	O	-087	TOTAL Metals	"	1-1pt Jar
14.				TOTAL Semi VOA	"	
15.				TOTAL VOA	"	2-4ozJars
-736 16.	S	O	-088	TOTAL Metals	"	1-1pt Jar
17.				TOTAL Semi VOA	"	
18.				TOTAL VOA	"	2-4oz Jars
-737 19.	S	O	-089	TOTAL Metals	"	1-1pt Jar
20.				TOTAL Semi VOA	"	

*** PHASES: O = Solid L = Liquid S = Sludge (Mixture of both) ***

WMCO: The container(s) in which the above samples were packaged were sealed by William L Hunt on 1-8-1992.

RECEIVER: I certify that the seal(s) on the container(s) in which the above samples were packaged were intact when received.

Signature Don Scott Date 1-09-92

NOTE: If the seal(s) were not intact, please contact D. J. Smith at (513) 738-9161 as soon as possible and send a nonconformance report to D. J. Smith. Please return this form to Analytical Data Review & Reporting in the envelope provided.

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT COMPANY OF OHIO 4587
Analytical Laboratories
Sample and Data Management

REQUEST FOR ANALYSES/OFF-SITE CUSTODY TRANSFER RECORD

Receiving Laboratory: CNLS
25 Woods Lake Road
Greenville, SC 29607

Release #: 1082
Purchase Order #: 4-13910
Page 2 of 3

Sample Type: Depleted Contaminated Soil

	ITEM #	CODE	PHASE	WMCO LAB NO.	ANALYSIS REQUESTED	DATE SAMPLED	NO. OF CONTAINERS
	01.	S	0	920107-089	TOTAL VOA	1-7-1992	2-4ozJars
923938	02.	S	0	-090	TOTAL Metals	"	1-1pt Jar
	03.				TOTAL Semi VOA	"	
	04.				TOTAL VOA	"	2-4o z Jars
-739	05.	S	0	-091	TOTAL Metals	"	1-1pt Jar
	06.				TOTAL Semi VOA	"	
	07.				TOTAL VOA	"	2-4oz Jars
-740	08.	S	0	-092	TOTAL Metals	"	1-1pt Jar
	09.				TOTAL Semi VOA	"	
	10.				TOTAL VOA	"	2-4o zJars
-741	11.	S	0	-093	TOTAL Metals	"	1-1pt Jar
	12.				TOTAL Semi VOA	"	
	13.				TOTAL VOA	"	2-4oz Jars
-742	14.	S	0	-094	TOTAL Metals	"	1-1pt Jar
	15.				TOTAL Semi VOA	"	
	16.				TOTAL VOA	"	2-4ozJars
-743	17.	S	0	-095	TOTAL Metals	"	1-1pt Jar
	18.				TOTAL Semi VOA	"	
	19.				TOTAL VOA	"	2-4oz Jars
-744	20.	S	0	-096	TOTAL Metals	"	1-1pt Jar

*** PHASES: 0 = Solid L = Liquid S = Sludge (Mixture of both) ***

WMCO: The container(s) in which the above samples were packaged were sealed by William J. Hay on 1-8-1992.

RECEIVER: I certify that the seal(s) on the container(s) in which the above samples were packaged were intact when received.

Signature [illegible] Date 1-09-92

NOTE: If the seal(s) were not intact, please contact D. J. Smith at (513) 738-9161 as soon as possible and send a nonconformance report to D. J. Smith. Please return this form to Analytical Data Review & Reporting in the envelope provided.

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT COMPANY OF OHIO
Analytical Laboratories
Sample and Data Management

-4587

REQUEST FOR ANALYSES/OFF-SITE CUSTODY TRANSFER RECORD

Receiving Laboratory: CNLS
25 Woods Lake Road
Greenville, SC 29607

Release #: 1082
Purchase Order #: 4-13910
Page 3 of 3

Sample Type: Depleted Contaminated Soil

ITEM #	CODE	PHASE	WMCO LAB NO.	ANALYSIS REQUESTED	DATE SAMPLED	NO. OF CONTAINERS
923749 01.	S	O	920107-096	TOTAL Semi VOA	1-7-1992	
02.				TOTAL VOA	"	2-4oz Jars
03.						
04.						
05.						
06.						
07.						
08.						
09.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.			****(2 week turnaround time needed for the following)****			

*** PHASES: O = Solid L = Liquid S = Sludge (Mixture of both) ***

WMCO: The container(s) in which the above samples were packaged were sealed by [signature] on 1-8-1992.

RECEIVER: I certify that the seal(s) on the container(s) in which the above samples were packaged were intact when received.

Signature [signature] Date 1-09-92

NOTE: If the seal(s) were not intact, please contact D. J. Smith at (513) 738-9161 as soon as possible and send a nonconformance report to D. J. Smith. Please return this form to Analytical Data Review & Reporting in the envelope provided.

WESTINGHOUSE MATERIALS COMPANY OF OHIO

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Control #: ___ . ___

ANALYSIS REQUEST / CUSTODY RECORD

Pg 1 of 2

PROJECT: RCRA CLOSURE PLAN T5/T6	CLIENT: SITE MEDIA SAMPLING	TECHNICIAN/EXT.: D. BACK 8964
PROJECT #: ———	CLIENT CONTACT: L. LOVE	CHARGE #: RZP-01
PE/PM: S. LUND	PHONE: 6727	LOT MARK CODE: ——— DB 1/7/92.

	SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS) TABLE 1	2	3	4	5	6
92	C138B-3478	920107-083	TRIP BLANK	LIQUID	1/7/92 / 0940	GLASS WTL / COOL 4C	1 GALLON 1 LITER 1 PINT 1-4 OZ 3/40ml	DB 1/7	X	DB 1/7	X	X	X
92	3479	084	FIELD BLANK	DB 1/7/92	1026		DB 1/7/92		X		X	X	X
92	3480	085	RINSATE	LIQUID	1235		1 GAL 1 LITER 1 PINT 1-4 OZ 3/40ml		X		X	X	X
92	3460	086	SP-1-1	SOIL	1043		2 PINTS 4-4 OZ		X		X	X	X
92	3461	087	SP-1-2	SOIL	1100		2 PINTS 4-4 OZ		X		X	X	X
92	3463	088	SP-2-1	SOIL	1013		2 PINTS 4-4 OZ		X		X	X	X
92	3467	089	SP-3-1	SOIL	1345		2 PINTS 4-4 OZ		X		X	X	X
92	3466	090	SP 3-4	SOIL	1345		2 PINTS 4-4 OZ		X		X	X	X
92	3468	091	SP-3-2	SOIL	DB 1/7/92 / 1410	DB 1/7/91	2 PINTS 4-4 OZ		X		X	X	X
92	C138B 3470	092	SP-4-1	SOIL	1/7/92 / 1409	GLASS WTL / COOL 4C	2 PINTS 4-4 OZ	DB 1/7	X	DB 1/7	X	X	X

Copy To: 2 COPIES TO S. LUND, 1 COPY TO L. LOVE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
PROCESS/CALL	D. A. Back	W. Hassaurt	1/7/92	15:10					

037

45082

WESTINGHOUSE MATERIALS COMPANY OF OHIO

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Control #: ____

ANALYSIS REQUEST / CUSTODY RECORD

PROJECT: RCRA CLOSURE PLAN T5/T6	CLIENT: SETE MEDIA SAMPLING	TECHNICIAN/EXT.: D. BAKER
PROJECT #: ~~SA~~ PD 1/17/92	CLIENT CONTACT: L. LOVE	CHARGE #: B2P-01
PE/PM: S. LUND	PHONE: 6727	LOT MARK CODE: ~~—~~ PD 1/7/92

SAMPLE IDENTIFICATION / ANALYSIS REQUESTED

(SEE REVERSE FOR PARAMETERS)

	SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	TABLE 1	2	3	4	5	6	
92	C1338-3473	920107-09	SP-4-4	SOIL	1/7/91 / 1415	GLASS W TEL / COOL 4°C	2 PINTS 4-4oz	PD 1/7/92	X	PD 1/7	X	X	X	
92	C1338 3477	0934	SP-4-2	SOIL	1420		2 PINTS 4-4oz		X		X	X	X	
92	C1338 3472	0935	SP-4-3	SOIL	PD 1/7/92 1417	PD 1/7/92	2 PINTS 4-4oz		X		X	X	X	
92	C1338-3474	0936	SP. 5-1	SOIL	1/7/91 / 1425	GLASS W TEL / COOL 4°C	2 PINTS 4-4oz	PD 1/7/92	X	PD 1/7/92	X	X	X	
									X		X	X	X	PD 1/7/92
									X		X	X	X	PD 1/7/92

Copy To: 2 COPIES TO S. LUND 1 COPY TO L. LOVE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
PROCESS/ALL	[signature]	W. Hammer	1/7/92	15:10					

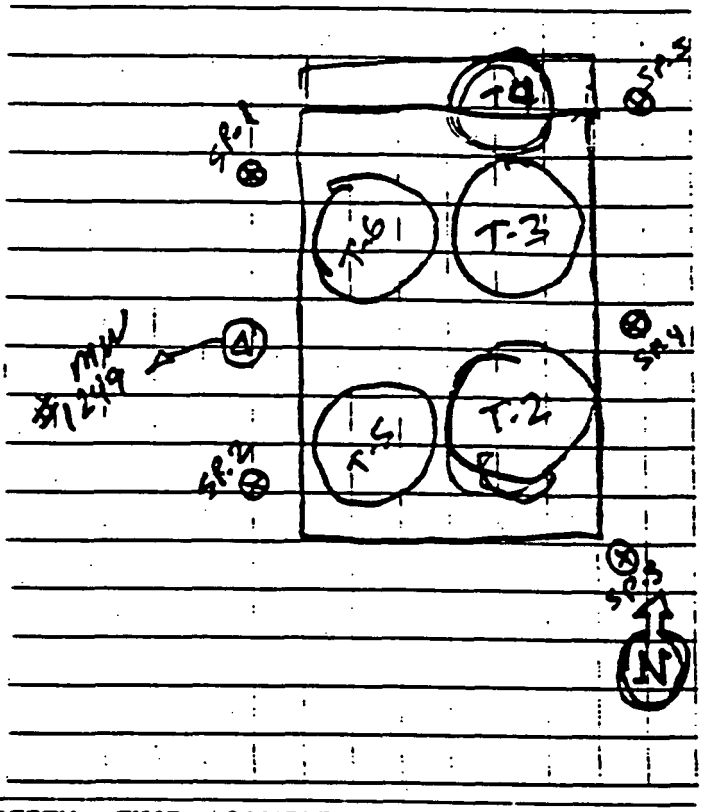
DATE: 1 7 92
TIME START: 0700
TIME FINISH: 1630
PAGE 1 OF 2

FEED MATERIAL PRODUCTION CENTER
P. O. BOX 398704
CINCINNATI, OHIO 45239-8704

PROJECT NAME: T-5/T-6 RCRA CLOSURE
PROJECT NO: N/A
LOCATION: NW of Bldg 13A
WEATHER: cloudy
TEMPERATURE: 40°F

CONTACT/EXT: L. LOVE / 6727

PURPOSE OF SAMPLING: RCRA CLOSURE
PROCESS PRODUCING WASTE: U. PROC.
SAMPLE REQUEST NO: 1388
SAMPLE PLAN NO: 91-1388



SAMPLE NUMBER	SAMPLE TYPE	COLLECTION METHOD	DEPTH	TIME	SAMPLE PRESERVATIVE	CONT TYPE	NUMBER/ VOLUME
92-1388-3478	LIQUID	POURED	N/A	0940	COOL 4°C	GLASS/ TLC	1-GAL 1-QUART 1-POT
92-1388-3479	↓	OPENED IN FIELD	↓	1020	↓	↓	↓
92-1388-3480	↓	POURED OVER EQUIP.	↓	1235	↓	↓	↓
92-1388-3483	SOIL	S.S. AUGER	0'-12"	1018	↓	↓	2-PINTS 4-4OZ
~~92-1388-3481~~	~~SOIL~~	~~S.S. AUGER~~	~~0'-12"~~	~~1043~~	~~↓~~	~~↓~~	~~↓~~
~~92-1388-3482~~	~~SOIL~~	~~S.S. AUGER~~	~~12"-24"~~	~~1100~~	~~↓~~	~~↓~~	~~↓~~
92-1388-3481	SOIL	S.S. AUGER	0'-12"	1043	↓	↓	↓
92-1388-3482	SOIL	S.S. AUGER	12"-24"	1100	↓	↓	↓
92-1388-3486	SOIL	S.S. AUGER	0'-12"	1345	↓	↓	↓
92-1388-3487	SOIL	S.S. AUGER	0"-12"	1345	↓	↓	↓
92-1388-3488	SOIL	SS AUGER	12"-20"	1410	↓	↓	↓

Field blank
Duplicate
SP-2-1
SP-1-1
SP-1-2
Duplicate SP-1-1
SP-3-1
SP-3-2
Stopped

00 1/7
00 1/7
Duplicate SP-3-1 #

FIELD MEASUREMENTS: RAD. READINGS IN SAMPLE AREA WERE VERY HIGH BACKGROUND
TRANSPORTATION METHOD: VAN to lab
SAMPLE TECHNICIANS: Wm. Myers, M. Arnett, D. Back, K. Hobbard
TECHNICIAN SIGNATURES: Wm. Myers, M. Arnett, D. Back, K. Hobbard

FIELD OBSERVATIONS: Rad Tech. Radio #378 John Mounts

NOTE @ SP-2-1 AUGER HIT REFUSAL AT 12" ALSO UPON COMPLETION CONTAMINATED WATER FILLED THE 12" HOLE TO 6" ~~AUGER~~ WAS STOPPED AS/SAMPLE PLAN ALS. ATTMC REQUE OF P.E/CO
SP-1-2 AUGER HIT REFUSAL AT 23" ALSO WATER BACK FILLED THE HOLE TO A DEPTH OF 12" NO 1-3 WAS COLLECTED DUE TO THIS.
SP-3-2 HIT WATER AUGER SUNK TO 36" @ 20" DEPTH PURE MUCK STOPPED SAMPLING
SP 5-1 HIT WATER @ 12" STOP SAMPLING AS/ED. WEISE (PE) AND SAMPLING PLAN

DATE: 01/02/92
TIME START: SAME/PW
TIME FINISH: SAME/RG
PAGE 2 OF 2

EM # DESCRIPTION	SAMPLE #	SAMPLE TYPE	COLLECTION METHOD	DEPTH	TIME	SAMPLE PRESERVE	CONT. TYPE	# / VOL	
-1	92-C132 3470	SOIL	S.S. AUGER	0"-12"	1407	COOL 4°C	GLASS W TLC	2-PINT 4-4oz	
SP-4-4 DUP 03	92-C132B-3473	SOIL		24"-36"	1415				* DUPLICATE OF SP.
SP-4-2	3471	SOIL		12"-24"	1420				
SP-4-3	3472	SOIL	03 1/7	24"-36"	1417	09 1/7/92	09 1/7	09 1/7	*
SP-5-1	92-C134 3474	SOIL	S.S. AUGER	0"-12"	1425	COOL 4°C	GLASS W TLC	2-PINT 4-4oz	

* DU

140

4587

Rec'd 1-27-92

Send to: (2) [illegible]
(1) L. Louc

Chem-Nuclear Laboratory Services, Inc.

Post Office Box 17467
Greenville, South Carolina 29606
(803) 235-0707

Westinghouse Environmental Management Company of Ohio

Feed Materials Production Center

Purchase Order # 413910

Analytical Results for

Release 1082

Submitted By

Chem-Nuclear
Laboratory Services, Inc.

Greenville, South Carolina

January 23, 1992

041

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

NARRATIVE

Fourteen samples were received in Release 1082 on January 9, 1992. Each sample was analyzed in accordance with the methods indicated on the Sample Tracking Report.

Surrogates were diluted out of recovery range on the volatile analyses of CNLS samples 920107-093 and 920107-095 because of high concentrations of non-target compounds.

The silver spike recovery on CNLS sample no. 923694 was outside control limits.

The arsenic, barium, cadmium, chromium, and lead spike recoveries on CNLS sample no. 923736 were outside control limits.

The arsenic post digest spike recoveries on WEMCO sample nos. 920107-086, 920107-093, 920107-096 were outside control limits.

The selenium post digest spike recoveries on WEMCO sample nos. 920107-086, 920107-087, 920107-089, 920107-090, 920107-091, 920107-092, 920107-093, 920107-095, and 920107-096 were outside control limits.

The relative percent difference of the arsenic, barium, chromium, and lead duplicate analyses for CNLS sample 923736 exceeded the 20% control limits, due to sample inhomogeniety.

All results are reported in ppm or ppb. For liquid samples and TCLP extracts, ppm is equivalent to mg/L and ppb is equivalent to ug/L. For solid samples, ppm is equivalent to mg/kg and ppb is equivalent to ug/kg.

Reviewed and Approved

Charles H. Reece
Project Manager

1/23/92
Date

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SAMPLE TRACKING REPORT

WEMCO Sample ID	CNLSI Reference #	Date Sampled	Date Prepared	Date Analyzed	Prep. Method	Instr. Method
920107-083	923731	01-07-92				
Arsenic			01-14-92	01-18-92	7060	7060
Selenium			01-14-92	01-17-92	7740	7740
Mercury			01-15-92	01-16-92	7470	7470
ICAP Metals			01-14-92	01-15-92	3010	6010
Volatile Organics			01-14-92	01-14-92	5030	8260
Semi-Volatile Organics			01-14-92	01-16-92	3510	8270
920107-084	923732	01-07-92				
Arsenic			01-14-92	01-18-92	7060	7060
Selenium			01-14-92	01-17-92	7740	7740
Mercury			01-15-92	01-16-92	7470	7470
ICAP Metals			01-14-92	01-15-92	3010	6010
Volatile Organics			01-20-92	01-20-92	5030	8260
Semi-Volatile Organics			01-14-92	01-16-92	3510	8270
920107-085	923733	01-07-92				
Arsenic			01-14-92	01-18-92	7060	7060
Selenium			01-14-92	01-17-92	7740	7740
Mercury			01-15-92	01-16-92	7470	7470
ICAP Metals			01-14-92	01-15-92	3010	6010
Volatile Organics			01-16-92	01-16-92	5030	8260
Semi-Volatile Organics			01-14-92	01-15-92	3510	8270
920107-086	923734	01-07-92				
Arsenic			01-14-92	01-18-92	3050	7060
Selenium			01-14-92	01-17-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-16-92	5030	8260
Semi-Volatile Organics			01-13-92	01-15-92	3540	8270
920107-087	923735	01-07-92				
Arsenic			01-14-92	01-18-92	3050	7060
Selenium			01-14-92	01-17-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-17-92	3050	6010
Volatile Organics			01-13-92	01-16-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SAMPLE TRACKING REPORT

WEMCO Sample ID	CNLSI Reference #	Date Sampled	Date Prepared	Date Analyzed	Prep. Method	Instr. Method
920107-088	923736	01-07-92				
Arsenic			01-14-92	01-18-92	3050	7060
Selenium			01-14-92	01-17-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-15-92	3050	6010
Volatile Organics			01-13-92	01-16-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270
920107-089	923737	01-07-92				
Arsenic			01-14-92	01-18-92	3050	7060
Selenium			01-14-92	01-17-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-15-92	3050	6010
Volatile Organics			01-13-92	01-17-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270
920107-090	923738	01-07-92				
Arsenic			01-14-92	01-18-92	3050	7060
Selenium			01-14-92	01-17-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-16-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270
920107-091	923739	01-07-92				
Arsenic			01-14-92	01-18-92	3050	7060
Selenium			01-14-92	01-17-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-16-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270
920107-092	923740	01-07-92				
Arsenic			01-14-92	01-20-92	3050	7060
Selenium			01-14-92	01-20-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-17-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270

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SAMPLE TRACKING REPORT

WEMCO Sample ID	CNLSI Reference #	Date Sampled	Date Prepared	Date Analyzed	Prep. Method	Instr. Method
920107-093	923741	01-07-92				
Arsenic			01-14-92	01-20-92	3050	7060
Selenium			01-14-92	01-20-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-17-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270
920107-094	923742	01-07-92				
Arsenic			01-14-92	01-20-92	3050	7060
Selenium			01-14-92	01-20-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-17-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270
920107-095	923743	01-07-92				
Arsenic			01-14-92	01-20-92	3050	7060
Selenium			01-14-92	01-20-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-17-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270
920107-096	923744	01-07-92				
Arsenic			01-14-92	01-20-92	3050	7060
Selenium			01-14-92	01-20-92	3050	7740
Mercury			01-15-92	01-16-92	7471	7471
ICAP Metals			01-14-92	01-16-92	3050	6010
Volatile Organics			01-13-92	01-20-92	5030	8260
Semi-Volatile Organics			01-13-92	01-16-92	3540	8270

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-083	920107-084	920107-085	920107-086
CNLSI No.:	923731	923732	923733	923734
Matrix:	Liquid	Liquid	Liquid	Solid
Units:	ppm	ppm	ppm	ppm
Arsenic	<0.02	<0.02	<0.02	6.84
Barium	<0.20	<0.20	<0.20	18.2
Cadmium	<0.02	<0.02	<0.02	<0.69
Chromium	<0.05	<0.05	<0.05	5.56
Lead	<0.08	<0.08	<0.08	32.0
Mercury	<0.003	<0.003	<0.003	<0.112
Selenium	<0.01	<0.01	<0.01	<0.74
Silver	<0.05	<0.05	<0.05	<2.29

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-087	920107-088	920107-089	920107-090
CNLSI No.:	923735	923736	923737	923738
Matrix:	Solid	Solid	Solid	Solid
Units:	ppm	ppm	ppm	ppm
Arsenic	5.72	20.6	4.73	3.56
Barium	189	75.9	245	298
Cadmium	7.51	<0.60	<0.70	<0.71
Chromium	29.4	16.1	75.4	60.8
Lead	17.4	21.1	88.0	82.7
Mercury	<0.128	<0.128	0.528	0.363
Selenium	<0.83	1.83	<0.76	<0.71
Silver	<2.46	<2.00	3.60	<2.35

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-091	920107-092	920107-093	920107-094
CNLSI No.:	923739	923740	923741	923742
Matrix:	Solid	Solid	Solid	Solid
Units:	ppm	ppm	ppm	ppm
Arsenic	4.58	3.30	4.47	7.55
Barium	102	53.2	66.3	82.6
Cadmium	<0.62	<0.69	<0.71	<0.72
Chromium	26.4	19.4	12.8	12.7
Lead	23.5	41.2	12.3	24.1
Mercury	<0.121	0.156	<0.114	<0.127
Selenium	<0.85	<0.90	<0.67	1.56
Silver	<2.05	<2.26	5.03	<2.39

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-095	920107-096
CNLSI No.:	923743	923744
Matrix:	Solid	Solid
Units:	ppm	ppm
Arsenic	4.86	29.1
Barium	73.5	37.0
Cadmium	<0.72	<0.64
Chromium	16.3	6.94
Lead	13.4	43.9
Mercury	<0.109	0.449
Selenium	<0.87	<0.90
Silver	<2.37	<2.12

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-083	920107-084	920107-085	920107-086
CNLSI NO.:	923731	923732	923733	923734
Matrix:	Liquid	Liquid	Liquid	Solid
Preparation:	1	1	1	2
Units:	ppm	ppm	ppm	ppm
Volatile Organics:				
Trichlorofluoromethane	<0.17	<0.17	<0.17	<0.42
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.17	<0.17	<0.17	<0.42
Acetone	<0.42	<0.42	<0.42	<1.0
Carbon Disulfide	<0.12	<0.12	<0.12	<0.40
Methylene Chloride	<0.10	<0.10	<0.10	<0.25
2-Butanone (MEK)	<0.25	<0.25	<0.25	<0.63
1,1,1-Trichloroethane	<0.20	<0.20	<0.20	<0.50
Carbon Tetrachloride	<0.15	<0.15	<0.15	<0.38
Benzene	<0.08	<0.08	<0.08	<0.21
Trichloroethylene	<0.22	<0.22	<0.22	<0.54
Methyl Isobutyl Ketone	<0.17	<0.17	<0.17	<0.42
Toluene	<0.17	<0.17	<0.17	<0.42
Chlorobenzene	<0.18	<0.18	<0.18	<0.46
1,1,2-Trichloroethane	<0.10	<0.10	<0.10	<0.25
Tetrachloroethylene	<0.47	<0.47	<0.47	<1.2
Ethylbenzene	<0.08	<0.08	<0.08	<0.21
m,p-Xylenes	<0.10	<0.10	<0.10	<0.25
o-Xylene	<0.07	<0.07	<0.07	<0.17
o-Dichlorobenzene	<0.23	<0.23	<0.23	<0.58
2-Nitropropane	ND	ND	ND	ND
Cyclohexanone	ND	ND	ND	ND
Ethyl Acetate	ND	ND	ND	ND
Ethyl Ether	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND	ND
Surrogates: (% Recovery)				
1,2-Dichloroethane-d4	103	91	100	88
Toluene-d8	102	109	99	104
Bromofluorobenzene	93	108	92	106

Preparation: 1 = No preparation
2 = Methanol extraction

ND = Not detected through a computer search of the Wiley/EPA mass spectra database
D = Surrogates diluted out of recovery range

ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-087	920107-088	920107-089	920107-090
CNLSI NO.:	923735	923736	923737	923738
Matrix:	Solid	Solid	Solid	Solid
Preparation:	2	2	2	2
Units:	ppm	ppm	ppm	ppm
Volatile Organics:				
Trichlorofluoromethane	<0.42	<0.42	<0.42	<0.42
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.42	<0.42	<0.42	<0.42
Acetone	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	<0.30	<1.1	<0.30	<0.30
Methylene Chloride	<0.25	<0.25	<0.25	<0.25
2-Butanone (MEK)	<0.63	<0.63	<0.63	<0.63
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	<0.38	<0.38	<0.38	<0.38
Benzene	<0.21	<0.21	<0.21	<0.21
Trichloroethylene	<0.54	<0.54	<0.54	<0.54
Methyl Isobutyl Ketone	<0.42	<0.42	<0.42	<0.42
Toluene	<0.42	<0.42	<0.42	<0.42
Chlorobenzene	<0.46	<0.46	<0.46	<0.46
1,1,2-Trichloroethane	<0.25	<0.25	<0.25	<0.25
Tetrachloroethylene	<1.2	<1.2	<1.2	<1.2
Ethylbenzene	<0.21	<0.21	<0.21	<0.21
m,p-Xylenes	<0.25	<0.25	<0.25	<0.25
o-Xylene	<0.17	<0.17	<0.17	<0.17
o-Dichlorobenzene	<0.58	<0.58	<0.58	<0.58
2-Nitropropane	ND	ND	ND	ND
Cyclohexanone	ND	ND	ND	ND
Ethyl Acetate	ND	ND	ND	ND
Ethyl Ether	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND	ND
Surrogates: (% Recovery)				
1,2-Dichloroethane-d4	90	97	91	98
Toluene-d8	97	98	101	105
Bromofluorobenzene	102	106	97	105

Preparation: 1 = No preparation
2 = Methanol extraction

ND = Not detected through a computer search of the Wiley/EPA mass spectral database
D = Surrogates diluted out of recovery range

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-091	920107-092	920107-093	920107-094
CNLSI NO.:	923739	923740	923741	923742
Matrix:	Solid	Solid	Solid	Solid
Preparation:	2	2	2	2
Units:	ppm	ppm	ppm	ppm
Volatile Organics:				
Trichlorofluoromethane	<0.42	<0.42	<4.2	<0.42
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.42	<0.42	<4.2	<0.42
Acetone	<1.0	<1.0	<10	<1.0
Carbon Disulfide	<1.1	<0.30	<2.9	<0.30
Methylene Chloride	<0.25	<0.25	<2.5	<0.25
2-Butanone (MEK)	<0.63	<0.63	<6.3	<0.63
1,1,1-Trichloroethane	<0.50	<0.50	<5.0	<0.50
Carbon Tetrachloride	<0.38	<0.38	<3.8	<0.38
Benzene	<0.21	<0.21	<2.1	<0.21
Trichloroethylene	<0.54	<0.54	<5.4	<0.54
Methyl Isobutyl Ketone	<0.42	<0.42	<4.2	<0.42
Toluene	<0.42	<0.42	<4.2	<0.42
Chlorobenzene	<0.46	<0.46	<4.6	<0.46
1,1,2-Trichloroethane	<0.25	<0.25	<2.5	<0.25
Tetrachloroethylene	<1.2	<1.2	37	<1.2
Ethylbenzene	<0.21	<0.21	<2.1	<0.21
m,p-Xylenes	<0.25	<0.25	<2.5	<0.25
o-Xylene	<0.17	<0.17	<1.7	<0.17
o-Dichlorobenzene	<0.58	<0.58	<5.8	<0.58
2-Nitropropane	ND	ND	ND	ND
Cyclohexanone	ND	ND	ND	ND
Ethyl Acetate	ND	ND	ND	ND
Ethyl Ether	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND	ND
Surrogates: (% Recovery)				
1,2-Dichloroethane-d4	103	91	D	89
Toluene-d8	109	97	D	97
Bromofluorobenzene	113	96	D	95

Preparation: 1 = No preparation
2 = Methanol extraction

ND = Not detected through a computer search of the Wiley/EPA mass spectral database
D = Surrogates diluted out of recovery range

ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-095	920107-096
CNLSI NO.:	923743	923744
Matrix:	Solid	Solid
Preparation:	2	2
Units:	ppm	ppm
Volatile Organics:		
Trichlorofluoromethane	<2.8	<0.42
1,1,2-Trichloro-1,2,2-Trifluoroethane	<2.8	<0.42
Acetone	4.6	<1.0
Carbon Disulfide	<2.0	<1.1
Methylene Chloride	<1.7	<0.25
2-Butanone (MEK)	<4.2	<0.63
1,1,1-Trichloroethane	<3.3	<0.50
Carbon Tetrachloride	<2.5	<0.38
Benzene	<1.4	<0.21
Trichloroethylene	<3.6	<0.54
Methyl Isobutyl Ketone	<2.8	<0.42
Toluene	<2.8	<0.42
Chlorobenzene	<3.1	<0.46
1,1,2-Trichloroethane	<1.7	<0.25
Tetrachloroethylene	30.5	<1.2
Ethylbenzene	<1.4	<0.21
m,p-Xylenes	<1.7	<0.25
o-Xylene	<1.1	<0.17
o-Dichlorobenzene	<3.9	<0.58
2-Nitropropane	ND	ND
Cyclohexanone	ND	ND
Ethyl Acetate	ND	ND
Ethyl Ether	ND	ND
Pyridine	ND	ND
Chlorinated Fluorocarbons	ND	ND
Surrogates: (% Recovery)		
1,2-Dichloroethane-d4	D	91
Toluene-d8	D	98
Bromofluorobenzene	D	109

Preparation: 1 = No preparation
2 = Methanol extraction

ND = Not detected through a computer search of the Wiley/EPA mass spectral database
D = Surrogates diluted out of recovery range

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-083	920107-084	920107-085	920107-086
CNLSI NO.:	923731	923732	923733	923734
Matrix:	Liquid	Liquid	Liquid	Solid
Units:	ppm	ppm	ppm	ppm
Semi-Volatile Organics:				
Pyridine	<0.02	<0.02	<0.02	<2.0
o-Cresol	<0.01	<0.01	<0.01	<1.0
Hexachloroethane	<0.01	<0.01	<0.01	<1.0
m,p-Cresol	<0.01	<0.01	<0.01	<1.0
Nitrobenzene	<0.01	<0.01	<0.01	<1.0
Hexachlorobutadiene	<0.01	<0.01	<0.01	<1.0
2,4,6-Trichlorophenol	<0.01	<0.01	<0.01	<1.0
2,4,5-Trichlorophenol	<0.01	<0.01	<0.01	<1.0
2,4-Dinitrotoluene	<0.01	<0.01	<0.01	<1.0
Hexachlorobenzene	<0.01	<0.01	<0.01	<1.0
Pentachlorophenol	<0.01	<0.01	<0.01	<1.0
Surrogates: (% Recovery)				
2-Fluorophenol	37	37	39	61
Phenol-d6	17	19	21 no eff.	59
Nitrobenzene-d5	48	52	58	55
2-Fluorobiphenyl	68	68	73	68
2,4,6-Tribromophenol	70	69	76	76
Terphenyl-d14	121	121	131	122

no eff.

