## APPROVED

## ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PRELIMINARY SITE ASSESSMENT REPORT VOLUME II - SUPPORTING DOCUMENTATION

Hanna Furnace Site and Shenango-Steel Mill Buffalo, NY

Site No. 915029 Erie County



Prepared for: New York State Department of

RECEIVE NOV 7 1995

BUREAU OF HAZARDOUS SITE CONTROL DIVISION OF HAZARDOUS WASTE REMEDIATION

### **Environmental Conservation**

50 Wolf Road, Albany, New York 12233 Michael D. Zagata, Commissioner

Division of Hazardous Waste Remediation Michael J. O'Toole, Jr., Director

By:
ABB Environmental Services
Portland, Maine

November 1995

#### NYSDEC SUPERFUND STANDBY CONTRACT WORK ASSIGNMENT NO. D002472-14

## PRELIMINARY SITE ASSESSMENT REPORT VOLUME II - SUPPORTING DOCUMENTATION

#### HANNA FURNACE CITY OF BUFFALO, NEW YORK

**SITE NO. 915029** 

#### Submitted to:

New York State Department of Environmental Conservation Albany, New York

Submitted by:

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November 1995

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## HANNA FURNACE PRELIMINARY SITE ASSESSMENT REPORT VOLUME II - SUPPORTING DOCUMENTATION

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## SECTION 1.0 GEOPHYSICAL REPORT

**ABB Environmental Services** 

#### Geophysical Survey Summary

#### Introduction

Magnetic and electromagnetic (EM) surveys were conducted at the Hanna Furnace Site for NYSDEC. The purpose of these surveys was to guide the location of test pitting activities. A GEM gradiometer was used for magnetic data collection and an EM-31 was used to collect electromagnetic data. Data were downloaded to a field computer and interpreted on-site. Four geophysical contour maps were developed and include; magnetic vertical gradient, total magnetic field, quadrature (EM), and in-phase (EM). These maps are attached to this appendix.

#### Magnetometer Data

Two plots of the magnetometer data have been generated. The plots include a map of the magnetic vertical gradient and a map of the total magnetic field. The magnetometer data collected at the site are of questionable value. The average magnetic level at the site was significantly different from the normal average magnetic level for this latitude (32000 nanoTeslas (nT) vs. 56000 nT). This indicates that the fill area is highly magnetic, which makes sense considering the fill material consists primarily of foundry materials. The total field map shows multiple small scale anomalies. This is not typical for a total field map. Normally, aerially larger scale magnetic anomalies are found associated with buried debris.

The gradient data on the other hand appear nearly normal. The anomaly distribution suggests that the fill is primarily non-metallic with scattered shallow buried metal objects. The source of the linear feature trending east-west between lines 80E and 130E is unclear, though it is likely a survey or instrument artifact. It is plausible these anomalies may be related to an abandoned railroad track. Normally, anomalies that trend along the data collection lines are instrument related and the lack of a similar feature on the EM31 data supports this interpretation. On the other hand, the linear anomaly spans several days of operation, and the chances of having similar malfunctions along nearby lines, on different days, seems remote.

#### EM31 Data

The EM31 data are separated into the Quadrature Phase and the In Phase component on the two of the attached plots.

The EM31 data appear to illustrate various fill conditions. The quadrature data, which represents the lower conductivity material, appear to outline several fill areas. More conductive fill was found on the west half of the survey area. The conductive fill apparently extends to approximately 800 feet east (see Quadrature map). The Quadrature map also shows several features in the west half of the site. The two north-south trending features are located at 50-100 east and 170-250 east. These may be related to the burial of different materials.

The In-Phase map shows that the majority of the metal debris exists in the north half of the survey area. This may also be a function of depth of burial. It is possible that debris exists at the old ground surface elevation beneath the deeper fill area to the south.

#### Suggested Test Pit Locations

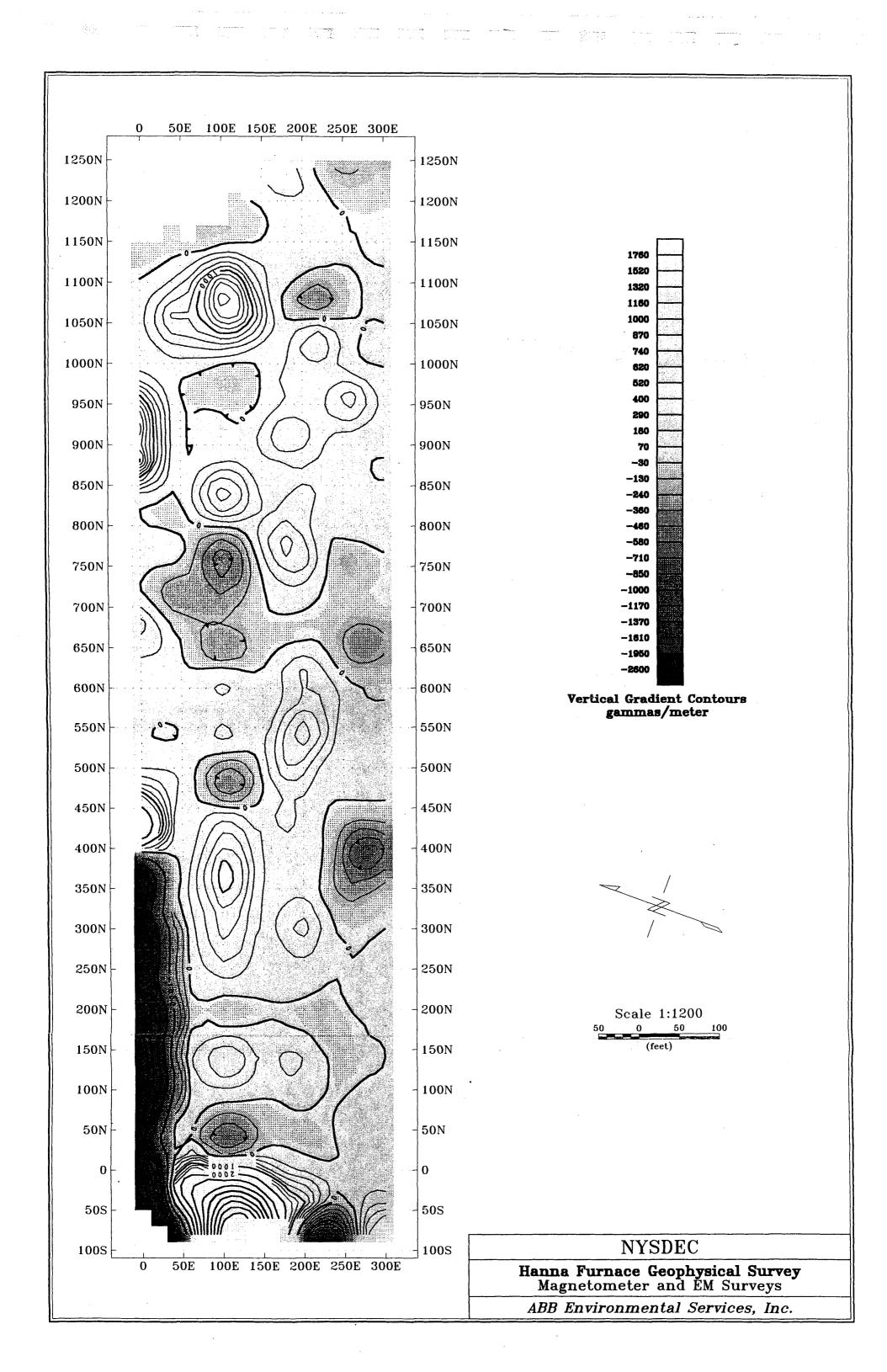
Six test pit locations were selected based upon observed geophysical anomalies. Two additional test pits

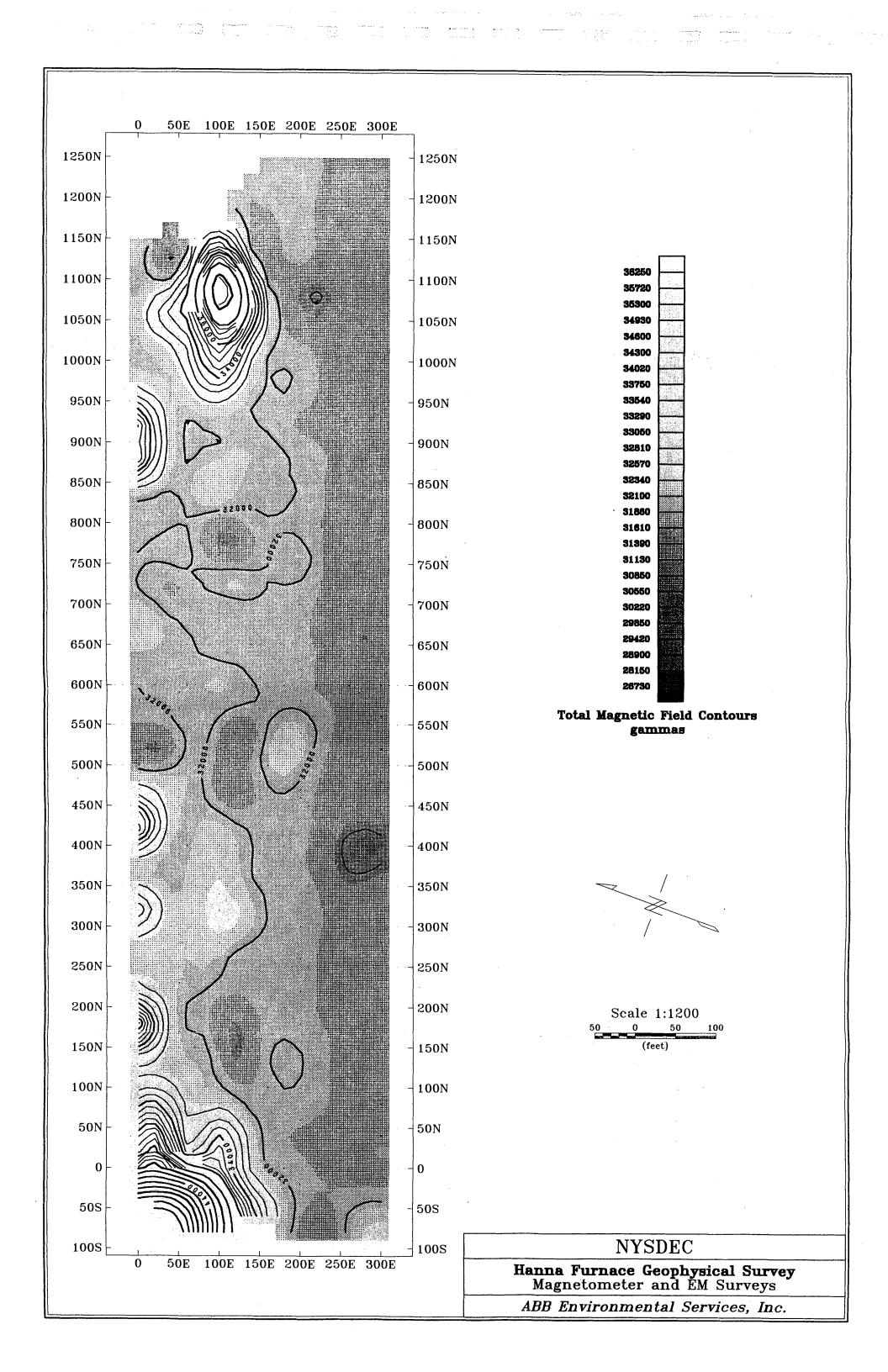
were excavated without reference to the geophysical data. Following is the list of recommended locations based upon the geophysical data.

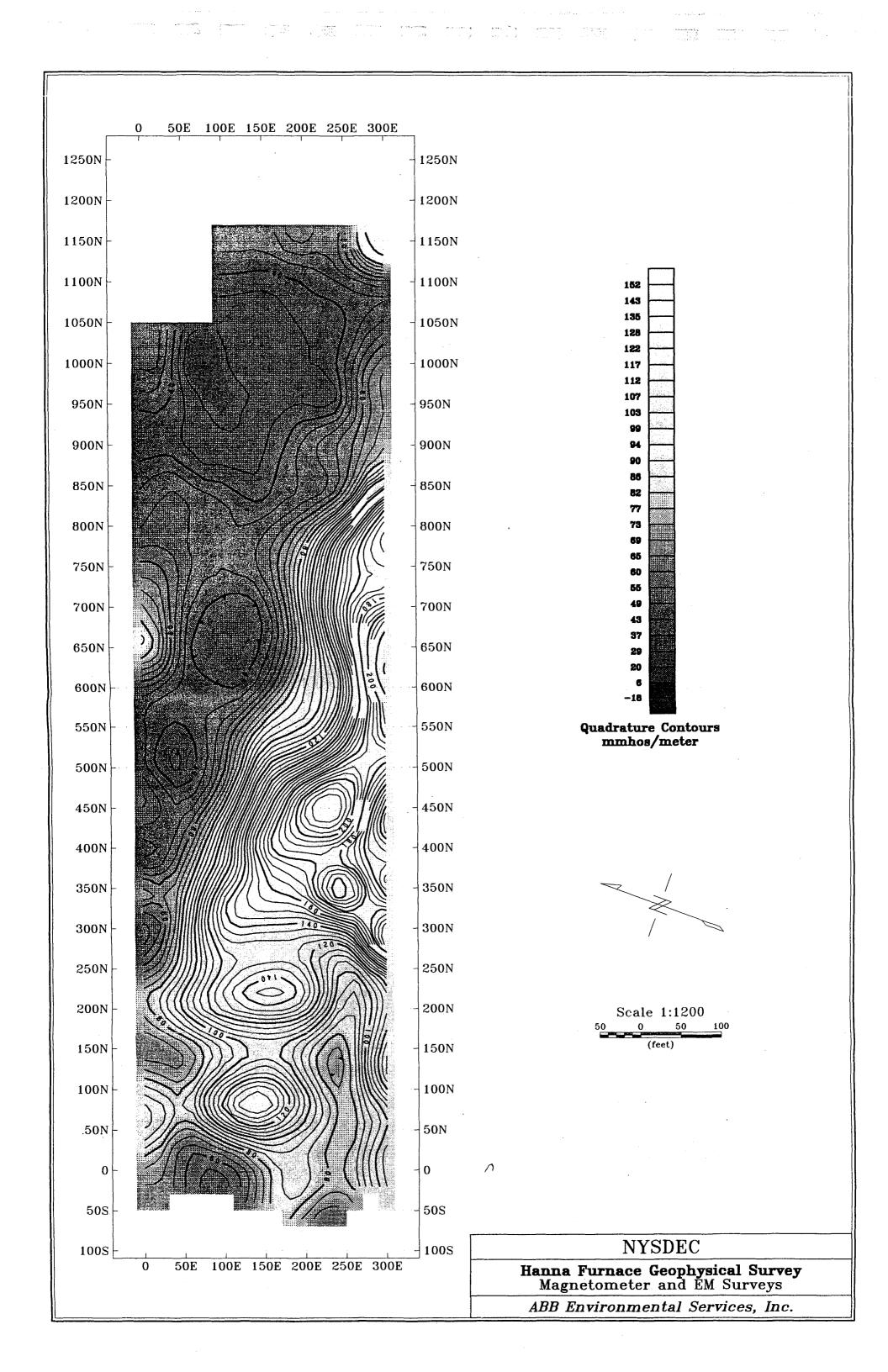
Test Pit 101 (80E, 150N)	This location is positioned between the Quadrature Phase anomalies to assess the material between the anomalies.
Test Pit 102 (150E, 210N)	This anomaly is located in a similar Quadrature Phase EM31 anomaly north of TP-103.
Test Pit 103 (120E, 80N)	This location was picked primarily based upon the presence of a Quadrature anomaly. In addition, this test pit should serve to assess whether the linear magnetometer anomaly is an artifact.
Test Pit 104 (60E, 430N)	This location is positioned off the east edge of the major Quadrature anomaly, but within the deeper fill area to assess the composition of the fill in this area.
Test Pit 105 (210E, 540N)	This location was picked primarily based upon the magnetometer data. A cluster of magnetic anomalies was found in this area.
Test Pit 106 (100E, 630N)	This location is positioned off the east edge of the Quadrature phase anomaly, yet along the linear magnetic anomaly to assess the composition of fill east of the conductive fill area, and to assess whether the linear magnetic trend represents a real feature.