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-087	920107-088	920107-089	920107-090
CNLSI NO.:	923735	923736	923737	923738
Matrix:	Solid	Solid	Solid	Solid
Units:	ppm	ppm	ppm	ppm
Semi-Volatile Organics:				
Pyridine	<2.0	<2.0	<2.0	<2.0
o-Cresol	<1.0	<1.0	<1.0	<1.0
Hexachloroethane	<1.0	<1.0	<1.0	<1.0
m,p-Cresol	<1.0	<1.0	<1.0	<1.0
Nitrobenzene	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0	<1.0
2,4,6-Trichlorophenol	<1.0	<1.0	<1.0	<1.0
2,4,5-Trichlorophenol	<1.0	<1.0	<1.0	<1.0
2,4-Dinitrotoluene	<1.0	<1.0	<1.0	<1.0
Hexachlorobenzene	<1.0	<1.0	<1.0	<1.0
Pentachlorophenol	<1.0	<1.0	<1.0	<1.0
Surrogates: (% Recovery)				
2-Fluorophenol	53	49	51	41
Phenol-d6	59	54	49	48
Nitrobenzene-d5	59	56	51	58
2-Fluorobiphenyl	73	69	61	67
2,4,6-Tribromophenol	67	63	62	46
Terphenyl-d14	123	118	102	109

ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-091	920107-092	920107-093	920107-094
CNLSI NO.:	923739	923740	923741	923742
Matrix:	Solid	Solid	Solid	Solid
Units:	ppm	ppm	ppm	ppm
Semi-Volatile Organics:				
Pyridine	<2.0	<2.0	<2.0	<2.0
o-Cresol	<1.0	<1.0	<1.0	<1.0
Hexachloroethane	<1.0	<1.0	<1.0	<1.0
m,p-Cresol	<1.0	<1.0	<1.0	<1.0
Nitrobenzene	<1.0	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0	<1.0
2,4,6-Trichlorophenol	<1.0	<1.0	<1.0	<1.0
2,4,5-Trichlorophenol	<1.0	<1.0	<1.0	<1.0
2,4-Dinitrotoluene	<1.0	<1.0	<1.0	<1.0
Hexachlorobenzene	<1.0	<1.0	<1.0	<1.0
Pentachlorophenol	<1.0	<1.0	<1.0	<1.0
Surrogates: (% Recovery)				
2-Fluorophenol	56	42	64	48
Phenol-d6	61	46	63	49
Nitrobenzene-d5	61	54	61	50
2-Fluorobiphenyl	74	66	75	63
2,4,6-Tribromophenol	73	65	70	66
Terphenyl-d14	126	114	124	112

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ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920107-095	920107-096
CNLSI NO.:	923743	923744
Matrix:	Solid	Solid
Units:	ppm	ppm
Semi-Volatile Organics:		
Pyridine	<2.0	<2.0
o-Cresol	<1.0	<1.0
Hexachloroethane	<1.0	<1.0
m,p-Cresol	<1.0	<1.0
Nitrobenzene	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0
2,4,6-Trichlorophenol	<1.0	<1.0
2,4,5-Trichlorophenol	<1.0	<1.0
2,4-Dinitrotoluene	<1.0	<1.0
Hexachlorobenzene	<1.0	<1.0
Pentachlorophenol	<1.0	<1.0
Surrogates: (% Recovery)		
2-Fluorophenol	59	47
Phenol-d6	60	48
Nitrobenzene-d5	57	54
2-Fluorobiphenyl	68	60
2,4,6-Tribromophenol	53	62
Terphenyl-d14	125	98

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SUMMARY OF METALS

QUALITY CONTROL

RELEASE 1082

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Date: January 23, 1992

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Parts per Million

Analyte	QC Batch	Initial Calibration True	Found	% R	Continuing Calibration True	First	%R	Last	%R
Arsenic	01-18-92	0.0500	0.0498	100	0.0500	0.0527	105	0.0529	106
Barium	01-15-92	1.00	1.03	103	5.00	4.83	97	4.72	94
Cadmium	01-15-92	1.00	1.05	105	5.00	4.83	97	4.90	98
Chromium	01-15-92	1.00	1.05	105	5.00	4.95	99	4.91	98
Lead	01-15-92	1.00	1.03	103	5.00	4.84	97	4.79	96
Mercury	01-16-92	0.0050	0.0051	102	0.0050	0.0050	100	0.0052	104
Selenium	01-17-92	0.0500	0.0505	101	0.0500	0.0499	100	0.0454	91
Selenium	01-16-92	0.0500	0.0494	99	0.0500	0.0451	90	0.0451	90
Silver	01-15-92	1.00	0.98	98	0.50	0.46	92	0.46	92
Arsenic	01-20-92	0.0500	0.0517	103	0.0500	0.0519	104	0.0511	102
Barium	01-16-92	1.00	1.04	104	5.00	4.90	98	4.83	97
Cadmium	01-16-92	1.00	1.05	105	5.00	5.01	100	4.88	97
Chromium	01-16-92	1.00	1.07	107	5.00	5.19	104	5.02	100
Lead	01-16-92	1.00	1.03	103	5.00	5.06	101	4.85	97
Selenium	01-20-92	0.0500	0.0491	98	0.0500	0.0458	92	0.0486	97
Silver	01-16-92	1.00	0.99	99	0.50	0.49	98	0.46	92
Barium	01-17-92	1.00	1.04	104	5.00	5.04	101	4.88	98
Cadmium	01-17-92	1.00	1.02	102	5.00	5.14	103	4.96	99
Chromium	01-17-92	1.00	1.02	102	5.00	5.12	102	4.92	98
Lead	01-17-92	1.00	1.02	102	5.00	5.10	102	4.88	98
Silver	01-17-92	1.00	1.00	100	0.50	0.50	100	0.47	94

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

INSTRUMENT BLANKS

Parts per Million

Analyte	Batch	Initial Blank	Continuing Calibration Blank First	Continuing Calibration Blank Last
Arsenic	01-18-92	<0.003	<0.003	<0.003
Barium	01-15-92	<0.020	<0.020	<0.020
Cadmium	01-15-92	<0.005	<0.005	<0.005
Chromium	01-15-92	<0.009	<0.009	<0.009
Lead	01-15-92	<0.025	<0.025	<0.025
Mercury	01-16-92	0.0002	0.0001	<0.0001
Selenium	01-17-92	<0.003	<0.003	<0.003
Selenium	01-16-92	<0.003	<0.003	<0.003
Silver	01-15-92	<0.005	<0.005	<0.005
Arsenic	01-20-92	<0.003	<0.003	<0.003
Barium	01-16-92	<0.020	<0.020	<0.020
Cadmium	01-16-92	<0.005	<0.005	<0.005
Chromium	01-16-92	<0.009	<0.009	<0.009
Lead	01-16-92	<0.025	<0.025	<0.025
Selenium	01-20-92	<0.003	<0.003	<0.003
Silver	01-16-92	<0.005	<0.005	<0.005
Barium	01-17-92	<0.020	<0.020	<0.020
Cadmium	01-17-92	<0.005	<0.005	<0.005
Chromium	01-17-92	<0.009	<0.009	<0.009
Lead	01-17-92	<0.025	<0.025	<0.025
Silver	01-17-92	<0.005	<0.005	<0.005

WEMCO PO: 413910
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PREPARATION BLANK

Units: ppm

Analyte	Prepared	Method	Date Analyzed	Results
Arsenic	01-14-92	7060	01-15-92	<0.02
Barium	01-14-92	3010	01-15-92	<0.20
Cadmium	01-14-92	3010	01-15-92	<0.02
Chromium	01-14-92	3010	01-15-92	<0.05
Lead	01-14-92	3010	01-15-92	<0.08
Selenium	01-14-92	7740	01-15-92	<0.01
Silver	01-14-92	3010	01-15-92	<0.05
Arsenic	01-14-92	3050	01-18-92	<0.02
Barium	01-14-92	3050	01-15-92	<0.20
Cadmium	01-14-92	3050	01-15-92	<0.02
Chromium	01-14-92	3050	01-15-92	<0.05
Lead	01-14-92	3050	01-15-92	<0.08
Selenium	01-14-92	3050	01-16-92	<0.01
Silver	01-14-92	3050	01-15-92	<0.05

WEMCO PO: 413910
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SPIKE SAMPLE RECOVERY

CNLSI No.: 923729
Matrix: Liquid
Preparation: 3010/7060
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-21-92	0.106	ND	0.100	106
Barium	01-15-92	1.96	ND	2.00	98
Cadmium	01-15-92	0.05	ND	0.05	100
Chromium	01-15-92	0.19	ND	0.20	95
Lead	01-15-92	0.46	ND	0.50	92
Selenium	01-21-92	0.115	ND	0.100	115
Silver	01-15-92	0.06	ND	0.05	120

n = Spike sample recovery not within control limits of 75-125%.

WEMCO PO: 413910
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Date: January 23, 1992

not this release

SPIKE SAMPLE RECOVERY

CNLSI No.: 923694
Matrix: Liquid
Preparation: 3050
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	0.0935	ND	0.100	94
Barium	01-16-92	82.7	ND	87.6	94
Cadmium	01-16-92	1.92	ND	2.19	88
Chromium	01-16-92	8.25	ND	8.76	94
Lead	01-16-92	50.0	32.4	21.9	80
Selenium	01-17-92	0.114	ND	0.100	114
Silver	01-16-92	1.49	ND	2.19	(n)68

n = Spike sample recovery not within control limits of 75-125%.

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SPIKE SAMPLE RECOVERY

CNLSI No.: 923736 080
Matrix: Solid
Preparation: 3050
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-20-92	22.87	20.57	4.69	(n)149 SR> 4x SA ok
Barium	01-16-92	148	75.9	97.3	(n)74
Cadmium	01-16-92	1.75	ND	2.43	(n)72
Chromium	01-16-92	18.0	16.1	9.73	(n)19
Lead	01-16-92	63	21	24.3	(n)172
Selenium	01-17-92	5.55	1.70	4.69	82
Silver	01-16-92	1.87	ND	2.43	77

n = Spike sample recovery not within control limits of 75-125%.

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SPIKE SAMPLE RECOVERY

CNLSI No.: 923659
Matrix: Liquid
Preparation: 7470
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Mercury	01-09-92	0.0049	ND	0.0050	98

n = Spike sample recovery not within control limits of 75-125%.

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SPIKE SAMPLE RECOVERY

CNLSI No.: 923716
Matrix: Liquid
Preparation: 7471
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Mercury	01-16-92	0.0052	ND	0.0050	103

n = Spike sample recovery not within control limits of 75-125%.

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SPIKE SAMPLE RECOVERY

CNLSI No.: 923741 013
Matrix: Solid
Preparation: 7471
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Mercury	01-16-92	0.0055	ND	0.0050	109

n = Spike sample recovery not within control limits of 75-125%.

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

POST DIGEST SPIKE SAMPLE RECOVERY

WEMCO NO: 920107-083
CNLSI NO: 923731
Matrix: Liquid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	0.102	ND	0.100	102
Selenium	01-17-92	0.0918	ND	0.100	92

WEMCO NO: 920107-084
CNLSI NO: 923732
Matrix: Liquid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	0.102	ND	0.100	102
Selenium	01-17-92	0.0903	ND	0.100	90

WEMCO NO: 920107-085
CNLSI NO: 923733
Matrix: Liquid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	0.0960	ND	0.100	96
Selenium	01-17-92	0.0876	ND	0.100	88

WEMCO NO: 920107-086
CNLSI NO: 923734
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	10.14	6.84	4.27	(w)77
Selenium	01-17-92	0.0821	ND	0.100	(w)82

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

POST DIGEST SPIKE SAMPLE RECOVERY

WEMCO NO: 920107-087
CNLSI NO: 923735
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	9.74	5.72	4.56	88
Selenium	01-17-92	4.22	0.65	4.56	(w)78

WEMCO NO: 920107-089
CNLSI NO: 923737
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	8.36	4.73	4.20	86
Selenium	01-17-92	0.0629	ND	0.100	(w)63

WEMCO NO: 920107-090
CNLSI NO: 923738
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	7.18	3.56	3.94	92
Selenium	01-17-92	0.0831	ND	0.100	(w)83

WEMCO NO: 920107-091
CNLSI NO: 923739
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-18-92	9.05	4.58	4.74	94
Selenium	01-17-92	0.0795	ND	0.100	(w)80

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

POST DIGEST SPIKE SAMPLE RECOVERY

WEMCO NO: 920107-092
CNLSI NO: 923740
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-20-92	7.90	3.30	4.98	92
Selenium	01-20-92	0.0769	ND	0.100	(w)77

WEMCO NO: 920107-093
CNLSI NO: 923741
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-20-92	7.34	4.47	3.71	(w)77
Selenium	01-20-92	0.0657	ND	0.100	(w)66

WEMCO NO: 920107-094
CNLSI NO: 923742
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-20-92	10.88	7.55	4.03	83
Selenium	01-20-92	4.99	1.56	4.03	85

WEMCO NO: 920107-095
CNLSI NO: 923743
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-20-92	8.73	4.86	4.83	80
Selenium	01-20-92	0.0762	ND	0.100	(w)76

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

POST DIGEST SPIKE SAMPLE RECOVERY

WEMCO NO: 920107-096
CNLSI NO: 923744
Matrix: Solid
Units: ppm

Analyte	QC Batch	Spike Sample Result	Sample Result	Spike Added	Percent Recovery
Arsenic	01-20-92	37.69	29.05	5.00	(w)173
Selenium	01-20-92	0.0840	ND	0.100	(w)84

w = Spike sample recovery is outside control limits of 85-115%.

PDS ok from 75-125

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

DUPLICATES

CNLSI No.: 923729
Matrix: Liquid
Preparation: 3010/7060
Units: ppm

Analyte	QC Batch	Sample	Duplicate	RPD
Arsenic	01-21-92	ND	ND	---
Barium	01-15-92	ND	ND	---
Cadmium	01-15-92	ND	ND	---
Chromium	01-15-92	ND	ND	---
Lead	01-15-92	ND	ND	---
Selenium	01-21-92	ND	ND	---
Silver	01-15-92	ND	ND	---

c = Control limit (+/-)

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

DUPLICATES

CNLSI No.: 923694
Matrix: Liquid
Preparation: 3050
Units: ppm

Analyte	QC Batch	Sample	Duplicate	RPD
Arsenic	01-18-92	ND	ND	---
Barium	01-16-92	ND	ND	---
Cadmium	01-16-92	ND	ND	---
Chromium	01-16-92	ND	ND	---
Lead	01-16-92	32.4	36.9	13.0 ✓
Selenium	01-17-92	ND	ND	---
Silver	01-16-92	ND	ND	---

c = Control limit (+/-)

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

DUPLICATES

CNLSI No.: 923736
Matrix: Solid
Preparation: 3050
Units: ppm

Analyte	QC Batch	Sample	Duplicate	RPD
Arsenic	01-20-92	20.6	16.7	*21
Barium	01-16-92	75.9	27.4	*94
Cadmium	01-16-92	ND	ND	---
Chromium	01-16-92	16.1	5.38	*100
Lead	01-16-92	21.1	29.8	*34
Selenium	01-17-92	1.70	1.83	7.4
Silver	01-16-92	ND	ND	---

c = Control limit (+/-)

35 - 50 NS

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

DUPLICATES

CNLSI No.: 923659
Matrix: Liquid
Preparation: 7470
Units: ppm

Analyte	QC Batch	Sample	Duplicate	RPD
Mercury	01-09-92	ND	ND	---

c = Control limit (+/-)

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

DUPLICATES

CNLSI No.: 923716
Matrix: Liquid
Preparation: 7471
Units: ppm

Analyte	QC Batch	Sample	Duplicate	RPD
Mercury	01-16-92	ND	ND	---

c = Control limit (+/-)

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

DUPLICATES

CNLSI No.: 923741
Matrix: Solid
Preparation: 7471
Units: ppm

Analyte	QC Batch	Sample	Duplicate	RPD
Mercury	01-16-92	ND	ND	---

c = Control limit (+/-)

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

LABORATORY CONTROL SAMPLE

Units: ppm

Analyte	QC Batch	True	Found	Percent Recovery
Arsenic	01-15-92	1.00	0.91	91
Barium	01-15-92	1.00	1.01	101
Cadmium	01-15-92	1.00	0.97	97
Chromium	01-15-92	1.00	1.02	102
Lead	01-15-92	1.00	0.95	95
Selenium	01-15-92	1.00	0.90	90
Silver	01-15-92	1.00	0.92	92
Arsenic	01-17-92	1.00	0.93	93
Barium	01-15-92	1.00	0.94	94
Cadmium	01-15-92	1.00	0.89	89
Chromium	01-15-92	1.00	0.93	93
Lead	01-15-92	1.00	0.84	84
Selenium	01-15-92	1.00	1.09	109
Silver	01-15-92	1.00	0.80	80

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SUMMARY OF VOLATILE ORGANICS

QUALITY CONTROL

RELEASE 1082

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

CONTINUING CALIBRATION AND INSTRUMENT BLANKS

VOLATILES

QC Batch (Date Analyzed):	01-14-92	01-16-92	01-16-92
CCC Criteria Met	Yes	Yes	Yes
SPCC Criteria Met	Yes	Yes	Yes
Instrument Blank: (ppm)			
Trichlorofluoromethane	<0.010	<0.010	<0.010
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.010	<0.010	<0.010
Acetone	<0.025	<0.025	<0.025
Carbon Disulfide	<0.007	<0.007	<0.007
Methylene Chloride	<0.006	<0.006	<0.006
2-Butanone (MEK)	<0.015	<0.015	<0.015
1,1,1-Trichloroethane	<0.012	<0.012	<0.012
Carbon Tetrachloride	<0.009	<0.009	<0.009
Benzene	<0.005	<0.005	<0.005
Trichloroethylene	<0.013	<0.013	<0.013
Methyl Isobutyl Ketone	<0.010	<0.010	<0.010
Toluene	<0.010	<0.010	<0.010
Chlorobenzene	<0.011	<0.011	<0.011
1,1,2-Trichloroethane	<0.006	<0.006	<0.006
Tetrachloroethylene	<0.028	<0.028	<0.028
Ethylbenzene	<0.005	<0.005	<0.005
m,p-Xylene	<0.006	<0.006	<0.006
o-Xylene	<0.004	<0.004	<0.004
o-Dichlorobenzene	<0.014	<0.014	<0.014
2-Nitropropane	ND	ND	ND
Cyclohexanone	ND	ND	ND
Ethyl Acetate	ND	ND	ND
Ethyl Ether	ND	ND	ND
Pyridine	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND
Surrogates: (% Recovery)			
1,2-Dichloroethane-d4	105	91	90
Toluene-d8	107	105	95
Bromofluorobenzene	98	104	98

ND = Not detected through computer search of the Wiley/EPA Mass Spectral Database

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

CONTINUING CALIBRATION AND INSTRUMENT BLANKS

VOLATILES

QC Batch (Date Analyzed):	01-17-92	01-20-92
CCC Criteria Met	Yes	Yes
SPCC Criteria Met	Yes	Yes
Instrument Blank: (ppm)		
Trichlorofluoromethane	<0.010	<0.010
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.010	<0.010
Acetone	<0.025	<0.025
Carbon Disulfide	<0.007	<0.007
Methylene Chloride	<0.006	<0.006
2-Butanone (MEK)	<0.015	<0.015
1,1,1-Trichloroethane	<0.012	<0.012
Carbon Tetrachloride	<0.009	<0.009
Benzene	<0.005	<0.005
Trichloroethylene	<0.013	<0.013
Methyl Isobutyl Ketone	<0.010	<0.010
Toluene	<0.010	<0.010
Chlorobenzene	<0.011	<0.011
1,1,2-Trichloroethane	<0.006	<0.006
Tetrachloroethylene	<0.028	<0.028
Ethylbenzene	<0.005	<0.005
m,p-Xylene	<0.006	<0.006
o-Xylene	<0.004	<0.004
o-Dichlorobenzene	<0.014	<0.014
2-Nitropropane	ND	ND
Cyclohexanone	ND	ND
Ethyl Acetate	ND	ND
Ethyl Ether	ND	ND
Pyridine	ND	ND
Chlorinated Fluorocarbons	ND	ND
Surrogates: (% Recovery)		
1,2-Dichloroethane-d4	91	86
Toluene-d8	106	100
Bromofluorobenzene	107	102

ND = Not detected through computer search of the Wiley/EPA Mass Spectral Database

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

METHOD BLANK

VOLATILES

Matrix: Solid
Preparation: Methanol Extraction
Units: Parts per Million

Date Analyzed:	01-13-92
Date Prepared:	01-13-92
Trichlorofluoromethane	<0.42
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.42
Acetone	<1.0
Carbon Disulfide	<1.1
Methylene Chloride	<0.25
2-Butanone (MEK)	<0.63
1,1,1-Trichloroethane	<0.50
Carbon Tetrachloride	<0.38
Benzene	<0.21
Trichloroethylene	<0.54
Methyl Isobutyl Ketone	<0.42
Toluene	<0.42
Chlorobenzene	<0.46
1,1,2-Trichloroethane	<0.25
Tetrachloroethylene	<1.2
Ethylbenzene	<0.21
m,p-Xylene	<0.25
o-Xylene	<0.17
o-Dichlorobenzene	<0.58
2-Nitropropane	ND
Cyclohexanone	ND
Ethyl Acetate	ND
Ethyl Ether	ND
Pyridine	ND
Chlorinated Fluorocarbons	ND

Surrogates: (% Recovery)	
1,2-Dichloroethane-d4	97
Toluene-d8	106
Bromofluorobenzene	105

ND = Not detected through computer search of the Wiley/EPA Mass Spectral Database

EMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

CNLSI Sample #: 923720
Matrix: Liquid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
1,1-Dichloroethene	0.050	ND	0.041	82
Trichloroethene	0.050	ND	0.047	95
Chlorobenzene	0.050	ND	0.051	103
Toluene	0.050	ND	0.048	96
Benzene	0.050	ND	0.049	97

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
1,1-Dichloroethene	0.043	87	5.5
Trichloroethene	0.051	102	7.5
Chlorobenzene	0.055	109	5.9
Toluene	0.053	105	8.6
Benzene	0.053	105	7.7

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

CNLSI Sample #: 923678
Matrix: Solid
Preparation: Methanol Extraction
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
1,1-Dichloroethene	2.1	ND	1.9	90
Trichloroethene	2.1	ND	1.9	90
Chlorobenzene	2.1	ND	1.8	86
Toluene	2.1	ND	1.9	90
Benzene	2.1	ND	1.9	90

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
1,1-Dichloroethene	1.8	86	5
Trichloroethene	1.9	90	0
Chlorobenzene	1.9	90	5
Toluene	2.0	95	5
Benzene	2.0	95	5

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

SUMMARY OF SEMI-VOLATILE ORGANICS

QUALITY CONTROL

RELEASE 1082

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

METHOD BLANK

Semi-Volatiles

Units: Parts per Million

Date Analyzed:	01-15-92	01-16-92
Date Prepared:	01-13-92	01-14-92
CCC Criteria Met	Yes	Yes
SPCC Criteria Met	Yes	Yes
Pyridine	<0.02	<2.0
o-Cresol	<0.01	<1.0
Hexachloroethane	<0.01	<1.0
m,p-Cresol	<0.01	<1.0
Nitrobenzene	<0.01	<1.0
Hexachlorobutadiene	<0.01	<1.0
2,4,6-Trichlorophenol	<0.01	<1.0
2,4,5-Trichlorophenol	<0.01	<1.0
2,4-Dinitrotoluene	<0.01	<1.0
Hexachlorobenzene	<0.01	<1.0
Pentachlorophenol	<0.01	<1.0

Surrogates: (% Recovery)

2-Fluorophenol	41	69
Phenol-d6	21	68
Nitrobenzene-d5	56	60
2-Fluorobiphenyl	67	75
2,4,6-Tribromophenol	68	80
Terphenyl-d14	112	120

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

Semi-Volatiles

no EPA limits for most compds. esc PCP.

CNLSI No.: 913209
Matrix: Liquid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
Pyridine	50	ND	25.4	51
o-Cresol	100	ND	76.4	76
Hexachloroethane	50	ND	38.1	76
m,p-Cresol	100	ND	141	141
Hexachlorobutadiene	50	ND	41.3	83
2,4,6-Trichlorophenol	100	ND	76.5	77
2,4,5-Trichlorophenol	100	ND	94.1	94
2,4-Dinitrotoluene	100	ND	85.5	85
Hexachlorobenzene	50	ND	55.8	112
Pentachlorophenol	200	ND	190	95

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
Pyridine	25.9	52	2.1
o-Cresol	74.2	74	2.9
Hexachloroethane	37.8	76	0.7
m,p-Cresol	137	137	2.9
Hexachlorobutadiene	40.5	81	2.0
2,4,6-Trichlorophenol	74.2	74	3.1
2,4,5-Trichlorophenol	90.5	91	3.8
2,4-Dinitrotoluene	86.3	86	1.0
Hexachlorobenzene	55.4	111	0.7
Pentachlorophenol	184	92	3.2

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

Semi-Volatiles

CNLSI No.: 912077
Matrix: Solid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
Pyridine	50	ND	39.0	78
o-Cresol	100	ND	51.3	51
Hexachloroethane	50	ND	25.4	51
m,p-Cresol	100	ND	85.7	86
Hexachlorobutadiene	50	ND	46.1	92
2,4,6-Trichloro-phenol	100	ND	75.6	76
,5-Trichloro-phenol	100	ND	68.3	68
2,4-Dinitrotoluene	100	ND	94.1	94
Hexachlorobenzene	50	ND	54.4	109
Pentachlorophenol	200	ND	213.4	107

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
Pyridine	31.6	63	20.9
o-Cresol	42.8	43	18.1
Hexachloroethane	24.4	49	3.9
m,p-Cresol	75.7	76	12.4
Hexachlorobutadiene	47.6	95	3.2
2,4,6-Trichlorophenol	71.7	72	5.3
2,4,5-Trichlorophenol	64.9	65	5.2
2,4-Dinitrotoluene	86.8	87	8.0
Hexachlorobenzene	55.1	110	1.3
Pentachlorophenol	218.4	109	2.3

WEMCO PO: 413910
Release No.: 1082
Date: January 23, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

Semi-Volatiles

CNLSI No.: 923737
Matrix: Solid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
Pyridine	50	ND	24.3	49
o-Cresol	100	ND	59.1	59
Hexachloroethane	50	ND	33.3	67
m,p-Cresol	100	ND	59.9	60
Hexachlorobutadiene	50	ND	41.9	81
2,4,6-Trichloro-phenol	100	ND	55.6	56
2,4,5-Trichloro-phenol	100	ND	55.6	56
2,4-Dinitrotoluene	100	ND	67.9	68
Hexachlorobenzene	50	ND	45.8	92
Pentachlorophenol	200	ND	156.8	78

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
Pyridine	26.5	53	9.0
o-Cresol	59.8	60	1.3
Hexachloroethane	31.2	62	6.3
m,p-Cresol	59.7	60	0.4
Hexachlorobutadiene	38.2	76	9.2
2,4,6-Trichlorophenol	53.8	54	3.3
2,4,5-Trichlorophenol	53.8	54	3.3
2,4-Dinitrotoluene	61.5	62	9.9
Hexachlorobenzene	42.5	85	7.5
Pentachlorophenol	143.7	72	8.7

Release #1368

TABULATED RESULTS FROM T3 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1368)

Sample No.	92-138A-4068	92-138A-4069	92-138A-4070	92-138A-4071	92-138A-4072	92-138A-4078
Description	T3 INLET	T3 OUTLET	T3 OUT-DUP	TRANS. PUMP	PAD DRAIN PIPE	TRIP BLANK
WEMCO ID.	920415-078	920415-079	920415-080	920415-081	920415-082	920415-083
ITAS ID	1990-001	1990-002	1990-003	1990-004	1990-005	1990-006
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
CHLOROMETHANE	10 U	10 U	10 U	100 U	10 U	10 U
VINYL CHLORIDE	10 U	10 U	10 U	100 U	10 U	10 U
CHLOROETHANE	10 U	10 U	10 U	100 U	10 U	10 U
TRICHLOROFLUOROMETHANE	10 U	10 U	10 U	100 U	10 U	10 U
METHYLENE CHLORIDE	10 U	10 U	10 U	100 U	10 U	4 J
ACETONE	10 U	10 U	16 U	210 U	10 U	15 U
CARBON DISULFIDE	5 U	5 U	5 U	50 U	5 U	5 U
1,1-DICHLOROETHENE	5 U	5 U	5 U	50 U	5 U	5 U
trans-1,2-DICHLOROETHENE	5 U	5 U	5 U	50 U	5 U	5 U
1,2-DICHLOROETHANE	5 U	5 U	5 U	50 U	5 U	5 U
2-BUTANONE	10 U	10 U	11 U	100 U	10 U	16 U
1,1,1-TRICHLOROETHANE	5 U	5 U	5 U	620 U	5 U	5 U
CARBON TETRACHLORIDE	5 U	5 U	5 U	50 U	5 U	5 U
TRICHLOROETHENE	5 U	5 U	5 U	50 U	5 U	5 U
1,1,2-TRICHLOROETHANE	5 U	5 U	5 U	50 U	5 U	5 U
BENZENE	5 U	5 U	5 U	50 U	5 U	5 U
4-METHYL-2-PENTANONE	10 U	10 U	10 U	100 U	10 U	10 U
TETRACHLOROETHYLENE	5 U	5 U	5 U	50 U	5 U	5 U
TOLUENE	5 U	5 U	5 U	50 U	5 U	2 J
CHLOROBENZENE	2 J	1 J	1 J	50 U	2 J	5 U
ETHYLBENZENE	5 U	5 U	5 U	50 U	5 U	5 U
XYLENES (TOTAL)	5 U	5 U	5 U	50 U	5 U	5 U

(B) Analyte detected in control blank
(J) Estimated value
(NR) Not Reported
(R) Rejected
(U) Not detected at concentration listed

TABULATED RESULTS FROM T3 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1368)

Sample No.	92-138A-4068	92-138A-4069	92-138A-4070	92-138A-4071	92-138A-4072	92-138A-4078
Description	T3 INLET	T3 OUTLET	T3 OUT-DUP	TRANS. PUMP	PAD DRAIN PIPE	TRIP BLANK
WEMCO ID.	920415-078	920415-079	920415-080	920415-081	920415-082	920415-083
ITAS ID	1990-001	1990-002	1990-003	1990-004	1990-005	1990-006
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
SEMI-VOLATILE ORGANICS:	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	10 U	10 U	10 U	NR	10 U	10 U
3-METHYLPHENOL	10 U	10 U	10 U	NR	10 U	10 U
4-METHYLPHENOL	10 U	10 U	10 U	NR	10 U	10 U
1,4-DICHLOROBENZENE	10 U	10 U	10 U	NR	10 U	10 U
2,4-DINITROTOLUENE	10 U	10 U	10 U	NR	10 U	10 U
HEXACHLOROBENZENE	10 U	10 U	10 U	NR	10 U	10 U
HEXACHLORO-1,3-BUTADIENE	10 U	10 U	10 U	NR	10 U	10 U
HEXACHLOROETHANE	10 U	10 U	10 U	NR	10 U	10 U
NITROBENZENE	10 U	10 U	10 U	NR	10 U	10 U
PENTACHLOROPHENOL	52 U	52 U	52 U	NR	52 U	52 U
PYRIDINE	10 U	10 U	10 U	NR	10 U	10 U
2,4,5-TRICHLOROPHENOL	10 U	10 U	10 U	NR	10 U	10 U
2,4,6-TRICHLOROPHENOL	10 U	10 U	10 U	NR	10 U	10 U
METALS (TOTAL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U
BARIUM	0.01000 U	0.01000 U	0.01000 U	2.36000	0.01000 U	0.01000 U
CADMIUM	0.01000 U	0.01000 U	0.01000 U	0.03000	0.01000 U	0.01000 U
CHROMIUM	0.02500 U	0.02500 U	0.02500 U	109.000	0.02500 U	0.02500 U
LEAD	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10000 U
MERCURY	0.00020 U	0.00024	0.00025	0.01500	0.00020 U	0.00020 U
SELENIUM	0.50000 U	0.50000 U	0.50000 U	4.02000	0.50000 U	0.50000 U
SILVER	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U

(B) Analyte detected in control blank
(J) Estimated value
(NR) Not Reported
(R) Rejected
(U) Not detected at concentration listed

TABULATED RESULTS FROM T3 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1368)

Sample No.	92-138A-4068		92-138A-4069		92-138A-4070		92-138A-4071		92-138A-4072		92-138A-4078	
Description	T3 INLET		T3 OUTLET		T3 OUT-DUP		TRANS. PUMP		PAD DRAIN PIPE		TRIP BLANK	
WEMCO ID.	920415-078		920415-079		920415-080		920415-081		920415-082		920415-083	
ITAS ID	1990-001		1990-002		1990-003		1990-004		1990-005		1990-006	
Matrix	Liquid		Liquid		Liquid		Liquid		Liquid		Liquid	
METALS (TCLP)	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
ARSENIC	0.50000	U	0.50000	U	0.50000	U	0.50000	U	0.50000	U	0.50000	U
BARIUM	0.36100	R	0.60600	R	0.46100	R	1.95600		0.81200		0.01600	R
CADMIUM	0.01000	U	0.01000	U	0.01000	U	0.01600		0.01000	U	0.01000	U
CHROMIUM	0.02500	U	3.62000		3.63700		67.0300		0.02500	U	0.02500	U
LEAD	0.10000	U	0.10000	U	0.10000	U	0.10000	U	0.10000	U	0.10000	U
MERCURY	0.00020	U	0.00020	U	0.00020	U	0.00740		0.00020	U	0.00020	U
SELENIUM	0.50000	U	0.50000	U	0.50000	U	2.53000		0.50000	U	0.50000	U
SILVER	0.02000	U	0.02000	U	0.02000	U	0.02000	U	0.02000	U	0.02000	U
RADIOLOGICAL	(pCi/mL)		(pCi/mL)		(pCi/mL)		(pCi/mL)		(pCi/mL)		(pCi/mL)	
Gross Alpha	1.28		1125.00		1093.00		2184.00		0.08	J	0.06	
Gross Beta	0.92		769.40		764.90		2033.00		0.18	J	0.15	

(B) Analyte detected in control blank
(J) Estimated value
(NR) Not Reported
(R) Rejected
(U) Not detected at concentration listed

092

4582

-4587

From: W. J. Cowan (9221) WEMCO:EM:SAM:ALPO:92-0054

Date: May 5, 1992

Subject: REPORT OF ANALYSIS FOR RELEASE NUMBER 1368

To : E.D. Wiese

The attached data package has been reviewed by the Data Review and Reporting group and has been approved for distribution by the Analytical Laboratories Project Oversight group.

Six samples arrived at Westinghouse Environmental Management Company on April 15, 1992.

The sample(s) were submitted for analyses in the support of the T5/T6 RCRA Closure project.

The samples were collected on April 15, 1992 and were labeled as follows:

WEMCO SAMPLE NUMBER	CLIENT SAMPLE NUMBER
920415-078	92-138A-4068 T-3 Inlet
920415-079	92-138A-4069 T-3 Outlet
920415-080	92-138A-4070 4069 Dup.
920415-081	92-138A-4071 Transfer Pump
920415-082	92-138A-4072 Containment Pad Outlet Pipe
920415-083	92-138A-4078 Trip Blank

COMMENTS:

The Analytical Laboratories Project Oversight group is pleased to be of service to you. If you have any questions or comments, please call me at 738-9238.

W. J. Cowan, Project Scientist
Analytical Laboratory Project Oversight
Sampling & Analysis Management

WJC:bar

c: L.J. Love
G. Henderson

ALPO Release Letterbook Log
Central Files

OFFSITE DATA REVIEW CHECKLIST

Larry J. Evans	1368	5/19/92
REVIEWER'S NAME	RELEASE NO.	DATE REVIEWED

YES	NO	N/A		
X			A)	Holding times were met. If no, explain:
	X		B)	All samples are included in release. If no, explain: Sample 920415-081 BNA needed re-extraction due to surrogates out of QC acceptance. Re-extract was not done due to client request that re-extracts not be performed out of hold time. There is no documentation in the release to support this claim! No BNA results are reported for this sample.
X			C)	All determinations are included in release. If no, explain:
X			D)	Results have been checked for reasonableness. The data has been found to be reasonable. If no, explain:
X			E)	Samples are included in QC lot tables. If no, explain:
X			F)	Blanks were analyzed and results are within acceptable limits. If no, explain: There is a slight amount of Barium in the TCLP extraction blank EXT BLK 12828.
X			G)	Internal QC check standards (reference standards, ICS, etc) were analyzed and are within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1368

YES	NO	N/A		
x			H)	Matrix spikes were analyzed and are within acceptable limits. If no, explain:
x			I)	Matrix spike duplicates were analyzed (organics) and are within acceptable limits. If no, explain:
x			J)	Surrogates were analyzed for all VOA/BNA samples and the results are within acceptable limits. If no, explain:
x			K)	Duplicates were analyzed (inorganics) and are within acceptable limits. If no, explain:
		x	L)	Blind Quality Control samples were analyzed with the release and all results were within acceptable limits. (For long term tracking purposes only.)
		x		Results are attached. If no, explain:
		x	M)	The Calculated Precision Terms of controls is within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1368

YES	NO	N/A		
		x	N)	The Calculated Accuracy Terms of controls is within acceptable limits. If no, explain:
x			O)	Overall Quality Control of release is acceptable. If no, explain: The samples were received at 18 degrees centigrade. Sample 920415-081 BNA needed re-extraction due to surrogates out of QC acceptance. Re-extract was not done due to client request that re-extracts not be performed out of hold time. There is no documentation in the release to support this claim! No BNA results are reported for this sample.

P) Sample numbers included in release:

920415-078	920415-079	920415-080	920415-081	920415-082	920415-083

Q) Copies of results are to be sent to: E. Weise, L. Love, G. Henderson and S. Lund

R) Project Name: T5 / T6 RCRA Closure - Sampling Plan 92-138A

SIGNATURE OF DATA REVIEWER: Larry J. Evans

DATE OF FINAL REVIEW: 5/19/92

T-5 & T-6 1-15-92

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Pg 1 of 1

ANALYSIS REQUEST / CUSTODY RECORD

Control #: _____

PROJECT: T5 T6 RCRA CLOSURE	CLIENT: SITE MEDIA SAMPLING	TECHNICIAN/EXT.: W. MYERS / 4301
PROJECT #: N/A	CLIENT CONTACT: L. LOVE	CHARGE #: RZP-01
PE/PM: ED WEISE	PHONE: 6727	LOT MARK CODE: N/A

SAMPLE IDENTIFICATION

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME
92-138A-4068		SAMPLE #2	LIQUID	4/15/92 0945	GLASS TLC/ COOL TO 4°C	1 GAL & 4 QUARTS 2 4OZ
92-138A-4069		SAMPLE #3		1020		
92-138A-4070		SAMPLE #4		1040		
92-138A-4071		SAMPLE #5		1120		
92-138A-4072		SAMPLE #6		1130		
92-138A-4078		FIELD BLANK		1130		

NOTHING FOLLOWS

ANALYSIS REQUESTED

(SEE REVERSE FOR PARAMETERS)

SAMPLE NUMBER	TABLE 1	2	3	4	5	6	7
92-138A-4068	X	X	X	X	X	X	X
92-138A-4069	X	X	X	X	X	X	X
92-138A-4070	X	X	X	X	X	X	X
92-138A-4071	X	X	X	X	X	X	X
92-138A-4072	X	X	X	X	X	X	X
92-138A-4078	X	X	X	X	X	X	X

Copy To: E. WEISE L. LOVE G. HENDERSON

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
PROCESS ALL	W.A. Myers	[illegible]	4/15/92	1420					

090

45882

TABLE 1 TCLP (Full Spectrum)

METALS
- Arsenic
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Silver

PESTICIDE/HERBICIDE
- Chlordane
- 2,4 - D
- Endrin
- Lindane
- Methoxychlor
- Toxaphene
- 2,4,5 - TP Acid- (Silvex)

VOLATILES
- Benzene
- Carbon Tetrachloride
- Chlorobenzene
- Chloroform
- 2 - Butane
- 1,1 - Dichloroethane
- 1,2 - Dichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride

SEMI VOLATILES
- 1,4 - Dichlorobenzene
- 2,4 - Dinitrotoluene
- Hexachlorobenzene
- Hexachloroethane
- Hexachloro - 1,3 - Butadiene
- Nitrobenzene
- Pentachlorophenol
- 2,4,5 - Trichlorophenol
- 2,4,6 - Trichlorophenol
- o - Cresol
- m - Cresol
- p - Cresol
- Pyridine

TABLE 2 METALS

X TCLP X TOTALS

METALS

Arsenic	Lead
Barium	Mercury
Cadmium	Selenium
Chromium	Silver

TABLE 3 PEST/HERB

_ TCLP _ TOTALS

PESTICIDE/HERBICIDE

Chlordane	2,4 - D
Methoxychlor	Endrin
Toxaphene	Lindane
2,4,5 - TP Acid- (Silvex)	

TABLE 4 VOA/SEMI VOA

_ ~~TCLP~~ X TOTALS

VOLATILES
- Benzene
- Carbon Tetrachloride
- Chlorobenzene
- Chloroform
- 2 - Butane
- 1,1 - Dichloroethane
- 1,2 - Dichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride

SEMI VOLATILES
- 1,4 - Dichlorobenzene
- 2,4 - Dinitrotoluene
- Hexachlorobenzene
- Hexachloroethane
- Hexachloro - 1,3 - Butadiene
- Nitrobenzene
- Pentachlorophenol
- 2,4,5 - Trichlorophenol
- 2,4,6 - Trichlorophenol
- o- Cresol
- m - Cresol
- p - Cresol
- Pyridine

TABLE 5 RAD

- ~~Cs 137~~
- ~~Np 237~~
- ~~Pu 238~~
- ~~Pu 239/240~~
- ~~Ra 226~~
- ~~Ra 228~~
- ~~Ru 106~~
- ~~Tc 99~~
- X Th Total
- ~~Th 228~~
- ~~Th 230~~
- ~~Th 232~~
- X U Total
- ~~U 234~~
- X U 235/~~236~~
- ~~U 238~~
- X ~~Gross Alpha/Beta~~ A/B SCREEN

TABLE 7

- _ Paint Filter Liquid Test (PFLT)
- _ pH (If PFLT fails)
- _ Flash Point (If PFLT fails)
- _ HSL
  - _ Full
  - _ Extended
  - _ Abreviated

TABLE 6 TOTAL VOA

- Acetone
- Benzene
- Carbon Disulfide
- Carbon Tetrachloride
- Chlorinated Fluorocarbon
- Chlorobenzene
- Chloroethane
- Chloromethane
- 1,1 - Dichloroethane
- 1,2 - Dichloroethane
- Trans - 1,2 - Dichloroethane
- o - Dichlorobenzene
- 2 - Ethoxyethanol
- Ethyl Acetate
- Ethyl Benzene
- Ethyl Ether
- Isobutanol
- Methanol
- Methyl Isobutyl Ketone
- Methyl Ethyl Ketone
- Methylene Chloride
- Nitrobenzene
- 2 - Nitropropane
- Pyridine
- Tetrachloroethylene
- Toluene
- 1,1,1 - Trichloroethane
- 1,1,2 - Trichloro-1,2,2 - Trifluoroethane
- Trichlorofluoromethane
- Vinyl Chloride
- Xylenes

T-5 & T-6 4-15-92 LOGBOOK 141 - 4538

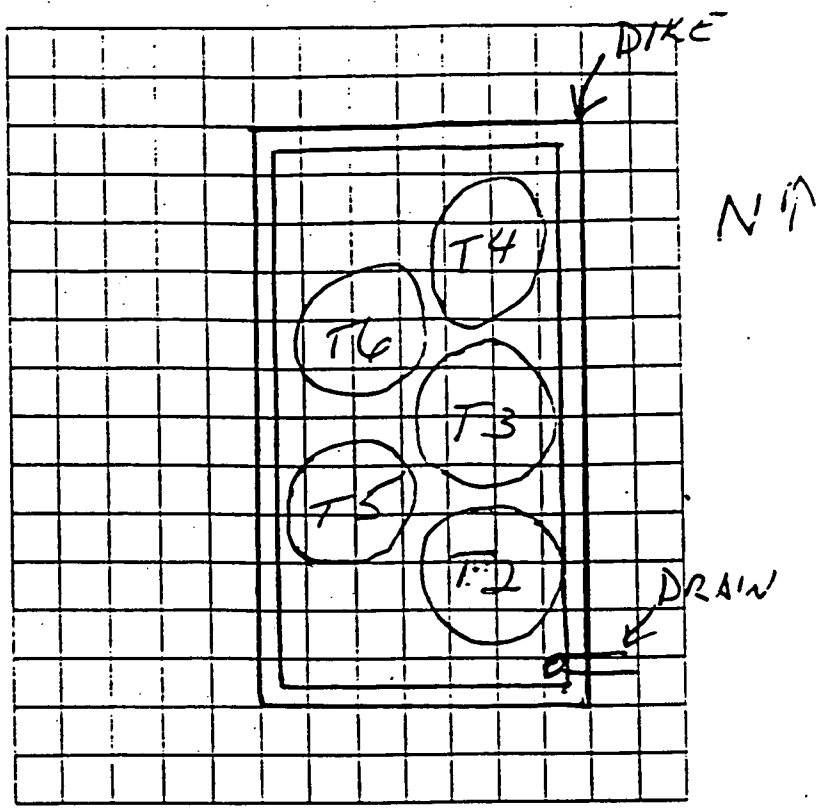
DATE: 4/15/92
TIME START: 0900
TIME FINISH:
PAGE 2 OF 2

FEED MATERIAL PRODUCTION CENTER
P. O. BOX 398704
CINCINNATI, OHIO 45239-8704

PROJECT NAME: T5/T6 RECLAMATION
PROJECT NO: N/A
LOCATION: WEST OF PILOT PLANT
WEATHER: CLOUDY
TEMPERATURE: 50°

CONTACT/EXT: L LOVE/6737

PURPOSE OF SAMPLING: RECLAMATION
PROCESS PRODUCING WASTE: N/A PROCESS
SAMPLE REQUEST NO: 135A
SAMPLE PLAN NO: 92-135A



	SAMPLE NUMBER	SAMPLE TYPE	COLLECTION METHOD	DEPTH	TIME	SAMPLE PRESERVATIVE	CONT TYPE	NUMBER/ VOLUME
SAMPLE #2	92-135A-4068	LIQUID	POURED	N/A	0945	COOL TO 4°C	GLASS/ TLC	1GAL WIDE MOUTH
SAMPLE #3	92-135A-4069	↓	↓	↓	1020	↓	↓	↓
SAMPLE #4	92-135A-4070				1040			
SAMPLE #5	92-135A-4071				1120			
SAMPLE #6	92-135A-4072				1130			
LOGBOOK	92-135A-4078				1130			

NOTHING FOLLOWS

FIELD MEASUREMENTS: N/A
TRANSPORTATION METHOD: VAN TO LAB
SAMPLE TECHNICIANS: W MYERS W NEYER
TECHNICIAN SIGNATURES: Wm. Myers W. Neyer
FIELD OBSERVATIONS: N/A

LOGBOOK 14

4587

DATE: 4 11 82
TIME START: 0900
TIME FINISH:
PAGE 1 OF 2

SAMPLE #2 IS TANK 3 INFLOW PIPE WM
SAMPLE #3 IS TANK 3 OUTFLOW PIPE WM
SAMPLE #4 IS DUPLICATE OF SAMPLE #3 WM
SAMPLE #5 IS ~~RAD DRAIN LINE~~ TRANSFER PUMP WM
SAMPLE #6 IS PAD DRAIN LINE WM
NOTHING FOLLOWS

-4587

INTERNATIONAL TECHNOLOGY CORPORATION

Memorandum

To: Bill Cowan
WEMCO

Date: 05/15/92

From: Bob White REW
ITAS-St. Louis

Subject: Project 245.01, Purchase Order 417988

The Certificate of Analysis has been revised for Release 1368. The revision applies to rad. screen analysis for the samples, indicating that all the assay results yielded less than 5.0 uCi/L. The rad. screen reports have also been resubmitted for the category levels. The levels required revision due to a computer error. The results and calculations remain unchanged.

Please see the attached revised Report.

Please call me direct if you have any questions or comments at 314-298-8566.

INTERNATIONAL TECHNOLOGY CORPORATION

CERTIFICATE OF ANALYSIS - REVISED

Westinghouse Environmental Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030
May 15, 1992

Attention: Bill Cowan

Purchase Order Number: 417988

This is the Certificate of Analysis for the following:

Project Number : 245-01
Release Order : 1368
Date Received by Lab: April 17, 1992
Number of Samples : Six (6)
Sample Types : Water

I. Introduction

On April 17, 1992, six (6) samples were received at ITAS - St. Louis laboratory from Westinghouse Environmental Management Company of Ohio. The list of analytical tests performed, as well as receipt and analysis, can be found in the attached report. The samples were labeled as follows:

CLIENT ID	ITAS ID	
920415-078	1990-001	T-3 Inlet
920415-079	1990-002	T-3 Outlet
920415-080	1990-003	T-3 Outlet Dup.
920415-081	1990-004	Transfer Pump
920415-082	1990-005	Containment Pad Outlet
920415-083	1990-006	Trip Blank

All samples were screened prior to analysis yielding less than 5.0 uCi/L.

Westinghouse Environmental Management Company of Ohio
May 15, 1992
Project Number: 245-01

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical tests. Each set of data will include sample identification information, the analytical results, and the appropriate detection limits.

The analysis requested includes: TCLP Metals, TCLP Mercury, Metals by EPA method 6010, Mercury by EPA method 7470, Semivolatiles by EPA method 8270, and Volatiles by EPA method 8240 including library search.

III. Quality Control

The QA/QC information can be found immediately following the analytical data. This QA/QC data are used to assess the laboratory's accuracy and precision during the analytical procedure.

The samples were extracted and analyzed within the required hold time.

IV. Nonconformance

These samples were received at 18 degrees centigrade.

Sample 1990-004 (920415-081) needed reextraction for the BNA's due to missing/low surrogate recovery because of a probable matrix effect. Reextract was not done due to client request that reextracts not be performed out of hold time. No BNA results are reported for this sample.

I certify that this Certificate of Analysis is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Reviewed and Approved:

Robert E. White

Robert E. White
Project Manager

T-3 Inlet Pipe

4587

RESUBMITTED DATA

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-078

Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.46	NA
Total Counts/ Count Time (cpm)	3.60	4.50	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.80	NA
Assay Results (picocuries/milliliter)	1.28	0.92	0.00
Total Activity (pCi)	4665.12	3353.51	0.00
Max Quantity for Category I (milliliters)	7788.16	108342.36	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

4587

T-3 Outlet Pipe

RESUBMITTED DATA

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-079

Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.46	NA
Total Counts/ Count Time (cpm)	2408.17	2804.67	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.80	NA
Assay Results (picocuries/milliliter)	1125.00	769.40	0.00
Total Activity (pCi)	4087431.45	2795439.78	0.00
Max Quantity for Category I (milliliters)	8.89	129.97	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

____ Category I (no restrictions)
____ Category II (Licensed Lab only)
X Category III (Radiation work permit required)

-4587

T-3 Outlet Pipe - Duplicate

RESUBMITTED DATA

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-080

Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.45	NA
Total Counts/ Count Time (cpm)	2353.90	2776.17	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.87	NA
Assay Results (picocuries/milliliter)	1093.00	764.90	0.00
Total Activity (pCi)	3971166.73	2779090.06	0.00
Max Quantity for Category I (milliliters)	9.15	130.74	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

____ Category I (no restrictions)
____ Category II (Licensed Lab only)
X Category III (Radiation work permit required)

RESUBMITTED DATA

Transfer Pump

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-081

Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.45	NA
Total Counts/ Count Time (cpm)	2565.43	6147.67	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.87	NA
Assay Results (picocuries/milliliter)	2184.00	2033.00	0.00
Total Activity (pCi)	7935066.92	7386442.79	0.00
Max Quantity for Category I (milliliters)	4.58	49.19	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

____ Category I (no restrictions)
____ Category II (Licensed Lab only)
X Category III (Radiation work permit required)

- 45 07

RESUBMITTED DATA

Containment Pad Outlet Pipe

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-082

Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.51	NA
Total Counts/ Count Time (cpm)	0.23	1.23	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.90	NA
Assay Results (picocuries/milliliter)	0.08	0.18	0.00
Total Activity (pCi)	291.93	653.99	0.00
Max Quantity for Category I (milliliters)	124455.51	555555.56	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

RESUBMITTED DATA

Trip Blank

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-083

Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.51	NA
Total Counts/ Count Time (cpm)	0.07	1.27	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.60	NA
Assay Results (picocuries/milliliter)	0.06	0.15	0.00
Total Activity (pCi)	202.52	542.45	0.00
Max Quantity for Category I (milliliters)	179404.38	669792.36	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

Rc'd 5-15-92 (WTC)

TS/TG RCRA Closure

E Weisel
L. Low
G Henderson
S Lund

- -4587

INTERNATIONAL TECHNOLOGY CORPORATION 92-1368A

CERTIFICATE OF ANALYSIS

Westinghouse Environmental Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030
May 14, 1992

Attention: Bill Cowan

Purchase Order Number: 417988

This is the Certificate of Analysis for the following:

Project Number : 245-01
Release Order : 1368
Date Received by Lab: April 17, 1992
Number of Samples : Six (6)
Sample Types : Water

I. Introduction

On April 17, 1992, six (6) samples were received at ITAS - St. Louis laboratory from Westinghouse Environmental Management Company of Ohio. The list of analytical tests performed, as well as receipt and analysis, can be found in the attached report. The samples were labeled as follows:

CLIENT ID	ITAS ID
920415-078	1990-001
920415-079	1990-002
920415-080	1990-003
920415-081	1990-004
920415-082	1990-005
920415-083	1990-006

All samples were screened prior to analysis. Samples 920415-078 (1990-001), 920415-082 (1990-005), and 920415-083 (1990-006) yielded less than 5.0 uCi/L. Samples 920415-079, (1990-002) 920415-080 (1990-003), and 920415-081 (1990-004) yielded greater than 5.0 uCi/L.

Westinghouse Environmental Management Company of Ohio
May 14, 1992
Project Number: 245-01

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical tests. Each set of data will include sample identification information, the analytical results, and the appropriate detection limits.

The analysis requested includes: TCLP Metals, TCLP Mercury, Metals by EPA method 6010, Mercury by EPA method 7470, Semivolatiles by EPA method 8270, and Volatiles by EPA method 8240 including library search.

III. Quality Control

The QA/QC information can be found immediately following the analytical data. This QA/QC data are used to assess the laboratory's accuracy and precision during the analytical procedure.

The samples were extracted and analyzed within the required hold time.

IV. Nonconformance

These samples were received at 18 degrees centigrade.

Sample 1990-004 (920415-081) needed reextraction for the BNA's due to missing/low surrogate recovery because of a probable matrix effect. Reextract was not done due to client request that reextracts not be performed out of hold time. No BNA results are reported for this sample.

I certify that this Certificate of Analysis is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Reviewed and Approved:

Robert E. White

Robert E. White
Project Manager

T-3 Inlet

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location:	FERNALD SITE	Date Received:	17-APR-92
Project Numer:	245.01	Date Collected:	15-APR-92
Client Sample ID:	920415-078	Sample Matrix:	Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.46	NA
Total Counts/ Count Time (cpm)	3.60	4.50	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.80	NA
Assay Results (picocuries/milliliter)	1.28	0.92	0.00
Total Activity (pCi)	4665.12	3353.51	0.00
Max Quantity for Category I (milliliters)	7788.16	108342.36	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

T-3 Outlet

-4587

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location:	FERNALD SITE	Date Received:	17-APR-92
Project Numer:	245.01	Date Collected:	15-APR-92
Client Sample ID:	920415-079	Sample Matrix:	Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.46	NA
Total Counts/ Count Time (cpm)	2408.17	2804.67	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.80	NA
Assay Results (picocuries/milliliter)	1125.00	769.40	0.00
Total Activity (pCi)	4087431.45	2795439.78	0.00
Max Quantity for Category I (milliliters)	8.89	129.97	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

T-3 Outlet Duplicate

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location:	FERNALD SITE	Date Received:	17-APR-92
Project Numer:	245.01	Date Collected:	15-APR-92
Client Sample ID:	920415-080	Sample Matrix:	Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.45	NA
Total Counts/ Count Time (cpm)	2353.90	2776.17	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.87	NA
Assay Results (picocuries/milliliter)	1093.00	764.90	0.00
Total Activity (pCi)	3971166.73	2779090.06	0.00
Max Quantity for Category I (milliliters)	9.15	130.74	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

Transfer Pump

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location:	FERNALD SITE	Date Received:	17-APR-92
Project Numer:	245.01	Date Collected:	15-APR-92
Client Sample ID:	920415-081	Sample Matrix:	Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.45	NA
Total Counts/ Count Time (cpm)	2565.43	6147.67	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.87	NA
Assay Results (picocuries/milliliter)	2184.00	2033.00	0.00
Total Activity (pCi)	7935066.92	7386442.79	0.00
Max Quantity for Category I (milliliters)	4.58	49.19	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

Containment Pad Outlet

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-082
Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.51	NA
Total Counts/ Count Time (cpm)	0.23	1.23	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.90	NA
Assay Results (picocuries/milliliter)	0.08	0.18	0.00
Total Activity (pCi)	291.93	653.99	0.00
Max Quantity for Category I (milliliters)	124455.51	555555.56	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

Trip Blank

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920415-083

Date Received: 17-APR-92
Date Collected: 15-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 3633.27 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	17-APR-92	17-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.51	NA
Total Counts/ Count Time (cpm)	0.07	1.27	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.60	NA
Assay Results (picocuries/milliliter)	0.06	0.15	0.00
Total Activity (pCi)	202.52	542.45	0.00
Max Quantity for Category I (milliliters)	179404.38	669792.36	NA

Reviewed and approved by / Date: Bill Thomas 17-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

T-3 Inlet

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920415-078
LAB ID: 1990-001

REPORT DATE : 05/14/92
SAMPLED DATE: 04/15/92
REC'D DATE : 04/17/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/22/92	10	U	1
Vinyl Chloride	04/22/92	10 0.002 = 2ug/L	U	1
Chloroethane	04/22/92	10	U	1
Trichlorofluoromethane	04/22/92	10	U	1
Methylene Chloride	04/22/92	4	BJ	1
Acetone	04/22/92	10	BJ	1
Carbon Disulfide	04/22/92	5	U	1
1,1-Dichloroethene	04/22/92	5	U	1
trans-1,2-Dichloroethene	04/22/92	5	U	1
2-Dichloroethane	04/22/92	5	U	1
Butanone	04/22/92	7	J	1
1,1,1-Trichloroethane	04/22/92	5	U	1
Carbon Tetrachloride	04/22/92	5	U	1
Trichloroethene	04/22/92	5	U	1
1,1,2-Trichloroethane	04/22/92	5	U	1
Benzene	04/22/92	5	U	1
4-Methyl-2-Pentanone	04/22/92	2	BJ	1
Tetrachloroethylene	04/22/92	5	U	1
Toluene	04/22/92	5	U	1
Chlorobenzene	04/22/92	2	J	1
Ethylbenzene	04/22/92	5	U	1
Xylenes (Total)	04/22/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/22/92	93
Bromofluorobenzene	04/22/92	96
1,2-Dichloroethane-d4	04/22/92	96

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

T-3 Outlet

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

REPORT DATE : 05/14/92
CLIENT ID: 920415-079
SAMPLED DATE: 04/15/92
LAB ID: 1990-002
REC'D DATE : 04/17/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/22/92	10	U	1
Vinyl Chloride	04/22/92	10	U	1
Chloroethane	04/22/92	10	U	1
Trichlorofluoromethane	04/22/92	10	U	1
Methylene Chloride	04/22/92	4	BJ	1
Acetone	04/22/92	7	BJ	1
Carbon Disulfide	04/22/92	5	U	1
1,1-Dichloroethene	04/22/92	5	U	1
trans-1,2-Dichloroethene	04/22/92	5	U	1
1,2-Dichloroethane	04/22/92	5	U	1
2-Butanone	04/22/92	9	J	1
1,1,1-Trichloroethane	04/22/92	5	U	1
Carbon Tetrachloride	04/22/92	5	U	1
Trichloroethene	04/22/92	5	U	1
1,1,2-Trichloroethane	04/22/92	5	U	1
Benzene	04/22/92	5	U	1
4-Methyl-2-Pentanone	04/22/92	10	U	1
Tetrachloroethylene	04/22/92	5	U	1
Toluene	04/22/92	5	U	1
Chlorobenzene	04/22/92	1	J	1
Ethylbenzene	04/22/92	5	U	1
Xylenes (Total)	04/22/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/22/92	92
Bromofluorobenzene	04/22/92	96
1,2-Dichloroethane-d4	04/22/92	98

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-3 Outlet
Duplicate

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

REPORT DATE : 05/14/92
SAMPLED DATE: 04/15/92
REC'D DATE : 04/17/92

CLIENT ID: 920415-080
LAB ID: 1990-003

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/22/92	10	U	1
Vinyl Chloride	04/22/92	10	U	1
Chloroethane	04/22/92	10	U	1
Trichlorofluoromethane	04/22/92	10	U	1
Methylene Chloride	04/22/92	4	BJ	1
Acetone	04/22/92	16	B	1
Carbon Disulfide	04/22/92	5	U	1
1,1-Dichloroethene	04/22/92	5	U	1
trans-1,2-Dichloroethene	04/22/92	5	U	1
1,1-Dichloroethane	04/22/92	5	U	1
2-Butanone	04/22/92	11	B?	1
1,1,1-Trichloroethane	04/22/92	5	U	1
Carbon Tetrachloride	04/22/92	5	U	1
Trichloroethene	04/22/92	5	U	1
1,1,2-Trichloroethane	04/22/92	5	U	1
Benzene	04/22/92	5	U	1
4-Methyl-2-Pentanone	04/22/92	10	U	1
Tetrachloroethylene	04/22/92	5	U	1
Toluene	04/22/92	1	J	1
Chlorobenzene	04/22/92	1	J	1
Ethylbenzene	04/22/92	5	U	1
Xylenes (Total)	04/22/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/22/92	95
Bromofluorobenzene	04/22/92	94
1,2-Dichloroethane-d4	04/22/92	99

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

- - 4587

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Transfer Pump

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

REPORT DATE : 05/14/92
SAMPLED DATE: 04/15/92
REC'D DATE : 04/17/92

CLIENT ID: 920415-081
LAB ID: 1990-004

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/22/92	100	U	10
Vinyl Chloride	04/22/92	100	U	10
Chloroethane	04/22/92	100	U	10
Trichlorofluoromethane	04/22/92	100	U	10
Methylene Chloride	04/22/92	21	BJ	10
Acetone	04/22/92	210	B	10
Carbon Disulfide	04/22/92	50	U	10
1,1-Dichloroethene	04/22/92	50	U	10
trans-1,2-Dichloroethene	04/22/92	50	U	10
1,2-Dichloroethane	04/22/92	50	U	10
2-Butanone	04/22/92	26	J	10
1,1,1-Trichloroethane	04/22/92	620		10
Carbon Tetrachloride	04/22/92	50	U	10
Trichloroethene	04/22/92	50	U	10
1,1,2-Trichloroethane	04/22/92	50	U	10
Benzene	04/22/92	50	U	10
4-Methyl-2-Pentanone	04/22/92	100	U	10
Tetrachloroethylene	04/22/92	50	U	10
Toluene	04/22/92	50	U	10
Chlorobenzene	04/22/92	50	U	10
Ethylbenzene	04/22/92	50	U	10
Xylenes (Total)	04/22/92	50	U	10

SURROGATES		% RECOVERY
Toluene	04/22/92	94
Bromofluorobenzene	04/22/92	96
1,2-Dichloroethane-d4	04/22/92	97

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

- -4587

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Containment Pad Outlet

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

REPORT DATE : 05/14/92
SAMPLED DATE: 04/15/92
REC'D DATE : 04/17/92

CLIENT ID: 920415-082
LAB ID: 1990-005

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/22/92	10	U	1
Vinyl Chloride	04/22/92	10	U	1
Chloroethane	04/22/92	10	U	1
Trichlorofluoromethane	04/22/92	10	U	1
Methylene Chloride	04/22/92	4	BJ	1
Acetone	04/22/92	10	BJ	1
Carbon Disulfide	04/22/92	5	U	1
1,1-Dichloroethene	04/22/92	5	U	1
trans-1,2-Dichloroethene	04/22/92	5	U	1
1,2-Dichloroethane	04/22/92	5	U	1
2-Butanone	04/22/92	4	J	1
1,1,1-Trichloroethane	04/22/92	5	U	1
Carbon Tetrachloride	04/22/92	5	U	1
Trichloroethene	04/22/92	5	U	1
1,1,2-Trichloroethane	04/22/92	5	U	1
Benzene	04/22/92	5	U	1
4-Methyl-2-Pentanone	04/22/92	10	U	1
Tetrachloroethylene	04/22/92	5	U	1
Toluene	04/22/92	5	U	1
Chlorobenzene	04/22/92	2	J	1
Ethylbenzene	04/22/92	5	U	1
Xylenes (Total)	04/22/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/22/92	93
Bromofluorobenzene	04/22/92	96
1,2-Dichloroethane-d4	04/22/92	97

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Trip Blank

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920415-083
LAB ID: 1990-006

REPORT DATE : 05/14/92
SAMPLED DATE: 04/15/92
REC'D DATE : 04/17/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/22/92	10	U	1
Vinyl Chloride	04/22/92	10	U	1
Chloroethane	04/22/92	10	U	1
Trichlorofluoromethane	04/22/92	10	U	1
Methylene Chloride	04/22/92	4	BJ	1
Acetone	04/22/92	15	B	1
Carbon Disulfide	04/22/92	5	U	1
1,1-Dichloroethene	04/22/92	5	U	1
trans-1,2-Dichloroethene	04/22/92	5	U	1
1,2-Dichloroethane	04/22/92	5	U	1
2-Butanone	04/22/92	16		1
1,1,1-Trichloroethane	04/22/92	5	U	1
Carbon Tetrachloride	04/22/92	5	U	1
Trichloroethene	04/22/92	5	U	1
1,1,2-Trichloroethane	04/22/92	5	U	1
Benzene	04/22/92	5	U	1
4-Methyl-2-Pentanone	04/22/92	10	U	1
Tetrachloroethylene	04/22/92	5	U	1
Toluene	04/22/92	2	J	1
Chlorobenzene	04/22/92	5	U	1
Ethylbenzene	04/22/92	5	U	1
Xylenes (Total)	04/22/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/22/92	93
Bromofluorobenzene	04/22/92	98
1,2-Dichloroethane-d4	04/22/92	98

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

REPORT DATE : 05/14/92
SAMPLED DATE: NA
REC'D DATE : NA

CLIENT ID: NA
LAB ID: QC BLK 12831

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/22/92	10	U	1
Vinyl Chloride	04/22/92	10	U	1
Chloroethane	04/22/92	10	U	1
Trichlorofluoromethane	04/22/92	10	U	1
Methylene Chloride	04/22/92	2	BJ	1
Acetone	04/22/92	3	BJ	1
Carbon Disulfide	04/22/92	5	U	1
1,1-Dichloroethene	04/22/92	5	U	1
trans-1,2-Dichloroethene	04/22/92	5	U	1
1,2-Dichloroethane	04/22/92	5	U	1
2-Butanone	04/22/92	10	U	1
1,1,1-Trichloroethane	04/22/92	5	U	1
Carbon Tetrachloride	04/22/92	5	U	1
Trichloroethene	04/22/92	5	U	1
1,1,2-Trichloroethane	04/22/92	5	U	1
Benzene	04/22/92	5	U	1
4-Methyl-2-Pentanone	04/22/92	1	J	1
Tetrachloroethylene	04/22/92	5	U	1
Toluene	04/22/92	5	U	1
Chlorobenzene	04/22/92	5	U	1
Ethylbenzene	04/22/92	5	U	1
Xylenes (Total)	04/22/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/22/92	94
Bromofluorobenzene	04/22/92	98
1,2-Dichloroethane-d4	04/22/92	96

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

REPORT DATE : 05/14/92
SAMPLED DATE: NA
REC'D DATE : NA

CLIENT ID: NA
LAB ID: QC LCS 12831

PARAMETER	DATE ANALYZED	% RECOVERY
Chloromethane	04/22/92	94
Vinyl Chloride	04/22/92	95
Chloroethane	04/22/92	93
Trichlorofluoromethane	04/22/92	87
Methylene Chloride	04/22/92	98
Acetone	04/22/92	90
Carbon Disulfide	04/22/92	103
1,1-Dichloroethene	04/22/92	101
[illegible]ans-1,2-Dichloroethene	04/22/92	101
[illegible]-Dichloroethane	04/22/92	104
2-Butanone	04/22/92	96
1,1,1-Trichloroethane	04/22/92	104
Carbon Tetrachloride	04/22/92	101
Trichloroethene	04/22/92	102
1,1,2-Trichloroethane	04/22/92	105
Benzene	04/22/92	105
4-Methyl-2-Pentanone	04/22/92	103
Tetrachloroethylene	04/22/92	100
Toluene	04/22/92	101
Chlorobenzene	04/22/92	104
Ethylbenzene	04/22/92	103
Xylenes (Total)	04/22/92	102