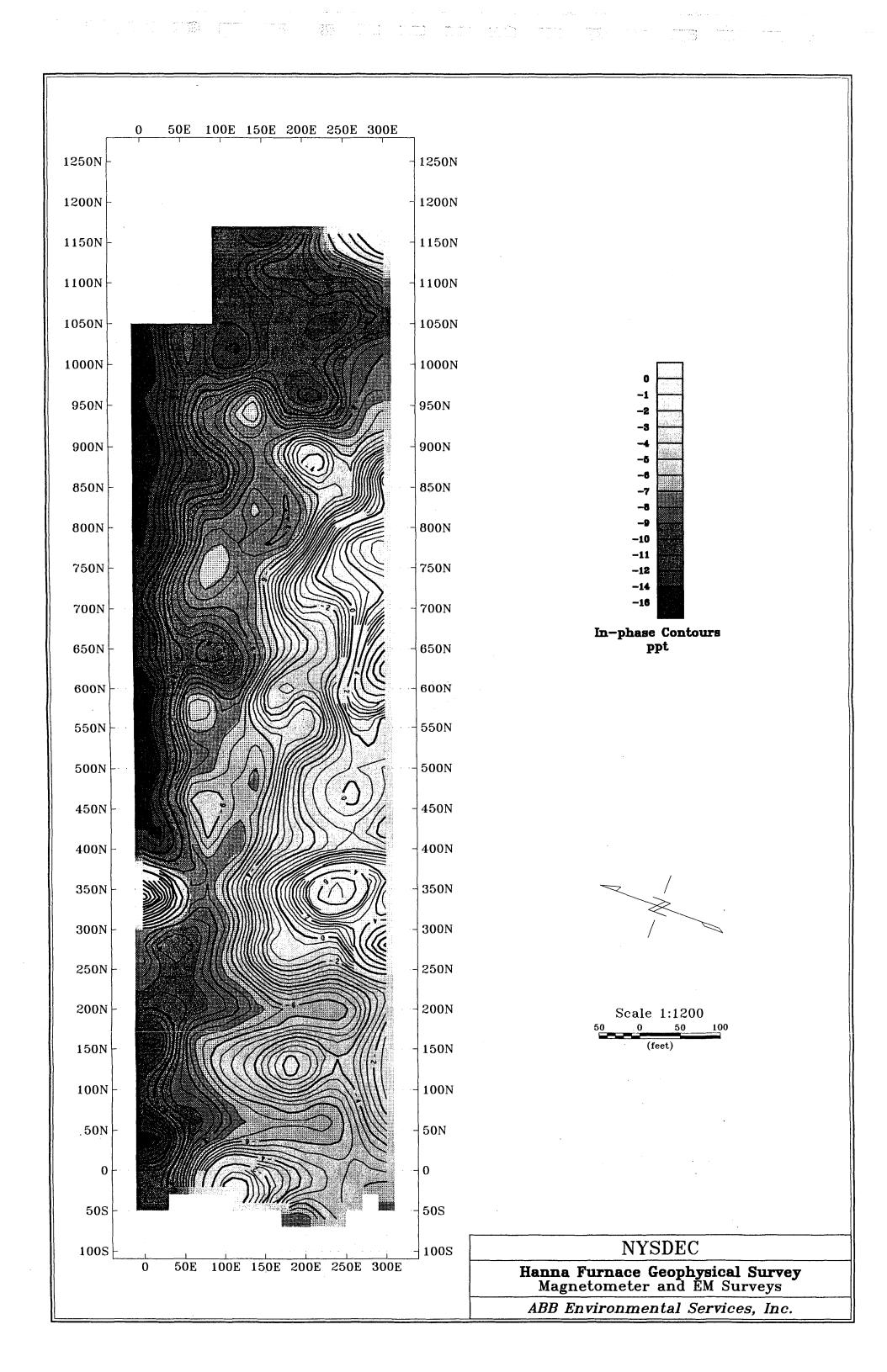
#### **Summary**

The geophysical data collected at the Hanna Furnace site indicate that the landfill consists primarily of non-metallic material. More conductive fill exists on the west half of the survey area. Scattered surface debris was found to the east. A linear magnetic anomaly was found, but is most likely a survey artifact or may be related to an abandoned railroad bed.









### SECTION 2.0

#### FIELD DATA RECORDS

**ABB Environmental Services** 

	en de en	GROUNDWA	TER SAMPLE	FIELD DATA	RECORD	i mora o o a Massimo do se defe
	Project: Hanna Fur			Site: Hanne	Furnice	MW-109
F	Project Number: 7169	-40		Date: 2 11/2	<u> १९ ६५</u>	
	<u>:</u>			Time: Start: 1		End; 1415
S	ample Location ID: H F	MWIDGX	LX94XX	Signature of Sa	ampler: BLB	Ed C
	Well Depth 25 Ft.	Measured Historical	Top of Well Top of Protecti	Well Riser Stick		Protective O.14 Ft. Casing/Well Difference
Water Level/Weil Data	Depth to Water 7.90 Ft.	Well Material: PVC SS	Well Locked?:		2 inch 1 inch 3 inch	Protective 2.62 Ft. Casing  Water Level Equip. Used: Elect. Cond. Probe Float Activated
Water Lev	Height of Water Column X	16 GaVFt. (2 in.)65 GaVFt. (4 in.) 1.5 GaVFt. (6 in.) GaVFt. (in.)	-	Pro Cor	il Integrity: t. Casing Secure ncrete Collar Intact er	Yes No
tation		ampling Equipment Us	ed :		Decontamination	n Fluids Used:
Equipment Documentation	Purging Sampling	Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Teflon/Silicon Tubing Airlift Hand Pump In-line Filter Press/Vac Filter	Equipment ID ABB I COT IO	070 (	Methanol (100 Methanol (100 25% Methanol Deionized Wal Liquinox Solut Hexane HNO <sub>3</sub> /D.I. Wal Potable Water	1%) V75% ASTM Type II water ter ion ter Solution
Jata	PID: Ambient Air	<u> </u>	ppm Purge Dat	ta CollectedIn-linIn Co	eTurbi	
Field Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µn Turbidity (NTUS) Oxidation - Reduction, ↔ Dissolved Oxygen, ppm	139	Gal. @ 6.0 (	3al. @ 9.0 (	Gal. @	Gal. @Gal.
ts.	Analytical Parameter	•		Volume Required	Sample Bottle ILo	t Nos.
Sample Collection Requirements ( / If Required at this Location)		Na   H <sub>1</sub>   H <sub>2</sub>   H <sub>3</sub>   H <sub>4</sub>   H <sub>4</sub>   H <sub>4</sub>   H <sub>4</sub>   H <sub>4</sub>   H <sub>5</sub>   H <sub></sub>	C 2x N0,,4°C 1x OH,4°C 1x S0,,4°C 1x S0,,4°C 1x S0,,4°C 1x S0,,4°C 2x S0,,4°C 2x	(40 ml (1 liter AG (1 liter P (500mLP (1 liter P (1 liter AG (1 liter AG (1 liter AG	376840 373632 4157610 4157012	
Sample (	Notes: K PID Tend	usy 1.4 ppm	durine, pi	orging	ABB Env	rironmental Services

	* * * * * * * * * * * * * * * * * * *		TER SAMPLE	FIELD DATA	A RECORD		200
	Project: #NY50EC				FULLE	MW-110	
F	Project Number: 7164	1-30		Date: 11/24			
				Time: Start: _	1235	End: 1335	
S	Sample Location ID: # F	MWIION:	NXGHNX	Signature of S	Sampler: 3-K	3uth	
œ.	Well Depth 22.4 Ft.	Measured Historical	Top of Well Top of Protect	Well Riser Stict ve (from ground)	k-up <u>2.7%</u> Ft.	Protective 0.15 Ft Casing/Well Difference	:8
Water Level/Well Data	Depth to Water <u>8.05</u> Ft.	Well Material:PVCSS	Well Locked?:		,2 inch ,4 inch ,6 inch	Water Level Equip. Use  Elect. Cond. Prob  Float Activated  Press. Transduce	10
Water	Height of Water Column X (식, <u>년</u> 5 Ft.	1.6 Gal/Ft. (2 in.) 5.5 Gal/Ft. (4 in.) 1.5 Gal/Ft. (6 in.) Gal/Ft. (_ in.)	7.5	Price Col Burgard	ell Integrity: ot. Casing Secure oncrete Collar Intact ther	Yes No	- - -
ation		ampling Equipment Us	sed:		Decontamination	r Fluids Used :	_
Equipment Documentation	(/ If Used For) Purging Sampling	Peristaltic Pump Submersible Pump Bailer & PVC/Silicon Tubing Teflor/Silicon Tubing Airlift Hand Pump In-line Filter Press/Vac Filter	Equipment ID 自合合性OSG(() ()如为ASS	-070	All That Apply at Loc Methanol (100 25% Methanol Deionized Wat Liquinox Soluti Hexane HNO <sub>3</sub> /D.I. Wa Potable Water None	%) /75% ASTM Type II wa ter ter Solution	tler
Data	PID: Ambient Air				ne Turbic Container KColore		loudy
Field Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µm Turbidity (NTUS) Oxidation - Reduction, 4/ Dissolved Oxygen, ppm	11	Gal. @ 5.0 (	11.1 11.1 11.1 11.5 11.5 11.5 11.8 11.8	Gal. @	Gal. @G	al.
s.	-	•		Volume Required	Sample Bottle ILo	t Nos.	
Sample Collection Requirements ( / If Required at this Location)	X VOCs X SVOCs X Metals X Cyanide Nitrate/Sulfate Nitrate/Phosphate X Pest/PCB TPH TOC	H   N   N   N   N   N   N   N   N   N	C 2: N0,,4°C 1: aOH,4°C 1: so,,4°C 1: so,,4°C 1: so,,4°C 2: so,,4°C 2: so,,4°C 2:	(40 ml c1 liter AG (1 liter P (500mLP (1 liter P (1 liter P (1 liter AG (1 liter AG	376840 373632 4157010 4157010 373632		
Sample C	Notes: <u>Green cold</u>	er to cleur	water		ABB Fov	rironmental Servici	

Project         PA-14         Site           Project No.         7169-40         Sampler           Date         1017/94		. 10		
Field Instrumentation Calibration Data			72.	
Equipment Type/I.D.	Battery. Condition	Calibration Information		
Horiba WG Checker	OK	pH 4 <u></u> pH 7	pH 10	AutoCal Solin All paramacaep MSkm
5/1 304001		pH 4 pH 7	pH 10	MII postare and
HAZCO 3896		F: 1		_
	·	Cond. Std/		
	· <del></del>	Cond. Std/		
Dissolved Oxygen (Temp/Turb/	~ Jua	Cond. Std/		/meter value
A-> Above	OK	All periums. Ch Avg. Winkler Value	nom Matar Ve	alue I/ nom
Redox	<u> </u>	Avg. Willinia Value	ppiii weter va	ingeb_bb
		Zobeli Sol. Value	Meter Value_	
Photoionization Meter		<del>-</del>	_	
NYSDEC TIP#2	OK	Zero/Zero Air? QYes QNo	Span Gas Va	lue ppm Equiv.
the second				ue ppm Equiv.
HAZCO# 3513 (580B)		Zero/Zero Air? □Yes No	-	
Other 1-LEL/OZ Meter HAZC	C		Meter Vai	ue <u>lo Z</u> ppm Equiv.
Other 1-4=402 Meter Aria	OK	100 HAZE O Och	41.00+	
# 5522/#4760/#4433	<u> </u>	See HAZLO Cal.	Svec.	<del>V</del>
Decontamination Fluids: Methyl II  Other; I  HNO3/DI Rinse Solution: ECJ State  Filtration Paper ID: (In Line) Manuf/T	; Lot No ype Hydrate; Lot No ype iging; Lot No ype /pe	ID	<u>NA</u> 	<del></del>
H <sub>2</sub> SQ <sub>4</sub> Lot No. ——				
HCL Lot No.		Other Lot No		
NaOH Lot No	W Preserv	ec		

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Project No. 7169-40 Sampler	Signature	BERITL	
Date 10/18/94			
Field Instrumentation Calibration Data			۳.
Equipment Type/I.D.	Battery Condition	Calibration Information	
		pH 4 pH 7	pH 10
		pH 4 pH 7	pH 10
		pH 4 pH 7	pH 10
		Cond. Std/	Cond. Std/meter value
·	<del></del>	Cond. Std/	Cond. Std/meter value
		Cond. Std/	Cond. Std/meter value
Dissolved Oxygen			
		Avg. Winkler Value	ppm Meter Valueppm
Redox			
		Zobell Sol. Value	Meter Value
Photoionization Meter	_ i.		
N45DEC TIP#2	OK	Zero/Zero Air? □Yes StNo	Span Gas Value <u>l<sup>OO</sup>ppm Equiv.</u>
TE 5400 11070 #3562	ΩL		Meter Value 1 ppm Equiv.
TE-580B HAZO #3593	OK	Zero/Zero Air? OYes No	Span Gas Value <u>IOO</u> ppm Equiv.
3/11 4224 1-22 1			Meter Value (2) ppm Equiv.
3-Minister #5522 #44766	1 #433 OK	- Precalibrated	
ISCMX LELIOZHER	itzio Ok	, _	
Pluids/Materials Record  Deionized Water Source: ECJ Stag  Trip Blank Water Source: ECJ Lab;	Lot No	* Burnisolai ID_	
Decontamination Fluids: Methyl H			
HNO <sub>3</sub> /DI Rinse Solution: ECJ Sta	^		
Filtration Paper ID: (In Line) Manuf/Ty			
•	-	Lot No	
Chemicals Used: HNO3 Lot No. Lak			
H <sub>2</sub> SQ <sub>4</sub> Lot No.			
HCL Lot No		Other Lat No.	
1 .	b preserv	ecl	
NaOH Lot No.			
NaOH Lot No.	<b></b>		

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FIELD INSTRUMENTATION & M	ATERIAL QUALITY ASSURANCE RECORD
Project NYSDEC Site Have Project No. 7169-40 Sampler Signal Date 1012194	k Furnace
Field Instrumentation Calibration Data	
Equipment Type/I.D. Batt	ery Calibration Information
Horiba WQChecker O	
Horiba WQ 0	pH 4 pH 7 pH 10
Dissolved Oxygen	Avg. Winkler Valueppm Meter Valueppm
Redox	Zobell Sol. Value Meter Value
Photoionization Meter HAZO # 3593 SYN UZZ 47-20-7	Zero/Zero Air? 🖸 Yes 🏝 No Span Gas Value 100 ppm Equiv.  Meter Value 100 ppm Equiv.
· · · · · · · · · · · · · · · · · · ·	Zero/Zero Air? 🔾 Yes 🔾 No Span Gas Valueppm Equiv.
Other <u>Horiba</u> WQChecker	Tusb=0 D0=19.99 Temp=2.5 Sal=0.35
Fluids/Materials Record  Deionized Water Source: (ECJ Staging) Portable	
Trip Blank Water Source:ECJ Lab; Lot No Other: Type	SST 10 HFQTXX ZXXXQUXX
	10
	//
(Vacuum) Manut/Type Chemicals Used: HNO3Lot NoCDCP: H <sub>2</sub> SO <sub>4</sub> Lot No	
HCL Lot No	Other Lot No.