SURROGATES		% RECOVERY
Toluene	04/22/92	94
Bromofluorobenzene	04/22/92	99
1,2-Dichloroethane-d4	04/22/92	96

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(U) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

T-3 Inlet

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : 920415-078
ITAS LAB ID: 1990-001

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	04/21/92	04/23/92	10	ND
3-Methylphenol	04/21/92	04/23/92	•	ND
4-Methylphenol	04/21/92	04/23/92	10 *	ND
1,4-Dichlorobenzene	04/21/92	04/23/92	10	ND
2,4-Dinitrotoluene	04/21/92	04/23/92	10	ND
Hexachlorobenzene	04/21/92	04/23/92	10	ND
Hexachloro-1,3-butadiene	04/21/92	04/23/92	10	ND
Hexachloroethane	04/21/92	04/23/92	10	ND
Nitrobenezene	04/21/92	04/23/92	10	ND
Pentachlorophenol	04/21/92	04/23/92	52	ND
Pyridine	04/21/92	04/23/92	10	ND
2,4,5-Trichlorophenol	04/21/92	04/23/92	10	ND
2,4,6-Trichlorophenol	04/21/92	04/23/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	04/21/92	04/23/92	53
Phenol-d5	04/21/92	04/23/92	38
Nitrobenzene-d5	04/21/92	04/23/92	49
2-Fluorobiphenyl	04/21/92	04/23/92	54
2,4,6-Tribromophenol	04/21/92	04/23/92	77
Terphenyl-d14	04/21/92	04/23/92	60

• 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01 T-3 Outlet

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : 920415-079
ITAS LAB ID: 1990-002

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	04/21/92	04/23/92	10	ND
3-Methylphenol	04/21/92	04/23/92	*	ND
4-Methylphenol	04/21/92	04/23/92	10 *	ND
1,4-Dichlorobenzene	04/21/92	04/23/92	10	ND
2,4-Dinitrotoluene	04/21/92	04/23/92	10	ND
Hexachlorobenzene	04/21/92	04/23/92	10	ND
Hexachloro-1,3-butadiene	04/21/92	04/23/92	10	ND
Hexachloroethane	04/21/92	04/23/92	10	ND
Nitrobenezene	04/21/92	04/23/92	10	ND
Pentachlorophenol	04/21/92	04/23/92	52	ND
Pyridine	04/21/92	04/23/92	10	ND
2,4,5-Trichlorophenol	04/21/92	04/23/92	10	ND
2,4,6-Trichlorophenol	04/21/92	04/23/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	04/21/92	04/23/92	41
Phenol-d5	04/21/92	04/23/92	28
Nitrobenzene-d5	04/21/92	04/23/92	91
2-Fluorobiphenyl	04/21/92	04/23/92	86
2,4,6-Tribromophenol	04/21/92	04/23/92	74
Terphenyl-d14	04/21/92	04/23/92	95

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

T-3 Outlet Duplicate

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

CLIENT ID : 920415-080
ITAS LAB ID: 1990-003

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	04/21/92	04/23/92	10	ND
3-Methylphenol	04/21/92	04/23/92	•	ND
4-Methylphenol	04/21/92	04/23/92	10 •	ND
1,4-Dichlorobenzene	04/21/92	04/23/92	10	ND
2,4-Dinitrotoluene	04/21/92	04/23/92	10	ND
Hexachlorobenzene	04/21/92	04/23/92	10	ND
Hexachloro-1,3-butadiene	04/21/92	04/23/92	10	ND
Hexachloroethane	04/21/92	04/23/92	10	ND
Nitrobenezene	04/21/92	04/23/92	10	ND
Pentachlorophenol	04/21/92	04/23/92	52	ND
Pyridine	04/21/92	04/23/92	10	ND
2,4,5-Trichlorophenol	04/21/92	04/23/92	10	ND
2,4,6-Trichlorophenol	04/21/92	04/23/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	04/21/92	04/23/92	28
Phenol-d5	04/21/92	04/23/92	20
Nitrobenzene-d5	04/21/92	04/23/92	68
2-Fluorobiphenyl	04/21/92	04/23/92	67
2,4,6-Tribromophenol	04/21/92	04/23/92	65
Terphenyl-d14	04/21/92	04/23/92	82

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• 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

Containment Pad Outlet

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : 920415-082
ITAS LAB ID: 1990-005

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	04/21/92	04/23/92	10	ND
3-Methylphenol	04/21/92	04/23/92	•	ND
4-Methylphenol	04/21/92	04/23/92	10 *	ND
1,4-Dichlorobenzene	04/21/92	04/23/92	10	ND
2,4-Dinitrotoluene	04/21/92	04/23/92	10	ND
Hexachlorobenzene	04/21/92	04/23/92	10	ND
Hexachloro-1,3-butadiene	04/21/92	04/23/92	10	ND
Hexachloroethane	04/21/92	04/23/92	10	ND
Nitrobenezene	04/21/92	04/23/92	10	ND
Pentachlorophenol	04/21/92	04/23/92	52	ND
Pyridine	04/21/92	04/23/92	10	ND
2,4,5-Trichlorophenol	04/21/92	04/23/92	10	ND
2,4,6-Trichlorophenol	04/21/92	04/23/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	04/21/92	04/23/92	54
Phenol-d5	04/21/92	04/23/92	40
Nitrobenzene-d5	04/21/92	04/23/92	71
2-Fluorobiphenyl	04/21/92	04/23/92	73
2,4,6-Tribromophenol	04/21/92	04/23/92	78
Terphenyl-d14	04/21/92	04/23/92	81

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

Trip Blank

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : 920415-083
ITAS LAB ID: 1990-006

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	04/21/92	04/23/92	12	ND
3-Methylphenol	04/21/92	04/23/92	•	ND
4-Methylphenol	04/21/92	04/23/92	12 •	ND
1,4-Dichlorobenzene	04/21/92	04/23/92	12	ND
2,4-Dinitrotoluene	04/21/92	04/23/92	12	ND
Hexachlorobenzene	04/21/92	04/23/92	12	ND
Hexachloro-1,3-butadiene	04/21/92	04/23/92	12	ND
Hexachloroethane	04/21/92	04/23/92	12	ND
Nitrobenezene	04/21/92	04/23/92	12	ND
[illegible]tachlorophenol	04/21/92	04/23/92	58	ND
[illegible]idine	04/21/92	04/23/92	12	ND
2,4,5-Trichlorophenol	04/21/92	04/23/92	12	ND
2,4,6-Trichlorophenol	04/21/92	04/23/92	12	ND

SURROGATE			% RECOVERY
2-Fluorophenol	04/21/92	04/23/92	60
Phenol-d5	04/21/92	04/23/92	44
Nitrobenzene-d5	04/21/92	04/23/92	87
2-Fluorobiphenyl	04/21/92	04/23/92	88
2,4,6-Tribromophenol	04/21/92	04/23/92	79
Terphenyl-d14	04/21/92	04/23/92	88

• 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 12801

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	04/21/92	04/23/92	10	ND
3-Methylphenol	04/21/92	04/23/92	*	ND
4-Methylphenol	04/21/92	04/23/92	10 *	ND
1,4-Dichlorobenzene	04/21/92	04/23/92	10	ND
2,4-Dinitrotoluene	04/21/92	04/23/92	10	ND
Hexachlorobenzene	04/21/92	04/23/92	10	ND
Hexachloro-1,3-butadiene	04/21/92	04/23/92	10	ND
Hexachloroethane	04/21/92	04/23/92	10	ND
Nitrobenezene	04/21/92	04/23/92	10	ND
Pentachlorophenol	04/21/92	04/23/92	50	ND
Pyridine	04/21/92	04/23/92	10	ND
2,4,5-Trichlorophenol	04/21/92	04/23/92	10	ND
2,4,6-Trichlorophenol	04/21/92	04/23/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	04/21/92	04/23/92	38
Phenol-d5	04/21/92	04/23/92	29
Nitrobenzene-d5	04/21/92	04/23/92	78
2-Fluorobiphenyl	04/21/92	04/23/92	78
2,4,6-Tribromophenol	04/21/92	04/23/92	68
Terphenyl-d14	04/21/92	04/23/92	86

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC SPK 12801

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	% RECOVERY
2-Methylphenol	04/21/92	04/23/92	43
3-Methylphenol	04/21/92	04/23/92	*
4-Methylphenol	04/21/92	04/23/92	49 *
1,4-Dichlorobenzene	04/21/92	04/23/92	56
2,4-Dinitrotoluene	04/21/92	04/23/92	84
Hexachlorobenzene	04/21/92	04/23/92	78
Hexachloro-1,3-butadiene	04/21/92	04/23/92	52
Hexachloroethane	04/21/92	04/23/92	50
Nitrobenezene	04/21/92	04/23/92	75
Pentachlorophenol	04/21/92	04/23/92	73
Pyridine	04/21/92	04/23/92	68
2,4,5-Trichlorophenol	04/21/92	04/23/92	55
2,4,6-Trichlorophenol	04/21/92	04/23/92	75
SURROGATE			
2-Fluorophenol	04/21/92	04/23/92	46
Phenol-d5	04/21/92	04/23/92	34
Nitrobenzene-d5	04/21/92	04/23/92	76
2-Fluorobiphenyl	04/21/92	04/23/92	82
2,4,6-Tribromophenol	04/21/92	04/23/92	80
Terphenyl-d14	04/21/92	04/23/92	88

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920415-078	1990-001	Arsenic	05/12/92	ND	0.50
T-3 Inlet		Barium	05/12/92	ND	0.01
		Cadmium	05/12/92	ND	0.01
		Chromium	05/12/92	ND	.025
		Lead	05/12/92	ND	0.10
		Mercury	04/30/92	ND	0.0002
		Selenium	05/12/92	ND	0.50
		Silver	05/12/92	ND	0.02
920415-079	1990-002	Arsenic	05/12/92	ND	0.50
		Barium	05/12/92	ND	0.01
T-3 Outlet		Cadmium	05/12/92	ND	0.01
		Chromium	05/12/92	ND	.025
		Lead	05/12/92	ND	0.10
		Mercury	04/30/92	0.00024	0.0002
		Selenium	05/12/92	ND	0.50
		Silver	05/12/92	ND	0.02
920415-080	1990-003	Arsenic	05/12/92	ND	0.50
		Barium	05/12/92	ND	0.01
		Cadmium	05/12/92	ND	0.01
T-3 Outlet - Duplicate		Chromium	05/12/92	ND	.025
		Lead	05/12/92	ND	0.10
		Mercury	04/30/92	0.00025	0.0002
		Selenium	05/12/92	ND	0.50
		Silver	05/12/92	ND	0.02

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

-458

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920415-081	1990-004	Arsenic	05/12/92	ND	0.50
		Barium	05/12/92	2.36	0.01
Transfer Pump		Cadmium	05/12/92	0.03	0.01
		Chromium **	05/12/92	109	5.00
		Lead	05/12/92	ND	0.10
		Mercury *	05/06/92	0.015	0.0008
		Selenium	05/12/92	4.02	0.50
		Silver	05/12/92	ND	0.02
920415-082	1990-005	Arsenic	05/12/92	ND	0.50
		Barium	05/12/92	ND	0.01
Containment Pad Outlet		Cadmium	05/12/92	ND	0.01
		Chromium	05/12/92	ND	.025
		Lead	05/12/92	ND	0.10
		Mercury	04/30/92	ND	0.0002
		Selenium	05/12/92	ND	0.50
		Silver	05/12/92	ND	0.02
920415-083	1990-006	Arsenic	05/12/92	ND	0.50
		Barium	05/12/92	ND	0.01
		Cadmium	05/12/92	ND	0.01
Trip Blank		Chromium	05/12/92	ND	.025
		Lead	05/12/92	ND	0.10
		Mercury	04/30/92	ND	0.0002
		Selenium	05/12/92	ND	0.50
		Silver	05/12/92	ND	0.02

* Analyzed at a 1:4 dilution.
** Analyzed at a 1:20 dilution.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
NA	QC BLK 12856	Arsenic	05/12/92	ND	0.50
		Barium	05/12/92	ND	0.01
		Cadmium	05/12/92	ND	0.01
		Chromium	05/12/92	ND	.025
		Lead	05/12/92	ND	0.10
		Selenium	05/12/92	ND	0.50
		Silver	05/12/92	ND	0.02
NA	QC BLK 124292	Mercury	04/30/92	ND	.0002
NA	QC BLK 130492	Mercury	05/06/92	ND	.0002

				% RECOVERY
NA	QC LCS 12856	Arsenic	05/12/92	90
		Barium	05/12/92	100
		Cadmium	05/12/92	95
		Chromium	05/12/92	97
		Lead	05/12/92	100
		Selenium	05/12/92	99
		Silver	05/12/92	93
NA	QC LCS 123692	Mercury	04/30/92	102
	QC LCS 129792	Mercury	05/06/92	104

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-3 Inlet

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

CLIENT ID : 920415-078
ITAS LAB ID: 1990-001

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	04/22/92	05/13/92	0.500	ND	5.0
Barium	04/22/92	05/13/92	0.010	0.361	100.0
Cadmium	04/22/92	05/13/92	0.010	ND	1.0
Chromium	04/22/92	05/13/92	0.025	ND	5.0
Lead	04/22/92	05/13/92	0.100	ND	5.0
Mercury	04/22/92	04/30/92	.0002	ND	0.2
Selenium	04/22/92	05/13/92	0.500	ND	1.0
Silver	04/22/92	05/13/92	0.020	ND	5.0

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-3 Outlet

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

CLIENT ID : 920415-079
ITAS LAB ID: 1990-002

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	04/22/92	05/13/92	0.500	ND	5.0
Barium	04/22/92	05/13/92	0.010	0.606	100.0
Cadmium	04/22/92	05/13/92	0.010	ND	1.0
Chromium	04/22/92	05/13/92	0.025	3.620	5.0
Lead	04/22/92	05/13/92	0.100	ND	5.0
Mercury	04/22/92	04/30/92	.0002	ND	0.2
Selenium	04/22/92	05/13/92	0.500	ND	1.0
Silver	04/22/92	05/13/92	0.020	ND	5.0

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-3 Outlet - Duplicate

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/15/92
DATE RECEIVED: 04/17/92
REPORT DATE : 05/13/92

CLIENT ID : 920415-080
ITAS LAB ID: 1990-003

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	04/22/92	05/13/92	0.500	ND	5.0
Barium	04/22/92	05/13/92	0.010	0.461	100.0
Cadmium	04/22/92	05/13/92	0.010	ND	1.0
Chromium	04/22/92	05/13/92	0.025	3.637	5.0
Lead	04/22/92	05/13/92	0.100	ND	5.0
Mercury	04/22/92	04/30/92	.0002	ND	0.2
Selenium	04/22/92	05/13/92	0.500	ND	1.0
Silver	04/22/92	05/13/92	0.020	ND	5.0

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Transfer Pump

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/15/92
CLIENT ID : 920415-081
DATE RECEIVED: 04/17/92
ITAS LAB ID: 1990-004
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	04/22/92	05/13/92	0.500	ND	5.0
Barium	04/22/92	05/13/92	0.010	1.956	100.0
Cadmium	04/22/92	05/13/92	0.010	0.016	1.0
Chromium	04/22/92	05/13/92	0.500	67.03 *	5.0
Lead	04/22/92	05/13/92	0.100	ND	5.0
Mercury	04/22/92	04/30/92	.0002	0.0074	0.2
Selenium	04/22/92	05/13/92	0.500	2.530	1.0
Silver	04/22/92	05/13/92	0.020	ND	5.0

* Analyzed at a 1:20 dilution.

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Containment Pad Outlet

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/15/92
CLIENT ID : 920415-082
DATE RECEIVED: 04/17/92
ITAS LAB ID: 1990-005
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	04/22/92	05/13/92	0.500	ND	5.0
Barium	04/22/92	05/13/92	0.010	0.812	100.0
Cadmium	04/22/92	05/13/92	0.010	ND	1.0
Chromium	04/22/92	05/13/92	0.025	ND	5.0
Lead	04/22/92	05/13/92	0.100	ND	5.0
Mercury	04/22/92	04/30/92	.0002	ND	0.2
Selenium	04/22/92	05/13/92	0.500	ND	1.0
Silver	04/22/92	05/13/92	0.020	ND	5.0

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Trip Blank

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/15/92
CLIENT ID : 920415-083
DATE RECEIVED: 04/17/92
ITAS LAB ID: 1990-006
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	04/22/92	05/13/92	0.500	ND	5.0
Barium	04/22/92	05/13/92	0.010	0.016	100.0
Cadmium	04/22/92	05/13/92	0.010	ND	1.0
Chromium	04/22/92	05/13/92	0.025	ND	5.0
Lead	04/22/92	05/13/92	0.100	ND	5.0
Mercury	04/22/92	04/30/92	.0002	ND	0.2
Selenium	04/22/92	05/13/92	0.500	ND	1.0
Silver	04/22/92	05/13/92	0.020	ND	5.0

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 12857

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	NA	05/13/92	0.500	ND	5.0
Barium	NA	05/13/92	0.010	ND	100.0
Cadmium	NA	05/13/92	0.010	ND	1.0
Chromium	NA	05/13/92	0.025	ND	5.0
Lead	NA	05/13/92	0.100	ND	5.0
Selenium	NA	05/13/92	0.500	ND	1.0
Silver	NA	05/13/92	0.020	ND	5.0

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC LCS 12857

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	% RECOVERY
Arsenic	NA	05/13/92	100
Barium	NA	05/13/92	101
Cadmium	NA	05/13/92	97
Chromium	NA	05/13/92	98
Lead	NA	05/13/92	104
Selenium	NA	05/13/92	95
Silver	NA	05/13/92	105

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: EXT BLK 12828

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	04/22/92	05/13/92	0.500	ND	5.0
Barium	04/22/92	05/13/92	0.010	0.167	100.0
Cadmium	04/22/92	05/13/92	0.010	ND	1.0
Chromium	04/22/92	05/13/92	0.025	ND	5.0
Lead	04/22/92	05/13/92	0.100	ND	5.0
Selenium	04/22/92	05/13/92	0.500	ND	1.0
Silver	04/22/92	05/13/92	0.020	ND	5.0

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 122492

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Mercury	NA	04/30/92	0.0002	ND	0.2

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC LCS 121892

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/13/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	% RECOVERY
Mercury	NA	04/30/92	100

Release #1386

TABULATED RESULTS FROM TANK T6 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1386)

Sample No. 92-138A-	4137	4138	4139	4130	4131	4135	4136
Description	Trip Blank	Field Blank	Blank-WBE	T6 R-1	T6-R2	T6-R3	R3(DUP)
ANALIS No.	920423-59	920423-60	920423-61	920423-62	920423-63	920423-64	920423-65
CNLSI NO.	924567	924568	924569	924570	924567	924567	924567
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
TRICHLOROFLUROROMETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
ACETONE	0.42 U	0.42 U	0.42 U	0.53 U	0.72	0.42 U	0.42 U
CARBON DISULFIDE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
METHYLENE CHLORIDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
2-BUTANONE (MEK)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,1-TRICHLOROETHANE	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
CARBON TETRACHLORIDE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BENZENE	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TRICHLOROETHYLENE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
METHYL ISOBUTYL KETONE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
TOLUENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
CHLOROBENZENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROETHANE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
TETRATCHLOROETHYLENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
ETHYL BENZENE	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
m,p-XYLENES	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
o-XYLENE	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
o-DICHLOROBENZENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
2-NITROPROPANE	ND	ND	ND	ND	ND	ND	ND
CYCLOHEXANONE	ND	ND	ND	ND	ND	ND	ND
ETHYL ACETATE	ND	ND	ND	ND	ND	ND	ND
ETHYL ETHER	ND	ND	ND	ND	ND	ND	ND
PYRIDINE	ND	ND	ND	ND	ND	ND	ND
CHLORINATED FLUOROCARBONS	ND	ND	ND	ND	ND	ND	ND

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected In Control Blank
(U) Analyte Was Not Detected At Listed Detection Limit

TABULATED RESULTS FROM TANK T6 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1386)

Sample No. 92-138A- Description ANALIS No. CNLSI NO. Matrix	4137 Trip Blank 920423-59 924567 Liquid	4138 Field Blank 920423-60 924568 Liquid	4139 Blank-WBE 920423-61 924569 Liquid	4130 T6 R-1 920423-62 924570 Liquid	4131 T6-R2 920423-63 924567 Liquid	4135 T6-R3 920423-64 924567 Liquid	4136 R3(DUP) 920423-65 924567 Liquid
SEMI-VOLATILE ORGANICS	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
PYRIDINE	NR	0.02 U	0.02 U	0.4 U	0.2 U	0.2 U	0.2 U
o-CRESOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
HEXACHLOROETHANE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
m,p-CRESOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
NITROBENZENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
HEXACHLOROBUTADIENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
2,4,6-TRICHLOROPHENOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
2,4,5-TRICHLOROPHENOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
2,4-DINITROTOLUENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
HEXACHLOROBENZENE	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U
PENTACHLOROPHENOL	NR	0.01 U	0.01 U	0.2 U	0.1 U	0.1 U	0.1 U

(J) Estimated Value (NR) Not Reported
(B) Analyte Detected in Control Blank
(ND) Analyte Was Not Detected (Laboratory Qualifier = U)

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From: W. J. Cowan (9238) WEMCO:EM:SAM:RCRA-92-0048

Date: June 8, 1992

Subject: REPORT OF ANALYSIS FOR RCRA RELEASE NUMBER 1386

To : E. D. Wiese

The attached data package has been reviewed by the Data Review and Reporting group and has been approved for distribution by the Analytical Laboratories Project Oversight group.

Seven samples arrived at Westinghouse Environmental Management Company on April 23, 1992.

The sample(s) were submitted for analyses in the support of the T5/T6 RCRA Closure project.

The samples were collected on April 23, 1992 and were labeled as follows:

WEMCO SAMPLE NUMBER	CLIENT SAMPLE NUMBER
920423-059	92-138A-4137 TRIP BLANK
920423-060	92-138A-4138 FIELD BLANK
920423-061	92-138A-4139 WATER BLAST EQUIP. BLANK #2
920423-062	92-138A-4130 T-6 RINSE #1
920423-063	92-138A-4131 T-6 RINSE #2
920423-064	92-138A-4135 T-6 RINSE #3
920423-065	92-138A-4136 T-6 RINSE #3 DUPLICATE

COMMENTS:

The Analytical Laboratories Project Oversight group is pleased to be of service to you. If you have any questions or comments, please call me at 738-9238.

W. J. Cowan, Project Scientist
Analytical Laboratory Project Oversight
Sampling & Analysis Management

WJC:bar

c: D. J. Smith
G. Henderson
L. Love
S. Lund
Central Files
Release File

ALPO Release Letterbook Log

OFFSITE DATA REVIEW CHECKLIST

Larry J. Evans — REVIEWER'S NAME
1386 — RELEASE NO.
6/5/92 — DATE REVIEWED

YES	NO	N/A		
x			A)	Holding times were met. If no, explain:
x			B)	All samples are included in release. If no, explain:
x			C)	All determinations are included in release. If no, explain:
x			D)	Results have been checked for reasonableness. The data has been found to be reasonable. If no, explain:
x			E)	Samples are included in QC lot tables. If no, explain:
x			F)	Blanks were analyzed and results are within acceptable limits. If no, explain:
x			G)	Internal QC check standards (reference standards, ICS, etc) were analyzed and are within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1386

YES	NO	N/A		
x			H)	Matrix spikes were analyzed and are within acceptable limits. If no, explain:
x			I)	Matrix spike duplicates were analyzed (organics) and are within acceptable limits. If no, explain:
x			J)	Surrogates were analyzed for all VOA/BNA samples and the results are within acceptable limits. If no, explain: Surrogates were diluted out of recovery range for the Semi-volatile analyses of 920423-062, -063, -064, and -065 because of high concentrations of non-target compounds.
		x	K)	Duplicates were analyzed (inorganics) and are within acceptable limits. If no, explain:
		x	L)	Blind Quality Control samples were analyzed with the release and all results were within acceptable limits. (For long term tracking purposes only.)
		x		Results are attached. If no, explain:
		x	M)	The Calculated Precision Terms of controls is within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1386

YES	NO	N/A		
		x	N)	The Calculated Accuracy Terms of controls is within acceptable limits. If no, explain:
x			O)	Overall Quality Control of release is acceptable. If no, explain: The Total analysis target list was narrowed to the TCLP list of target compounds by Bill Cowen.

P) Sample numbers included in release:

920423-059 920423-060 920423-061 920423-062 920423-063 920423-064

920423-065

Q) Copies of results are to be sent to: G. Henderson, L. Love, S. Lund and E. Wiese

R) Project Name: T5 / T6 RCRA Closure - Sampling Plan 92-138A

SIGNATURE OF DATA REVIEWER: Larry J Evans

DATE OF FINAL REVIEW: 6/5/92

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT COMPANY OF OHIO 4587
Sample Processing Laboratory
Site Sample Management

REQUEST FOR ANALYSES/OFF-SITE CUSTODY TRANSFER RECORD

Receiving Laboratory: Clemson Technical Center, Inc.
100 Technology Drive
Anderson, SC 29625

Release #: 1386
Purchase Order #: 4-13910
Page 1 of 1

Sample Type: Depleted Contaminated Liquid

ITEM #	CODE	PHASE	WMCO LAB NO.	ANALYSIS REQUESTED	DATE SAMPLED	NO. OF CONTAINERS
920423-01	LA J	L	920423-059	Total VOA	4-23-92	3-40ml vial
-568 02	LA J	L	-060	Total Semi VOA	"	2-1 qt jar
03.				Total VOA	"	3-40ml vial
-569 04	LA J	L	-061	Total Semi VOA	"	2-1 qt jar
05.				Total VOA	"	3-40ml vial
-570 06	LF J	L	-062	Total Semi VOA	"	2-1 qt jar
07.				Total VOA	"	3-40ml vial
-571 08	LF J	L	-063	Total Semi VOA	"	2-1 qt jar
09.				Total VOA	"	3-40ml vial
-572 10	LF J	L	-064	Total Semi VOA	"	2-1 qt jar
11.				Total VOA	"	3-40ml vial
12	LF J	L	-065	Total Semi VOA	"	2-1 qt jar
13.				Total VOA	"	3-40ml vial
14.						
15.						
16.						
17.						
18.						
19.						
20.						

*** PHASES: O = Solid L = Liquid S = Sludge (Mixture of both) ***

WMCO: The container(s) in which the above samples were packaged were sealed by Roswell Van Horsen on 4-24-92.

RECEIVER: I certify that the seal(s) on the container(s) in which the above samples were packaged were intact when received.

Signature [illegible] Date 4-27-92

NOTE: If the seal(s) were not intact, please contact D. J. Smith at (513) 738-9161 as soon as possible and send a nonconformance report to D. J. Smith. Please return this form to Analytical Data Review & Reporting in the envelope provided.

Westinghouse Environmental Management Company of Ohio, P. O. Box 398704, Cincinnati, Ohio 45239-8704

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Control #: _____

ANALYSIS REQUEST / CUSTODY RECORD

PROJECT: T5/T6 RCRA CLOSURE	CLIENT: SITE MEDIA SAMPLING	TECHNICIAN/EXT.: W. NEVER / 8927
PROJECT #: N/A	CLIENT CONTACT: L. LOVE	CHARGE #: R2P-01
PE/PM: ED WEISE	PHONE: 6727	LOT MARK CODE: N/A

SAMPLE IDENTIFICATION

ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS)

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	TABLE 1	2	3	4	5	6	7
* 92-138A-4137		TRIP BLANK	LIQUID	4-23-92/0830	GLASS T&C COOL TO 4°C	1 qt 3-40ml	/	/	/	/	X	X	/
92-138A-4138		FIELD BLANK	↓	↓ 0950	↓	↓	/	X	/	X	X	X	/
92-138A-4139		EQUIP. BLANK #2	↓	↓ 1300	↓	↓	/	X	/	X	X	X	/
		NOTHING FOLLOWS											

Copy To: G. HENDERSON / L. LOVE / S. LAND / E. WEISE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
Process del	Will Thyer	W. Never	4/23/92	1500					

* EM# 92-138A-4137 ON TABLE #5 - A/B SCREEN ONLY.

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1-4582

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Control #: _____

ANALYSIS REQUEST / CUSTODY RECORD

Pg 2 of 2

PROJECT: 75/76 RCRA CLOSURE	CLIENT: SITE MEDIA SAMPLING	TECHNICIAN/EXT.: W. NEYER
PROJECT #: N/A	CLIENT CONTACT: L. LOVE	CHARGE #: RZP-01
PE/PM: ED WEISE	PHONE: 6727	LOT MARK CODE: N/A

SAMPLE IDENTIFICATION / ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS)

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	TABLE 1	2	3	4	5	6	7
92-138A-4130		TANK 6 RINSE 1	LIQUID	4-23-92/0900	GLASS T&C COOL TO 4°C	1 GAL		X		X	X	X	
92-138A-4131		TANK 6 RINSE 2	↓	1010	↓	↓		X		X	X	X	
92-138A-4135		TANK 6 RINSE 3	↓	1045	↓	↓		X		X	X	X	
92-138A-4136		TANK 9 RINSE 1	↓	1045	↓	↓		X		X	X	X	
		NOTHING FOLLOWS											

Copy To: G. HENDERSON / L. LOVE / S. LUND / E. WEISE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
PROCESS ALL	W. Neyer	W. Neyer	4/23/92	1500					

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4587

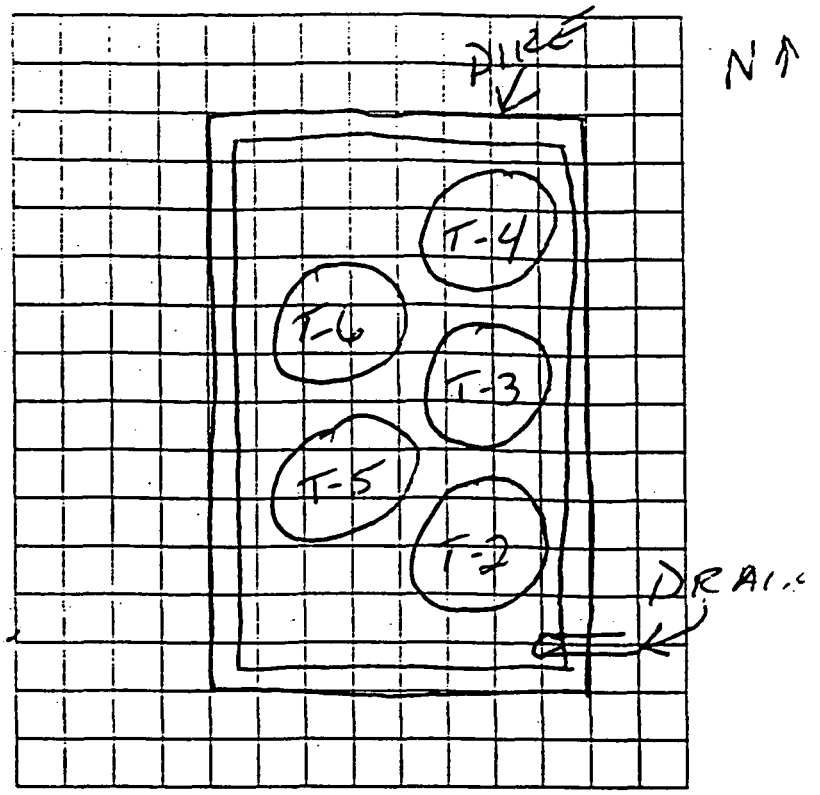
DATE: 4 23 92
TIME START: 0815
TIME FINISH: 1100
PAGE 1 OF 2

FEED MATERIAL PRODUCTION CENTER
P. O. BOX 398704
CINCINNATI, OHIO 45239-8704

PROJECT NAME: T5 T6 RCRA CLOSURE
PROJECT NO: N/A
LOCATION: WEST OF PILOT PLANT
WEATHER: CLOUDY CLEARING
TEMPERATURE: 60°

CONTACT/EXT: L LOVE / 6727

PURPOSE OF SAMPLING: RCRA DETERMINATION
PROCESS PRODUCING WASTE: [illegible] PROCESS
SAMPLE REQUEST NO: 138A
SAMPLE PLAN NO: 138A



SAMPLE NUMBER	SAMPLE TYPE	COLLECTION METHOD	DEPTH	TIME	SAMPLE PRESERVATIVE	CONT TYPE	NUMBER/ VOLUME
92-138A-4137	LIQUID	POURED	N/A	0830	COOL TO 4°C	GLASS TLC	1-4oz 3-40ml
92-138A-4138				0950			1 GAL 4-4oz 2-4oz 3-40ml
92-138A-4130				0900			1 GAL 5-4oz 2-4oz 3-40ml
92-138A-4131				1010			
92-138A-4135				1045			
92-138A-4136				1045			
~~[illegible]~~	WAN 4-23-92						
~~[illegible]~~	WAN 4-23-92						
~~[illegible]~~	WAN 4-23-92						
EQUIP BLANK #2 92-138A-4139	LIQUID	POURED	N/A	1300	COOL TO 4°C	GLASS TLC	1 GAL 2-4oz 2-4oz 3-40ml

FIELD SAMPLE #6-1
SAMPLE #6-2
SAMPLE #6-3
SAMPLE 9-1

FIELD MEASUREMENTS: N/A
TRANSPORTATION METHOD: VAN TO LAB
SAMPLE TECHNICIANS: W MYERS K. HUBBARD W. NEYER
TECHNICIAN SIGNATURES: [signature] [signature] [signature]
FIELD OBSERVATIONS:

SAMPLE #6-1 IS FROM TANK T6 RINSE #1
SAMPLE #6-2 IS FROM TANK T6 RINSE #2
SAMPLE #6-3 IS FROM TANK T6 RINSE #3
SAMPLE #9-1 IS DUPLICATE OF SAMPLE #6-3 EM # 92-138A-4132

SAMPLE #5-1, 5-2, + 5-3 WERE NOT TAKEN. - NO PIPE FITTER
EQUIP BLANK #2 WAS TAKEN AFTER EQUIPMENT WAS DECONNED BETWEEN T6 + T5.

DATE: 4 23 92
TIME START: 0815
TIME FINISH: 1500
PAGE 2 OF 2

SAMPLE NUMBER	SAMPLE TYPE	COLLECTION METHOD	TIME	SAMPLE PRESERVATIVE	CONT TYPE	NUMBER VOLUME
	NOTHING FOLLOWS					

JAN 4-23-92

HAZCO SERVICES, INC.

Clemson Technical Center, Inc.
emson Research Park
0 Technology Drive
nderson, SC 29625
(803) 646-2413
Fax# (803) 646-5311

A Chemical Waste Management Company

TO: BILL COWAN

FROM: Chuck Reece CR

SUBJECT: RELEASES 1382 AND 1386

DATE: 5/4/92

COPIES: Donna Fisher

This is to verify our previous conversations concerning these two releases. They both request the analysis for total semivolatiles. Per our discussion CTC will perform a total analysis for only the TCLP list of semivolatile organic compounds. If you have questions please call. Thanks.

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6-3-92 CMW

Clemson Technical Center, Inc.

Clemson Research Park
0 Technology Drive
Anderson, SC 29625
(803) 646-2413
Fax# (803) 646-5311

A Chemical Waste Management Company

Westinghouse Environmental Management Company of Ohio

Feed Materials Production Center

Purchase Order # 413910

Analytical Results for

Release 1386

Submitted By

Clemson Technical Center, Inc.

Anderson, South Carolina

(formerly Chem-Nuclear Laboratory Services, Inc.)

May 21, 1992

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Printed on recycled paper

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WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

NARRATIVE

Seven samples were received in Release 1386 on April 27, 1992. Each sample was analyzed in accordance with the methods indicated on the Sample Tracking Report.

Surrogates were diluted out of recovery range on the Semi-Volatile analyses of WEMCO samples 920423-062, 920423-063, 920423-064, and 920423-065 because of high concentrations of non-target compounds.

All results are reported in ppm or ppb. For liquid samples and TCLP extracts, ppm is equivalent to mg/L and ppb is equivalent to ug/L. For solid samples, ppm is equivalent to mg/kg and ppb is equivalent to ug/kg.

Reviewed and Approved

Charles N Reece — 5-27-92

Project Manager — Date

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

SAMPLE TRACKING REPORT

WEMCO Sample ID	CWMI-CTC Reference #	Date Sampled	Date Prepared	Date Analyzed	Prep. Method	Instr. Method
920423-059	924567	04-23-92				
Volatile Organics			05-01-92	05-01-92	5030	8260
920423-060	924568	04-23-92				
Volatile Organics			05-01-92	05-01-92	5030	8260
Semi-Volatile Organics			04-30-92	05-13-92	3510	8270
920423-061	924569	04-23-92				
Volatile Organics			04-30-92	04-30-92	5030	8260
Semi-Volatile Organics			04-30-92	05-11-92	3510	8270
920423-062	924570	04-23-92				
Volatile Organics			05-01-92	05-01-92	5030	8260
Semi-Volatile Organics			04-30-92	05-11-92	3510	8270
920423-063	924571	04-23-92				
Volatile Organics			05-06-92	05-06-92	5030	8260
Semi-Volatile Organics			04-30-92	05-12-92	3510	8270
920423-064	924572	04-23-92				
Volatile Organics			05-06-92	05-06-92	5030	8260
Semi-Volatile Organics			04-30-92	05-12-92	3510	8270
920423-065	924573	04-23-92				
Volatile Organics			05-06-92	05-06-92	5030	8260
Semi-Volatile Organics			04-30-92	05-12-92	3510	8270

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920423-059	920423-060	920423-061	920423-062
CWMI-CTC NO.:	924567	924568	924569	924570
Matrix:	Liquid	Liquid	Liquid	Liquid
Preparation:	1	1	1	1
Units:	ppm	ppm	ppm	ppm
Volatile Organics:				
Trichlorofluoromethane	<0.17	<0.17	<0.17	<0.17
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.17	<0.17	<0.17	<0.17
Acetone	<0.42	<0.42	<0.42	0.53
Carbon Disulfide	<0.12	<0.12	<0.12	<0.12
Methylene Chloride	<0.10	<0.10	<0.10	<0.10
2-Butanone (MEK)	<0.25	<0.25	<0.25	<0.25
1,1,1-Trichloroethane	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride	<0.15	<0.15	<0.15	<0.15
Benzene	<0.08	<0.08	<0.08	<0.08
Trichloroethylene	<0.22	<0.22	<0.22	<0.22
Methyl Isobutyl Ketone	<0.17	<0.17	<0.17	<0.17
Toluene	<0.17	<0.17	<0.17	<0.17
Chlorobenzene	<0.18	<0.18	<0.18	<0.18
1,1,2-Trichloroethane	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	<0.47	<0.47	<0.47	<0.47
Ethylbenzene	<0.08	<0.08	<0.08	<0.08
m,p-Xylenes	<0.10	<0.10	<0.10	<0.10
o-Xylene	<0.07	<0.07	<0.07	<0.07
o-Dichlorobenzene	<0.23	<0.23	<0.23	<0.23
2-Nitropropane	ND	ND	ND	ND
Cyclohexanone	ND	ND	ND	ND
Ethyl Acetate	ND	ND	ND	ND
Ethyl Ether	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND	ND
Surrogates: (% Recovery)				
1,2-Dichloroethane-d4	97	99	87	98
Toluene-d8	105	104	99	100
Bromofluorobenzene	91	92	104	87

Preparation: 1 = No preparation
2 = Methanol extraction
3 = Methanol dilution

ND = Not detected through a computer search of the Wiley/EPA mass spectral database
D = Surrogates diluted out of recovery range

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920423-063	920423-064	920423-065
CWMI-CTC NO.:	924571	924572	924573
Matrix:	Liquid	Liquid	Liquid
Preparation:	1	1	1
Units:	ppm	ppm	ppm
Volatile Organics:			
Trichlorofluoromethane	<0.17	<0.17	<0.17
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.17	<0.17	<0.17
Acetone	0.72	<0.42	<0.42
Carbon Disulfide	<0.12	<0.12	<0.12
Methylene Chloride	<0.10	<0.10	<0.10
2-Butanone (MEK)	<0.25	<0.25	<0.25
1,1,1-Trichloroethane	<0.20	<0.20	<0.20
Carbon Tetrachloride	<0.15	<0.15	<0.15
Benzene	<0.08	<0.08	<0.08
Trichloroethylene	<0.22	<0.22	<0.22
Methyl Isobutyl Ketone	<0.17	<0.17	<0.17
Toluene	<0.17	<0.17	<0.17
Chlorobenzene	<0.18	<0.18	<0.18
1,1,2-Trichloroethane	<0.10	<0.10	<0.10
Tetrachloroethylene	<0.47	<0.47	<0.47
Ethylbenzene	<0.08	<0.08	<0.08
m,p-Xylenes	<0.10	<0.10	<0.10
o-Xylene	<0.07	<0.07	<0.07
o-Dichlorobenzene	<0.23	<0.23	<0.23
2-Nitropropane	ND	ND	ND
Cyclohexanone	ND	ND	ND
Ethyl Acetate	ND	ND	ND
Ethyl Ether	ND	ND	ND
Pyridine	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND
Surrogates: (% Recovery)			
1,2-Dichloroethane-d4	97	90	93
Toluene-d8	100	95	99
Bromofluorobenzene	104	103	105

Preparation: 1 = No preparation
2 = Methanol extraction
3 = Methanol dilution

ND = Not detected through a computer search of the Wiley/EPA mass spectral database

D = Surrogates diluted out of recovery range

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

ANALYTICAL RESULTS FOR SAMPLES

WEMCO ID:	920423-060	920423-061	920423-062	920423-063
CWMI-CTC NO.:	924568	924569	924570	924571
Matrix:	Liquid	Liquid	Liquid	Liquid
Units:	ppm	ppm	ppm	ppm
Semi-Volatile Organics (TCLP List):				
Pyridine	<0.02	<0.02	<0.40	<0.2
o-Cresol	<0.01	<0.01	<0.20	<0.1
Hexachloroethane	<0.01	<0.01	<0.20	<0.1
m,p-Cresol	<0.01	<0.01	<0.20	<0.1
Nitrobenzene	<0.01	<0.01	<0.20	<0.1
Hexachlorobutadiene	<0.01	<0.01	<0.20	<0.1
2,4,6-Trichlorophenol	<0.01	<0.01	<0.20	<0.1
2,4,5-Trichlorophenol	<0.01	<0.01	<0.20	<0.1
2,4-Dinitrotoluene	<0.01	<0.01	<0.20	<0.1
Hexachlorobenzene	<0.01	<0.01	<0.20	<0.1
Pentachlorophenol	<0.01	<0.01	<0.20	<0.1
Surrogates: (% Recovery)				
2-Fluorophenol	22	29	D	D
Phenol-d6	18	21	D	D
Nitrobenzene-d5	78	41	D	D
2-Fluorobiphenyl	59	45	D	D
2,4,6-Tribromophenol	27	30	D	D
Terphenyl-d14	66	65	D	D

Contractually OK

D=Surrogates diluted out of recovery range

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WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

ANALYTICAL RESULTS FOR SAMPLES

10X dil

WEMCO ID:	920423-064	920423-065
CWMI-CTC NO.:	924572	924573
Matrix:	Liquid	Liquid
Units:	ppm	ppm
Total Semi-Volatile Organics (TCLP LIST):		
Pyridine	<0.2	<0.2
o-Cresol	<0.1	<0.1
Hexachloroethane	<0.1	<0.1
m,p-Cresol	<0.1	<0.1
Nitrobenzene	<0.1	<0.1
Hexachlorobutadiene	<0.1	<0.1
2,4,6-Trichlorophenol	<0.1	<0.1
2,4,5-Trichlorophenol	<0.1	<0.1
2,4-Dinitrotoluene	<0.1	<0.1
Hexachlorobenzene	<0.1	<0.1
Pentachlorophenol	<0.1	<0.1
Surrogates: (% Recovery)		
2-Fluorophenol	D	D
Phenol-d6	D	D
Nitrobenzene-d5	D	D
2-Fluorobiphenyl	D	D
2,4,6-Tribromophenol	D	D
Terphenyl-d14	D	D

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

SUMMARY OF VOLATILE ORGANICS

QUALITY CONTROL

RELEASE 1386

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

CONTINUING CALIBRATION AND INSTRUMENT BLANKS

VOLATILES

QC Batch (Date Analyzed):	04-30-92	05-01-92	05-06-92
CCC Criteria Met	Yes	Yes	Yes
SPCC Criteria Met	Yes	Yes	Yes
Instrument Blank: (ppm)			
Trichlorofluoromethane	<0.010	<0.010	<0.010
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.010	<0.010	<0.010
Acetone	<0.025	<0.025	<0.025
Carbon Disulfide	<0.007	<0.007	<0.007
Methylene Chloride	<0.006	<0.006	<0.006
2-Butanone (MEK)	<0.015	<0.015	<0.015
1,1,1-Trichloroethane	<0.012	<0.012	<0.012
Carbon Tetrachloride	<0.009	<0.009	<0.009
Benzene	<0.005	<0.005	<0.005
Trichloroethylene	<0.013	<0.013	<0.013
Methyl Isobutyl Ketone	<0.010	<0.010	<0.010
Toluene	<0.010	<0.010	<0.010
Chlorobenzene	<0.011	<0.011	<0.011
1,1,2-Trichloroethane	<0.006	<0.006	<0.006
Tetrachloroethylene	<0.028	<0.028	<0.028
Ethylbenzene	<0.005	<0.005	<0.005
m,p-Xylene	<0.006	<0.006	<0.006
o-Xylene	<0.004	<0.004	<0.004
o-Dichlorobenzene	<0.014	<0.014	<0.014
2-Nitropropane	ND	ND	ND
Cyclohexanone	ND	ND	ND
Ethyl Acetate	ND	ND	ND
Ethyl Ether	ND	ND	ND
Pyridine	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND
Surrogates: (% Recovery)			
1,2-Dichloroethane-d4	85	91	96
Toluene-d8	101	91	95
Bromofluorobenzene	106	93	102

ND = Not detected through computer search of the Wiley/EPA Mass Spectral Database

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WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

CWMI-CTC Sample #: 924572
Matrix: Liquid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
1,1-Dichloroethene	0.050	ND	0.048	96
Trichloroethene	0.050	ND	0.054	108
Chlorobenzene	0.050	ND	0.056	112
Toluene	0.050	ND	0.050	100
Benzene	0.050	ND	0.051	102

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
1,1-Dichloroethene	0.047	94	2.1
Trichloroethene	0.054	108	0.0
Chlorobenzene	0.054	108	3.6
Toluene	0.050	100	0.0
Benzene	0.051	102	0.0

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

SUMMARY OF SEMI-VOLATILE ORGANICS

QUALITY CONTROL

RELEASE 1386

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

CONTINUING CALIBRATION AND METHOD BLANKS
Semi-Volatiles

Date Analyzed:	05-08-92	05=11-92	05-13-92
Date Prepared:	04-30-92	04-30-92	04-30-92
CCC Criteria Met	Yes	Yes	Yes
SPCC Criteria Met	Yes	Yes	Yes

Method Blank: (ppm)

Pyridine	<0.02
o-Cresol	<0.01
Hexachloroethane	<0.01
m,p-Cresol	<0.01
Nitrobenzene	<0.01
Hexachlorobutadiene	<0.01
2,4,6-Trichlorophenol	<0.01
2,4,5-Trichlorophenol	<0.01
2,4-Dinitrotoluene	<0.01
Hexachlorobenzene	<0.01
Pentachlorophenol	<0.01

Surrogates: (% Recovery)

2-Fluorophenol	21
Phenol-d6	16
Nitrobenzene-d5	57
2-Fluorobiphenyl	59
2,4,6-Tribromophenol	30
Terphenyl-d14	76

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

Semi-Volatiles

CWMI-CTC No.: 924568
Matrix: Liquid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
Pyridine	50	ND	17.1	34
o-Cresol	100	ND	46.9	47
Hexachloroethane	50	ND	18.4	37
m,p-Cresol	100	ND	84.2	84
Hexachloro-butadiene	50	ND	19.1	38
2,4,6-Trichloro-phenol	100	ND	34.4	34
2,4,5-Trichloro-phenol	100	ND	34.1	34
2,4-Dinitro-toluene	100	ND	56.5	57
Hexachlorobenzene	50	ND	31.5	63
Pentachlorophenol	200	ND	57.0	29

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
Pyridine	22.8	46	28.6
o-Cresol	55.2	55	16.3
Hexachloroethane	24.4	49	28.0
m,p-Cresol	99.1	99	16.3
Hexachlorobutadiene	25.8	52	29.8
2,4,6-Trichlorophenol	41.7	42	19.2
2,4,5-Trichlorophenol	41.7	42	20.2
2,4-Dinitrotoluene	58.8	59	4.0
Hexachlorobenzene	31.0	62	1.6
Pentachloropenol	72.6	36	24.1

SUMMARY OF VOLATILE ORGANICS

QUALITY CONTROL

RELEASE 1386

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

CONTINUING CALIBRATION AND INSTRUMENT BLANKS

VOLATILES

QC Batch (Date Analyzed):	04-30-92	05-01-92	05-06-92
CCC Criteria Met	Yes	Yes	Yes
SPCC Criteria Met	Yes	Yes	Yes
Instrument Blank: (ppm)			
Trichlorofluoromethane	<0.010	<0.010	<0.010
1,1,2-Trichloro-1,2,2-Trifluoroethane	<0.010	<0.010	<0.010
Acetone	<0.025	<0.025	<0.025
Carbon Disulfide	<0.007	<0.007	<0.007
Methylene Chloride	<0.006	<0.006	<0.006
2-Butanone (MEK)	<0.015	<0.015	<0.015
1,1,1-Trichloroethane	<0.012	<0.012	<0.012
Carbon Tetrachloride	<0.009	<0.009	<0.009
Benzene	<0.005	<0.005	<0.005
Trichloroethylene	<0.013	<0.013	<0.013
Methyl Isobutyl Ketone	<0.010	<0.010	<0.010
Toluene	<0.010	<0.010	<0.010
Chlorobenzene	<0.011	<0.011	<0.011
1,1,2-Trichloroethane	<0.006	<0.006	<0.006
Tetrachloroethylene	<0.028	<0.028	<0.028
Ethylbenzene	<0.005	<0.005	<0.005
m,p-Xylene	<0.006	<0.006	<0.006
o-Xylene	<0.004	<0.004	<0.004
o-Dichlorobenzene	<0.014	<0.014	<0.014
2-Nitropropane	ND	ND	ND
Cyclohexanone	ND	ND	ND
Ethyl Acetate	ND	ND	ND
Ethyl Ether	ND	ND	ND
Pyridine	ND	ND	ND
Chlorinated Fluorocarbons	ND	ND	ND
Surrogates: (% Recovery)			
1,2-Dichloroethane-d4	85	91	96
Toluene-d8	101	91	95
Bromofluorobenzene	106	93	102

ND = Not detected through computer search of the Wiley/EPA Mass Spectral Database

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

CWMI-CTC Sample #: 924572
Matrix: Liquid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
1,1-Dichloroethene	0.050	ND	0.048	96
Trichloroethene	0.050	ND	0.054	108
Chlorobenzene	0.050	ND	0.056	112
Toluene	0.050	ND	0.050	100
Benzene	0.050	ND	0.051	102

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
1,1-Dichloroethene	0.047	94	2.1
Trichloroethene	0.054	108	0.0
Chlorobenzene	0.054	108	3.6
Toluene	0.050	100	0.0
Benzene	0.051	102	0.0

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

SUMMARY OF SEMI-VOLATILE ORGANICS

QUALITY CONTROL

RELEASE 1386

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

CONTINUING CALIBRATION AND METHOD BLANKS
Semi-Volatiles

Date Analyzed:	05-08-92	05=11-92	05-13-92
Date Prepared:	04-30-92	04-30-92	04-30-92
CCC Criteria Met	Yes	Yes	Yes
SPCC Criteria Met	Yes	Yes	Yes

Method Blank: (ppm)

Pyridine	<0.02
o-Cresol	<0.01
Hexachloroethane	<0.01
m,p-Cresol	<0.01
Nitrobenzene	<0.01
Hexachlorobutadiene	<0.01
2,4,6-Trichlorophenol	<0.01
2,4,5-Trichlorophenol	<0.01
2,4-Dinitrotoluene	<0.01
Hexachlorobenzene	<0.01
Pentachlorophenol	<0.01

Surrogates: (% Recovery)

2-Fluorophenol	21
Phenol-d6	16
Nitrobenzene-d5	57
2-Fluorobiphenyl	59
2,4,6-Tribromophenol	30
Terphenyl-d14	76

WEMCO PO: 413910
Release No.: 1386
Date: May 21, 1992

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

Semi-Volatiles

CWMI-CTC No.: 924568
Matrix: Liquid
Units: Parts per Million

Compound Spiked	Amount Spiked	Sample Result	Matrix Spike Result	Percent Recovery
Pyridine	50	ND	17.1	34
o-Cresol	100	ND	46.9	47
Hexachloroethane	50	ND	18.4	37
m,p-Cresol	100	ND	84.2	84
Hexachloro-butadiene	50	ND	19.1	38
2,4,6-Trichloro-phenol	100	ND	34.4	34
2,4,5-Trichloro-phenol	100	ND	34.1	34
2,4-Dinitro-toluene	100	ND	56.5	57
Hexachlorobenzene	50	ND	31.5	63
Pentachlorophenol	200	ND	57.0	29

Compound Spiked	Matrix Spike Dup Result	Percent Recovery	Relative Percent Difference
Pyridine	22.8	46	28.6
o-Cresol	55.2	55	16.3
Hexachloroethane	24.4	49	28.0
m,p-Cresol	99.1	99	16.3
Hexachlorobutadiene	25.8	52	29.8
2,4,6-Trichlorophenol	41.7	42	19.2
2,4,5-Trichlorophenol	41.7	42	20.2
2,4-Dinitrotoluene	58.8	59	4.0
Hexachlorobenzene	31.0	62	1.6
Pentachloropenol	72.6	36	24.1

Release #1388

TABULATED RESULTS FROM TANK T5 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1388)

Sample No.	4147	4148	4149	4150	4153	4151
Description	Trip Blank	Field Blank	T5-R1	T5-R2	T5-R2d	T5-R3
ANALIS No.	920424-025	920424-026	920424-027	920424-028	920424-029	920424-030
ITAS ID	2004-001	2004-002	2004-003	2004-004	2004-005	2004-006
Matrix	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
CHLOROMETHANE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
VINYL CHLORIDE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
CHLOROETHANE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
TRICHLOROFLUOROMETHANE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
METHYLENE CHLORIDE	2 J	1 J	1000 U J	2000 U J	2000 U J	2500 U J
ACETONE	22 J	7 J	1000 U J	2000 U J	2000 U J	2500 U J
CARBON DISULFIDE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
1,1-DICHLOROETHENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
trans-1,2-DICHLOROETHENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
1,2-DICHLOROETHANE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
2-BUTANONE	10 U J	20 U J	1000 U J	2000 U J	1030 J	2500 U J
1,1,1-TRICHLOROETHANE	5 U J	5 U J	16000 J	32000 J	29000 J	44000 J
CARBON TETRACHLORIDE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
TRICHLOROETHENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
1,1,2-TRICHLOROETHANE	5 U J	5 U J	250 J	350 J	330 J	410 J
BENZENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
4-METHYL-2-PENTANONE	10 U J	10 U J	1000 U J	2000 U J	2000 U J	2500 U J
TERTACHLOROETHYLENE	5 U J	5 U J	290 J	460 J	360 J	500 J
TOLUENE	5 U J	1 J	670 J	1000 U J	1000 U J	1200 J
CHLOROBENZENE	5 U J	5 U J	500 U J	1000 U J	1000 U J	1200 U J
ETHYLBENZENE	5 U J	5 U J	400 J	620 J	480 J	670 J
XYLENES (TOTAL)	5 U J	5 U J	2800 J	4000 J	3300 J	4500 J

(B) Analyte Detected in Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitation limit

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1-45842

TABULATED RESULTS FROM TANK T5 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1388)

Sample No.	4147	4148	4149	4150	4153	4151
Description	Trip Blank	Field Blank	T5-R1	T5-R2	T5-R2d	T5-R3
ANALIS No.	920424-025	920424-026	920424-027	920424-028	920424-029	920424-030
ITAS ID	2004-001	2004-002	2004-003	2004-004	2004-005	2004-006
Matrix	Liquid	Liquid	Liquid	0.00	Liquid	Liquid
SEMI-VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
3-METHYLPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
4-METHYLPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	19.63 J	20.56 J
1,4-DICHLOROBENZENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
2,4-DINITROTOLUENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
HEXACHLOROBENZENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
HEXACHLORO-1,3-BUTADIENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
HEXACHLOROETHANE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
NITROBENZENE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
PENTACHLOROPHENOL	NR	54.00 U J	54.00 U J	53.00 U J	52.00 U J	52.00 U J
PYRIDINE	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
2,4,5-TRICHLOROPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
2,4,6-TRICHLOROPHENOL	NR	11.00 U J	11.00 U J	11.00 U J	11.00 U J	10.00 U J
METALS (Totals)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U
BARIUM	NR	0.01000 U	1.34100	0.17100	0.17100	0.20800
CADMIUM	NR	0.01000 U	0.35100	0.12900	0.13900	0.09800
CHROMIUM	NR	0.02500 U	1.97200	0.50300	0.51100	0.40500
LEAD	NR	0.10000 U	6.15600	0.31600	0.23800	0.27900
MERCURY	NR	0.00020 U	0.00034	0.00020 U	0.00020 U	0.00020 U
SELENIUM	NR	0.50000 U	0.78000	0.50000 U	0.50000 U	0.50000 U
SILVER	NR	0.02000 U	0.10000	0.02000 U	0.02000 U	0.02000 U
METALS (TCLP)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U
BARIUM	NR	NR	0.47400 R	0.33500 R	0.44800 R	0.76000 R
CADMIUM	NR	NR	0.33100	0.13100	0.13400	0.10100
CHROMIUM	NR	NR	0.94600	0.45800	0.48500	0.40200
LEAD	NR	NR	0.15300	0.09300	0.08800	0.06800
MERCURY	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U
SELENIUM	NR	NR	0.07400	0.50000 U	0.50000 U	0.50000 U
SILVER	NR	NR	0.02800	0.02000 U	0.00800	0.02000 U

TABULATED RESULTS FROM TANK T5 RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1388)

Sample No.	4147	4148	4149	4150	4153	4151
Description	Trip Blank	Field Blank	T5-R1	T5-R2	T5-R2d	T5-R3
ANALIS No.	920424-025	920424-026	920424-027	920424-028	920424-029	920424-030
ITAS ID	2004-001	2004-002	2004-003	2004-004	2004-005	2004-006
Matrix	Liquid	Liquid	Liquid	0.00	Liquid	Liquid
RADIOLOGICAL	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)
Gross Alpha	0.06	0.12	29.25	23.50	25.90	23.63
Gross Beta	0.20	0.22	79.87	58.45	59.17	54.63

(B) Analyte Detected in Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitation limit

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-4587

From: W. J. Cowan (9238) WEMCO:EM(SAM)(ALPO)-92-0055

Date: June 16, 1992

Subject: REPORT OF ANALYSIS FOR RCRA RELEASE NUMBER 1388

To : E.D. Wiese

The attached data package has been reviewed by the Data Review and Reporting group and has been approved for distribution by the Analytical Laboratories Project Oversight group.

Six samples arrived at Westinghouse Environmental Management Company on April 24, 1992.

The sample(s) were submitted for analyses in the support of the T5/T6 RCRA Closure project.

The samples were collected on April 24, 1992 and were labeled as follows:

WEMCO SAMPLE NUMBER	CLIENT SAMPLE NUMBER
920424-025	92-138A-4147
920424-026	92-138A-4148
920424-027	92-138A-4149
920424-028	92-138A-4150
920424-029	92-138A-4153
920424-030	92-138A-4151

COMMENTS:

The Analytical Laboratories Project Oversight group is pleased to be of service to you. If you have any questions or comments, please call me at 738-9238.

W. J. Cowan, Project Scientist
Analytical Laboratory Project Oversight
Sampling & Analysis Management

WJC:bar

c: G. Henderson
L.J. Love
S.J. Lund

ALPO Release Letterbook Log
Central Files

OFFSITE DATA REVIEW CHECKLIST

Larry J. Evans	1388	6/8/92
REVIEWER'S NAME	RELEASE NO.	DATE REVIEWED

YES	NO	N/A		
	x		A)	Holding times were met. If no, explain: The water samples for Total BNA extraction missed hold times due to improper classification of liquid samples.
x			B)	All samples are included in release. If no, explain:
x			C)	All determinations are included in release. If no, explain:
x			D)	Results have been checked for reasonableness. The data has been found to be reasonable. If no, explain:
x			E)	Samples are included in QC lot tables. If no, explain:
x			F)	Blanks were analyzed and results are within acceptable limits. If no, explain: The extraction blank EXT BLK 13017 contains a slight amount of Barium.
x			G)	Internal QC check standards (reference standards, ICS, etc) were analyzed and are within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1388

YES	NO	N/A		
x			H)	Matrix spikes were analyzed and are within acceptable limits. If no, explain:
x			I)	Matrix spike duplicates were analyzed (organics) and are within acceptable limits. If no, explain:
	x		J)	Surrogates were analyzed for all VOA/BNA samples and the results are within acceptable limits. If no, explain: The semi-volatile analysis of samples 920424-027, -028, -029, and -030 gave no recovery of phenol-d5 surrogate, and sample 920424-027 gave a low recovery of 2-Fluorophenol surrogate.
		x	K)	Duplicates were analyzed (inorganics) and are within acceptable limits. If no, explain:
		x	L)	Blind Quality Control samples were analyzed with the release and all results were within acceptable limits. (For long term tracking purposes only.)
		x		Results are attached. If no, explain:
		x	M)	The Calculated Precision Terms of controls is within acceptable limits. If no, explain:

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1388

YES	NO	N/A		
		x	N)	The Calculated Accuracy Terms of controls is within acceptable limits. If no, explain:
x			O)	Overall Quality Control of release is acceptable. If no, explain: The semi-volatile analysis of samples 920424-027, -028, -029, and -030 gave no recovery of phenol-d5 surrogate, and sample 920424-027 gave a low recovery of 2-Fluorophenol surrogate. Re-extraction was not possible due to a lack of sample for re-extraction. This was probably a matrix affect. The surrogates and spike recoveries were acceptable in the method blanks and LCS. The water samples for Total BNA extraction missed hold times due to improper classification of liquid samples. The samples were received at 18 degrees centigrade.

P) Sample numbers included in release:

920424-025	920424-026	920424-027	920424-028	920424-029	920424-030

Q) Copies of results are to be sent to: G. Henderson, L. Love, S. Lund and E. Weise

R) Project Name: T5/T6 RCRA Closure - Sampling Plan 92-138A

SIGNATURE OF DATA REVIEWER: Lavory J Evans

DATE OF FINAL REVIEW: 6/8/92

temp 10°C both ctns

LI# 380

LI # ... SHELF # SIGC #1

-4587

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT COMPANY OF OHIO
Sample Processing Laboratory
Site Sample Management

REQUEST FOR ANALYSES/OFF-SITE CUSTODY TRANSFER RECORD

Receiving Laboratory: ITAS - St. Louis
13715 Rider Trail North
Earth City, MO 63045

Release #: 1388
Purchase Order #: 417988-80
Page 1 of 2

Sample Type: Depleted Contaminated Liquid

ITEM #	CODE	PHASE	WMCO LAB NO.	ANALYSIS REQUESTED	DATE SAMPLED	NO. OF CONTAINERS
01.	J	L	920424-025	Total VOA	4-24-92	3-40ml vial
02.				Alpha/Beta	"	1-4oz jar
03.	J	L	-026	Total Metals	"	1-1qt jar
04.				Total Semi VOA	"	2-1qt jar
05.				Total VOA	"	3-40ml vial
06.				Alpha/Beta	"	1-4oz jar
07.	J	L	-027	Total Metals	"	1-1qt jar
08.				TCLP Metals	"	1-1qt jar
09.				Total Semi VOA	"	2-1qt jar
10.				Total VOA	"	3-40ml vial
11.				Alpha/Beta	"	1-4oz jar
12.	J	L	-028	Total Metals	"	1-1qt jar
13.				TCLP Metals	"	1-1qt jar
14.				Total Semi VOA	"	2-1qt jar
15.				Total VOA	"	3-40ml vial
16.				Alpha/Beta	"	1-4oz jar
17.	J	L	-029	Total Metals	"	1-1qt jar
18.				TCLP Metals	"	1-1qt jar
19.				Total Semi VOA	"	2-1qt jar
20.				Total VOA	"	3-40ml vial

*** PHASES: O = Solid L = Liquid S = Sludge (Mixture of both) ***

WMCO: The container(s) in which the above samples were packaged were sealed by Howard VanHorsen on 4-27-1992.

RECEIVER: I certify that the seal(s) on the container(s) in which the above samples were packaged were intact when received.

Signature John Walker Date 04-28-92

NOTE: If the seal(s) were not intact, please contact D. J. Smith at (513) 738-9161 as soon as possible and send a nonconformance report to D. J. Smith. Please return this form to Analytical Data Review & Reporting in the envelope provided.

185

Jerry 10°C
both cans

-4587

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT COMPANY OF OHIO
Sample Processing Laboratory
Site Sample Management

REQUEST FOR ANALYSES/OFF-SITE CUSTODY TRANSFER RECORD

Receiving Laboratory: ITAS - St. Louis
13715 Rider Trail North
Earth City, MO 63045

Release #: 1388
Purchase Order #: 417988-80
Page 2 of 2

Sample Type:

ITEM #	CODE	PHASE	WMCO LAB NO.	ANALYSIS REQUESTED	DATE SAMPLED	NO. OF CONTAINERS
01.	J	L	920424-029	Alpha/Beta	4-24-92	1-4oz jar
6 02.	J	L	-030	Total Metals	"	1-1qt jar
03.				TCLP Metals	"	1-1qt jar
04.				Total Semi VOA	"	2-1qt jar
05.				Total VOA	"	3-40ml vial
06.				Alpha/Beta	"	1-4oz jar
07.						
08.						
09.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

*** PHASES: O = Solid L = Liquid S = Sludge (Mixture of both) ***

WMCO: The container(s) in which the above samples were packaged were sealed by Howell Kruthoson on 4-27-1992.

RECEIVER: I certify that the seal(s) on the container(s) in which the above samples were packaged were intact when received.

Signature John Wilkes Date 04-28-92

NOTE: If the seal(s) were not intact, please contact D. J. Smith at (513) 738-9161 as soon as possible and send a nonconformance report to D. J. Smith. Please return this form to Analytical Data Review & Reporting in the envelope provided.

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Westinghouse Environmental Management Company of Ohio, P. O. Box 398704, Cincinnati, Ohio 45239-8704

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Pg 1 of 2

ANALYSIS REQUEST / CUSTODY RECORD

Control #: _____

PROJECT: T5 TG RCRA CLOSURE
PROJECT #: N/A
PE/PM: F.D. WEISE

CLIENT: SITE MEDIA SAMPLING
CLIENT CONTACT: L. LOVE
PHONE: 6727

TECHNICIAN/EXT.: W. NEYER / 8727
CHARGE #: R2P-01
LOT MARK CODE: N/A

ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS)

SAMPLE IDENTIFICATION

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	TABLE 1	2	3	4	5	6	7
* 12-138A-4147		TRIP BLANK	LIQUID	4/24/92 0830	GLASS TAC COOL TO 4°C	1-40Z 3-40ml 1-GAL 4-1LT 3-40ml	/	X	/	X	X	X	/
12-138A-4148		FIELD BLANK	↓	↓ 1100	↓		/	X	/	X	X	X	/
		NOTHING FOLLOWS											

Copy To: L. LOVE / G. HENDERSON / S. LLOYD / F. WEISE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
Processing	W. Neyer	[illegible]	4/24/92	2:60					

* EM# 12-138A-4147 ON TABLE #5 - A/B SCREEN ONLY.