E.C. JORDAN, CO.

FIELD INSTRUMENTA			RANCE RECORD
Project S Project No. <u>7/69-40</u> S	ite	W/ /	<del></del>
Project No. <u>+169-40</u> S	iampler Signature	ma. ny	· · · · · · · · · · · · · · · · · · ·
Date		0	
Field Instrumentation Calibration	n Data		
Equipment Type/I.D.	Battery Condition	Calibration Information	
**************************************		pH 4 pH 7	
		pH 4 pH 7	pH 10
·	_ •	pH 4 pH 7	pH 10
		Cond. Std/	Cond. Std/
	<del></del>	Cond. Std/	Cond. Std/
		Cond. Std/	Cond. Std/
Dissolved Oxygen			
	· <del></del>	Avg. Winkler Valuep	pm Meter Valueppm
Redox	•		
		Zobell Sol. Value	Meter Value
Photoionization Meter MYSDE	< 42	,	Industela-
Photovac TIP I	ok	Zero/Zero Air? Q Yes Q No	Span Gas Value ppm Equiv. 4 /1872
			Meter Value 99 ppm Equiv.
		Zem/Zero Air? □ Yes □ No	Span Gas Valueppm Equiv.
			Meter Valueppm Equiv.
Other			<del></del> ,,
Horiba WATOR Checker	u-10 ok	USEP Supplied	pH solution: auto Caribestian
		piveduce peri	formed - OK!
			·····
Fluids/Materials Record			
Deionized Water Source:ECJ Sta	ging Portable System	Other	
Trip Blank Water Source:ECJ Lab	); Lot No		
<u>✓</u> Other;	Type _ bob Supplies	<u>-t</u> ID	
Decontamination Fluids:Methyl	l Hydrate; Lot No		
<u>✓</u> Other;	Type Potacio (120	10 LIGHINOX	
HNO <sub>3</sub> /DI Rinse Solution:ECJ S			
Filtration Paper ID: (In Line) Manuf/I			
(Vacuum) Manu	ut/Type	Lot No	
Chemicals Used: HNO3Lot No		ZnAOC Lot No.	
		Other Lot No.	
		Other Lot No.	
	·		Contraction of
PAS SELVATIVE	S AME ALL LAC	, supplied by NYTES	( w/ the WITHES
1100		ij	E.C. JORDAN, CO.

ij.

Project No. Hanna Funda Sampler Date 10/10/44		Zi KButh	<del>-</del> , , , , , , , , , , , , , , , , , , ,
Field Instrumentation Calibration Data		٦,	¥
Equipment Type/I.D.	Battery Condition	Calibration Information	
Horiba Waketer		pH 4 pH 7 pH 10	
SIN 304001		pH 4 pH 7 pH 10	
HAZCO 3896		pH 4 pH 7 pH 10	MS/cm
	<del></del>	Cond. Std/ Cond. Std. Auto /4	
		Cond. Std/ Cond. Std/_	
Disable d Outre	<del></del>	Cond. Std/ Cond. Std/_	meter value
Dissolved Oxygen Horiba wa Meter		Auto Cal. Sol'n	
Redox	<del></del>	Avg. Winkler Value ppm Meter Value	ppm 
1.550A		Zobell Sol. Value Meter Value	
Photoionization Meter		Motor Value	
NYSDEC TIPHZ SIN FA 900042	<u>ok</u>	Zero/Zero Air? Wes □ No Span Gas Value 600 p	opm Equiv.
		Meter Value 10 p	
HAZCO # 3593 (580B)	OK	Zero/Zero Air? □Yes □ No Span Gas Valuep	pm Equiv.
5/1 42247-267		Meter Value p	pm Equiv.
Other Temp/Tub/Schin			
Tompi 100 Black		Horiba	
HNO <sub>3</sub> /DI Rinse Solution: ECJ Stage Filtration Paper ID: (In Line) Manuf/Ty  (Vacuum) Manuf/Ty  Chemicals Used: HNO <sub>3</sub> Lot No  H <sub>2</sub> SO <sub>4</sub> Lot No  HCL Lot No	Lot No pe(ab r lydrate; Lot No lype(icular ging; Lot No pe pe A Presey	D   HFQTHE XXX 91   D   D   D   D   D   D   D   D   D	

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Project 7169-40 Site Project No. Hanna Funda Sampler  Date 101194			
Field Instrumentation Calibration Data			· · =,
Equipment Type/I.D.	Battery Condition	Calibration Information	
HORIBA WQ Meter	OK	pH 4 <u></u> pH 7	pH 10 Auto Cay
100400 NB		pH 4 pH 7	
HAZCO 3896	•	pH 4 pH 7	pH 10
Horiba woneter		Cond. Std/	Cond. Std. Auto /4.51 meter value
			_ Cond. Std/meter value
4, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10			_ Cond. Std/meter value
Dissolved Oxygen			- Garia: Garia
Horiba w greter	Autocal	Avg. Winkler Valuep	oom Meter Value oom
Redox	1	Avg. Hilling: Value	JPIII Weter valuepp
, 1000		Zobell Sol. Value	Meter Value
Physical administration & Season		ZUDEN SUI. VEIGE	Meter value
Photoionization Meter NYSTEC TIP#2	OK	Zero/Zero Air? Ž¥yes □ No	Span Gas Value <u>l∕C</u> )ppm Equiv.
NYSTECTIP#2		(After Spen, Text = 7.5)	Span Gas Value $\underline{G}_{1}^{C}$ ppm Equiv.  Meter Value $\underline{G}_{1}^{C}$ ppm Equiv.
447(0 #3593 15808)	OK	Zero/Zero Air? XYes □ No	
HAZLO#3593 (580B) SIN 42247 267		7610/7610 WIL: 7102 -110	Meter Value 100 ppm Equiv.
			Meter value ico ppm Equiv.
Other Temp Trusto Isalin		11	
Temporios promist	-	Horiba	
HNO <sub>3</sub> /DI Rinse Solution: ECJ Stage Filtration Paper ID: (In Line) Manuf/Ty	ype Ligural	Lot No Lot No Lot No Lot No Cher Lot No Other Lot No Other Lot No	/

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Project No. 7169-40 Samp	oler Signature	K-K-Buth		
Date 1048 10 1994				
Field Instrumentation Calibration Da	ta		· <b>=</b> _	
Equipment Type/I.D.	Battery Condition	Calibration Information	1	
		pH 4 pH 7	pH 10	
•		pH 4 pH 7		
· · · · · · · · · · · · · · · · · · ·		pH 4 pH 7	pH 10	.63
- <u></u>		Cond. Std/		
		Cond. Std/	Cond. Std	_/meter valu
	<del></del>	Cond. Std/	Cond. Std	_/meter valu
Dissolved Oxygen				
	<del></del>	Avg. Winkler Value	_ppm Meter Value	ppm
Redox				
		Zahali Sal Value	Meter Value	
Photoionization Meter TE 580 B HAZCO# 350		Zero/Zero Air? QYes QN	Meter Value	(∞ppm Equiv. <u>o</u> ppm Equiv. ppm Equiv.
TE SEOB HAZZOH 350	- Pl Pump 01	Zero/Zero Air? QYes QN	Meter Value	<u>∫∞</u> ppm Equiv. <u>∝</u> ppm Equiv.
TE 580 B HAZZO# 359  Gillian Gilibrator Air Other  3-Miniscun S #5572/#476	- Pl Pump Ol oc/#4433_0k	Zero/Zero Air? OYes ON Zero/Zero Air? OYes ON Cal-pumplus Preculibrate	Meter Value Meter Value Meter Value Meter Value Meter Value Meter Value	(∞ppm Equiv. <u>o</u> ppm Equiv. ppm Equiv.
TE 580 B HAZCO# 359  Gillian Gilibrator Air Other 3-Miniscun 5 #5572/#476	- Pl Pump 01	Zero/Zero Air? QYes QN	Meter Value Meter Value Meter Value Meter Value Meter Value Meter Value	[∞ppm Equiv. ppm Equiv. ppm Equiv.
TE SEOB HAZON 359  Gillian Gillbrator Air  Other  3-Miniscun S #5572 #476  1+920 UEUCZ  Fluids/Materials Record  Deionized Water Source: XECJ	OCHUM33 OK OK Staging Portable	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-pumplus  Precalibrate  Precalibrate  System Other	Meter Value Meter Value Meter Value Meter Value Meter Value Meter Value	<b>(</b> ∞ppm Equiv. <u>©</u> ppm Equiv. ppm Equiv.
TE 580 B Hazcott 350  Gillian Gilibrator Air  Other  3-Miniscun 5 #5572 #470  Itazco Leucz  Fluids/Materials Record  Deionized Water Source: YECJ  Trip Blank Water Source: ECJ	OCHUM33 OK OK Staging Portable	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-pumplus  Prevalibrate  Prevalibrate  System Other	Meter Value Meter Value Meter Value Meter Value Meter Value Meter Value	<b>(</b> ∞ppm Equiv. <u>o</u> ppm Equiv. ppm Equiv.
TE 580 B Hazcott 350  Gillian Gilibrator Air  Other  3-Miniscun 5 #5572 #470  Itazco Leucz  Fluids/Materials Record  Deionized Water Source: YECJ  Trip Blank Water Source: ECJ	Staging Portable Lab; Lot No	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-purplus  Precalibrate  Precalibrate  System Other	Meter Value Meter Value Meter Value Meter Value Meter Value Meter Value	<b>(</b> ∞ppm Equiv. <u>©</u> ppm Equiv. ppm Equiv.
Cillian Gillbrator Air Other 3-Miniscun S #5572 #476  1+9760 UEUC2  Fluids/Materials Record Deionized Water Source: ECJ  Trip Blank Water Source: ECJ  Decontamination Fluids: Meth	Staging Portable Lab; Lot No	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-pumplus  Prevalibrate  Prevalibrate  System Other	Meter Value Meter Value Meter Value Meter Value Meter Value Meter Value	<b>(</b> ∞ppm Equiv. <u>©</u> ppm Equiv. ppm Equiv.
Cillian Gillbrator Air Other 3-Miniscun S #5572 #476  1+9760 UEUC2  Fluids/Materials Record Deionized Water Source: ECJ  Trip Blank Water Source: ECJ  Decontamination Fluids: Meth	Staging Portable Lab; Lot No r; Type r; Type r; Type r; Type	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  K Cal-purplus  Precalibrate  Precalibrate  System Other	Meter Value Meter Value Meter Value Meter Value Meter Value	<b>(</b> ∞ppm Equiv. <u>©</u> ppm Equiv. ppm Equiv.
TE 580 B Hazcott 350  Gillian Gilibrator Air  Other  3-Miniscun 5 #5572 #470  1+9200 UEUC2  Fluids/Materials Record  Deionized Water Source: YECJ  Trip Blank Water Source: ECJ  Other  Decontamination Fluids: Method	Staging Portable Lab; Lot No.  r; Type  nyl Hydrate; Lot No.  Staging; Lot No.	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-purplus  Precalibrate  Precalibrate  System Other	Meter Value  Meter Value  Meter Value  Meter Value  Meter Value	Coppm Equiv. Or ppm Equiv. ppm Equiv. ppm Equiv.
TE SEO B HAZCOH 350  Gillian Gillbrator Air  Other  3-Miniscun S #5572 #470  1+9200 UEUC2  Fluids/Materials Record  Deionized Water Source: ECJ  Trip Blank Water Source: ECJ  Other  Decontamination Fluids: Metr  i\( \text{Other}  HNO3/DI Rinse Solution: ECJ  Filtration Paper ID: (In Line) Manu  (Vacuum) Manu	Staging Portable Lab; Lot No r; Type py; Hydrate; Lot No Staging; Lot No Staging; Lot No st/Type	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  K Cal-pumplus  Prevalibrate  Prevalibrate  Prevalibrate  ID  Lot No.  Lot No.	Meter Value  Meter Value  Meter Value  Meter Value  Meter Value	∫∞ppm Equiv.      ppm Equiv.      ppm Equiv.      ppm Equiv.
Cillian Gillbrator Air Other 3-Miniscun S #5572 #476  1+9200 UEUC2  Fluids/Materials Record Deionized Water Source: ECJ Trip Blank Water Source: ECJ — Other Decontamination Fluids: Metr i\( \text{L} \) Other  HNO3/DI Rinse Solution: ECJ Filtration Paper ID: (In Line) Manual	Staging Portable Lab; Lot No r; Type py; Hydrate; Lot No Staging; Lot No Staging; Lot No st/Type	Zero/Zero Air? QYes QN  Zero/Zero Air? QYes QN  Cal-pur-plus  Precalibrate  Precalibrate  System Other  ID  Lot No.  Lot No.  ZnAOC Lot No.	Meter Value  Meter Value  Meter Value  Meter Value  Meter Value  Colorator	Coppm Equiv. Oppm Equiv. ppm Equiv. ppm Equiv.
Chemicals Used: HNQ Lot No. —  Harcold 350  Cillian Gillbrator Air  ECJ  Filtration Fluids: — ECJ  Filtration Paper ID: (In Line) Manu  Chemicals Used: HNQ Lot No. —  H2 SQ Lot No. —	Staging Portable Lab; Lot No r; Type Luf_Type	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-purplus  Precalibrate  Precalibrate  System Other  ID  Lot No.  Lot No.  Other Lot No.	Meter Value  Meter Value  Meter Value  Meter Value  Meter Value	∫∞ppm Equiv.      ppm Equiv.      ppm Equiv.      ppm Equiv.
TE SEOB HAZCO# 350  Gillian Gillbrator Air  Other  3-Minisons #5572 #470  1+9700 UEUC2  Fluids/Materials Record  Deionized Water Source: ECJ  Trip Blank Water Source: ECJ  Other  Decontamination Fluids: Meth  i	Staging Portable Lab; Lot No r; Type hyl Hydrate; Lot No staging; Lot No affType Lab; Preseric	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-pumplus  Precalibrate  Precalibrate  Precalibrate  ID  Lot No.  Lot No.  Other Lot No.  Other Lot No.	Meter Value  Meter Value  Meter Value  Meter Value  Meter Value  Colorator	∫∞ppm Equiv.      ppm Equiv.      ppm Equiv.      ppm Equiv.
TE SEOB HAZCO# 350  Gillian Gillbrator Air  Other  3-Minisons #5572 #470  1+9700 UEUC2  Fluids/Materials Record  Deionized Water Source: ECJ  Trip Blank Water Source: ECJ  Other  Decontamination Fluids: Meth  i	Staging Portable Lab; Lot No r; Type Luf_Type	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-pumplus  Precalibrate  Precalibrate  Precalibrate  ID  Lot No.  Lot No.  Other Lot No.  Other Lot No.	Meter Value  Meter Value  Meter Value  Meter Value  Meter Value	∫∞ppm Equiv.      ppm Equiv.      ppm Equiv.      ppm Equiv.
TE SEOB HAZCO# 350  Gillian Gillbrator Air  Other  3-Minisons #5572 #470  1+9700 UEUC2  Fluids/Materials Record  Deionized Water Source: ECJ  Trip Blank Water Source: ECJ  Other  Decontamination Fluids: Meth  i	Staging Portable Lab; Lot No r; Type hyl Hydrate; Lot No staging; Lot No affType Lab; Preseric	Zero/Zero Air? OYes ON  Zero/Zero Air? OYes ON  Cal-pumplus  Precalibrate  Precalibrate  Precalibrate  ID  Lot No.  Lot No.  Other Lot No.  Other Lot No.	Meter Value  Meter Value  Meter Value  Meter Value  Meter Value	∫∞ppm Equiv.      ppm Equiv.      ppm Equiv.      ppm Equiv.