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FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Pg 2 of 2

ANALYSIS REQUEST / CUSTODY RECORD

Control #: _____

PROJECT: T5 TLO RCRA CLOSURE	CLIENT: SITE MEDIA SAMPLING	TECHNICIAN/EXT.: W. NEYER / 8927
PROJECT #: N/A	CLIENT CONTACT: L. LOVE	CHARGE #: RZP-01
PE/PM: ED WEISE	PHONE: 6727	LOT MARK CODE: N/A

SAMPLE IDENTIFICATION

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS) TABLE 1	2	3	4	5	6	7
92-138A-4149		T5-RINSE # 1	LIQUID	4-24-92 1050	GLASS TLC COOL TO 4°C	1 Gal 5-1 L 2-40 ml		X		X	X	X	
92-138A-4150		T5-RINSE # 2	↓	1310	↓	↓		X		X	X	X	
92-138A-4153		T9-RINSE # 2	↓	1310	↓	↓		X		X	X	X	
92-138A-4151		T5-RINSE # 3	↓	1335	↓	↓		X		X	X	X	
		NOTHING	FOLLOWS										

Copy To: G. HENDERSON / L. LOVE / S. LUND / E. WEISE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
Process Blk	W A Neyer	[illegible]	[illegible]	2:50					

4587

4587

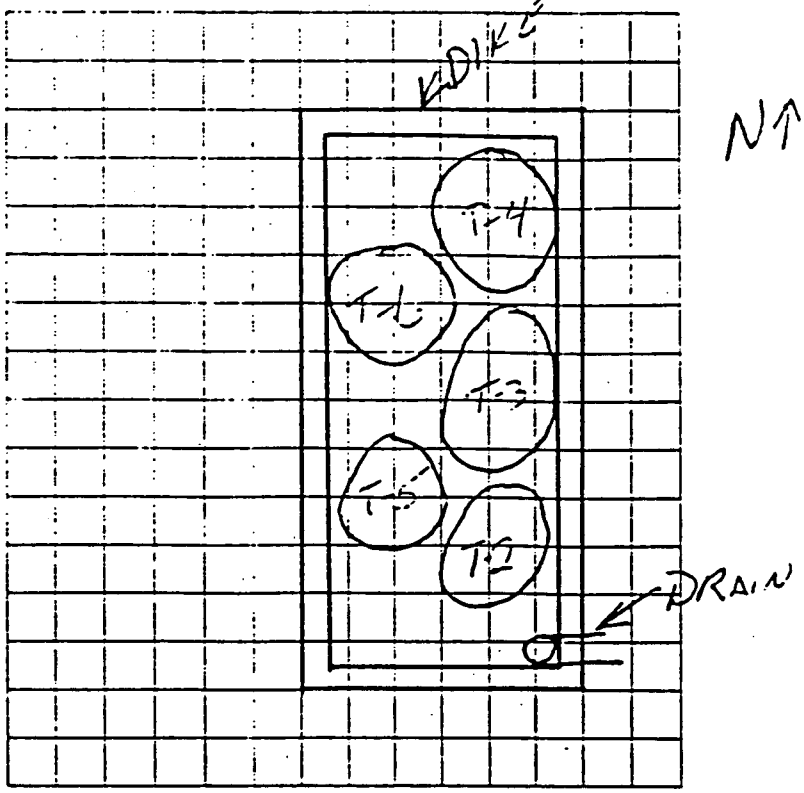
DATE: 4 24 12
TIME START: 0730
TIME FINISH: 1300
PAGE 1 OF 1

FEED MATERIAL PRODUCTION CENTER
P. O. BOX 398704
CINCINNATI, OHIO 45239-8704

PROJECT NAME: T-5 TO [illegible] CLOSURE
PROJECT NO: N/A
LOCATION: WEST OF PLANT
WEATHER: CLEAR
TEMPERATURE: 65

CONTACT.EXT: L. LOVE / 6727

PURPOSE OF SAMPLING: RCRA DETERMINATION
PROCESS PRODUCING WASTE: U DEGREES
SAMPLE REQUEST NO: 138A
SAMPLE PLAN NO: 138A



SAMPLE NUMBER	SAMPLE TYPE	COLLECTION METHOD	DEPTH	TIME	SAMPLE PRESERVATIVE	CONT TYPE	NUMBER/ VOLUME
92-138A-4147	LIQUID	POURED	N/A	0830	COOL TO 4°C	GLASS TLC	3 40 ml 1-502
92-138A-4148				1100			1 GAL 3 40 ml 4-1L 3-402
92-138A-4149				1050			1 GAL 3 40 ml 4-1L 3-402
92-138A-4150				1310			
92-138A-4153				1310			
92-138A-4151				1335			

ELD
MPLE 5-1
MPLES-2
MPLE 9-2
MPLES-3

NOTHING FOLLOWS

FIELD MEASUREMENTS: N/A
TRANSPORTATION METHOD: VAN TO LAB
SAMPLE TECHNICIANS: W. MYERS W. MYER G. STEVENS
TECHNICIAN SIGNATURES: Wm. Myers W. Myers G. Stevens

FIELD OBSERVATIONS:
CRITICALITY ALERT (DRILL) SOUNDED AT 0905 - ALL CLEAR SOUNDED AT 1005
SAMPLES 5-1, 5-2 & 5-3 + 9-2 WERE COLLECTED IN STAINLESS STEEL BUCKETS AND TRANSFERED TO CONTAINERS.
SAMPLE 9-2 IS A DUPLICATE OF 5-2

Rec'd 6-3-92 DMW

INTERNATIONAL TECHNOLOGY CORPORATION

CERTIFICATE OF ANALYSIS

Westinghouse Environmental Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030
May 28, 1992

Attention: Bill Cowan

Purchase Order Number: 417988

This is the Certificate of Analysis for the following:

Project Number	:	245-01
Release Order	:	1388
Date Received by Lab	:	April 28, 1992
Number of Samples	:	Six (6)
Sample Types	:	Liquid

I. Introduction

On April 28, 1992, six (6) samples were received at ITAS - St. Louis laboratory from Westinghouse Environmental Management Company of Ohio. The list of analytical tests performed, as well as receipt and analysis, can be found in the attached report. The samples were labeled as follows:

CLIENT ID	ITAS ID
920424-025	2004-001 Trip Blank
920424-026	2004-002 Field Blank
920424-027	2004-003 T-5 Rinse #1
920424-028	2004-004 T-5 Rinse #2
920424-029	2004-005 T-5 Rinse #2 Duplicate
920424-030	2004-006 T-5 Rinse #3

All samples were screened prior to analysis and yielded less than 5.0 uCi/L.

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical tests. Each set of data will include sample identification information, the analytical results, and the appropriate detection limits.

Westinghouse Environmental Management Company of Ohio
May 28, 1992
Project Number: 245-01

The analyses requested include: TCLP Metals, TCLP Mercury, Metals by EPA method 6010, Mercury by EPA method 7470, Semivolatiles by EPA method 8270, and Volatiles by EPA method 8240 including library search.

III. Quality Control

The QA/QC information can be found immediately following the analytical data. This QA/QC data are used to assess the laboratory's accuracy and precision during the analytical procedure.

The samples were extracted and analyzed within the required hold time.

IV. Nonconformance/Comments

Semivolatile analysis requested for samples 2004-003, 2004-004, 2004-005, and 2004-006 gave no recovery of phenol-d5 surrogate, and sample 2004-003 gave low recovery of 2-fluorophenol surrogate. The laboratory received only 1-liter of each sample, therefore it was not possible to re-extract to determine if the low recoveries are a result of a matrix affect or a laboratory dependent affect. However, examination of the GC/MS chromatograms for each of these samples shows that extracts have high concentrations of organics, some of which overloaded the chromatography column. This is a strong indication that a matrix affect is the likely cause of the low surrogate recoveries. Note also that the surrogate and spike recoveries were normal in the method blank and LCS.

The WEMCO Chain of Custody identified these samples as liquids. The client was asked on May 5, 1992 to specify whether these samples were aqueous or nonaqueous liquids. ITAS was told the samples were nonaqueous liquids. During organic preparation for semivolatiles by EPA method 8270, these samples were identified as aqueous and were prepared as such. The samples were prepared within the fourteen (14) day hold time for nonaqueous liquids specified by WEMCO. However, they did not meet the seven (7) day hold time required for aqueous samples.

These samples were received at eighteen (18) degrees centigrade.

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Company of Ohio
May 28, 1992
Project Number: 245-01

V. The following table lists samples with their associated QC.

ANALYSIS	LABID	ASSOCIATED QC
Volatiles	2004-001 2004-002	QC BLK & QC LCS 12923
	2004-003	QC BLK & QC LCS 12944
	2004-004 2004-005 2004-006	QC BLK & QC LCS 12980

I certify that this Certificate of Analysis is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Reviewed and Approved:

Robert E. White

Robert E. White
Project Manager

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920424-025

Date Received: 28-APR-92
Date Collected: 24-APR-92
Sample Matrix: Liquid

SAMPLE RECEIVING
Total Sample Volume: 238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

Trip Blank

	Gross Alpha	Gross Beta	Other
Count Date	28-APR-92	28-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.49	NA
Total Counts/ Count Time (cpm)	0.07	1.63	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	1.07	NA
Assay Results (picocuries/milliliter)	0.06	0.20	0.00
Total Activity (pCi)	13.71	48.11	0.00
Max Quantity for Category I (milliliters)	173761.95	495294.70	NA

Reviewed and approved by / Date: Bill Thomas 28-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920424-026

Date Received: 28-APR-92
Date Collected: 24-APR-92
Sample Matrix: Liquid

SAMPLE RECEIVING
Total Sample Volume: 6238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

Field Blank

	Gross Alpha	Gross Beta	Other
Count Date	28-APR-92	28-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.30	0.49	NA
Total Counts/ Count Time (cpm)	0.33	1.50	NA
BKG Counts/ Bkg Count Time (cpm)	0.13	1.27	NA
Assay Results (picocuries/milliliter)	0.12	0.22	0.00
Total Activity (pCi)	724.89	1381.16	0.00
Max Quantity for Category I (milliliters)	86058.52	451671.18	NA

Reviewed and approved by / Date: Bill Thomas 28-APR-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920424-027

Date Received: 28-APR-92
Date Collected: 24-APR-92
Sample Matrix: Liquid

SAMPLE RECEIVING
Total Sample Volume: 4023.64 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

T-5 Rinse #1

	Gross Alpha	Gross Beta	Other
Count Date	28-APR-92	28-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.49	NA
Total Counts/ Count Time (cpm)	48.07	297.03	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	1.03	NA
Assay Results (picocuries/milliliter)	29.25	79.87	0.00
Total Activity (pCi)	117691.35	321367.81	0.00
Max Quantity for Category I (milliliters)	341.88	1252.03	NA

Reviewed and approved by / Date: Bill Thomas 28-APR-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920424-028

Date Received: 28-APR-92
Date Collected: 24-APR-92
Sample Matrix: Liquid

SAMPLE RECEIVING
Total Sample Volume: 4023.64 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

T-5 Rinse =2

	Gross Alpha	Gross Beta	Other
Count Date	28-APR-92	28-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.30	0.49	NA
Total Counts/ Count Time (cpm)	42.43	219.50	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	1.10	NA
Assay Results (picocuries/milliliter)	23.50	58.45	0.00
Total Activity (pCi)	94555.45	235181.52	0.00
Max Quantity for Category I (milliliters)	425.53	1710.86	NA

Reviewed and approved by / Date: Bill Thomas 28-APR-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920424-029

Date Received: 28-APR-92
Date Collected: 24-APR-92
Sample Matrix: Liquid

SAMPLE RECEIVING
Total Sample Volume: 4023.64 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	28-APR-92	28-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.50	NA
Total Counts/ Count Time (cpm)	46.97	225.77	NA
BKG Counts/ Bkg Count Time (cpm)	0.17	1.13	NA
Assay Results (picocuries/milliliter)	25.90	59.17	0.00
Total Activity (pCi)	104212.17	238078.54	0.00
Max Quantity for Category I (milliliters)	386.10	1690.05	NA

T-5 Rinse =2
Duplicate

Reviewed and approved by / Date: Bill Thomas 28-APR-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920424-030

Date Received: 28-APR-92
Date Collected: 24-APR-92
Sample Matrix: Liquid

SAMPLE RECEIVING
Total Sample Volume: 4023.64 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

	Gross Alpha	Gross Beta	Other
Count Date	28-APR-92	28-APR-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.51	NA
Total Counts/ Count Time (cpm)	43.13	210.87	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	1.00	NA
Assay Results (picocuries/milliliter)	23.63	54.63	0.00
Total Activity (pCi)	95078.52	219811.23	0.00
Max Quantity for Category I (milliliters)	423.19	1830.50	NA

T-5 Rinse =3

Reviewed and approved by / Date: Bill Thomas 28-APR-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Liquid

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920424-026	2004-002	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	ND	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Mercury	05/13/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

Field Blank

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio - 4587
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Liquid

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920424-027	2004-003	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	1.341	0.01
T-5 Rinse #1		Cadmium	05/19/92	0.351	0.01
		Chromium	05/19/92	1.972	.025
		Lead	05/19/92	6.156	0.10
		Mercury	05/13/92	.00034	.0002
		Selenium	05/19/92	0.780	0.50
		Silver	05/19/92	0.100	0.02
920424-028	2004-004	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.171	0.01
T-5 Rinse #2		Cadmium	05/19/92	0.129	0.01
		Chromium	05/19/92	0.503	.025
		Lead	05/19/92	0.316	0.10
		Mercury	05/13/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

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INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio - 45 5 07
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Liquid

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920424-029	2004-005	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.171	0.01
		Cadmium	05/19/92	0.139	0.01
T-2 Rinse #2 Duplicate		Chromium	05/19/92	0.511	.025
		Lead	05/19/92	0.238	0.10
		Mercury	05/13/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02
920424-030	2004-006	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.208	0.01
		Cadmium	05/19/92	0.098	0.01
T-5 Rinse #3		Chromium	05/19/92	0.405	.025
		Lead	05/19/92	0.279	0.10
		Mercury	05/13/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
NA	QC BLK 13034	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	ND	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02
NA	QC BLK 136492	Mercury	05/13/92	ND	.0002

				% RECOVERY
NA	QC LCS 13034	Arsenic	05/19/92	96
		Barium	05/19/92	104
		Cadmium	05/19/92	99
		Chromium	05/19/92	101
		Lead	05/19/92	103
		Selenium	05/19/92	104
		Silver	05/19/92	99
NA	QC LCS 135792	Mercury	05/13/92	99

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: LIQUID

CLIENT ID: 920424-025
LAB ID: 2004-001

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/29/92	10	U	1
Vinyl Chloride	04/29/92	10	U	1
Chloroethane	04/29/92	10	U	1
Trichlorofluoromethane	04/29/92	10	U	1
Methylene Chloride	04/29/92	2	BJ	1
Acetone	04/29/92	22	B	1
Carbon Disulfide	04/29/92	5	U	1
1,1-Dichloroethene	04/29/92	5	U	1
[illegible]ans-1,2-Dichloroethene	04/29/92	5	U	1
[illegible]-Dichloroethane	04/29/92	5	U	1
[illegible]Butanone	04/29/92	10	U	1
1,1,1-Trichloroethane	04/29/92	5	U	1
Carbon Tetrachloride	04/29/92	5	U	1
Trichloroethene	04/29/92	5	U	1
1,1,2-Trichloroethane	04/29/92	5	U	1
Benzene	04/29/92	5	U	1
4-Methyl-2-Pentanone	04/29/92	10	U	1
Tetrachloroethylene	04/29/92	5	U	1
Toluene	04/29/92	5	U	1
Chlorobenzene	04/29/92	5	U	1
Ethylbenzene	04/29/92	5	U	1
Xylenes (Total)	04/29/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/29/92	93
Bromofluorobenzene	04/29/92	93
1,2-Dichloroethane-d4	04/29/92	96

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

4587

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: LIQUID

CLIENT ID: 920424-026
LAB ID: 2004-002

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/29/92	10	U	1
Vinyl Chloride	04/29/92	10	U	1
Chloroethane	04/29/92	10	U	1
Trichlorofluoromethane	04/29/92	10	U	1
Methylene Chloride	04/29/92	1	BJ	1
Acetone	04/29/92	7	BJ	1
Carbon Disulfide	04/29/92	5	U	1
1,1-Dichloroethene	04/29/92	5	U	1
ans-1,2-Dichloroethene	04/29/92	5	U	1
-Dichloroethane	04/29/92	5	U	1
-Butanone	04/29/92	20		1
1,1,1-Trichloroethane	04/29/92	5	U	1
Carbon Tetrachloride	04/29/92	5	U	1
Trichloroethene	04/29/92	5	U	1
1,1,2-Trichloroethane	04/29/92	5	U	1
Benzene	04/29/92	5	U	1
4-Methyl-2-Pentanone	04/29/92	10	U	1
Tetrachloroethylene	04/29/92	5	U	1
Toluene	04/29/92	1	J	1
Chlorobenzene	04/29/92	5	U	1
Ethylbenzene	04/29/92	5	U	1
Xylenes (Total)	04/29/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/29/92	93
Bromofluorobenzene	04/29/92	93
1,2-Dichloroethane-d4	04/29/92	98

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-5 Rinse #1

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: LIQUID

CLIENT ID: 920424-027
LAB ID: 2004-003

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/30/92	1000	U	100
Vinyl Chloride	04/30/92	1000	U	100
Chloroethane	04/30/92	1000	U	100
Trichlorofluoromethane	04/30/92	1000	U	100
Methylene Chloride	04/30/92	140	BJ	100
Acetone	04/30/92	460	BJ	100
Carbon Disulfide	04/30/92	500	U	100
1,1-Dichloroethene	04/30/92	500	U	100
ans-1,2-Dichloroethene	04/30/92	500	U	100
-Dichloroethane	04/30/92	500	U	100
2-Butanone	04/30/92	170	BJ	100
1,1,1-Trichloroethane	04/30/92	16000		100
Carbon Tetrachloride	04/30/92	500	U	100
Trichloroethene	04/30/92	500	U	100
1,1,2-Trichloroethane	04/30/92	250	J	100
Benzene	04/30/92	500	U	100
4-Methyl-2-Pentanone	04/30/92	130	J	100
Tetrachloroethylene	04/30/92	290	J	100
Toluene	04/30/92	670		100
Chlorobenzene	04/30/92	500	U	100
Ethylbenzene	04/30/92	400	J	100
Xylenes (Total)	04/30/92	2800		100

SURROGATES		% RECOVERY
Toluene	04/30/92	99
Bromofluorobenzene	04/30/92	97
1,2-Dichloroethane-d4	04/30/92	99

DF=100

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

T-5 Rinse #2

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: LIQUID

CLIENT ID: 920424-028
LAB ID: 2004-004

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/04/92	2000	U	200
Vinyl Chloride	05/04/92	2000	U	200
Chloroethane	05/04/92	2000	U	200
Trichlorofluoromethane	05/04/92	2000	U	200
Methylene Chloride	05/04/92	370	BJ	200
Acetone	05/04/92	620	BJ	200
Carbon Disulfide	05/04/92	1000	U	200
1,1-Dichloroethene	05/04/92	1000	U	200
ns-1,2-Dichloroethene	05/04/92	1000	U	200
-Dichloroethane	05/04/92	1000	U	200
2-Butanone	05/04/92	270	B J	200
1,1,1-Trichloroethane	05/04/92	32000		200
Carbon Tetrachloride	05/04/92	1000	U	200
Trichloroethene	05/04/92	1000	U	200
1,1,2-Trichloroethane	05/04/92	350	J	200
Benzene	05/04/92	1000	U	200
4-Methyl-2-Pentanone	05/04/92	2000	U	200
Tetrachloroethylene	05/04/92	460	J	200
Toluene	05/04/92	1000	B J	200
Chlorobenzene	05/04/92	1000	U	200
Ethylbenzene	05/04/92	620	J	200
Xylenes (Total)	05/04/92	4000		200

SURROGATES		% RECOVERY
Toluene	05/04/92	94
Bromofluorobenzene	05/04/92	100
1,2-Dichloroethane-d4	05/04/92	103

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

DF=200.

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

T-5 Rinse #2 Duplicate

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: LIQUID

CLIENT ID: 920424-029
LAB ID: 2004-005

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/04/92	2000	U	200
Vinyl Chloride	05/04/92	2000	U	200
Chloroethane	05/04/92	2000	U	200
Trichlorofluoromethane	05/04/92	2000	U	200
Methylene Chloride	05/04/92	370	BJ	200
Acetone	05/04/92	570	BJ	200
Carbon Disulfide	05/04/92	1000	U	200
1,1-Dichloroethene	05/04/92	1000	U	200
trans-1,2-Dichloroethene	05/04/92	1000	U	200
1,2-Dichloroethane	05/04/92	1000	U	200
2-Butanone	05/04/92	1030	J	200
1,1,1-Trichloroethane	05/04/92	29000		200
Carbon Tetrachloride	05/04/92	1000	U	200
Trichloroethene	05/04/92	1000	U	200
1,1,2-Trichloroethane	05/04/92	330	J	200
Benzene	05/04/92	1000	U	200
4-Methyl-2-Pentanone	05/04/92	2000	U	200
Tetrachloroethylene	05/04/92	360	J	200
Toluene	05/04/92	870	B J	200
Chlorobenzene	05/04/92	1000	U	200
Ethylbenzene	05/04/92	480	J	200
Xylenes (Total)	05/04/92	3300		200

SURROGATES		% RECOVERY
Toluene	05/04/92	97
Bromofluorobenzene	05/04/92	100
1,2-Dichloroethane-d4	05/04/92	104

DF-200

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

T-5 Rinse #3

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: LIQUID

CLIENT ID: 920424-030
LAB ID: 2004-006

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/04/92	2500	U	250
Vinyl Chloride	05/04/92	2500	U	250
Chloroethane	05/04/92	2500	U	250
Trichlorofluoromethane	05/04/92	2500	U	250
Methylene Chloride	05/04/92	360	BJ	250
Acetone	05/04/92	1050	BJ	250
Carbon Disulfide	05/04/92	1200	U	250
1,1-Dichloroethene	05/04/92	1200	U	250
trans-1,2-Dichloroethene	05/04/92	1200	U	250
1,2-Dichloroethane	05/04/92	1200	U	250
2-Butanone	05/04/92	2500	U	250
1,1,1-Trichloroethane	05/04/92	44000		250
Carbon Tetrachloride	05/04/92	1200	U	250
Trichloroethene	05/04/92	1200	U	250
1,1,2-Trichloroethane	05/04/92	410	J	250
Benzene	05/04/92	1200	U	250
4-Methyl-2-Pentanone	05/04/92	2500	U	250
Tetrachloroethylene	05/04/92	500	J	250
Toluene	05/04/92	1200	B J	250
Chlorobenzene	05/04/92	1200	U	250
Ethylbenzene	05/04/92	670	J	250
Xylenes (Total)	05/04/92	4500		250

SURROGATES		% RECOVERY
Toluene	05/04/92	96
Bromofluorobenzene	05/04/92	99
1,2-Dichloroethane-d4	05/04/92	105

DF=250

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC LCS 12923

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	% RECOVERY
Chloromethane	04/29/92	125
Vinyl Chloride	04/29/92	119
Chloroethane	04/29/92	102
Trichlorofluoromethane	04/29/92	101
Methylene Chloride	04/29/92	95
Acetone	04/29/92	106
Carbon Disulfide	04/29/92	102
1,1-Dichloroethene	04/29/92	101
trans-1,2-Dichloroethene	04/29/92	96
1,2-Dichloroethane	04/29/92	97
2-Butanone	04/29/92	107
1,1,1-Trichloroethane	04/29/92	95
Carbon Tetrachloride	04/29/92	96
Trichloroethene	04/29/92	92
1,1,2-Trichloroethane	04/29/92	96
Benzene	04/29/92	94
4-Methyl-2-Pentanone	04/29/92	107
Tetrachloroethylene	04/29/92	92
Toluene	04/29/92	92
Chlorobenzene	04/29/92	94
Ethylbenzene	04/29/92	91
Xylenes (Total)	04/29/92	93

SURROGATES		% RECOVERY
Toluene	04/29/92	94
Bromofluorobenzene	04/29/92	93
1,2-Dichloroethane-d4	04/29/92	96

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC LCS 12944

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	% RECOVERY
Chloromethane	04/30/92	101
Vinyl Chloride	04/30/92	116
Chloroethane	04/30/92	102
Trichlorofluoromethane	04/30/92	102
Methylene Chloride	04/30/92	91
Acetone	04/30/92	100
Carbon Disulfide	04/30/92	99
1,1-Dichloroethene	04/30/92	97
trans-1,2-Dichloroethene	04/30/92	91
1,1-Dichloroethane	04/30/92	95
2-Butanone	04/30/92	97
1,1,1-Trichloroethane	04/30/92	92
Carbon Tetrachloride	04/30/92	93
Trichloroethene	04/30/92	92
1,1,2-Trichloroethane	04/30/92	95
Benzene	04/30/92	95
4-Methyl-2-Pentanone	04/30/92	102
Tetrachloroethylene	04/30/92	91
Toluene	04/30/92	96
Chlorobenzene	04/30/92	91
Ethylbenzene	04/30/92	94
Xylenes (Total)	04/30/92	93

SURROGATES		% RECOVERY
Toluene	04/30/92	99
Bromofluorobenzene	04/30/92	96
1,2-Dichloroethane-d4	04/30/92	101

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC LCS 12980

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	% RECOVERY
Chloromethane	05/04/92	73
Vinyl Chloride	05/04/92	82
Chloroethane	05/04/92	81
Trichlorofluoromethane	05/04/92	81
Methylene Chloride	05/04/92	88
Acetone	05/04/92	101
Carbon Disulfide	05/04/92	104
1,1-Dichloroethene	05/04/92	100
[illegible]ns-1,2-Dichloroethene	05/04/92	96
[illegible]-Dichloroethane	05/04/92	97
2-Butanone	05/04/92	107
1,1,1-Trichloroethane	05/04/92	98
Carbon Tetrachloride	05/04/92	100
Trichloroethene	05/04/92	95
1,1,2-Trichloroethane	05/04/92	103
Benzene	05/04/92	98
4-Methyl-2-Pentanone	05/04/92	102
Tetrachloroethylene	05/04/92	91
Toluene	05/04/92	92
Chlorobenzene	05/04/92	93
Ethylbenzene	05/04/92	91
Xylenes (Total)	05/04/92	92

SURROGATES		% RECOVERY
Toluene	05/04/92	95
Bromofluorobenzene	05/04/92	99
1,2-Dichloroethane-d4	05/04/92	101

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC BLK 12923

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/29/92	10	U	1
Vinyl Chloride	04/29/92	10	U	1
Chloroethane	04/29/92	10	U	1
Trichlorofluoromethane	04/29/92	10	U	1
Methylene Chloride	04/29/92	2	BJ	1
Acetone	04/29/92	3	BJ	1
Carbon Disulfide	04/29/92	5	U	1
1,1-Dichloroethene	04/29/92	5	U	1
[illegible]ns-1,2-Dichloroethene	04/29/92	5	U	1
[illegible]-Dichloroethane	04/29/92	5	U	1
2-Butanone	04/29/92	10	U	1
1,1,1-Trichloroethane	04/29/92	5	U	1
Carbon Tetrachloride	04/29/92	5	U	1
Trichloroethene	04/29/92	5	U	1
1,1,2-Trichloroethane	04/29/92	5	U	1
Benzene	04/29/92	5	U	1
4-Methyl-2-Pentanone	04/29/92	1	BJ	1
Tetrachloroethylene	04/29/92	5	U	1
Toluene	04/29/92	5	U	1
Chlorobenzene	04/29/92	5	U	1
Ethylbenzene	04/29/92	5	U	1
Xylenes (Total)	04/29/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/29/92	92
Bromofluorobenzene	04/29/92	91
1,2-Dichloroethane-d4	04/29/92	93

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC BLK 12944

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	04/30/92	10	U	1
Vinyl Chloride	04/30/92	10	U	1
Chloroethane	04/30/92	10	U	1
Trichlorofluoromethane	04/30/92	10	U	1
Methylene Chloride	04/30/92	1	BJ	1
Acetone	04/30/92	3	BJ	1
Carbon Disulfide	04/30/92	5	U	1
1,1-Dichloroethene	04/30/92	5	U	1
ans-1,2-Dichloroethene	04/30/92	5	U	1
-Dichloroethane	04/30/92	5	U	1
-Butanone	04/30/92	10	U	1
1,1,1-Trichloroethane	04/30/92	5	U	1
Carbon Tetrachloride	04/30/92	5	U	1
Trichloroethene	04/30/92	5	U	1
1,1,2-Trichloroethane	04/30/92	5	U	1
Benzene	04/30/92	5	U	1
4-Methyl-2-Pentanone	04/30/92	10	U	1
Tetrachloroethylene	04/30/92	5	U	1
Toluene	04/30/92	5	U	1
Chlorobenzene	04/30/92	5	U	1
Ethylbenzene	04/30/92	5	U	1
Xylenes (Total)	04/30/92	5	U	1

SURROGATES		% RECOVERY
Toluene	04/30/92	98
Bromofluorobenzene	04/30/92	97
1,2-Dichloroethane-d4	04/30/92	99

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC BLK 12980

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/04/92	10	U	1
Vinyl Chloride	05/04/92	10	U	1
Chloroethane	05/04/92	10	U	1
Trichlorofluoromethane	05/04/92	10	U	1
Methylene Chloride	05/04/92	3	J	1
Acetone	05/04/92	3	J	1
Carbon Disulfide	05/04/92	5	U	1
1,1-Dichloroethene	05/04/92	5	U	1
trans-1,2-Dichloroethene	05/04/92	5	U	1
1,2-Dichloroethane	05/04/92	5	U	1
2-Butanone	05/04/92	10	U	1
1,1,1-Trichloroethane	05/04/92	5	U	1
Carbon Tetrachloride	05/04/92	5	U	1
Trichloroethene	05/04/92	5	U	1
1,1,2-Trichloroethane	05/04/92	5	U	1
Benzene	05/04/92	5	U	1
4-Methyl-2-Pentanone	05/04/92	1	J	1
Tetrachloroethylene	05/04/92	5	U	1
Toluene	05/04/92	5	U	1
Chlorobenzene	05/04/92	5	U	1
Ethylbenzene	05/04/92	5	U	1
Xylenes (Total)	05/04/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/04/92	96
Bromofluorobenzene	05/04/92	99
1,2-Dichloroethane-d4	05/04/92	98

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (U) ANALYTE WAS NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Liquid

CLIENT ID : 920424-026
ITAS LAB ID: 2004-002

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	11	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	11 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	11	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	11	ND
Hexachlorobenzene	05/05/92	05/07/92	11	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	11	ND
Hexachloroethane	05/05/92	05/07/92	11	ND
Nitrobenezene	05/05/92	05/07/92	11	ND
Pentachlorophenol	05/05/92	05/07/92	54	ND
Pyridine	05/05/92	05/07/92	11	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	11	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	11	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/05/92	05/07/92	57
Phenol-d5	05/05/92	05/07/92	38
Nitrobenzene-d5	05/05/92	05/07/92	80
2-Fluorobiphenyl	05/05/92	05/07/92	87
2,4,6-Tribromophenol	05/05/92	05/07/92	90
Terphenyl-d14	05/05/92	05/07/92	104

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Liquid

CLIENT ID : 920424-027
ITAS LAB ID: 2004-003

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/07/92	05/08/92	11	ND
3-Methylphenol	05/07/92	05/08/92	*	ND
4-Methylphenol	05/07/92	05/08/92	11 *	ND
1,4-Dichlorobenzene	05/07/92	05/08/92	11	ND
2,4-Dinitrotoluene	05/07/92	05/08/92	11	ND
Hexachlorobenzene	05/07/92	05/08/92	11	ND
Hexachloro-1,3-butadiene	05/07/92	05/08/92	11	ND
Hexachloroethane	05/07/92	05/08/92	11	ND
Nitrobenezene	05/07/92	05/08/92	11	ND
Pentachlorophenol	05/07/92	05/08/92	54	ND
Pyridine	05/07/92	05/08/92	11 ~~108~~	ND
2,4,5-Trichlorophenol	05/07/92	05/08/92	11	ND
2,4,6-Trichlorophenol	05/07/92	05/08/92	11	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/07/92	05/08/92	~~18~~
Phenol-d5	05/07/92	05/08/92	0
Nitrobenzene-d5	05/07/92	05/08/92	107
2-Fluorobiphenyl	05/07/92	05/08/92	74
2,4,6-Tribromophenol	05/07/92	05/08/92	110
Terphenyl-d14	05/07/92	05/08/92	89

conf OK

• 3-Methylphenol and 4-Methylphenol co-elute.

~~Me-phenols based~~

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Liquid

CLIENT ID : 920424-028
ITAS LAB ID: 2004-004

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/07/92	05/08/92	11	ND
3-Methylphenol	05/07/92	05/08/92	*	ND
4-Methylphenol	05/07/92	05/08/92	11 *	ND
1,4-Dichlorobenzene	05/07/92	05/08/92	11	ND
2,4-Dinitrotoluene	05/07/92	05/08/92	11	ND
Hexachlorobenzene	05/07/92	05/08/92	11	ND
Hexachloro-1,3-butadiene	05/07/92	05/08/92	11	ND
Hexachloroethane	05/07/92	05/08/92	11	ND
Nitrobenezene	05/07/92	05/08/92	11	ND
Pentachlorophenol	05/07/92	05/08/92	53	ND
Pyridine	05/07/92	05/08/92	11	ND
2,4,5-Trichlorophenol	05/07/92	05/08/92	11	ND
2,4,6-Trichlorophenol	05/07/92	05/08/92	11	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/07/92	05/08/92	33 *
Phenol-d5	05/07/92	05/08/92	0 *
Nitrobenzene-d5	05/07/92	05/08/92	104
2-Fluorobiphenyl	05/07/92	05/08/92	78
2,4,6-Tribromophenol	05/07/92	05/08/92	111
Terphenyl-d14	05/07/92	05/08/92	87

Contr. OK

* 3-Methylphenol and 4-Methylphenol co-elute.

~~3-phenols~~ ~~[illegible]~~ low

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

2-4587

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Liquid

CLIENT ID : 920424-029
ITAS LAB ID: 2004-005

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/07/92	05/08/92	11	ND
3-Methylphenol	05/07/92	05/08/92	*	ND
4-Methylphenol	05/07/92	05/08/92	11 *	19.63
1,4-Dichlorobenzene	05/07/92	05/08/92	11	ND
2,4-Dinitrotoluene	05/07/92	05/08/92	11	ND
Hexachlorobenzene	05/07/92	05/08/92	11	ND
Hexachloro-1,3-butadiene	05/07/92	05/08/92	11	ND
Hexachloroethane	05/07/92	05/08/92	11	ND
Nitrobenezene	05/07/92	05/08/92	11	ND
Pentachlorophenol	05/07/92	05/08/92	53	ND
Pyridine	05/07/92	05/08/92	11	ND
2,4,5-Trichlorophenol	05/07/92	05/08/92	11	ND
2,4,6-Trichlorophenol	05/07/92	05/08/92	11	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/07/92	05/08/92	30
Phenol-d5	05/07/92	05/08/92	0
Nitrobenzene-d5	05/07/92	05/08/92	104
2-Fluorobiphenyl	05/07/92	05/08/92	70
2,4,6-Tribromophenol	05/07/92	05/08/92	101
Terphenyl-d14	05/07/92	05/08/92	80

* 3-Methylphenol and 4-Methylphenol co-elute.

Acid phenols
[illegible] low

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

E-4587

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Liquid

CLIENT ID : 920424-030
ITAS LAB ID: 2004-006

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/07/92	05/08/92	10	ND
3-Methylphenol	05/07/92	05/08/92	*	ND
4-Methylphenol	05/07/92	05/08/92	10 ●	20.56
1,4-Dichlorobenzene	05/07/92	05/08/92	10	ND
2,4-Dinitrotoluene	05/07/92	05/08/92	10	ND
Hexachlorobenzene	05/07/92	05/08/92	10	ND
Hexachloro-1,3-butadiene	05/07/92	05/08/92	10	ND
Hexachloroethane	05/07/92	05/08/92	10	ND
Nitrobenezene	05/07/92	05/08/92	10	ND
Pentachlorophenol	05/07/92	05/08/92	52	ND
Pyridine	05/07/92	05/08/92	10	ND
2,4,5-Trichlorophenol	05/07/92	05/08/92	10	ND
2,4,6-Trichlorophenol	05/07/92	05/08/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/07/92	05/08/92	37
Phenol-d5	05/07/92	05/08/92	0
Nitrobenzene-d5	05/07/92	05/08/92	95
2-Fluorobiphenyl	05/07/92	05/08/92	74
2,4,6-Tribromophenol	05/07/92	05/08/92	107
Terphenyl-d14	05/07/92	05/08/92	81

● 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

E-E4587

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 13043

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/07/92	05/08/92	10	ND
3-Methylphenol	05/07/92	05/08/92	*	ND
4-Methylphenol	05/07/92	05/08/92	10 •	ND
1,4-Dichlorobenzene	05/07/92	05/08/92	10	ND
2,4-Dinitrotoluene	05/07/92	05/08/92	10	ND
Hexachlorobenzene	05/07/92	05/08/92	10	ND
Hexachloro-1,3-butadiene	05/07/92	05/08/92	10	ND
Hexachloroethane	05/07/92	05/08/92	10	ND
Nitrobenezene	05/07/92	05/08/92	10	ND
Pentachlorophenol	05/07/92	05/08/92	50	ND
Pyridine	05/07/92	05/08/92	10	ND
2,4,5-Trichlorophenol	05/07/92	05/08/92	10	ND
2,4,6-Trichlorophenol	05/07/92	05/08/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/07/92	05/08/92	56
Phenol-d5	05/07/92	05/08/92	39
Nitrobenzene-d5	05/07/92	05/08/92	82
2-Fluorobiphenyl	05/07/92	05/08/92	86
2,4,6-Tribromophenol	05/07/92	05/08/92	78
Terphenyl-d14	05/07/92	05/08/92	92

• 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

E-4587

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC SPK 13043

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	% RECOVERY
2-Methylphenol	05/07/92	05/08/92	49
3-Methylphenol	05/07/92	05/08/92	*
4-Methylphenol	05/07/92	05/08/92	56 *
1,4-Dichlorobenzene	05/07/92	05/08/92	70
2,4-Dinitrotoluene	05/07/92	05/08/92	80
Hexachlorobenzene	05/07/92	05/08/92	80
Hexachloro-1,3-butadiene	05/07/92	05/08/92	63
Hexachloroethane	05/07/92	05/08/92	59
Nitrobenezene	05/07/92	05/08/92	79
Pentachlorophenol	05/07/92	05/08/92	68
Pyridine	05/07/92	05/08/92	42
2,4,5-Trichlorophenol	05/07/92	05/08/92	56
2,4,6-Trichlorophenol	05/07/92	05/08/92	76
SURROGATE			
2-Fluorophenol	05/07/92	05/08/92	55
Phenol-d5	05/07/92	05/08/92	38
Nitrobenzene-d5	05/07/92	05/08/92	84
2-Fluorobiphenyl	05/07/92	05/08/92	86
2,4,6-Tribromophenol	05/07/92	05/08/92	80
Terphenyl-d14	05/07/92	05/08/92	91

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587
4587

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 13019

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	•	ND
4-Methylphenol	05/05/92	05/07/92	10 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
entachlorophenol	05/05/92	05/07/92	50	ND
ridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/05/92	05/07/92	58
Phenol-d5	05/05/92	05/07/92	39
Nitrobenzene-d5	05/05/92	05/07/92	85
2-Fluorobiphenyl	05/05/92	05/07/92	84
2,4,6-Tribromophenol	05/05/92	05/07/92	83
Terphenyl-d14	05/05/92	05/07/92	103

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC SPK 13019

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/27/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	% RECOVERY
2-Methylphenol	05/05/92	05/07/92	50
3-Methylphenol	05/05/92	05/07/92	*
4-Methylphenol	05/05/92	05/07/92	58 *
1,4-Dichlorobenzene	05/05/92	05/07/92	75
2,4-Dinitrotoluene	05/05/92	05/07/92	83
Hexachlorobenzene	05/05/92	05/07/92	83
Hexachloro-1,3-butadiene	05/05/92	05/07/92	69
Hexachloroethane	05/05/92	05/07/92	70
Nitrobenezene	05/05/92	05/07/92	81
Pentachlorophenol	05/05/92	05/07/92	72
Pyridine	05/05/92	05/07/92	42
2,4,5-Trichlorophenol	05/05/92	05/07/92	56
2,4,6-Trichlorophenol	05/05/92	05/07/92	76
SURROGATE			
2-Fluorophenol	05/05/92	05/07/92	60
Phenol-d5	05/05/92	05/07/92	40
Nitrobenzene-d5	05/05/92	05/07/92	86
2-Fluorobiphenyl	05/05/92	05/07/92	88
2,4,6-Tribromophenol	05/05/92	05/07/92	93
Terphenyl-d14	05/05/92	05/07/92	100

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Liquid

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/21/92

CLIENT ID : 920424-027
ITAS LAB ID: 2004-003

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.474	100.0
Cadmium	05/05/92	05/19/92	0.010	0.331	1.0
Chromium	05/05/92	05/19/92	0.025	0.946	5.0
Lead	05/05/92	05/19/92	0.100	0.153	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	0.074	1.0
Silver	05/05/92	05/19/92	0.020	0.028	5.0

T-5 Rinse #1

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Liquid

SAMPLE DATE : 04/24/92
CLIENT ID : 920424-028
DATE RECEIVED: 04/28/92
ITAS LAB ID: 2004-004
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.335	100.0
Cadmium	05/05/92	05/19/92	0.010	0.131	1.0
Chromium	05/05/92	05/19/92	0.025	0.458	5.0
Lead	05/05/92	05/19/92	0.100	0.093	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

T-5 Rinse #2

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Liquid

SAMPLE DATE : 04/24/92
CLIENT ID : 920424-029
DATE RECEIVED: 04/28/92
ITAS LAB ID: 2004-005
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.448	100.0
Cadmium	05/05/92	05/19/92	0.010	0.134	1.0
Chromium	05/05/92	05/19/92	0.025	0.485	5.0
Lead	05/05/92	05/19/92	0.100	0.088	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	0.008	5.0

T-5 Rinse #2 Dup.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Liquid

SAMPLE DATE : 04/24/92
DATE RECEIVED: 04/28/92
REPORT DATE : 05/21/92

CLIENT ID : 920424-030
ITAS LAB ID: 2004-006

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.760	100.0
Cadmium	05/05/92	05/19/92	0.010	0.101	1.0
Chromium	05/05/92	05/19/92	0.025	0.402	5.0
Lead	05/05/92	05/19/92	0.100	0.068	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

T-5 Rinse #3

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: EXT BLK 13017

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.051	100.0
Cadmium	05/05/92	05/19/92	0.010	ND	1.0
Chromium	05/05/92	05/19/92	0.025	ND	5.0
Lead	05/05/92	05/19/92	0.100	ND	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

- 4587

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 13052

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	NA	05/19/92	0.500	ND	5.0
Barium	NA	05/19/92	0.010	ND	100.0
Cadmium	NA	05/19/92	0.010	ND	1.0
Chromium	NA	05/19/92	0.025	ND	5.0
Lead	NA	05/19/92	0.100	ND	5.0
Selenium	NA	05/19/92	0.500	ND	1.0
Silver	NA	05/19/92	0.020	ND	5.0

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC LCS 13052

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	% RECOVERY
Arsenic	NA	05/19/92	98
Barium	NA	05/19/92	103
Cadmium	NA	05/19/92	98
Chromium	NA	05/19/92	100
Lead	NA	05/19/92	100
Selenium	NA	05/19/92	102
Silver	NA	05/19/92	95

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 132492

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Mercury	NA	05/08/92	0.0002	ND	0.2

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/21/92

CLIENT ID : NA
ITAS LAB ID: QC LCS 131892

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	% RECOVERY
Mercury	NA	05/08/92	104

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Release #1396

TABULATED RESULTS FROM CONTAINMENT PAD RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1396)

Sample No.	4197	4198	4199	4219	4200	4201	4202	4196
Description	Field Blank	Equip. Blank	Pad Rinse 1	T5-R4 (Tank 5)	Pad Rinse 3	Pad Rinse 2d	Pad Rinse 2	Trip Blank
ANALIS No.	920430-054	920430-029	920430-055	920501-010	920430-056	920430-057	920430-058	920430-028
ITAS ID	2018-001	2018-002	2018-003	2018-004	2018-005	2018-006	2018-007	2018-008
Matrix	Water	Water	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
CHLOROMETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
VINYL CHLORIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
CHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
TRICHLOROFLUOROMETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
METHYLENE CHLORIDE	6 U	6 U	5 U	5 U	5 U	5 U	5 U	7
ACETONE	2 J	1 J	10 U	10 U	10 U	10 U	10 U	2 J
CARBON DISULFIDE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-DICHLOROETHENE	5 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U
trans-1,2-DICHLOROETHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-DICHLOROETHANE	5 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U
2-BUTANONE	8 J	2 J	10 U	10 U	10 U	10 U	10 U	12 U
1,1,1-TRICHLOROETHANE	5 U	5 U	5 U	1200	5 U	1 J	1 J	5 U
CARBON TETRACHLORIDE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
TRICHLOROETHENE	5 U	5 U	5 U	3 J	5 U	5 U	5 U	5 U
1,1,2-TRICHLOROETHANE	5 U	5 U	5 U	43	5 U	5 U	5 U	5 U
BENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	10 U	10 U	10 U	1 J	10 U	10 U	10 U	10 U
TERTACHLOROETHYLENE	5 U	5 U	5 U	13	5 U	5 U	5 U	5 U
TOLUENE	5 U	5 U	5 U	70	5 U	5 U	5 U	1 J
CHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ETHYLBENZENE	5 U	5 U	5 U	27	5 U	5 U	5 U	5 U
XYLENES (TOTAL)	5 U	5 U	5 U	190	5 U	5 U	5 U	5 U

(B) Analyte Detected in Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitative limit

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-4587

TABULATED RESULTS FROM CONTAINMENT PAD RINSE SAMPLING FOR T5/T6 CLOSURE (RELEASE 1396)

Sample No.	4197	4198	4199	4219	4200	4201	4202	4196
Description	Field Blank	Equip. Blank	Pad Rinse 1	T5-R4 (Tank 5)	Pad Rinse 3	Pad Rinse 2d	Pad Rinse 2	Trip Blank
ANALIS No.	920430-054	920430-029	920430-055	920501-010	920430-056	920430-057	920430-058	920430-028
ITAS ID	2018-001	2018-002	2018-003	2018-004	2018-005	2018-006	2018-007	2018-008
Matrix	Water	Water	Water	Water	Water	Water	Water	Water
SEMI-VOLATILE ORGANICS	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
2-METHYLPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
3-METHYLPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
4-METHYLPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
1,4-DICHLOROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
2,4-DINITROTOLUENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
HEXACHLOROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
HEXACHLORO-1,3-BUTADIENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
HEXACHLOROETHANE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
NITROBENZENE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
PENTACHLOROPHENOL	50 U	50 U	51 U	51 U	52 U	55 U	50 U	NR
PYRIDINE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
2,4,5-TRICHLOROPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
2,4,6-TRICHLOROPHENOL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NR
METALS (Totals)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
BARIUM	0.01000 U	0.01200	0.04500 R	0.01000 U	0.09000 R	0.03400 R	0.04700 R	NR
CADMIUM	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	NR
CHROMIUM	0.02500 U	0.02500 U	0.02500 U	0.02500 U	0.03900	0.02500 U	0.02500 U	NR
LEAD	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10900	0.10000 U	0.10000 U	NR
MERCURY	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NR
SELENIUM	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
SILVER	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	NR
METALS (TCLP)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ARSENIC	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
BARIUM	NR	NR	0.22100 R	0.25600 R	0.15800 R	0.18300 R	0.20400 R	NR
CADMIUM	NR	NR	0.01000 U	0.01000 U	0.01000 U	0.01000 U	0.01000 U	NR
CHROMIUM	NR	NR	0.02500 U	0.02500 U	0.02500 U	0.02500 U	0.02500 U	NR
LEAD	NR	NR	0.10000 U	0.10000 U	0.10000 U	0.10000 U	0.10000 U	NR
MERCURY	NR	NR	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NR
SELENIUM	NR	NR	0.50000 U	0.50000 U	0.50000 U	0.50000 U	0.50000 U	NR
SILVER	NR	NR	0.02000 U	0.02000 U	0.02000 U	0.02000 U	0.02000 U	NR
RADIOLOGICAL	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)	(pCi/mL)
Gross Alpha	0.06	0.06	0.13 J	0.13 J	0.03 J	0.07 J	7.21	0.01
Gross Beta	0.18	0.18	1.10 J	1.13 J	1.23 J	0.93 J	4.29	0.18

(B) Analyte Detected in Control Blank
(J) Estimated Value
(NR) Not Reported
(R) Rejected
(U) Analyte undetected. Value is quantitative limit

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I-4587

From: W. J. Cowan (9238) WEMCO:EM:(SAM)(ALPO):RCRA-92-0057

Date: June 25, 1992

Subject: REPORT OF ANALYSIS FOR RCRA RELEASE NUMBER 1396

To : E. D. Wiese

The attached data package has been reviewed by the Data Review and Reporting group and has been approved for distribution by the Analytical Laboratories Project Oversight group.

The sample(s) were submitted for analyses in the support of the T5/T6 RCRA Closure project.

The samples were collected on April 30, 1992, and were labeled as follows:

WEMCO SAMPLE NUMBER	CLIENT SAMPLE NUMBER
920430-028	92-138A-4196 TRIP BLANK
920430-029	92-138A-4198 HAND LANCE EQUIP. BLANK
920430-054	92-138A-4197 FIELD BLANK
920430-055	92-138A-4199 CONTAINMENT PAD RINSE #1
920430-056	92-138A-4200 " " RINSE #3
920430-057	92-138A-4201 " " RINSE #3 DUP.
920430-058	92-138A-4202 " " RINSE #2
920501-010	92-138A-4219 T-5 RINSE #4

COMMENTS: See Offsite Data Review Checklist.

The Analytical Laboratories Project Oversight group is pleased to be of service to you. If you have any questions or comments, please call me at 738-9238.

W. J. Cowan, Project Scientist
Analytical Laboratory Project Oversight
Sampling & Analysis Management

WJC:gls

c: G. Henderson
J. Love
S. J. Lund

ALPO Release Letterbook Log
Central Files
Release File

OFFSITE DATA REVIEW CHECKLIST

Larry J. Evans	1396 ITAS	6/24/92
REVIEWER'S NAME	RELEASE NO.	DATE REVIEWED

YES	NO	N/A		
x			A)	Holding times were met. If no, explain:
x			B)	All samples are included in release. If no, explain:
x			C)	All determinations are included in release. If no, explain:
x			D)	Results have been checked for reasonableness. The data has been found to be reasonable. If no, explain:
		x	E)	Samples are included in QC lot tables. If no, explain:
x			F)	Blanks were analyzed and results are within acceptable limits. If no, explain: Methyl Ethyl Ether is present in the Trip blank VOA. There is a slight amount of Barium in the TCLP blank EXT BLK 13017 and the Equipment blank Total metals analysis.
x			G)	Internal QC check standards (reference standards, ICS, etc) were analyzed and are within acceptable limits. If no, explain:

3 (There is no page 2)

OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1396 ITAS

YES	NO	N/A		
		x	H)	Matrix spikes were analyzed and are within acceptable limits. If no, explain:
		x	I)	Matrix spike duplicates were analyzed (organics) and are within acceptable limits. If no, explain:
x			J)	Surrogates were analyzed for all VOA/BNA samples and the results are within acceptable limits. If no, explain:
		x	K)	Duplicates were analyzed (inorganics) and are within acceptable limits. If no, explain:
x			L)	Blind Quality Control samples were analyzed with the release and all results were within acceptable limits. (For long term tracking purposes only.)
x				Results are attached. If no, explain:
		x	M)	The Calculated Precision Terms of controls is within acceptable limits. If no, explain:

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OFFSITE DATA REVIEW CHECKLIST

RELEASE NO: 1396 ITAS

YES	NO	N/A		
		x	N)	The Calculated Accuracy Terms of controls is within acceptable limits. If no, explain:
x			O)	Overall Quality Control of release is acceptable. If no, explain: Total VOAs were received at 22 degrees centigrade. There is no documentation, Chain of Custody, established for sample 920501-010 in this release!

P) Sample numbers included in release:

920430-054	920430-055	920430-056	920430-057	920430-058	920430-028
920430-029	920501-010				

Q) Copies of results are to be sent to: L. Love, G. Henderson, S. Lund, and E. Weise

R) Project Name: T5/T6 RCRA Closure - Sampling Plan 92-138A

SIGNATURE OF DATA REVIEWER: [illegible]

DATE OF FINAL REVIEW: [illegible]

5

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Pg 1 of 1

ANALYSIS REQUEST / CUSTODY RECORD

Control #: _____

PROJECT: T5/T6 RCRA CLOSURE
PROJECT #: N/A
PE/PM: E. WEISE

CLIENT: SITE MEDIA SAMPLING
CLIENT CONTACT: L. LOVE
PHONE: 6727

TECHNICIAN/EXT.: W. MYERS / 9301
CHARGE #: RZP-01
LOT MARK CODE: N/A

ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS)

SAMPLE IDENTIFICATION

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	TABLE 1	2	3	4	5	6	7
92-138A-4197		FIELD BLANK	LIQUID	04/30/92/0945	GLASS TLC/ COOL TO 4°C	1-GAL 4-LITER 1-4OZ		X		X	X	X	
92-138A-4199		RINSE #1		1035		1 GAL 5 LITER 3-4OZ 3-40ml		X		X	X	X	
92-138A-4200		RINSE #3		1100				X		X	X	X	
92-138A-4201		RINSE #4		1010				X		X	X	X	
92-138A-4202		RINSE #2		1000									
		NOTHING FOLLOWS											

Copy To: L. LOVE / G. HENDERSON / S. LUND / E. WEISE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
Process All	Wm. Myers	[illegible]	4/30/92	1135					

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4582

TABLE 1 TCLP (Full Spectrum)

METALS
- Arsenic
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Silver

PESTICIDE/HERBICIDE
- Chlorodane
- 2,4 - D
- Endrin
- Lindane
- Methoxychlor
- Toxaphene
- 2,4,5 - TP Acid- (Silvex)

VOLATILES
- Benzene
- Carbon Tetrachloride
- Chlorobenzene
- Chloroform
- 2 - Butane
- 1,1 - Dichloroethane
- 1,2 - Dichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride

SEMI VOLATILES
- 1,4 - Dichlorobenzene
- 2,4 - Dinitrotoluene
- Hexachlorobenzene
- Hexachloroethane
- Hexachloro - 1,3 Butadiene
- Nitrobenzene
- Pentachlorophenol
- 2,4,5 - Trichlorophenol
- 2,4,6 - Trichlorophenol
- o- Cresol
- m - Cresol
- p - Cresol
- Pyridine

TABLE 2 METALS

~~_ TCLP~~ X TOTALS

METALS

Arsenic	Lead
Barium	Mercury
Cadmium	Selenium
Chromium	Silver

TABLE 3 PEST/HERB

_ TCLP _ TOTALS

PESTICIDE/HERBICIDE

Chlorodane	2,4 - D
Methoxychlor	Endrin
Toxaphene	Lindane
2,4,5 - TP Acid- (Silvex)	

TABLE 4 VOA/SEMI VOA

~~_ TCLP~~ X TOTALS

~~VOLATILES~~

- Benzene
- Carbon Tetrachloride
- Chlorobenzene
- Chloroform
- 2 - Butane
- 1,1 - Dichloroethane
- 1,2 - Dichloroethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl Chloride

SEMI VOLATILES
- 1,4 - Dichlorobenzene
- 2,4 - Dinitrotoluene
- Hexachlorobenzene
- Hexachloroethane
- Hexachloro - 1,3 - Butadiene
- Nitrobenzene
- Pentachlorophenol
- 2,4,5 - Trichlorophenol
- 2,4,6 - Trichlorophenol
- o- Cresol
- m - Cresol
- p - Cresol
- Pyridine

TABLE 5 RAD

- ~~Cs 137~~
- ~~Np 237~~
- ~~Pu 238~~
- ~~Pu 239/240~~
- ~~Ra 226~~
- ~~Ra 228~~
- ~~Ru 106~~
- ~~Tc 99~~
- X Th Total
- ~~Th 228~~
- ~~Th 230~~
- ~~Th 232~~
- X U Total
- ~~U 234~~
- X U 235/~~236~~
- ~~U 238~~
- X Gross Alpha/Beta

TABLE 7

- _ Paint Filter Liquid Test (PFLT)
- _ pH (If PFLT fails)
- _ Flash Point (If PFLT fails)
- _ HSL
  - _ Full
  - _ Extended
  - _ Abreviated

TABLE 6 TOTAL VOA

- Acetone
- Benzene
- Carbon Disulfide
- Carbon Tetrachloride
- Chlorinated Fluorocarbon
- Chlorobenzene
- Chloroethane
- Chloromethane
- 1,1 - Dichloroethane
- 1,2 - Dichloroethane
- Trans - 1,2 - Dichloroethane
- o - Dichlorobenzene
- 2 - Ethoxyethanol
- Ethyl Acetate
- Ethyl Benzene
- Ethyl Ether
- Isobutanol
- Methanol
- Methyl Isobutyl Ketone
- Methyl Etheyl Ketone
- Methylene Chloride
- Nitrobenzene
- 2 - Nitropropane
- Pyridine
- Tetrachloroethylene
- Toluene
- 1,1,1 - Trichloroethane
- 1,1,2 - Trichloro-1,2,2 - Trifluoroethane
- Trichlorofluoromethane
- Vinyl Chloride
- Xylenes

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Pg 1 of 1

ANALYSIS REQUEST / CUSTODY RECORD

Control #: _____

PROJECT: TS/TG RCRA CLOSURE	CLIENT: SITE MEDIA SAMPLING	TECHNICIAN/EXT.: W. MYERS/9301
PROJECT #: N/A	CLIENT CONTACT: L. LOVE	CHARGE #: RZP-01
PE/PM: E. WEISE	PHONE: 6727	LOT MARK CODE: N/A

SAMPLE IDENTIFICATION

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS) TABLE 1	2	3	4	5	6	7
* 92-138A-4196		TRIP BLANK	LIQUID	04/29/92/0850	GLASS TLC/ COOL TO 4°C	1-40z 3-40ml	~~WM 4/30/92~~				X	X	
92-138A-4198		EQUIPMENT BLANK	↓	04/29/92/0900	↓	1-GAL 4-LITER 3-40ml		X		X	X	X	
		NOTHING		FOLLOWS									

Copy To: L. LOVE / G. HENDERSON / E. WEISE / S. LUND

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
Process All	Wm. Myers	[illegible]	4/30/92	1135					

* Only do A/B Screen from Table 5.

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4587

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

P.O. BOX 398704, CINCINNATI, OHIO 45239-8704

Control #: _____

ANALYSIS REQUEST / CUSTODY RECORD

Pg 1 of 1

PROJECT: T-5 AND T-6 RCRA CLOSURE	CLIENT: SITE MEDIA SAMPLING	TECHNICIAN/EXT.: D. BACK / 9063
PROJECT #: N/A	CLIENT CONTACT: L. LOVE	CHARGE #: RZP.01
PE/PM: ED WEISE	PHONE: 6727	LOT MARK CODE: N/A

SAMPLE IDENTIFICATION

ANALYSIS REQUESTED (SEE REVERSE FOR PARAMETERS)

SAMPLE NUMBER	CUSTOMER NUMBER	DESCRIPTION	MATRIX	DATE/TIME COLLECTED	CONTAINER/ PRESERVATIVE	# CONT/ VOLUME	TABLE 1	2	3	4	5	6	7
92-138A-4219		SP. T-5 RINSATE-4	LIQUID	4/30/92 @ 1344	GLASS VOA / COOL 4°C	1-GALLON 4-1 LITERS 3-40 ML	|	X	|	X	X	X	|
		NOTHING BELOW											

OB 4/30/92

Copy To: L. LOVE / S. LUND: 2 COPIES / E. WEISE

ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME	ITEM/REASON	RELINQUISHED BY	RECEIVED BY	DATE	TIME
Process/Ana	[illegible]	[illegible]	4-30-92	16:50					

4587

242

4587

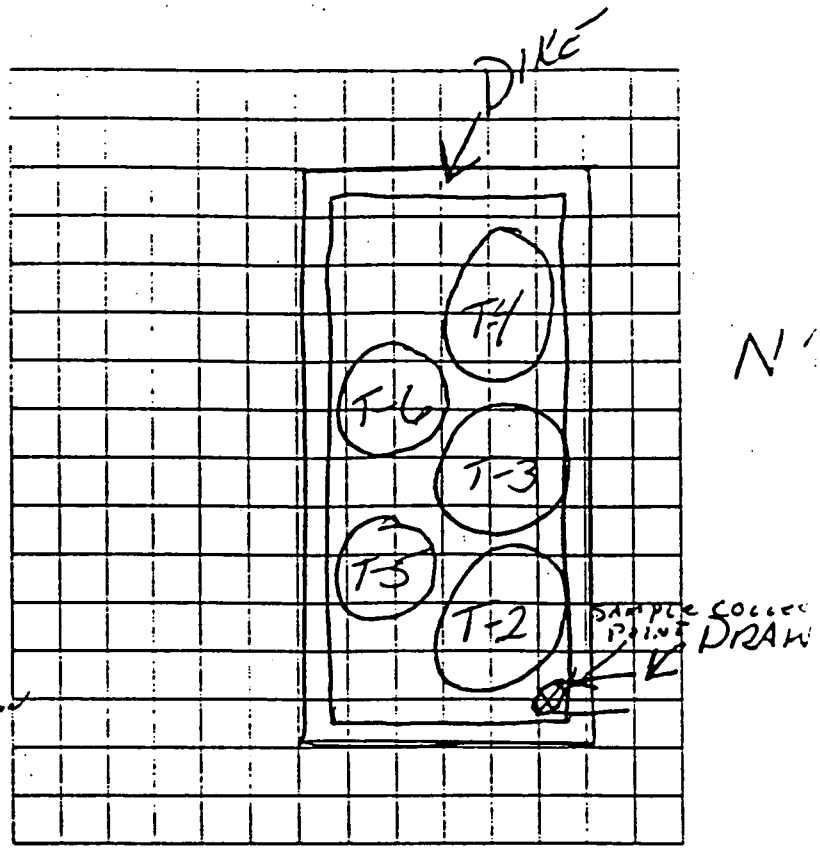
DATE: 4 30 92
TIME START: 0800
TIME FINISH: 1130
PAGE 1 OF 1

FEED MATERIAL PRODUCTION CENTER
P. O. BOX 398704
CINCINNATI, OHIO 45239-8704

PROJECT NAME: TSTG RCRA CLOSURE
PROJECT NO: N/A
LOCATION: WEST OF PILOT PLANT
WEATHER: OVERCAST/CLEARING
TEMPERATURE: 50°

CONTACT/EXT: L LOVE / 6127

PURPOSE OF SAMPLING: RCRA DETERMINATION
PROCESS PRODUCING WASTE: N. PROCESS
SAMPLE REQUEST NO: 135A
SAMPLE PLAN NO: 92-135A



	SAMPLE NUMBER	SAMPLE TYPE	COLLECTION METHOD	DEPTH	TIME	SAMPLE PRESERVATIVE	CONT TYPE	NUMBER/ VOLUME
	92-138-4197	LIQUID	POURED	N/A	0945	COOL TO 4°C	GLASS TFC	1 GAL 2-40z 4-QT 3 [illegible]
FIELD BLANK #1	92-138-4198	↓	↓	↓	0935	↓	↓	1-GAL 2-40z 5-QT 3 [illegible]
RINSE #2	92-138-4200				1000			
RINSE #4	92-138-4201				1010			
RINSE #3	92-138-4202				1100			

Last Item

FIELD MEASUREMENTS: N/A
TRANSPORTATION METHOD: VAN TO LAB
SAMPLE TECHNICIANS: W. MYERS G STEVENS W Meyer
TECHNICIAN SIGNATURES: Wm Meyer G. Stevens W. Meyer

FIELD OBSERVATIONS:

FIELD BLANK WAS USED ON 4/29/92 AND COOLED TO 4°C AND STORED UNTIL 4/30/92 AND WAS USED ALSO ON 4/30/92 - DUE TO WASH OCCURING ON 4/29/92 AND 1ST RINSE OCCURED ON 4/30/92 WAS 4-30-92
RINSE #4 IS A DUPLICATE OF RINSE #2 WAS 4-30-92

T5/T6 RCRA Chem
92-138A

L. Lou
G. Henderson
S Lund
C. Weiss

Rec'd
6-4-92
DMW

INTERNATIONAL TECHNOLOGY CORPORATION

--4587

CERTIFICATE OF ANALYSIS

Westinghouse Environmental Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030
June 3, 1992

Attention: Bill Cowan

Purchase Order Number: 417988

This is the Certificate of Analysis for the following:

Project Number	:	245-01
Release Order	:	1396
Date Received by Lab	:	May 4, 1992
Number of Samples	:	Eight (8)
Sample Types	:	Water

I. Introduction

On May 4, 1992, eight (8) samples were received at ITAS - St. Louis laboratory from Westinghouse Environmental Management Company of Ohio. The list of analytical tests performed, as well as receipt and analysis, can be found in the attached report. The samples were labeled as follows:

CLIENT ID	ITAS ID
920430-054	2018-001 FIELD BLANK
920430-029	2018-002 EQUIP. BLANK
920430-055	2018-003 PAD RINSE #1
920501-010	2018-004 T-5 RINSE #4
920430-056	2018-005 PAD RINSE #3
920430-057	2018-006 PAD RINSE #2 DUP.
920430-058	2018-007 PAD RINSE #2
920430-028	2018-008 TRIP BLANK

All samples were screened prior to analysis and yielded less than 5.0 uCi/L.

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920430-054
Date Received: 04-MAY-92
Date Collected: 30-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 6238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

FIELD BLANK

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.49	NA
Total Counts/ Count Time (cpm)	0.10	1.13	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.83	NA
Assay Results (picocuries/milliliter)	0.06	0.18	0.00
Total Activity (pCi)	359.01	1113.54	0.00
Max Quantity for Category I (milliliters)	173761.95	560224.09	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

INTERNATIONAL TECHNOLOGY CORPORATION

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920430-029

Date Received: 04-MAY-92
Date Collected: 29-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 6238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

EQUIP. BLANK

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.30	0.49	NA
Total Counts/ Count Time (cpm)	0.03	0.90	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	0.80	NA
Assay Results (picocuries/milliliter)	0.06	0.18	0.00
Total Activity (pCi)	362.57	1097.32	0.00
Max Quantity for Category I (milliliters)	172057.81	568504.83	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

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IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920430-055

Date Received: 04-MAY-92
Date Collected: 30-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 8238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

Pad Rinse #1

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.49	NA
Total Counts/ Count Time (cpm)	19.57	18.63	NA
BKG Counts/ Bkg Count Time (cpm)	0.13	1.10	NA
Assay Results (picocuries/milliliter)	7.18	4.06	0.00
Total Activity (pCi)	59126.22	33463.94	0.00
Max Quantity for Category I (milliliters)	1393.34	24618.41	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

INTERNATIONAL TECHNOLOGY CORPORATION

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920501-010

Date Received: 04-MAY-92
Date Collected: 01-MAY-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 8238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

T-5 RINSE #4

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.30	0.49	NA
Total Counts/ Count Time (cpm)	0.67	4.10	NA
BKG Counts/ Bkg Count Time (cpm)	0.13	1.13	NA
Assay Results (picocuries/milliliter)	0.20	0.68	0.00
Total Activity (pCi)	1649.31	5616.04	0.00
Max Quantity for Category I (milliliters)	49950.05	146692.09	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

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IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920430-056

Date Received: 04-MAY-92
Date Collected: 30-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 8238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

Pad Rinse #3

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.50	NA
Total Counts/ Count Time (cpm)	17.13	15.87	NA
BKG Counts/ Bkg Count Time (cpm)	0.03	1.23	NA
Assay Results (picocuries/milliliter)	6.21	3.31	0.00
Total Activity (pCi)	51192.75	27260.51	0.00
Max Quantity for Category I (milliliters)	1609.27	30220.61	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

INTERNATIONAL TECHNOLOGY CORPORATION

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920430-057

Date Received: 04-MAY-92
Date Collected: 30-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 8238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

Pad Rinse #2 Dup.