Project PSA-14 Site Project No. 7169-40 Sampler Date 10/20/44	Hawa Fi	orneu	SURANCE RECOR	9
Field Instrumentation Calibration Data			=	
Equipment Type/I.D.	Battery Condition	Calibration Information		
	· · ·	pH 4 pH 7	pH 10	
		pH 4 pH 7	pH 10	
		pH 4 pH 7	pH 10	
		Cond. Std/	_ Cond. Std/	meter value
		Cond. Std/	_ Cond. Std/	meter value
		Cond. Std/	_ Cond. Std/	meter value
Dissolved Oxygen				
****		Avg. Winkler Value	opm Meter Value	ррт
Redox				
		Zobell Sol. Value	Meter Value	İ
Photoionization Meter				
TE-590B Hazic \$3593	OK	Zero/Zero Air? □Yes XNo	Span Gas Value ICC pp	m Equiv.
	Lemp Feiler	(e-)	Meter Value <u>98</u> pp	n Equiv.
NYSDEC	LOW	Zero/Zero Air? □Yes 🔊 No	Span Gas Value <u>.ℓC</u> ppi	m Equiv.
			Meter Value GG pp	n Equiv.
Other				·
	OK	Precalibrated		
3. Miniscons #4435,4760				
3 ( 4 ( 4 ) ( 6 ) ( 7 )	3300 010	VI desictif side		
Fluids/Materials Record	_	•		
Deionized Water Source:ECJ Stag	ing Portable	System Other		
Trip Blank Water Source: ECJ Lab;				
Other; Ty	pe	ID		
Decontamination Fluids: Methyl H	ydrate; Lot No	<u> </u>		
Y Other; T	pe Liquis	<u> </u>		
HNO <sub>3</sub> /DI Rinse Solution: ECJ Stag	ging; Lot No			
Filtration Paper ID: (In Line) Manuf/Ty	pe	Lot No	/	
		Lot No	/	
Chemicals Used: HNO3 Lot No. Lal	> Presence	ZnAOC Lot No		
H <sub>2</sub> SQ <sub>4</sub> Lot No		Other Lot No		
HCL Lot No		Other Lot No		1
NaOH Lot No. <u>Lak</u>	preserv	<u>XX</u>		
			ABB Environmen	tal Services

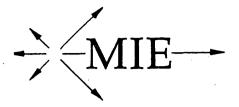
FIELD INSTRUMENTA	TION & MA	ATERIAL QUALITY AS	SURANCE RECO	RD
Project <u>PSA-14</u> Site	Harra 1	Furnace		<b>_</b>
Project No. 7161-40 Sampler	Signature _	BKButh		<u>.</u>
Date (71)94				
Field Instrumentation Calibration Data				
Equipment Type/I.D.	Battery Condition	Calibration Information		
Horiba U-10 Wachecker	OL	pH 4 pH 7	pH 10	
<u>511 304001</u>	·	рН 4 рН 7	pH 10	
(Hazco '3896)	. <del> </del>	pH 4 pH 7	pH 10	
·	. <del></del>	Cond. Std/	_ Cond. Std/_	meter value
		Cond. Std/	_ Cond. Std/_	meter value
		Cond. Std/	_ Cond. Std/_	meter value
Dissolved Oxygen Temp, Scho, T	いか			
w & checker	1/OL	Avg. Winkler Value	opm Meter Value	ppm
Redox				•
		Zobell Sol. Value	Meter Value	
Photoionization Meter				
NYSOEC TIPHZ	OK	Zero/Zero Air? DYes No	Span Gas Value <u>(00</u> p	opm Equiv.
		. •	Meter Value 99 p	
-		Zero/Zero Air? □Yes □No	Span Gas Valuep	ppm Equiv.
			Meter Value p	pm Equiv.
Other		,		
HAZCO ISC-MX (ELK)	UK	Preadbrated		
3- Minuras \$44433,47625552	ZOK	Precaborated		
	0 02	1 ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (		
Fluids/Materials Record				
Deionized Water Source: ECJ Stace	ging Portable	System Other		
Trip Blank Water Source: ECJ Lab				
Other; Ty	/pe	ID		
Decontamination Fluids: Methyl H	lydrate; Lot No	)		
Other; T	ype Liguin	ID_		
HNO <sub>3</sub> /DI Rinse Solution: ECJ Sta	ging; Lot No			
Filtration Paper ID: (In Line) Manuf/Ty	/pe			
(Vacuum) Manuf/Ty			/	-
Chemicals Used: HNO3 Lot No. 10.	o prescide			
H <sub>2</sub> SQ <sub>4</sub> Lot No				-
HCL Lot No NaOH Lot No		Other Lot No		-
NaOH Lot No. <u>Low</u>	o preser	160		

-ABB Environmental Services-

FIELD INSTRUMENTATION & MATERI	IAL QUALITY ASSURANCE RECORD
Project No. 7169-45 Sampler Signature	A FILI RNACE
Prior No. 7/69-40 Complex Company	11. 0. 7. 4
Project No Sampler Signature	
Date	00
Field Instrumentation Calibration Data	
Equipment Type/I.D. Battery Condition	Calibration Information
	pH 4 pH 7 pH 10
	pH 4 pH 7 pH 10
	pH 4 pH 7 pH 10
	Cond. Std/ Cond. Std/
	Cond. Std/ Cond. Std/
	Cond. Std/ Cond. Std/
Dissolved Oxygen	Avg. Winkler Valueppm Meter Valueppm
Redox	Avg. Wilkies Valueppill Meter Valueppill
TIGGOX	Tabali Cal Makin Marra Makin
Photoionization Meter	Zobell Sol. Value Meter Value
TE-580 BOVM DK	Zero/Zero Air? Tyes No Span Gas Value ppm Equiv.  Meter Value 97. ppm Equiv.
	Zero/Zero Air? 🔾 Yes 🔾 No Span Gas Valueppm Equiv.
	Meter Valueppm Equiv.
Other	,
HORIBA OK	Auto . Cal. (FRESH INSTR. FROM
	Auto Cal. (FRESH INSTR. FROM FACTORY TODAY)
Fluids/Materials Record	
Deionized Water Source:ECJ Staging Portable System	Other
Trip Blank Water Source:ECJ Lab; Lot No	
Other; Type	ID
Decontamination Fluids:Methyl Hydrate; Lot No	
Other; Type	ID
HNO <sub>3</sub> /DI Rinse Solution:ECJ Staging; Lot No	
Filtration Paper ID: (In Line) Manut/Type	Lot No/
(Vacuum) Manut/Type	Lot No//
Chemicals Used: HNO <sub>3</sub> Lot No.	ZnAOC Lot No.
H <sub>2</sub> SO <sub>4</sub> Lot No.	Other Lot No.
HCL Lot No.	Other Lot No.
NaOH Lot No.	

E.C. JORDAN, CO.

Project PSA-IU Site  Project No. 7169-40 Sampler S  Date 112944	Hanna (	Firmace		<b>J</b>
Field Instrumentation Calibration Data			¥.	
Equipment Type/I.D.  Horiba U-10 Wa Checker	Battery Condition	pH 4 pH 7 pH 4 pH 7	pH 10	
	Toch	pH 4 pH 7 Cond. Std / Cond. Std /	Cond. Std/	meter value
Dissolved Oxygen / Temp / Salin / Horiba U-10 walkecker Redox	OK	Avg. Winkler Valuep	pm Meter Value	ppm
Photoionization Meter NYSDECTIPHZ Other	<u>ok</u>	Zero/Zero Air? QYes No	Span Gas Value (OC) ppr Meter Value (ICC) ppr	n Equiv. n Equiv.
Fluids/Materials Record  Deionized Water Source: ECJ Stagi  Trip Blank Water Source: ECJ Lab;  Other; Typ  Decontamination Fluids: Methyl H	Lot No	D H   D H	/	<b>Δ</b> Χ.
			——ABB Environmen	tal Services



MIE, Inc.
1 Federal Street, #2
Billerica, Massachusetts 01821-3500
U.S.A.

Telephone: 508-663-7900 Fax: 508-663-4890

#### PDM-3 CALIBRATION CHECKLIST

HAZ. 5/N 3229

S/N 5522

Cali	bration:	
1)	Set Dust Concentration for 2-6 mg/m <sup>3</sup>	
2)	Check seal of sample chamber and flow adapter	
3)	Record calibration zero: ///3 mg/m <sup>3</sup>	
4)	Record 15 min. PDM average (TWA): 3.64 mg/m <sup>3</sup>	
5)	Record 15 min. Master average (ASA): 3.6/1 mg/m <sup>3</sup>	
6)	Confirm that PDM reads within ± .05 mg/m <sup>3</sup> of RAM-1	<u> </u>
Fina	l Assembly:	/
1)	Inspect sample chamber for excessive calibration dust	
2)	Inspect battery pack for fit with front bezel (flush to 1/16 in.)	
3)	Record average zero readings with battery pack: // C/ mg/m³	
4)	Install belt clip	
<i>5</i> )	Attach labels square to housings	
6)	Attach Sun Shield	
Fina	1 Test:	,
1)	Record clean room zero:mg/m <sup>3</sup>	
2)	Record reading with Sun Shield only:mg/m <sup>3</sup>	
3)	If Ref. Scat is included with unit enter value here and in log bookmg/m <sup>3</sup>	
4)	Test digital output	<u>'</u> .
5)	Test analog output, attach recorder sample	
6)	Life test (12 hour minimum)	
7)	Charge battery fully, approx 8.5 VDC @ 8 hours	
8)	Turn off instrument	1/
9)	Record S/N above and record S/N and calibration data in log book	
	nnician Fally 99  Date 13 July 99  Environment Inc.	_
Pev	800/02 MONITORING INSTRUMENTS for the ENVIRONMENT, INC.	



MIE, Inc.
1 Federal Street, #2
Billerica, Massachusetts 01821-3500
U.S.A.

Telephone: 508-663-7900 Fax: 508-663-4890

#### PDM-3 CALIBRATION CHECKLIST

S/N 4760

<u>Cali</u>	bration:	<i>j</i> .
1)	Set Dust Concentration for 2-6 mg/m <sup>3</sup>	
2)	Check seal of sample chamber and flow adapter	- /
3)	Record calibration zero: 1,71 mg/m <sup>3</sup>	
4)	Record 15 min. PDM average (TWA):mg/m <sup>3</sup>	
5)	Record 15 min. Master average (ASA): <u>406</u> mg/m <sup>3</sup>	
6)	Confirm that PDM reads within $\pm$ .05 mg/m <sup>3</sup> of RAM-1	
<u>Fina</u>	l Assembly:	
1)	Inspect sample chamber for excessive calibration dust	
2)	Inspect battery pack for fit with front bezel (flush to 1/16 in.)	/
3)	Record average zero readings with battery pack:mg/m <sup>3</sup>	
4)	Install belt clip	
5)	Attach labels square to housings	/
6)	Attach Sun Shield	
<u>Fina</u>	ıl Test:	- /
1)	Record clean room zero: <u>/, 29</u> mg/m <sup>3</sup>	
2)	Record reading with Sun Shield only:mg/m <sup>3</sup>	
3)	If Ref. Scat is included with unit enter value here and in log bookmg/m <sup>3</sup>	/
4)	Test digital output	
5)	Test analog output, attach recorder sample	
6)	Life test (12 hour minimum)	
7)	Charge battery fully, approx 8.5 VDC @ 8 hours	/
8)	Turn off instrument	_//
9)	Record S/N goove and record S/N and calibration data in log book	
	nnician F. J. Milij Date 28 Jan. 94	-
Rev	. 8/20/92 MONITORING INSTRUMENTS for the ENVIRONMENT, INC.	



### HAZCO Services, Inc.

**Instrument Description** 

580 B

Mfg. Serial #:

42247-267

Calibration Date:

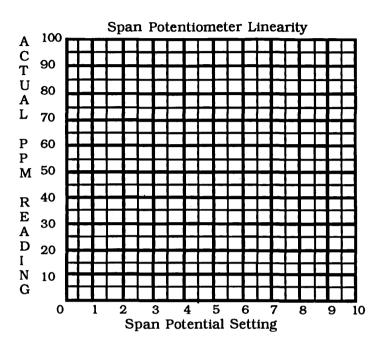
10-6-94

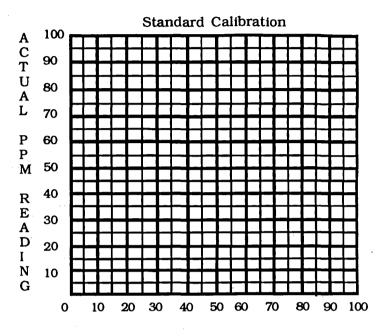
HAZCO Serial #:

*35*93

Technician:

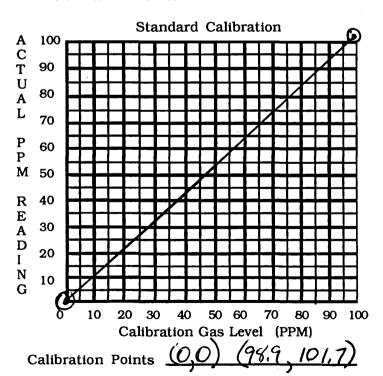
JB

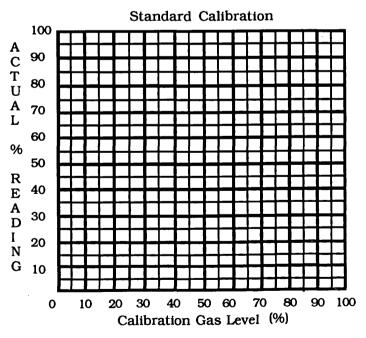




Calibration Points -

Calibration Points .