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.51	NA
Total Counts/ Count Time (cpm)	22.13	20.67	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.93	NA
Assay Results (picocuries/milliliter)	7.94	4.41	0.00
Total Activity (pCi)	65436.75	36330.87	0.00
Max Quantity for Category I (milliliters)	1258.97	22675.74	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

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INTERNATIONAL TECHNOLOGY CORPORATION

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920430-058

Date Received: 04-MAY-92
Date Collected: 30-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 8238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

Pad Rinse #2

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.31	0.51	NA
Total Counts/ Count Time (cpm)	19.77	20.00	NA
BKG Counts/ Bkg Count Time (cpm)	0.07	0.77	NA
Assay Results (picocuries/milliliter)	7.21	4.29	0.00
Total Activity (pCi)	59356.89	35342.27	0.00
Max Quantity for Category I (milliliters)	1387.93	23310.02	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

____ Category I (no restrictions)
X Category II (Licensed Lab only)
____ Category III (Radiation work permit required)

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INTERNATIONAL TECHNOLOGY CORPORATION

IT ANALYTICAL SERVICES - ST. LOUIS
SAMPLE RADIOLOGICAL SCREENING AND CATEGORIZATION

Client Location: FERNALD SITE
Project Numer: 245.01
Client Sample ID: 920430-028

Date Received: 04-MAY-92
Date Collected: 29-APR-92
Sample Matrix: Water

SAMPLE RECEIVING
Total Sample Volume: 238.29 ml

SAMPLE PREPARATION
Aliquot Volume: 4.000 ml

SAMPLE COUNTING

Trip Blank

	Gross Alpha	Gross Beta	Other
Count Date	04-MAY-92	04-MAY-92	NA
Instrument	LB4000	LB4000	NA
Efficiency	0.32	0.51	NA
Total Counts/ Count Time (cpm)	0.03	1.17	NA
BKG Counts/ Bkg Count Time (cpm)	0.00	0.90	NA
Assay Results (picocuries/milliliter)	0.01	0.18	0.00
Total Activity (pCi)	2.85	43.06	0.00
Max Quantity for Category I (milliliters)	836120.40	553403.43	NA

Reviewed and approved by / Date: Joe Koch 04-MAY-92

Indicate one of the following:

X Category I (no restrictions)
___ Category II (Licensed Lab only)
___ Category III (Radiation work permit required)

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INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

FIELD BLANK

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920430-054
LAB ID: 2018-001

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	6	B	1
Acetone	05/05/92	2	BJ	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
ans-1,2-Dichloroethene	05/05/92	5	U	1
-Dichloroethane	05/05/92	5	U	1
-Butanone	05/05/92	8	J	1
1,1,1-Trichloroethane	05/05/92	5	U	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	5	U	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	97
Bromofluorobenzene	05/05/92	99
1,2-Dichloroethane-d4	05/05/92	101

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

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INTERNATIONAL TECHNOLOGY CORPORATIO

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

EQUIP. BLANK

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920430-029
LAB ID: 2018-002

SAMPLE DATE : 04/29/
DATE RECEIVED: 05/04/
REPORT DATE : 06/03/

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTIO
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	6	B	1
Acetone	05/05/92	1	BJ	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
trans-1,2-Dichloroethene	05/05/92	5	U	1
1,2-Dichloroethane	05/05/92	5	U	1
2-Butanone	05/05/92	2	J	1
1,1,1-Trichloroethane	05/05/92	5	U	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	5	U	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	97
Bromofluorobenzene	05/05/92	99
1,2-Dichloroethane-d4	05/05/92	102

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

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INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Pad Rinse #1

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920430-055
LAB ID: 2018-003

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	5	BJ	1
Acetone	05/05/92	10	U	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
ans-1,2-Dichloroethene	05/05/92	5	U	1
2-Dichloroethane	05/05/92	5	U	1
2-Butanone	05/05/92	10	U	1
1,1,1-Trichloroethane	05/05/92	5	U	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	5	U	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	96
Bromofluorobenzene	05/05/92	102
1,2-Dichloroethane-d4	05/05/92	101

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-5 Rinse #4

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920501-010
LAB ID: 2018-004

SAMPLE DATE : 05/01/9
DATE RECEIVED: 05/04/9
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	5	B	1
Acetone	05/05/92	10	U	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	3	J	1
ans-1,2-Dichloroethene	05/05/92	5	U	1
-Dichloroethane	05/05/92	3	J	1
-Butanone	05/05/92	10	~~J~~ B	1
1,1,1-Trichloroethane	05/05/92	1100	E	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	3	J	1
1,1,2-Trichloroethane	05/05/92	43		1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	1	J	1
Tetrachloroethylene	05/05/92	13		1
Toluene	05/05/92	70 ✓		1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	27		1
Total Xylenes	05/05/92	190		1

SURROGATES		% RECOVERY
Toluene	XX/XX/XX	96
Bromofluorobenzene	XX/XX/XX	100
1,2-Dichloroethane-d4	XX/XX/XX	106

(E) CONCENTRATION EXCEEDED CALIBRATION RANGE OF GC/MS INSTRUMENT
(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Pad Rinse #3

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920430-056
LAB ID: 2018-005

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	2	BJ	1
Acetone	05/05/92	2	BJ	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
trans-1,2-Dichloroethene	05/05/92	5	U	1
2-Dichloroethane	05/05/92	5	U	1
Butanone	05/05/92	9	J	1
1,1,1-Trichloroethane	05/05/92	5	U	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	5	U	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	95
Bromofluorobenzene	05/05/92	98
1,2-Dichloroethane-d4	05/05/92	102

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

-4587

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Pad Rinse #2 Dup.

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920430-057
LAB ID: 2018-006

SAMPLE DATE : 04/30/
DATE RECEIVED: 05/04/
REPORT DATE : 06/03/

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTIO
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	4	BJ	1
Acetone	05/05/92	10	U	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
trans-1,2-Dichloroethene	05/05/92	5	U	1
2-Dichloroethane	05/05/92	5	U	1
Butanone	05/05/92	10	U	1
1,1,1-Trichloroethane	05/05/92	1	J	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	5	U	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	96
Bromofluorobenzene	05/05/92	99
1,2-Dichloroethane-d4	05/05/92	104

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

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INTERNATIONAL TECHNOLOGY CORPORATION

-4587

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Pad Rinse #2

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920430-058
LAB ID: 2018-007

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	4	BJ	1
Acetone	05/05/92	10	U	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
trans-1,2-Dichloroethene	05/05/92	5	U	1
1,2-Dichloroethane	05/05/92	5	U	1
2-Butanone	05/05/92	10	U	1
1,1,1-Trichloroethane	05/05/92	1	J	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	5	U	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	97
Bromofluorobenzene	05/05/92	98
1,2-Dichloroethane-d4	05/05/92	103

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

4587

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

Trip Blank

CLIENT ID: 920430-028
LAB ID: 2018-008

SAMPLE DATE : 04/29/9
DATE RECEIVED: 05/04/9
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTION
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	7	B	1
Acetone	05/05/92	2	BJ	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
trans-1,2-Dichloroethene	05/05/92	5	U	1
1,2-Dichloroethane	05/05/92	5	U	1
Butanone	05/05/92	12		1
1,1-Trichloroethane	05/05/92	5	U	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	1	J	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	96
Bromofluorobenzene	05/05/92	99
1,2-Dichloroethane-d4	05/05/92	97

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-5 Rinse #4

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: 920501-010
LAB ID: 2018-004 DL

SAMPLE DATE : 05/01/9
DATE RECEIVED: 05/04/9
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTIO
Chloromethane	05/05/92	100	U	10
Vinyl Chloride	05/05/92	100	U	10
Chloroethane	05/05/92	100	U	10
Trichlorofluoromethane	05/05/92	100	U	10
Methylene Chloride	05/05/92	20	BJ	10
Acetone	05/05/92	100	U	10
Carbon Disulfide	05/05/92	50	U	10
1,1-Dichloroethene	05/05/92	50	U	10
trans-1,2-Dichloroethene	05/05/92	50	U	10
1,2-Dichloroethane	05/05/92	50	U	10
2-Butanone	05/05/92	100	U	10
1,1,1-Trichloroethane	05/05/92	1200		10
Carbon Tetrachloride	05/05/92	160 ? real or not	false	10
Trichloroethene	05/05/92	50	U	10
1,1,2-Trichloroethane	05/05/92	40	J	10
Benzene	05/05/92	50	U	10
4-Methyl-2-Pentanone	05/05/92	100	U	10
Tetrachloroethylene	05/05/92	50	U	10
Toluene	05/05/92	59 ✓		10
Chlorobenzene	05/05/92	50	U	10
Ethylbenzene	05/05/92	12	J	10
Total Xylenes	05/05/92	160		10

ID confused w/ TCE

SURROGATES		% RECOVERY
Toluene	05/05/92	96
Bromofluorobenzene	05/05/92	100
1,2-Dichloroethane-d4	05/05/92	103

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

DF = 10.

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Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC BLK 13022

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 06/03/9

PARAMETER	DATE ANALYZED	CONC ug/L	QUAL.	DILUTIO
Chloromethane	05/05/92	10	U	1
Vinyl Chloride	05/05/92	10	U	1
Chloroethane	05/05/92	10	U	1
Trichlorofluoromethane	05/05/92	10	U	1
Methylene Chloride	05/05/92	3	BJ	1
Acetone	05/05/92	5	BJ	1
Carbon Disulfide	05/05/92	5	U	1
1,1-Dichloroethene	05/05/92	5	U	1
trans-1,2-Dichloroethene	05/05/92	5	U	1
1,2-Dichloroethane	05/05/92	5	U	1
2-Butanone	05/05/92	10	U	1
1,1,1-Trichloroethane	05/05/92	5	U	1
Carbon Tetrachloride	05/05/92	5	U	1
Trichloroethene	05/05/92	5	U	1
1,1,2-Trichloroethane	05/05/92	5	U	1
Benzene	05/05/92	5	U	1
4-Methyl-2-Pentanone	05/05/92	10	U	1
Tetrachloroethylene	05/05/92	5	U	1
Toluene	05/05/92	5	U	1
Chlorobenzene	05/05/92	5	U	1
Ethylbenzene	05/05/92	5	U	1
Total Xylenes	05/05/92	5	U	1

SURROGATES		% RECOVERY
Toluene	05/05/92	98
Bromofluorobenzene	05/05/92	97
1,2-Dichloroethane-d4	05/05/92	96

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

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Westinghouse Enviromental
Management Company of Ohio
7400 Willey Road
Fernald, Ohio 45030

-458%

PROJECT NUMBER: 245-01

CATEGORY: VOLATILES
METHOD: EPA 8240
MATRIX: WATER

CLIENT ID: NA
LAB ID: QC LCS 13022

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 06/03/92

PARAMETER	DATE ANALYZED	% RECOVERY
Chloromethane	05/05/92	78
Vinyl Chloride	05/05/92	85
Chloroethane	05/05/92	87
Trichlorofluoromethane	05/05/92	86
Methylene Chloride	05/05/92	96
Acetone	05/05/92	89
Carbon Disulfide	05/05/92	111
1,1-Dichloroethene	05/05/92	105
trans-1,2-Dichloroethene	05/05/92	100
1,2-Dichloroethane	05/05/92	95
2-Butanone	05/05/92	89
1,1,1-Trichloroethane	05/05/92	96
Carbon Tetrachloride	05/05/92	93
Trichloroethene	05/05/92	95
1,1,2-Trichloroethane	05/05/92	96
Benzene	05/05/92	94
4-Methyl-2-Pentanone	05/05/92	92
Tetrachloroethylene	05/05/92	91
Toluene	05/05/92	92
Chlorobenzene	05/05/92	92
Ethylbenzene	05/05/92	92
Total Xylenes	05/05/92	91

SURROGATES		% RECOVERY
Toluene	05/05/92	94
Bromofluorobenzene	05/05/92	98
1,2-Dichloroethane-d4	05/05/92	96

(J) ESTIMATED VALUE
(B) ANALYTE DETECTED IN CONTROL BLANK
(NA) NOT APPLICABLE; (ND) ANALYTE WAS NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245.01

Equip Blank

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : 920430-029
ITAS LAB ID: 2018-002

SAMPLE DATE : 04/29/
DATE RECEIVED: 05/04/
REPORT DATE : 05/28/

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	10 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
Pentachlorophenol	05/05/92	05/07/92	50	ND
Pyridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVER
2-Fluorophenol	05/05/92	05/07/92	61
Phenol-d5	05/05/92	05/07/92	41
Nitrobenzene-d5	05/05/92	05/07/92	80
2-Fluorobiphenyl	05/05/92	05/07/92	80
2,4,6-Tribromophenol	05/05/92	05/07/92	92
Terphenyl-d14	05/05/92	05/07/92	100

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

- -458%

PROJECT NUMBER: 245.01

Trip Blank

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : 920430-054
ITAS LAB ID: 2018-001

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/28/9

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	•	ND
4-Methylphenol	05/05/92	05/07/92	10 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
Pentachlorophenol	05/05/92	05/07/92	50	ND
Pyridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/05/92	05/07/92	63
Phenol-d5	05/05/92	05/07/92	41
Nitrobenzene-d5	05/05/92	05/07/92	83
2-Fluorobiphenyl	05/05/92	05/07/92	90
2,4,6-Tribromophenol	05/05/92	05/07/92	77
Terphenyl-d14	05/05/92	05/07/92	108

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

Pad Rinse #1

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : 920430-055
ITAS LAB ID: 2018-003

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/28/9

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	10 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
Pentachlorophenol	05/05/92	05/07/92	51	ND
Pyridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/05/92	05/07/92	55
Phenol-d5	05/05/92	05/07/92	37
Nitrobenzene-d5	05/05/92	05/07/92	82
2-Fluorobiphenyl	05/05/92	05/07/92	83
2,4,6-Tribromophenol	05/05/92	05/07/92	96
Terphenyl-d14	05/05/92	05/07/92	101

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

Pad Rinse #2

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : 920430-058
ITAS LAB ID: 2018-007

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/28/9

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	10 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
Pentachlorophenol	05/05/92	05/07/92	51	ND
Pyridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVERY
2-Fluorophenol	05/05/92	05/07/92	56
Phenol-d5	05/05/92	05/07/92	38
Nitrobenzene-d5	05/05/92	05/07/92	81
2-Fluorobiphenyl	05/05/92	05/07/92	83
2,4,6-Tribromophenol	05/05/92	05/07/92	93
Terphenyl-d14	05/05/92	05/07/92	99

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

Pad Rinse #2 Dup

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : 920430-057
ITAS LAB ID: 2018-006

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/28/9

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	10 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
Pentachlorophenol	05/05/92	05/07/92	52	ND
Pyridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVER
2-Fluorophenol	05/05/92	05/07/92	57
Phenol-d5	05/05/92	05/07/92	39
Nitrobenzene-d5	05/05/92	05/07/92	81
2-Fluorobiphenyl	05/05/92	05/07/92	83
2,4,6-Tribromophenol	05/05/92	05/07/92	95
Terphenyl-d14	05/05/92	05/07/92	101

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

Pad Rinse #3

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : 920430-056
ITAS LAB ID: 2018-005

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/28/9

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	11	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	11 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	11	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	11	ND
Hexachlorobenzene	05/05/92	05/07/92	11	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	11	ND
Hexachloroethane	05/05/92	05/07/92	11	ND
Nitrobenezene	05/05/92	05/07/92	11	ND
Pentachlorophenol	05/05/92	05/07/92	55	ND
Pyridine	05/05/92	05/07/92	11	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	11	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	11	ND

SURROGATE			% RECOVER
2-Fluorophenol	05/05/92	05/07/92	63
Phenol-d5	05/05/92	05/07/92	43
Nitrobenzene-d5	05/05/92	05/07/92	87
2-Fluorobiphenyl	05/05/92	05/07/92	85
2,4,6-Tribromophenol	05/05/92	05/07/92	97
Terphenyl-d14	05/05/92	05/07/92	109

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

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Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

T-5 Rinse #4

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : 920501-010
ITAS LAB ID: 2018-004

SAMPLE DATE : 05/01/
DATE RECEIVED: 05/04/
REPORT DATE : 05/28/

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	10	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
Pentachlorophenol	05/05/92	05/07/92	50	ND
Pyridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVE
2-Fluorophenol	05/05/92	05/07/92	59
Phenol-d5	05/05/92	05/07/92	40
Nitrobenzene-d5	05/05/92	05/07/92	86
2-Fluorobiphenyl	05/05/92	05/07/92	85
2,4,6-Tribromophenol	05/05/92	05/07/92	100
Terphenyl-d14	05/05/92	05/07/92	106

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : NA
ITAS LAB ID: QC BLK 13019

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/28/

PARAMETER	EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT ug/L	CONC ug/L
2-Methylphenol	05/05/92	05/07/92	10	ND
3-Methylphenol	05/05/92	05/07/92	*	ND
4-Methylphenol	05/05/92	05/07/92	10 *	ND
1,4-Dichlorobenzene	05/05/92	05/07/92	10	ND
2,4-Dinitrotoluene	05/05/92	05/07/92	10	ND
Hexachlorobenzene	05/05/92	05/07/92	10	ND
Hexachloro-1,3-butadiene	05/05/92	05/07/92	10	ND
Hexachloroethane	05/05/92	05/07/92	10	ND
Nitrobenezene	05/05/92	05/07/92	10	ND
Pentachlorophenol	05/05/92	05/07/92	50	ND
Pyridine	05/05/92	05/07/92	10	ND
2,4,5-Trichlorophenol	05/05/92	05/07/92	10	ND
2,4,6-Trichlorophenol	05/05/92	05/07/92	10	ND

SURROGATE			% RECOVE
2-Fluorophenol	05/05/92	05/07/92	58
Phenol-d5	05/05/92	05/07/92	39
Nitrobenzene-d5	05/05/92	05/07/92	85
2-Fluorobiphenyl	05/05/92	05/07/92	84
2,4,6-Tribromophenol	05/05/92	05/07/92	83
Terphenyl-d14	05/05/92	05/07/92	103

* 3-Methylphenol and 4-Methylphenol co-elute.

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245.01

CATEGORY: SEMIVOLATILES
METHOD : EPA 8270
MATRIX : WATER

CLIENT ID : NA
ITAS LAB ID: QC SPK 13019

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/28/92

PARAMETER	EXTRACT DATE	DATE ANALYZED	% RECOVERY
2-Methylphenol	05/05/92	05/07/92	50
3-Methylphenol	05/05/92	05/07/92	*
4-Methylphenol	05/05/92	05/07/92	58 *
1,4-Dichlorobenzene	05/05/92	05/07/92	75
2,4-Dinitrotoluene	05/05/92	05/07/92	83
Hexachlorobenzene	05/05/92	05/07/92	83
Hexachloro-1,3-butadiene	05/05/92	05/07/92	69
Hexachloroethane	05/05/92	05/07/92	70
Nitrobenezene	05/05/92	05/07/92	81
Pentachlorophenol	05/05/92	05/07/92	72
Pyridine	05/05/92	05/07/92	42
2,4,5-Trichlorophenol	05/05/92	05/07/92	56
2,4,6-Trichlorophenol	05/05/92	05/07/92	76
SURROGATE			
2-Fluorophenol	05/05/92	05/07/92	60
Phenol-d5	05/05/92	05/07/92	40
Nitrobenzene-d5	05/05/92	05/07/92	86
2-Fluorobiphenyl	05/05/92	05/07/92	88
2,4,6-Tribromophenol	05/05/92	05/07/92	93
Terphenyl-d14	05/05/92	05/07/92	100

* 3-Methylphenol and 4-Methylphenol co-elute.

272

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : 04/29/92
DATE RECEIVED: 05/04/92
REPORT DATE : 05/23/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920430-029	2018-002	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.012	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Mercury	05/06/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

Equip Blank

273

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

46

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-- -4587

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/23/9

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920430-054	2018-001	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	ND	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Mercury	05/06/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

Field Blank

274

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

45

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/23/9

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920430-055	2018-003	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.045 B(V)	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Mercury	05/06/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

Pad Rinse #1

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

275

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : 04/30/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/23/9

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920430-056	2018-005	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.090	0.01
		Cadmium	05/19/92	ND	0.01
Pad Rinse #3		Chromium	05/19/92	0.039	.025
		Lead	05/19/92	0.109	0.10
		Mercury	05/06/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02
920430-057	2018-006	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.034 B	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
Pad Rinse #2 Dup.		Lead	05/19/92	ND	0.10
		Mercury	05/06/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02
920430-058	2018-007	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	0.047 B	0.01
		Cadmium	05/19/92	ND	0.01
Pad Rinse #2		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Mercury	05/06/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio - 4587
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : Water

SAMPLE DATE : 05/01/9
DATE RECEIVED: 05/04/9
REPORT DATE : 05/23/9

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
920501-010	2018-004	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	ND	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Mercury	05/06/92	ND	.0002
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02

T-5 Rinse #4

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: RCRA METALS
METHOD : EPA 6010/7470
MATRIX : WATER

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/23/92

CLIENT ID	LAB ID	PARAMETER	DATE ANALYZED	CONC mg/L	DETECTION LIMIT mg/L
NA	QC BLK 13034	Arsenic	05/19/92	ND	0.50
		Barium	05/19/92	ND	0.01
		Cadmium	05/19/92	ND	0.01
		Chromium	05/19/92	ND	.025
		Lead	05/19/92	ND	0.10
		Selenium	05/19/92	ND	0.50
		Silver	05/19/92	ND	0.02
NA	QC BLK 130492	Mercury	05/06/92	ND	.0002

				% RECOVERY
NA	QC LCS 13034	Arsenic	05/19/92	96
		Barium	05/19/92	104
		Cadmium	05/19/92	99
		Chromium	05/19/92	101
		Lead	05/19/92	103
		Selenium	05/19/92	104
		Silver	05/19/92	99
NA	QC LCS 129792	Mercury	05/06/92	104

278

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Pad Rinse #1

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/30/92
DATE RECEIVED: 05/04/92
REPORT DATE : 05/23/92

CLIENT ID : 920430-055
ITAS LAB ID: 2018-003

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.221 U	100.0
Cadmium	05/05/92	05/19/92	0.010	ND	1.0
Chromium	05/05/92	05/19/92	0.025	ND	5.0
Lead	05/05/92	05/19/92	0.100	ND	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

279

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

T-5 Rinse #4

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 05/01/92
CLIENT ID : 920501-010
DATE RECEIVED: 05/04/92
ITAS LAB ID: 2018-004
REPORT DATE : 05/23/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.256	100.0
Cadmium	05/05/92	05/19/92	0.010	ND	1.0
Chromium	05/05/92	05/19/92	0.025	ND	5.0
Lead	05/05/92	05/19/92	0.100	ND	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

280

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

Pad Rinse #3

SAMPLE DATE : 04/30/92
DATE RECEIVED: 05/04/92
REPORT DATE : 05/23/92

CLIENT ID : 920430-056
ITAS LAB ID: 2018-005

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.158	100.0
Cadmium	05/05/92	05/19/92	0.010	ND	1.0
Chromium	05/05/92	05/19/92	0.025	ND	5.0
Lead	05/05/92	05/19/92	0.100	ND	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

281

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Pad Rinse #2 Dup.

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/30/92
CLIENT ID : 920430-057
DATE RECEIVED: 05/04/92
ITAS LAB ID: 2018-006
REPORT DATE : 05/23/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.185	100.0
Cadmium	05/05/92	05/19/92	0.010	ND	1.0
Chromium	05/05/92	05/19/92	0.025	ND	5.0
Lead	05/05/92	05/19/92	0.100	ND	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

Pad Rinse #2

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : 04/30/92
CLIENT ID : 920430-058
DATE RECEIVED: 05/04/92
ITAS LAB ID: 2018-007
REPORT DATE : 05/23/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.204	100.0
Cadmium	05/05/92	05/19/92	0.010	ND	1.0
Chromium	05/05/92	05/19/92	0.025	ND	5.0
Lead	05/05/92	05/19/92	0.100	ND	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

283

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

INTERNATIONAL TECHNOLOGY CORPORATION

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : NA
CLIENT ID : NA
DATE RECEIVED: NA
ITAS LAB ID: EXT BLK 13017
REPORT DATE : 05/23/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	05/05/92	05/19/92	0.500	ND	5.0
Barium	05/05/92	05/19/92	0.010	0.051	100.0
Cadmium	05/05/92	05/19/92	0.010	ND	1.0
Chromium	05/05/92	05/19/92	0.025	ND	5.0
Lead	05/05/92	05/19/92	0.100	ND	5.0
Mercury	05/05/92	05/08/92	.0002	ND	0.2
Selenium	05/05/92	05/19/92	0.500	ND	1.0
Silver	05/05/92	05/19/92	0.020	ND	5.0

284

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : NA
CLIENT ID : NA
DATE RECEIVED: NA
ITAS LAB ID: QC BLK 13052
REPORT DATE : 05/23/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Arsenic	NA	05/19/92	0.500	ND	5.0
Barium	NA	05/19/92	0.010	ND	100.0
Cadmium	NA	05/19/92	0.010	ND	1.0
Chromium	NA	05/19/92	0.025	ND	5.0
Lead	NA	05/19/92	0.100	ND	5.0
Selenium	NA	05/19/92	0.500	ND	1.0
Silver	NA	05/19/92	0.020	ND	5.0

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

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Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

-4587

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

SAMPLE DATE : NA
CLIENT ID : NA
DATE RECEIVED: NA
ITAS LAB ID: QC LCS 13052
REPORT DATE : 05/23/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	% RECOVERY
Arsenic	NA	05/19/92	98
Barium	NA	05/19/92	103
Cadmium	NA	05/19/92	98
Chromium	NA	05/19/92	100
Lead	NA	05/19/92	100
Selenium	NA	05/19/92	102
Silver	NA	05/19/92	95

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

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Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC BLK 132492

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	DETECTION LIMIT mg/L	CONC mg/L	REGULATORY LEVEL mg/L
Mercury	NA	05/08/92	.0002	ND	0.2

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

Westinghouse Environmental Management Co. of Ohio
7400 Willey Road
Fernald, Ohio 45030

4587

PROJECT NUMBER: 245-01

CATEGORY: TCLP METALS
METHOD : TCLP
MATRIX : Water

CLIENT ID : NA
ITAS LAB ID: QC LCS 131892

SAMPLE DATE : NA
DATE RECEIVED: NA
REPORT DATE : 05/21/92

PARAMETER	TCLP EXTRACT DATE	DATE ANALYZED	% RECOVERY
Mercury	NA	05/08/92	104

288

(NA) = NOT APPLICABLE; (ND) = NOT DETECTED

44

ENCLOSURE: LABORATORY REPORTS OF WASTES STORED IN TANKS T-5 AND T-6
(CPID APPENDIX A)

	TANK T5	TANK T6
Waste Category	Non-PCB solvents and chemicals	Non-PCB solvents and chemi
Name of Waste	solvent still bottoms (1,1,1-Trichloroethane)	solvent (1,1,1-Trichloroethane)
Water, wt. %	24.8	0.06
Suspended Solids, wt. %	0.57	<0.01
Phase Separation	Two phases present	No phase separation
Ash, wt. %	0.30	<0.01
Kinematic Viscosity, cST @ 25°c @	(A) 740 (B) 3.7	3.0
Flash Point, °F	N.D. [No flash point detected; sample b.p. @ 155° F]	N.D. [No flash point detected; sample b.p. @ 155° F]
Heat of Combustion, BTU/16	5300	3200
ensity, g/ml @ 25°c	1.140	1.309
Acidity, N	0.003	0.002
Alkalinity, g/KOH/g	NA	NA
pH, Standard Units	7.5	3.7
wt. % Retained (1/32")	0.02	<0.01
C, %	15.	6.0
H, %	2.9	0.94
O, %	Could not analyze	Could not analyze
Cl, %	43.1	48.3
F, %	36 ppm	35 ppm
S, %	0.02	0.08
P, %	0.24	0.13
PCB, µg/g	<5	<5
Specific Gravity	1.140	1.309
Radioactive Contamination	Total Alpha = 43 Total Beta = 56 Total Gamma = 27	Total Alpha = 22 Total Beta = 23 Total Gamma = 4.4

	TANK T5	TANK T6
ranium %U	0.002	0.004
Uranium +-Daughters	^{235}U = 0.775 wt. %	^{235}U = 0.998 wt. %
Other Radionuclides, % (A) = top portion (B) = bottom	NA	NA
Spectrochemical Analyses: (ppm unless indicated)		
Ag	<0.7	<0.01
Al	23	0.02
As	<25	<0.2
B	1.8	<0.01
Ba	<2	<0.01
Be	0.2	<0.01
Bi	0.4	NR [uranium interference]
Ca	180	0.10
Cd	<3	<0.02
Co	<2	<0.01
Cr	3	<0.2
Cu	27	0.4
Fe	8.82%	2
Ga	<0.7	<0.01
Ge	<0.7	<0.01
In	<2	<0.01
K	4.14%	5.82%
Li	<100	<100
Mg	18	0.8
Mn	0.4	<0.01
Mo	0.5	<0.01
Na	0.08%	<0.2

	TANK T5	TANK T6
Spectrochemical Analyses: (continued)		
Nb	<2	<0.01
Ni	5	NR [uranium interference]
Pb	9	<0.01
Pd	<2	<0.01
Pt	<2	<0.01
Ru	<25	<0.4
Sb	<5	<0.05
Si	72	0.5
Sm	3	0.03
Sr	<11	<0.10
Ta	<25	<0.2
Te	<25	<0.2
Ti	4	<0.01
Tl	<25	<0.2
V	<0.2	<0.01
W	<45	<0.4
Zm	54	<0.2
Zr	<3	0.10

TANK 5 ANALYSES BY DEPTH IN TANK

--4587

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYTICAL SERVICES

1550 Bear Creek Road • P O Box 549 • Oak Ridge Tennessee 37831 • 615-482-9707

CERTIFICATE OF ANALYSIS

TO ASI-Fernald Office
ATTN: L. T. Murphy
10845 Hamilton Cleves Road
Ross, OH 45061

DATE REPORTED February 22, 1988
PROJECT CODE ITEP 35080
ORDER NUMBER 602.09.02
PAGE 1 OF 2
Job No.: 303317

Sample Description: Four (4) TCLP extract samples and one (1) TCLP blank received December 17, 1987

	Blank (µg/liter)	Percent by Weight			
		1 Foot	3 Foot	6 Foot	9 Foot
Methylene Chloride	<5	ND	ND	ND	ND
1,1,1-Trichloroethane	7	9	66	61	98
Tetrachloroethene	ND	ND	ND	ND	ND

ND = Not detected.

Analyzed by EPA Method 624.

Approved by Laboratory Manager 294 ~~249~~

Title

TANK 5 - ANALYSES BY DEPTH IN TANK

-4587

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYTICAL SERVICES

1550 Bear Creek Road • P O Box 549 • Oak Ridge Tennessee 37831 • 615-482-9707

CERTIFICATE OF ANALYSIS

TO ASI-Fernald Office
ATTN: L. T. Murphy
10845 Hamilton Cleves Road
Ross, OH 45061

DATE REPORTED February 22, 1988
PROJECT CODE ITEP 35080
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Job No.: 303317

Sample Description: Four (4) TCLP extract samples and one (1) TCLP blank received December 17, 1987

Concentration units are mg/liter (ppm)

ICAP METALS SCAN

	1 Foot*	3 Foot	6 Foot	9 Foot	Blank
Aluminum	3.58	0.08	<0.05	<0.05	<0.05
Antimony	<0.05	0.29	0.11	<0.05	<0.05
Arsenic	0.46	0.34	0.24	<0.2	<0.2
Barium	0.20	0.765	0.612	0.789	<0.002
Beryllium	0.002	0.0029	0.009	0.008	<0.001
Cadmium	0.425	0.002	<0.002	<0.002	<0.002
Chromium	0.18	<0.02	<0.02	<0.02	<0.02
Copper	19.0	0.51	0.22	0.31	<0.01
Iron	15.8	0.32	0.29	0.29	<0.005
Lead	0.05	<0.05	<0.05	<0.05	<0.05
Lithium	0.40	<0.03	0.36	0.20	<0.03
Magnesium	49.7	0.07	0.05	0.01	<0.005
Manganese	19.1	0.03	<0.001	<0.001	<0.001
Nickel	2.31	<0.02	<0.02	<0.02	<0.02
Selenium	<0.2	<0.2	<0.2	<0.2	<0.2
Silver	0.02	<0.01	<0.01	<0.01	<0.01
Sodium	5,900	1,410	1,340	1,350	1.10
Thallium	<0.3	<0.3	<0.3	<0.3	<0.3
Titanium	0.069	<0.003	<0.003	<0.003	<0.003
Zinc	54.4	0.90	0.30	0.37	<0.01
Mercury	0.001	<0.0002	<0.0002	<0.0002	<0.0002

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*Sample at 1 Foot analyzed as total metals.

Approved by Laboratory Manager
Title