Calibration Points \_\_\_\_

#### Please Return Equipment To:

HAZCO Services, Inc. 2006 Springboro West Dayton, OH 45439 800-332-0435/513-293-2700 ET A ALUA ALLA Y ARVURTATALIS AMILIANO

SHIPPED FROM:

SHIP TO: \*

Hold for Pick up/

NYTEST ENVIRONMENTAL INC.

ADDRESS:

Brian Butler/ABB Env. Servic

Fed Ex Terminal 299 Cayuga Rd

60 SEAVIEW BLVD. PORT WASHINGTON

Cheektowaga, NY 14225

NY 11050

DI-HCL

! TRIP BLANK

ATTN:

DELIVER ON:

10/10 2nd day, ship on 10/PROTOCOL:

**DELIVER VIA:** 

ASP REFERENCE

Hanna Furnace

SAMPLE CONTAINER INVENTORY TEST # OF FIELD #OF BLK DI HIC RECD. CONDITION/COMMENTS JARS MATRIX BOTTLE SIZE/COMP PARAMETERS VOA **AQUEOUS** 40ML VIAL + HCL **AQUEOUS** 524.2- 40 ML VLAL IVOA BN/ AE/ BNA **AQUEOUS** ONE QUART GLASS 1 PER SAMPLE **AQUEOUS** ONE QUART GLASS PEST/PCB 2 PER SAMPLE BNA+PEST+PCB **AQUEOUS** ONE QUART GLASS 4 PER SAMPLE AQUEOUS 1PT PLASTIC+ HNO3 METALS TOTAL METALS FILTER IPT PLASTIC+HNO3 **AQUEOUS AQUEOUS** IPT PL #ZNAC+NAOH SULFIDE IPT PLASTIC+NAOH CYANIDE AQUEOUS. AQUEOUS 1PT GLASS + H2SO4 PHENOL **AQUEOUS** ONE QUART GLASS PCB 1 PER SAMPLE AQUEOUS IQT GLASS+HCL TPHC **AQUEOUS** 1QTGLASS+H2SO4 0&G **AQUEOUS** LIPT GLASS+HISO4\* K 1 OT FOR BLANKS. RINSIT ICUT | REACT AND 2 ND AQUEOUS IQT PLASTIC \*\* SOIL/MISC NON AQ 125ML JAR SP. VOA KONTONONONON NON AQ 4 OZ JAR \*\*\* XCCCCACXXX 42 8 OZ JAR \*\*\* NON AQ NON AQ 32 OZ JAR\*\*\* XXXXXXXXXXX

REMARKS:			/ )	•	
BLUE ICE	{ COOLER	rsk-cock	SEALS		
	CUES	Provid	ES OW	NDI	WATER.
	12b 7	Rlue	ICE	-	

PACKED BY: RECD BY: 6/10/94 DATE: DATE: SHIPPED BY: FEDEX 200 DAY INSPECTED BY:

<sup>\*</sup> THIS BOTTLE CAN BE USED FOR COD, TOC, TKN, NH3, PHENOL & TP

<sup>\*\*</sup> THIS BOTTLE CAN BE USED FOR TSS,CR+6,pH,BOD,TDS,PO4 & MBAS

<sup>\*\*\*</sup>ALL ANALYSIS CAN BE OBTAINED FROM THIS JAR UNLESS VOA VIALS ARE SUPPLIED

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Site: Hanna Furnace F	Project No. 7164-40
Location No. HF 55101 XXX94XX X D Date 10110/44	
Coordinates	AOC Filter Cake Area
SKETCH MAP OF SAMPLING SITE	Crew Members:  1. Brim Bitter  2. Kathy Griss  3.  4.  5.  6.  Monitor Equipment: PI Meter  N Explosive Gas N Avail. Oxygen N OVA Y Other  Photographs: (Roll Exposure)
SAMPLE DESCRIPTION: Black, dry, Simple dist.  Simple collected near edge & dist bike trail  Distributes in sunlight.  NOTES: TOLVOL, SULL, INDIT, PESTIPOIS,  Eptox metals, ign. react, corr.  Also whedal Dup, Ms/MSD	References: Field Book #: 3 Page #: 1- 2 Attachments: Signature: P C Sut \
	ARR Environmental Services Inc.

	SURFACE SOIL SAMP	LE DATA RECORD	
Project: Hana Fract Project Number: TI to 9-4 Sample Location ID: HF5510 Time: Start: 1945	O	Site: FilterCalco Date: 101000	- 12 th
DEPTH OF SAMPLE O-1.C  FIELD GC DATA: [ ] FIELD DUPLICATE O	EQUIPMENT USED F  [ ] HAND AUGER  [ ] SHOVEL [ ] HAND SPOON [ ] ALUMINUM PANS [ ] SS BUCKET [ ] TYPE OF SAMPLE CO [ M DISCRETE [ ] COMPOSITE  SAMPLE OBSERVATI [ ] ODOR [ ] LUCLOR [ ] LUCLOR  COLLECTED  SAMPLE  COLLECTED  SAMPLE   N   JETHYL   J25% M   XDEION   X LIQUIN   JHEXAN   JHOO3: JHOO3: JHOO3: JHOO3: JHOO3: JHOO3: JONGS:	. ALCOHOL IETHANOL/ 75% ASTM TYPE II WATER IIZED WATER IOX SOLUTION NE SOLUTION BLE WATER E:	
SAMPLES COLLECTED  MATRIX  / IF REQUIRED	<del> </del>		
IF REQUIRED SO A ATTHIS LOCATION BY SO ATTHIS LOCATION BY SO A ATTHIS LOCATION BY SO ATT	VOLUME REQUIRE  [ ]  [ ]  [ ]  [ ]  [ ]  [ ]		SAMPLE BOTTLE IDS
NOTESPAKETCH Collected from Wellington	top level of p	ale area near t bila trail.	cable debris-

Saniara Alumah	ianna Furinaa er: <u>7169-40</u>	<u>e                                      </u>	Site: Filter (	Like Hile	
Project Numb Sample Locat	ion ID: HESSIC	3XXX 94XX	Date:		
Time: Start:	1455	End: <u>1500</u>	Signature of Sam	ppier: Z. R. T.	
<b>DIL SAMPLE</b> EPTH OF SAMP	ue <u>0-1.0</u>	EQUIPMENT USEI [ ] HAND AUGER [ ] S.S. SPUT SPO [ ] SHOVEL [ ] HAND SPOON [ ] ALUMINUM PA [ ] SS BUCKET	OON []E []25 []20 NS []U	ONTAMINATION FLUIDS USED: LLL USED THYL ALCOHOL 5% METHANOU 75% ASTM TYPE II WATE EIONIZED WATER EIONIZED WATER EXANE NO 3 SOLUTION	R
ELD GC DATA: [	] FIELD DUPLICATE O	COLLECTED SAM	SOIL ATIONS:  SOIL ATIONS:  SOIL ATIONS:  SOIL ATIONS:  SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOI	OTABLE WATER ONE TYPE: LAY	         
MPLES COLLE IF REQUIRED AT THIS LOCATION	BURFACE WATER WATER WATER SEDIMENT	✓ IF PRESERVED WITH VOLL ACID-BASE REQU		SAMPLE BOTTLE IDS	<b></b>
I TEL VOC I TEL SIOC I TEL INO; II TEL PENING		Aphichu	TERRINER		-
y Estoxydd Glistella					_
OTES/SKETCH	Collected for	ion low, Flat	area in mic	dole of pile over-	

E.C. JORDAN CO.

	SURFACE SOIL SAM	PLE DATA RE	CORD	
Project: Hanna fund Project Number: HT 60,dub Sample Location ID: HF 55 Time: Start: 1500	7164-40	Date: 10	Her (also thea 10/44 Sampler: BK Bith	- - - -
SOIL SAMPLE  DEPTH OF SAMPLE	[ ] HAND AUGER [X] S.S. SPUT SPOX [ ] SHOVEL [ ] HAND SPOON [ ] ALUMINUM PAN [ X] SS BUCKET [ ]  TYPE OF SAMPLE OF [ ] COMPOSITE  SAMPLE OBSERVAT [ ] ODOR [ ] COLLECTED  SAMP  COLLECTED  SAMP  SAMP  COLLECTED  SAMP  SAMP  SAMP  COLLECTED  SAMP  SAMP  SAMP  SAMP  SAMP  COLLECTED  SAMP  SAMP  SAMP  SAMP  COLLECTED  SAMP  SAMP  SAMP  SAMP  SAMP  SAMP  SAMP  COLLECTED  SAMP  SAMP  SAMP  SAMP  SAMP  SAMP  COLLECTED  SAMP  SAMP  SAMP  SAMP  SAMP  COLLECTED  SAMP  SAMP  SAMP  SAMP  SAMP  COLLECTED  SAMP  S	S COLLECTED: TIONS:	DECONTAMINATION FLUIDS USED:  ALL USED  []ETHYL ALCOHOL []25% METHANOU 75% ASTM TYPE II []DEIONIZED WATER []LIQUINOX SOLUTION []HEXANE []HNO3 SOLUTION []POTABLE WATER []NONE  SOIL TYPE: []CLAY []SAND []ORGANIC []GRAVEL [] OTHER- V. DOUK DOC  CH: f. SAND (JOST WATER)  []OHER CONTROL OF COMMENT OF	own to blee
SAMPLES COLLECTED  MATRIX			Collected new	easterius Etracks,
TO REQUIRED OF AT THIS LOCATION TO SEE THE LOC	IF PRESERVED WITH REQUIR			

NOTES/SKETCH

SURFACE SOIL SAMPLING I	RECORD
Site: HANNA FURNACE P	Project No. 7169-40
Location No. 55 - 105 Date 10-10-19-19	Time 15:40 End 15:45
Coordinates	AOC DEBRIS LANDFILL
SKETCH MAP OF SAMPLING SITE  N  STEEP SLOPE  LANDFILL  SS-105  SCALE 1" = 100 FT.  SAMPLE PROFILE  No. Sample No. Depth (ft.)  S-1 HF55105 XXX74KL 0.5 TO 0.78  S-2	Crew Members:  1. Ton Loweley  2. Ashley Foster  3.  4.  5.  6.  Monitor Equipment: PI Meter N Explosive Gas Y N Avail. Oxygen Y N OVA Y N Other RAD: METER  Photographs: (Roll Exposure)
Sampling Equipment: S.S. Spoon & Buchet  Decon. Materials: Liquidot, DI water, Pot. Water	N/A
SAMPLE DESCRIPTION:  6 TO 10" BGS - Collected Mony "Scree  FREE" OF SW CORNER OF LANDPILL  - BLACK ASSINTED FILL MATIL. / METMUC  LISTRE D GRNEL SIZED PIECES, SURFACE  NOTES: MS LETTER, COM DIECES, White esh,  brick pieces etc.	References:
Collected 1-402 VOA TAR-TOL VOA  2-80g. SVOA JARS-TOL SVOA  P/PCB  FROMS.  EPTOX M. F.R.C.	ABB Environmental Services, Inc.—

#### SURFACE SOIL SAMPLING RECORD

		NN4 FURN			Project No. 7169-40
Lo	cation No	55-106		Date 10-10-9	Time 16:00 End 16:15
Co	ordinates NE	hr 2505-150l	E ON GEOPH	YSKAL GRID	AOC DEBRIS LANDFILL
SKETCH MAP OF SAMPLING SITE					
1			<b>*</b>		Crew Members:
1	<b>*</b>				1. TOM LONKLEY 2. AShlep FOSTER
- Z		L	MDFILL		3. 4.
			<b>▲</b> ≤5 -10	6	5.
(MIND)			(C)	) * ©	Monitor Equipment:
	SCALE 1"		_FT.		Explosive Gas Avail. Oxygen OVA Y N
	°	No.	Sample No.	Depth (ft.)	Other RAD Meter
	SCALE IN FEET	Samp	oling Equipmo	ent: Bucket	Photographs: (Roll Exposure)
	2		n. Materials: WNOX, DI ZTABLE W	water, latex	
SAMPLE DESCRIPTION:  BLACK SOIL MAT'L. DRY TO			References: Field Book #: Page #:3		
DAMP, MANY POOTS, ORCHNIC  W/ FILL MATIL.				Attachments:	
NOTES: LOCATION 15 ON TOP " OF LAWN FILL  NEAR 1505-150E ON GEOPHYSICAL  GRID					Signature: M. M. M.
1- 40g. VOA JAR TEL VOA 2-8g. SUCA STARS TEL SUCA P/RB					
	<b>a</b> - '	ig. SUCA	TARS.	TCL SUCH P/PCB " INDRA.	
	•			EP TOX.	ARR Environmental Services, Inc.

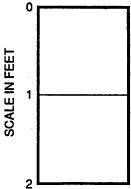
#### SURFACE SOIL SAMPLING RECORD

Site:	HANNA	FURNACE		Pr	oject No.	7169	-40
	<u> 55-1</u>	07	Date		-		nd 17:15
		- 205 ON GEOTH			,		LANDFILL

# SKETCH MAP OF SAMPLING SITE 155-107 Ň LANDFILL

SCALE 1" \_\_ /00 FT.

#### SAMPLE PROFILE



ſ		Sample No.	Depth (ft.)
Γ	S-1	HFSSIOT XXX94XX	0.5-0.8
1	S-2		
	S-3		

Sampling Equipment:

5.5. Spoon + Bucket

Decon. Materials:

LIQUINOX, DI Water POTABLE WATER

SAMPLE DESC	RIPTION: _	BLA	ck,	OPLANICS,		
Same	MAT'L.	AS	see	AT		

55-105 55-106 55-108

NOTES: NEAR 150E - 205 OF GEOPHYSICAL GRID AT A PREVIOUS EXCALATION (BY BACKhoe?) MONG SLIPE FACE-NEAR RD. 7 IN AREA OF LITS OF

SURFACE DEBRIS & GARBAGE

1-40.2 VOA JAR 2-807. SUBA JAR (SER SS-105 for ANALYSES)

#### **Crew Members:**

- 1. TOM LONGLEY
- 2. ASHLEY FOSTER
- 3.
- 4.
- 5.

Monitor Equipment:

PI Meter **Explosive Gas** 

Avail. Oxygen

OVA Other

RAD. METER

Photographs: (Roll Exposure)

References: \_

Field Book #: \_

Page #:\_ Attachments:

Signature:\_\_\_

-ABB Environmental Services, Inc.-

SURFACE SOIL SAMPLING	RECORD
Site: HANNA FURNACE	_Project No7/69-40
Location No. 55 - 108 Date 10-10-	44 Time 15:45 End 16:00
Coordinates NEAR 2805-330E on Geophys. Geld	AOC_DEBRIS LANDFILL
SKETCH MAP OF SAMPLING SITE	Crew Members:
4	
	1. Ton Longley
	1. Ton Lungley 2. Ashley Foster
N /	] 3.
LANDFILL	] 3.
	4.
	-  5.
SS-108	6.
(QUAIN)	<u>-[</u> ]
	Monitor Equipment:
SCALE 1" = 100 FT.	Explosive Gas Y N
· ·	Avail. Oxygen Y N
SAMPLE PROFILE  No. Sample No. Depth (ft.)	n Other
S-1 HF3510&XXX94XX 0.5 to 0.8	RAD. Meter
Sampling Equipment:  S.S. Spoon & Bucket	Photographs: (Roll Exposure)
Sampling Equipment:  S.S. Spoon & Bucket	N/A
3.3. 3934.	
Decon. Materials:	
LIQUINOX, DI Water, POTABLE WATER	-
SAMPLE DESCRIPTION:	References:
WET BLACK, LANDFILL MATIL., W/ PIECES OF RUSTY STEEL, SLAS,	Page #:3
Soil, etc.	Attachments:
	4.63,
NOTES: AT BOTTOM OF LANDFILL SWIPE,	Signature: The ill duffy
NEAR SMILL BODY OF DONDED	
Water.	
1-403 VOA JAR TCL VOA 2-803. SVOA JARS TCL SVOA " P/PCB	
" P/PCB	
EP TOX Thorg.	ABB Environmental Services, Inc.—

Site:	HANNA FURNA	re .	F	Project No	7169-4	10
Location No.	HANNA FURNAC SS-109	Date	10-11-94	Time/	8:00 En	d 18:10
Coordinates	·			AOC	OIL SHAD	L AREA
	ETCH MAP OF SAMPLI	1920X.7	SHARL 7	Crew M	embers:  n Longle  thy Grees	
WIND	<b>A</b> 55-	109			Equipment	
	Deco <u>Liq</u> i	Sample No.  HESSIGNMANAY  Diling Equipment:  Some of E  Materials:  MALERIALS:   ucleet	PI Meter Explosiv Avail. On OVA Other	re Gas xygen		
NOTES: App	DEBRIS  OLD FLOOR OF  PERISAL ON	- may BE	0.4	Referen Field Bo Page #: Attachm Signatur	eok #:	2 2 n.S. Jaky
					invironments	I Services Inc.

SURFACE SOIL SAMPLING RECORD

		SUR	FACE SOI	L SAMP	LING	RECORD			
	Site:HAA	INA FURNA	Œ		F	Project No	7169-40	)	
	Location No	55-110		Date	10-11-9	4 Time	7:45 End .	17:50	
	Coordinates					AOC	,		
	SKETCH	MAP OF SAMPLIN	JG SITE						
		OI OANNI EN				Crew Me	embers:		
1						1 Ton	~ Longler	1	
		514 66				a Va	a Longley Huy GRE	56	
N		FOR 55-1 Refer 25 55-114	Elestate	7		2.	7 -		
lï		13eper 10	SKEIGH	for	į	3.	•	<del></del> `.	
						4.			
						5.			
						6.			
(WINI									•
						Monitor I	Equipment:	~ ·	
	SCALE 1	*	FT.			Explosive	e Gas	⊘N ′N	
-	SAMPLE	PROFILE				Avail. Ox	ygen \	Y N Y N	
	0	No.	Sample No.	Depth	(ft.)	Other	RAD · A		-
	<b>—</b>	S-2	HF45110XXX94	0-0	2.7				-
	CALE IN FEET	S-3				Photogra	phs: (Roll Ex	(posure)	•
	N 1	Samp	ling Equipm	ent:					•
	SCAL	_5.9	s, spoon	Franch	et				• •
			. Materials:	377					
	2		INDX & F I water		rer,				
			-4	<					
SAI	MPLE DESCRIPTIO	BLACK, G	RAUELLY	SAND/S	s. ct	Reference Field Book	ces: ok #:2		
		Fill - Su				Page #:			
		DEMOLITION	DEBRIS.	- DRY		Attachin			<del></del>
	Tui51	South of	Concasto	Footin	,	Signatur	e: Tu	O. duy	2
NOT			JAR	0	_			1	F
	<b>J</b> .	-88y. 500	a Jars		<del>-</del>				
_		<u> </u>			-				
						ABB E	nvironmental :	Services, Inc.	

	su	RFACE SOII	LSAMPL	ING REC	CORD	
	NNA FURNACE			Projec	a No. 716	09-40
Location No	55-111		Date 10	1-11-74 Tin	ne <u>(** 30</u>	_ End
Coordinates				/	AOC OIL S	HACK AREX
SKE	TCH MAP OF SAMPL	ING SITE				
.	TOTAL OF SAME	ind one		Cr	rew Members	s:
<b>†</b>		<u> </u>			Tom Lon	g ley
	_				Tom Long	
N	FOR 55.	111 LOCATION H FOR 55-	Refue	2.	Karry a	<i>40 '</i> 75
	18 Sketc	7010 330	114	3.		
				4.		
				5.		
MIND				6.		
					onitor Equipr	
504	F 42		!		Meter plosive Gas	Ø N
SCA	_E 1" =	FT.		Av	ail. Oxygen	
SAM 0	PLE PROFILE			<u> </u>	VA :her	Y N
- 1	No. S-1		Depth (f	11.)		0. meter
<b>⊢</b>	S-2	HFSSILLXXX94			<del></del>	······································
#	S-3	1		╌┤│╒┆	notographs: (	Roll Exposure)
≧ 1	Sam	inlina Fauinme	ant.			
CALE IN FEET	_ <u></u>	pling Equipme	Buchet			
ο̈́	500	· · ·				<del> </del>
		on. Materials: uwo≠ ≠ P+7:4	ictor,	].		
2		I water				
	<b>h</b> , a	740 - 444 - 14	4	- 0		
	DELACLE, GRA			- :	eferences: eld Book #: _	_
	moist, FIRM in		10 8 11 13;	Pa	age #:	
				-   At	tachments:	•
				_   _		1101,
	rox. 100 N 7 3		XIE	- Si	gnature: <u>~</u>	Jun D. Angley
	OF LARGE EXIST			-   h		00
	Dup & MS		2 4855	-		
· · · · · · · · · · · · · · · · · · ·	3- 402 VO	DA JARS		-	÷	
	· "J. 3	-,, -,,,,,				
					ARR Environ	mental Services, inc.—

يتبع نبروري سينجه تبدت

sin: Han		IL SAMPLING	
Location No.	55-112	Date 10-11-9-4	Project No. 7169-40 Time 17:15 End 17:20
			ADC OIL SHACK AKEN
SCALE 11 O SCALE 12 O	FOR SS-112 LOCATION STERMAP OF SAMPLING SITE  FOR SS-112 LOCATION  LEPER TO SKEAL  SS-114  NO. Sample No.  S-1 HFZSITZXXX91  S-2  S-3  Sampling Equipm  S-5 SPOON  Decon. Materials  Lighthaux if P	Depth (ft.)  HXX 0-0.3  ment:  Parameter  To water	Crew Members:  1. Tom Longley  2. Kathy Gross  3.  4.  5.  6.  Monitor Equipment: PI Meter Y N Explosive Gas Y N Avail. Oxygen Y N OVA Y N Other  RAD Meter  Photographs: (Roll Exposure)
SAMPLE DESCRIPTION	ON: GRAVELLY SAND, LACK, DRY to MOIST,	BILT, FILL	References:
ЮТЕS:	40z. VOA JAR 8a SVOA JARS		Signature: Shu D. Try
			ABB Environmental Services, Inc.

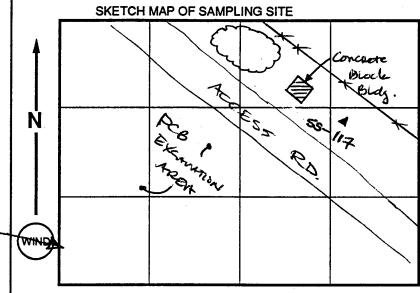
Site:	HANNA	FURNICE		Project No. 7169-40
				Project No. 7469-40  4 Time 1710 End 1715
				AOC DIL SHACK AREVA
SKE	TCH MAP OF SA	AMPLING SITE		Crew Members:
				1. Tom Longley 2. Kathy GROSS
	SEE	SKETCH for		3. 4.
	ł	DENTION		5. 6.
			1	Monitor Equipment:
O SAM	LE 1" = PLE PROFILE	No. Sample No. S-1 HF#SII3 wxf		Explosive Gas Y N Avail. Oxygen Y N OVA Y N Other
SCALE IN FEET		Sampling Equipm 5.5. Spean Decon. Materials Lanway & S DI water	: Potubler	Photographs: (Roll Exposure)
IPLE DESCR ∠L∧-	MIPTION: Bl	shig, meta	GRAVEL,	References: Field Book #: Page #: Attachments:
es: Lo		FACE DEBR 10A JAR SVUA JARS	15	Signature: H. D. Kl

SURFACE SOIL SAMPLING RECORD

Site: Hama F	ornace policy to district	Project No. 7169-40
Location No. RE 331	15XXX94XXXD Date 1010194	_ Time 1655 End 1705
Cooldinates		A00 30 0 100 3 1 2 1
SKETCH MAF	OF SAMPLING SITE	
	Leaves &	Crew Members:
	and string the	1. Boutles
	crus wads	1. Boutles 2. K. 6-055
<del> </del>	A-35.115	2. (2.)
		3.
	city God Side	4.
	Soil Gide 1 X	5.
	W W	
	1 cas, flicaled	6.
	L www. flicted	Monitor Equipment:
SCALE 1" =		PI Meter N N Explosive Gas
		Avail. Oxygen
O SAMPLE PRO	No. Sample No. Depth (ft.)	OVA Y N Other
Pill	S-1 HESSIISXXXXXXX O-D.51	
B. Fill	S-2 S-3	
SCALE IN FEET		Photographs: (Roll Exposure)
ALE	Sampling Equipment:	
S	55 bucket	
	Decon. Materials:	
2	Liquinox solin.	
MPI E DESCRIPTION:	0-0,5'- black gravely silt	References:
2 some organic	matter moist tobsoil.	Field Book #: 3
	choreup silly grewells	Page #: 4,5 Attachments:
races of tile o	ragnetts.	- AliA
res: Callactad	Sample + Dup, canposited	Signature: Pak But L
in Nicket	All parameters VCC	
5x0, 801/	EB, my wisterner.	
		ABB Environmental Services, Inc.

SURFACE SOIL SAMP	LE DATA RECORD
Project: Hanna Furinace Project Number: 7169-40 Sample Location ID: HF55116 XXX94XX Time: Start: 1705 End: 1715	Site: Sherange Steel- Date: 1944  Signature of Sampler: R- KButl
	ALL USED    ETHYL ALCOHOL   25% METHANOL/75% ASTM TYPE II WATER   DEIONIZED WATER   LIQUINOX SOLUTION   HEXANE   HNO3 SOLUTION   POTABLE WATER    OLLECTED:   NONE    SOIL TYPE:   CLAY   SAND   ORGANIC   GRAVEL   WITCH   ORGANIC   GRAVEL   WITCH   ORGANIC   CK   GRAVEL   CK   CHAPPER   OLL     ELOCATION SKETCH: GPERCES OIL SECURCIAL CLAY   Size Soul School   Oll     Chapper   Oll   Oll     Chapper
MATRIX  DE REQUIRED  AT THIS  LOCATION  SERVED  ACID-BASE  REQUIRE   (1) 1005  (2) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Sample collected near tires Empty, et croshed down	- oily satid topsoil?

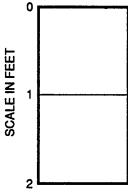
## They are take SURFACE SOIL SAMPLING RECORD \_\_\_\_\_Project No. \_\_\_\_7169-40 Site: HAMMA FURNICE Location No. 55-117 Date 10-10-14 Time 1800 End 15:10



SCALE 1" = +++ 5 FT.

#### SAMPLE PROFILE

Coordinates \_\_\_



ĺ		Sample No.	Depth (ft.)
	S-1	HFS5117XXX94XX	0.2 10 0.3
	S-2		
1	S-3		

Sampling Equipment:
1. HAND Auger
Decon, Materials:
LIQUINOX & POT. Water
NT 1.5.40 =

SAMPLE DESCHI W	 RAANIC,	michy	
		J	

NOTES:	In area w/ much surprice
	NEAR CULVERT/catch Brown
	1-40y VOA JAR
	2.80% JARS

### **Crew Members:**

- 1. Tom bongley 2. Ashley Foster

ADC SHENANGO STEEL

- 5.

Monitor Equipment:

Pl Meter	$\bigcirc$
Explosive Gas	Y
Avail. Oxygen	Υ

Other	ΥN	
	RAD METER	

Ν

Photographs:	(Roll	Exposure)

References:	2	
Page #:	5	
Attachments:		

10		71	
Signature:	70.	Lym	
-		777	

-ABB Environmental Services, Inc.-

## SURFACE SOIL SAMPLING RECORD Site: Hanna Furnace Project No. 7169-40 Location No. HESSIIEXXX 94XX Date 10/11/44 Time 1025 End 1040 AOC Sherango Steel Coordinates \_\_ SKETCH MAP OF SAMPLING SITE **Crew Members:** 1. BBtle-2. K Gruss N WIND **Monitor Equipment:** PI Meter **Explosive Gas** SCALE 1" = NTS FT. N Avail. Oxygen Ν OVA **SAMPLE PROFILE** Ν Other Sample No. Depth (ft.) HFSS/1EXXX94KX NA S-2 SCALE IN FEET S-3 Photographs: (Roll Exposure) Sampling Equipment: Decon. Materials: Deignized water liquinox solin SAMPLE DESCRIPTION: black to dark brown References: . Field Book #:. wet silty sand to some Page #: \_\_\_\_\_\_\_\_\_ Attachments: NIA Signature: P- KR point in executation @ former

-ABB Environmentai Services, Inc.-

		ivrvacë 119				
location No Coordinates						UANGO STEEL
			•			
SKE	TCH MAP OF	SAMPLING SITE			•	
					Crew Membe	rs:
					1. Tom L	ong ley
					1. Tom L 2. Ashley	- () 
					Z. Asverey	POSI BIL
					3.	
					4.	
				[	5.	
)					6.	
					Monitor Equip	oment:
904	LE 1" =	FT.			PI Meter Explosive Ga	s Y N
					Avail. Oxyger OVA	<sup>1</sup> Y N
O SAM	PLE PROFILE	No.   Sample No	Der	oth (ft.)	Other	Y N
		S-1 HF-55119xx		-0.6		MO. Meter
HII I		S-2 S-3				
SCALE IN FEET	_		_		Photographs:	(Roll Exposure)
ALE		Sampling Equip	ment: Bender	r i		
SS		tare aux	<u> </u>			
		Decon. Materials	5: P.T. Wit	er =		
2 —		DI Woter				
PLE DESCR	RIPTION:				References:	
	Very G	Pavelly Roots	. –		Field Book #: Page #:	2
<del>- ,</del> -	p022:64	J furnace	mater	rial	Attachments:	
<del></del>					<del></del>	111 1
ES: FROM	n low soo	T Mar Concre	te i	·	Signature:	Hund. Z
bri	le debri:	T Near Concre is pile & heu 4 JAR UA JORS	p of to	RES		2
	40g. VO	4 JAR	<b>v</b>	<u> </u>		
<del></del>	- 8 on 5 v	ua Jors	<del> </del>	<del></del>		

3.3

Site: Harra Furnace Project No. 7169-40  Location No. HFSS1ZOXXX94XX Date 191644 Time 1715 End 172  Coordinates AOC Grenage Stee  SKETCH MAP OF SAMPLING SITE  Crew Members:  1. BiBitler	
Coordinates  SKETCH MAP OF SAMPLING SITE  Crew Members:	
SKETCH MAP OF SAMPLING SITE  Crew Members:	25
Crew Members:	21
SCALE 1" = NTS FT.  SAMPLE PROFILE  Decon. Materials:  SAMPLE DESCRIPTION:  PLACE MOIST GROUP HITES  Sampling Equipment:  Photographs: (Roll Exposited Book #: 3 Page #: 5 C Attachments:	
NOTES: Collected for VOCs. SVOCs.  Inorg. post 1803. Eptox metals.  ignit react corres.  ABB Environmental Service	

Site: Hanna Furnace P	Project No. 711c4-40
Coordinates	AOC Sherwigo Steel
SCALE 1" = NTS FT.  SAMPLE PROFILE  No. Sample No. Depth (ft.)  S.1 HESSIZZAXXAUX O.C.S  S.2  Sampling Equipment:  S.5 B.C.C.  S.5 B.C.C.  Decon. Materials:  Diving Limite  Liquinax Sciin  SAMPLE DESCRIPTION:  S.7 = Ak Dicon Sciid  Aranci, dry growel is some firm  L.5 S.C.C.  L.5 S.C.   Time 1725 End 1740  AOC Sherwig Steel  Crew Members:  1. (3.3) tle-  2. k. 6.7055  3.  4.  5.  6.  Monitor Equipment: PI Meter Explosive Gas Avail. Oxygen OVA Y N  Other Y N  Photographs: (Roll Exposure)  NIT  References: Field Book #: 3  Page #: 6-7  Attachments:	
NOTES: Collected for 1005, 50000,  1000 post / Prides, EPTCK metals, 1000, 1000, 1000, 1000.	Signature: Peks. T.
	——ABB Environmental Services, Inc.——

SURFACE SOIL SAMPLING RECORD				
Site: Hanna Furnace Flocation No. HFSS121XXX94XX Date 10/11/94	Project No. 7169-40			
Location No. HESSIZIXXX94XX Date Ichilay				
Coordinates	_AOC Sherwago Steel			
SKETCH MAP OF SAMPLING SITE				
	Crew Members:			
†	1. BButler			
	1. BButler 2. K Gross			
N (300 55.118)				
	3.			
1522	4.			
	5.			
	6.			
(WIND)	·			
	Monitor Equipment: PI Meter  (Y) N			
SCALE 1" = <u>NTS</u> FT.	Explosive Gas  Avail. Oxygen  N			
SAMPLE PROFILE	I OVA Y N			
No. Sample No. Depth (ft.) S-1 HF551 ZIKXX54KK C-C.ら	Other			
	Photographs: (Roll Exposure)			
Sampling Equipment:  Society				
Decon. Materials:  Detonized H20				
Liquinox solin				
SAMPLE DESCRIPTION: Black fine graned rederial	References:			
(dust) adjacent to foundation hole	Field Book #: 3 Page #: 8/9			
Moist. some sky Suggests. Collected	Attachments:			
nground level.	<u>~~~</u>			
NOTES: Base of holes in foundation	Signature: P K But L			
filled his raids, water level ~ 8' bgs				
	ARR Environmental Services Inc.			

## SURFACE SOIL SAMPLING RECORD Site: Hanna Furnaco Project No. 7169-40 Location No. HF55123XXX94XX Date 10/11/44 Time 1000 End 1010 AOC Sherango Steal Coordinates \_\_\_ SKETCH MAP OF SAMPLING SITE **Crew Members:** 1. BButler 2. K Gross (see 45-118 N WIND **Monitor Equipment:** PI Meter **Explosive Gas** SCALE 1" = FT. Avail. Oxygen N AVO. SAMPLE PROFILE Other Sample No. Depth (ft.) No. S-1 HF551 Z3XXX44XX S-2 SCALE IN FEET S-3 Photographs: (Roll Exposure) Sampling Equipment: 55 Spoon 55 Bicket Decon. Materials: Deignized Water SAMPLE DESCRIPTION: BICK fine conciner References: \_ Field Book #: 3 material (dust) (w little slag, brick Page #: <u>8/9</u> fragments adjacent to foundation Attachments: PID = O Signature: RIC3 from boildezal Sample collected NOTES: \_ pile -ABB Environmental Services, Inc.-9312030S L 2

	ICE SOIL SAMPLING	ACCORD.
Site: HANNA FURN	ACEP	Project No. 7169-40
Location No. 55-124	Date <u>10-10-9</u>	Time 17:45 End 18:00
Coordinates		AOC SHENANCO STEEL
SKETCH MAP OF SAMPLING	SITE	l <b>-</b>
		Crew Members:
	*	1. Tom Longley
Rusisi		1. Tom Longley 2. Ashley Foster
N		·
	Concreto	3.
	DEBRIS	4.
	<b>A</b>	5
R		5.
TO THE TOTAL OF TH	40may	6.
	TRESPACE AND	Monitor Equipment:
	£1410	PI Meter V N
SCALE 1" = 100 FT.		Explosive Gas Y N
SAMPLE PROFILE		LOVA CONTRACTOR
	ample No. Depth (ft.)	Other Pas. Motor
S-2	95124XXX94XX 0.5-0.8	
<u> </u>		Photographs: (Pall Expecuse)
SCALE I Sempling S.S. S. S	r Caviernant	Photographs: (Roll Exposure)
Sampling	g Equipment:	
	Auger	
	Materials: ox is Potrole water	
	= winter	
10 - 1 - T	r waxaa aa	Defendance
SAMPLE DESCRIPTION:,	GRAVELLY SOIL ?	References:
		Page #:
	•	Attachments:
		11 11
NOTES: 1-400. VOA JA	r TCL VUA	Signature: The de Ayley
2. En SNUA JA	-25 TCL 500,4	
	" P/026	
	" Inorganis	
	-	
		ABB Environmental Services, Inc.

O' HANNA F	riginal	7/10/40
		Project No
Coordinates	Date	AOC SHEWANGO STEEL
Coordinates		
SKETCH MAP OF	SAMPLING SITE	
SCALE I" = ~ +	No.   Sample No.   Depth (ft.)  S-1   HF55125xxx94xx   0.5-0.6  S-2   S-3    Sampling Equipment:   .  S.S. Bucket'   Sproms 2   HAND AUC.   JR.	Crew Members:  1. Ton Longley 2. Athley Process  3.  4.  5.  6.  Monitor Equipment: PI Meter Y N Explosive Gas Y N Avail. Oxygen Y N Other Y N  Photographs: (Roll Exposure)
2	Decon. Materials: Liau word ? Pot. water, DI water	
	Dorah , Slag like	References:
NOTES: 1-42.	VOA JAR SVAA JARS	Signature: H. D. Thy
		ABB Environmental Services, Inc.

SURFAC	EWATER AND SEDIMEN	VI SAMPLE FI	ELD DATA RE	CORD
Project: HANN	A FURNACE	Site:	NYSDEC	
Project Number: 7	169-40	Date:	10-11-94	!
Sample Location ID:	5W/SD-101 HFSW	101 XXX94 XX,	HESDIOKXX	14KK
Time: Start: <u>09:30</u>	End: /0:15	Signature of	Sampler:	w. Zh
TEMPERATURE 13.3 FIELD GC DATA: [ ] FIELD DUPLIC	EQUIPMENT USED  WNONE, GRAB IN  [1] BOMB SAMPLEF  [1] PUMP  LINED? [1] YES, SEE FLOW MEASUR  Deg. C. SPEC. COND. 3.1  ATE COLLECTED	FOR COLLECTION: TO BOTTLE  REMENT DATA RECO  MS/cm  PHILOS/CM PH.  SAMPLE LOCA (XYES)	[X]DEIONIZED WAT [X]LIQUINOX SOLU [] HEXANE [] HNO3 SOLUTION DYPOTABLE WATE [] NONE  RD	DISS. O <sub>2</sub> METHOD USED:  [ ] WINKLER
THE BIOITY - 5	Sent 2 10 113 70	[]NO		M PROBE
SEDIMENT INFORMATION  DEPTH OF SEDIMENT SAMPLE  FIELD GC DATA: [ ] FIELD DUPLIC DUPLICATE ID	[ ] GRAVITY CORI	COLLECTED: 2 VOA or other param.	DECONTAMINATIO  3 ALL USED  [] ETHYL ALCOHO [] 25% METHANOI [] DEIONIZED WA PO LIQUINOX SOLUTIO [] HEXANE [] HNO 3 SOLUTIO [] POTABLE WATE [] NONE  SEDIMENT TYPE: [] CLAY [] SAND [] ORGANIC [] GRAVEL	OL L/ 75% ASTM TYPE II WATER TER JTION N
SAMPLES COLLECTED  MATRIX				
3 IF REQUIRED ATTHIS LOCATION	3 IF PRESERVED WITH ACID-BASE REQUIR			SAMPLE BOTTLE IDS
NOTES/SKETCH	LANDFILL 87 300 SW/5D-102 SW/5D- Swall lonely panded i	HF HF	SW 101 XXX90 SD 101 XXX90	<del>i</del> ××

Contract with the	SURFACEW	ATER AN	D SEDIMENT	SAMPLEFI	ELD DATA RE	CORD
Project:	HANNA	FURME		Site:	NYSSEC	
Project Number:	7169-	46		Date:		
Sample Location	10: <u>SN/50-102</u>	HFSW102	XXX94XX/4FSD	102 XXX 94 X	X V	111
Time: Start:	j0:15	End:	10:30	Signature of	Sampler:	· W. Ky
SURFACE WATER I	NFORMATION	TY	PE OF SURFACE WA	TER:	DECONTAMINATION	LE LUDE LIEFD.
PLUS EXTRA	VOL. FOR MS/1	nsd [] M	STREAM []R	IVER	3 ALL USED [ ] ETHYL ALCOHO	
WATER DEPTH AND	SAMPLE LOCATION	V	(ft)		DEIONIZED WAT	
DEPTH OF SAMPLE FROM TOP OF WAT		ACE (M) []	UIPMENT USED FOR NONE, GRAB INTO B BOMB SAMPLER PUMP	COLLECTION: OTTLE	[]HEXANE []HNO3 SOLUTION [X POTABLE WATE []NONE	
VELOCITY MEASUR	EMENTS OBTAINED	? [ ] YES, SEE	FLOW MEASUREME	NT DATA RECOR	1D	
	41.7		n	u5/cm	A - a	8.9 mg/L
TEMPERATURE	11.6	eg. C. SPEC.	COND.	<del>_µmhos/cm</del> - pH _	9.02 Units	DISS. O <sub>2</sub>
FIELD GC DATA: [X]	FIELD DUPLICATE	COLLECTED		SAMPLE LOCAT	ION SKETCH:	METHOD USED:
Ture - 117	DUPLICATE ID		<del></del>	[]YES []NO		[ ] WINKLER [X] PROBE
Sul 0.23	HFSW 102x	XX 94 X I	<b>D</b>	[ ]140		MENOR
SEDIMENT INFORMA	•	(ft) [	DUIPMENT USED FOR ] GRAVITY CORER ] S.S. SPLIT SPOON ] DREDGE ] HAND SPOON ] ALUMINUM PANS SS BUCKET	R COLLECTION:	DECONTAMINATIO  ALL USED  [ ] ETHYL ALCCHO [ ] 25% METHANO  [ ] DEIONIZED WA [ ] LIQUINOX SOLU [ ] HEXANE	DL U 75% ASTM TYPE II WATER TER
		ť	ī		[ ] HNO 3 SOLUTIO	
		· K	PE OF SAMPLE COL	U.A.	[ ] NONE	in .
		(X	COMPOSITE FOR	other	SEDIMENT TYPE:	ŧ.
			MPLE OBSERVATION	NS:	(X) SAND	}
		. [ . [×	COLOR Birch	ORGANIC	Ø ORGANIC Ø GRAVEL	
FIELD GC DATA: [34	FIELD DUPLICATE O DUPLICATE ID HF 50 102	COLLECTED	l <del></del>			
SAMPLES COLLECT						
	MATRIX					
_						
3 IF REQUIRED US AT THIS VE LOCATION US	SEDIMENT	3 IF PRESERVED W ACID-BASE	ATH VOLUME REQUIRED	3 IF SAMPLE COLLECTED		SAMPLE BOTTLE IDS
[X] TOL VOC [)	X	[ }	·	}		//
IN TOL P/REB 1	4 14	i i		<u> </u>		·
[ix] TOL MURG. [A	9 [4	[ ]	<del></del>	<b>-</b> } }		( <del></del> /
IX EP TOX M, ERF	į įd	į į				
	<u> </u>	[]				
NOTES/SKETCH						
	SEE	e ske	TCH FOR	SW/SD	-101 PN 1	DATA REZORD
						·
						riconmental Services

SURFACE WATER AND SED	INIENI SAMPLE	FIELD DATA RI	ECORD
Project: HANNA FURNACE	Site:	NYSDEC	
Project Number: 7169-40		10-12-94	
Sample Location ID: 5W/5D - 103			1 2 7
Time: Start: 15:00 End: 15:30	Signature	of Sampler:	u de halu
OURSE OF WATER INCORPORTION			
SHIPP: 04 CANAL [ ]STREAM [ ]PONDLA  WATER DEPTH AND SAMPLE LOCATION 8 (ft)		X DEIONIZED WA	OL IV 75% ASTM TYPE II WATER
DEPTH OF SAMPLE 6 I NONE, GI FROM TOP OF WATER 6 I PUMP 6	USED FOR COLLECTION: RAB INTO BOTTLE IMPLER	[] HNO3 SOLUTIO [X] POTABLE WATE	ON ER
VELOCITY MEASUREMENTS OBTAINED? [ ] YES, SEE FLOW M	EASUREMENT DATA REC	ORD	
TEMPERATURE N/A Deg. C. SPEC. COND	0.97 m5/cm	1 8.62 Units	DISS. O <sub>2</sub> N/A ppn
FIELD GC DATA: [ ] FIELD DUPLICATE COLLECTED DUPLICATE ID	SAMPLE LOC [★] YES	ATION SKETCH:	METHOD USED:
TUPB- D	[]NO		[ ] PROBE
SAL -0.03 HFSW 103 XXX 94 XX			
DEPTH OF SEDIMENT SAMPLE 1 J.S.S. SPI [ ] DREDG [ ] HAND S  BELOW 4 [ ] SS BUC [ ] SS BUC [ ] HAND  TYPE OF SIM DISCRE PLI COMPO  SAMPLE OE  LI ODOR	LIT SPOON E POON UM PANS KET BULLET ALGER AMPLE COLLECTED: TE FOR VOL SITE FOR When's BSERVATIONS:	3 ALL USED []ETHYL ALCOH	OL DL/ 75% ASTM TYPE II WATER ATER JUTION DN
SAMPLES COLLECTED			
MATRIX			
3 IF REQUIRED AT THIS LOCATION BY SYMM 3 IF PRESERVED WITH ACID-BASE  [XTC-L VOC [X] [X] [] [X] " SVCC [X] [X] [] [X] " TN:RG. [X] [X] [] [X] " TN:RG. [X] [X] [] [X] SP TOY R F.C.A [] [X] [] [X]	VOLUME 3 IF SAME COLLECTION [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [		SAMPLE BOTTLE IDS
NOTES/SKETCH			
SEDIMAN DELTA 2	SW/S CUTEAU CATE	D-103	
		ADD E-	vironmental Services

SURFACE WATER AND SEDIMENT	SAMPLEF	IELD DATA REC	ORD
Project: HANNA FURNINGE	Site:	MYSDEC	
Project Number: 7169-40	Date:	10-11-94	
Sample Location ID: 5W-104		N	141
Time: Start: 12:30 End: /3:00	Signature of	of Sampler:	mus N. Kong
	RIVER SEEP  R COLLECTION:	DECONTAMINATION F  ALL USED  [ ] ETHYL ALCOHOL  [ ] 25% METHANOU 7:  [X] DEIONIZED WATER  [X] LIQUINOX SOLUTION  [ ] HEXANE  [ ] HNO 3 SOLUTION  [ X] POTABLE WATER	5% ASTM TYPE II WATER
VELOCITY MEASUREMENTS OBTAINED? [ ] YES, SEE FLOW MEASUREM		[ ]NONE	
	- <i>1</i>		
TEMPERATURE 12.1 Deg. C. SPEC. COND.	_ <del>µmhes/cm~</del> pH	7.87 Units D	01SS. 02 11.5'5 mg/L
FIELD GC DATA: [] FIELD DUPLICATE COLLECTED  TUFE - 14  Sul, - 0.01 HFSW 104 XXX94XX	SAMPLE LOCA [X] YES [ ] NO		METHOD USED: ] WINKLER KI PROBE
SEDIMENT INFORMATION EQUIPMENT USED FO	OR COLLECTION	DECONTAMINATION F	a Hibe Heep.
[ ] GRAVITY CORER [ ] S.S. SPLIT SPOON [ ] DREDGE  DEPTH OF SEDIMENT SAMPLE	I	3 ALL USED [ ] ETHYL ALCOHOL	75% ASTM TYPE II WATER
Call of ment [] SS BUCKET  [] SS BUCKET  [] SS BUCKET  [] DISCRETE [] COMPOSITE  SAMPLE OBSERVATION [] ODOR [] COLOR [] COLOR [] TIELD GC DATA: [] FIELD DUPLICATE COLLECTED	ONS:	SEDIMENT TYPE: [ ] CLAY [ ] SAND [ ] ORGANIC [ ] GRAVEL	÷.
DUPLICATE ID	FER TO SHEET	SEPARATÉ DAT FOR SEDIM	A RECORD
SAMPLES COLLECTED	3,1001	7 44	
MATRIX			
3 IF REQUIRED  AT THIS  LOCATION  THE STATE OF THE SERVED WITH VOLUME REQUIRED  [X] TOL VOC [X] [] []  [X] " F/PLB [X] [] []  [X] " [X SALG [X] [] [] []  [X] " [X SALG [X] [] [] []  [X] " [X SALG [X]	3 IF SAMPI COLLECTE		AMPLE BOTTLE IDS
NOTESISKETCH POLICES P.D.			
PLLESS SW-106 SW	-104 FALL	۸ <b>1</b>	onmental Services

SU	RFACEWATER	AND SEDIMENT	<b>SAMPLE F</b>	FIELD DATA RE	CORD
Project: <u>H</u>	ANNA FUNNA	ece_	Site:	MYSDEC	
Project Number:	7169-40			10-11-94	
Sample Location ID:_	SD - 104			1	1011
Time: Start: 16:0	∞ End:	16:30	Signature	of Sampler:	<u> </u>
WATER DEPTH AND SAM DEPTH OF SAMPLE FROM TOP OF WATER	PLE LOCATION(ft	EQUIPMENT USED FO [ ] NONE, GRAB INTO ] [ ] BOMB SAMPLER [ ] PUMP	PRIVER  SEEP  OR COLLECTION: BOTTLE	[ ] DEIONIZED WAT [ ] LIQUINOX SOLUTION [ ] HEXANE [ ] HNO3 SOLUTION [ ] POTABLE WATE	OL J 75% ASTM TYPE II WATER FER ITION N
VELOCITY MEASUREMEN	ITS ORTAINED?[ ]YES	. SEE FLOW MEASUREN	MENT DATA RECO	OHU	
TEMPERATURE	Deg. C. SF	PEC. COND	µmhos/cm pH	IUnits	DISS. O <sub>2</sub> ppm
FIELD GC DATA: [ ] FIELD DUP	DUPLICATE COLLECTE LICATE ID	ED	SAMPLE LOCA [ ] YES [ ] NO	ATION SKETCH:	METHOD USED: [ ] WINKLER [ ] PROBE
SEDIMENT INFORMATION	V	EQUIPMENT USED F	OR COLLECTION	: DECONTAMINATIO	ON FLUIDS USED:
DEPTH OF SEDIMENT SAI	MPLE ~ 7 (ft)	[ ] GRAVITY CORER [ ] S.S. SPLIT SPOOI [ ] DREDGE [ ] HAND SPOON DX ALUMINUM PANS [ ] SS BUCKET DX HAND BUC  TYPE OF SAMPLE CO [X] DISCRETE FOR [X] COMPOSITE FOR SAMPLE OBSERVATI [ ] ODOR [ ] COLOR [ ]	N  CHET AUGER  DILECTED:  VOC  OThers  IONS:	3 ALL USED [ ] ETHYL ALCOHO [ ] 25% METHANO [X] DEIONIZED WA [X] LIQUINOX SOLI [ ] HEXANE [ ] HNO 3 SOLUTIC [X] POTABLE WATI [ ] NONE  SEDIMENT TYPE: [ ] CLAY [ X] SAND [ X] ORGANIC	DL IL/ 75% ASTM TYPE II WATER I.TER UTION
SAMPLES COLLECTED	- <del> </del>				
MATE	RIX				
SIFREQUIRED ATTHIS LOCATION BY   3 IF PRESERY SEDIONAL COLORS  (X) (X) (X) (X) (X) (X) (X) (X) (X) (X	1000	3 IF SAMPI COLLECTE [ ] [ ]		SAMPLE BOTTLE IDS	
ixiepraka,c,c,I [ ]					; <u> </u>
NOTES/SKETCH	<del></del>			· <del>····································</del>	
	SEE SE	etch For	SW -104	FOR LOCA	TION
				ABB En	vironmental Services

SURFACE WATER AND SEDIMENT	SAMPLE FIELD DATA RECORD
Project: HANNA FURNACE	Site: NYS DEC
Project Number: 7169-40	Date: 10-13-94
Sample Location ID: SW/SD-105	1/1/
Time: Start: 16:00 End: 16:30	Signature of Sampler: h. h.
WATER DEPTH AND SAMPLE LOCATION	RIVER   3 ALL USED     SEEP   [ ] ETHYL ALCOHOL     [ ] 25% METHANOU 75% ASTM TYPE II WATER
[ ] PUMP	[X] POTABLE WATER [ ] NONE
VELOCITY MEASUREMENTS OBTAINED? [ ] YES, SEE FLOW MEASUREM	
TEMPERATURE 8.2 Deg. C. SPEC. COND. 1.0	ms/cn ms/cn pmhos/cm pH 8,6 Units DISS. 02 N/A
FIELD GC DATA: [ ] FIELD DUPLICATE COLLECTED  THES - 2  DUPLICATE ID	SAMPLE LOCATION SKETCH: METHOD USED: [ ] WINKLER
5-4-0.63 HFSW 105 XXX94XX	[]NO []PROBE
SEDIMENT INFORMATION  EQUIPMENT USED FO  [ ] GRAVITY CORER  [ ] S.S. SPLIT SPOON [ ] DREDGE  HAND SPOON [ ] ALUMINUM PANS IN SS BUCKET  HAND BUCKET  TYPE OF SAMPLE CO IN DISCRETE FOR IN COMPOSITE FOR  SAMPLE OBSERVATIO [ ] ODOR IN COLOR MACLE [ ]  FIELD GC DATA: [ ] FIELD DUPLICATE COLLECTED  DUPLICATE ID  SAMPLES COLLECTED	3 ALL USED  [ ] ETHYL ALCOHOL [ ] 25% METHANOL/75% ASTM TYPE II WATE  [ ] DEIONIZED WATER [ ] LIQUINOX SOLUTION [ ] HEXANE [ ] HNO 3 SOLUTION [ ] POTABLE WATER  DLLECTED: [ ] NONE  SEDIMENT TYPE: [ ] CLAY  IONS: [ ] YSAND IONG ORGANIC
MATRIX  3 IF REQUIRED AT THIS LOCATION BY SO	3 IF SAMPLE COLLECTED SAMPLE BOTTLE IDS
	SHIPPING CANAL SHIPPING SHI

SURFACE WATER AND SEDIMENTS	SAMPLE FIELD DATA RECORD
Project: HANNA FURNACE	Site: NYSDEC
Project Number: 7169-40	Date: 10-11-94
Sample Location ID: SW/SD -106	Varia
Time: Start: 14:00 End: 15:00	Signature of Sampler: Man D. Ang
SURFACE WATER INFORMATION  SHIP CANAL [ ]STREAM [ ]R  [ ]PONDLAKE [ ]S  WATER DEPTH AND SAMPLE LOCATION ~18 (ft)  DEPTH OF SAMPLE FROM TOP OF WATER ~18/11 (ft) [ ] NONE, GRAB INTO BOTH I	IVER 3 ALL USED  EEP []ETHYL ALCOHOL []25% METHANOL/75% ASTM TYPE II WATER  LX DEIONIZED WATER [X LIQUINOX SOLUTION
VELOCITY MEASUREMENTS OBTAINED? [ ] YES, SEE FLOW MEASUREME	· · · · · · · · · · · · · · · · · · ·
TEMPERATURE 3.7 Deg. C. SPEC. COND. 0.532 "	n S/em yumboolem pH 8.06 Units DISS. 02 N/A pom
	SAMPLE LOCATION SKETCH: METHOD USED:
THES- 3 DUPLICATE ID	YES [ ] WINKLER
SHOW HESW 106 XXX 94 XX	[]NO []PROBE
DEPTH OF SEDIMENT SAMPLE	[ ] ETHYL ALCOHOL [ ] 25% METHANOU 75% ASTM TYPE II WATER [ ] DEIONIZED WATER [ ] LIQUINOX SOLUTION [ ] HEXANE [ ] HNO 3 SOLUTION [ ] POTABLE WATER  LECTED: [ ] NONE  SEDIMENT TYPE: [ ] CLAY
SAMPLES COLLECTED	
MATRIX  3 IF REQUIRED ATTHIS LOCATION TO SEE SW-104  MATRIX  3 IF PRESERVED WITH VOLUME REQUIRED  3 IF PRESERVED WITH VOLUME REQUIRED  1 IF PRESERVED WITH VOLUME REQUIRED  2 IF PRESERVED WITH VOLUME REQUIRED  2 IF PRESERVED WITH VOLUME REQUIRED  3 IF PRESERVED WITH VOLUME REQUIRED  3 IF PRESERVED WITH VOLUME REQUIRED  4 IF PRESERVED WITH VOLUME REQUIRED  5 IF PRESERVED WITH VOLU	3 IF SAMPLE COLLECTED SAMPLE BOTTLE IDS  [ ] / / / / / / / / / / / / / / / / / /
• • •	DATA RECORD  =F GW-106 AUSC

SURFACE WATER AND SEDIMENTS	SAMPLEFI	ELD DATA RECORD
Project: HANNA FURNACE	Site: 人	iysdec
Project Number: <u>7/69</u> -40	Date:	10-12-94
Sample Location ID: SW/SD - 107		. 11 01.
Time: Start: 17:20 End: 18:00	Signature of	Sampler: Than D. Tayly
SURFACE WATER INFORMATION  SHIP CANK [ ] STREAM [ ] R  [ ] POND/LAKE [ ] S  WATER DEPTH AND SAMPLE LOCATION	EEP	DECONTAMINATION FLUIDS USED:  3 ALL USED  [ ] ETHYL ALCOHOL  [ ] 25% METHANOL/ 75% ASTM TYPE II WATER  [ ] DEIONIZED WATER  [ ] LIQUINOX SOLUTION  [ ] HEXANE  [ ] HNO <sub>3</sub> SOLUTION  [ ] FOTABLE WATER  [ ] NONE
VELOCITY MEASUREMENTS OBTAINED? [ ] YES, SEE FLOW MEASUREME	NT DATA RECOR	ID
TEMPERATURE 8.4 Deg. C. SPEC. COND. 0.95	m5/cm <del>µmhos/cm</del> pH_	8.6 Units DISS. O <sub>2</sub> N/A ppm
FIELD GC DATA: [ ] FIELD DUPLICATE COLLECTED	SAMPLE LOCAT	
THEB- 2 DUPLICATE ID	[ ]YES [ ]NO	[ ] WINKLER [ ] PROBE
540.03 HFSW 107XXX94XX		· · · · · · · · · · · · · · · · · · ·
SEDIMENT INFORMATION  EQUIPMENT USED FOF [ ] GRAVITY CORER [ ] S.S. SPLIT SPOON [ ] DREDGE [ ] DREDGE [ ] HAND SPOON [ ] ALLUMINUM PANS SS BUCKET [ ] TYPE OF SAMPLE COLLECTED [ ] COLOR LIGHT [ ] ODOR L	LECTED: Voc. others VS:	DECONTAMINATION FLUIDS USED:  ALL USED  ETHYL ALCOHOL  25% METHANOL 75% ASTM TYPE II WATER  DEIONIZED WATER  LIQUINOX SOLUTION  HEXANE  HNO 3 SOLUTION  POTABLE WATER  NONE  SEDIMENT TYPE:  CLAY  SEDIMENT TYPE:  ORGANIC  GRAVEL  POSSIBLY LOT OF  CONCRETE WATERMIL
SAMPLES COLLECTED		
MATRIX  3 IF REQUIRED AT THIS LOCATION BY BY BY ACID-BASE  [V TCL VOC. [M] [V] [] [V] . SVIX. [M] [M] [] [V] 1 PACH [M] [M] [] [V] 1 TANK [V] [V] [V] [V] [V] [V] 1 TANK [V]	3 IF SAMPLE COLLECTED  [ ]  [ ]  [ ]  [ ]  [ ]	SAMPLE BOTTLE IDS
NOTES/SKETCH SILVS		N
BLIX. DO SW/GD CT.  SW/GD 5  HWY.  AT END OF CANAL'S	~ s	HIP CANA
CEMENT WALL		ARR Environmental Services

## SUMP/DRY WELL/STRUCTURE SAMPLING RECORD PAGE 1 OF \_3 HANNA FURNACE CONCRETE SUMP SITE \_ STRUCTURE TYPE. STRUCTURE ID CD/CL-101 DATE 10-12-94 TIME\_ 10:40 10:00 COORDINATES\_ PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS CREW MEMBERS: 4. A. FOSTER 5. 6. MONITORING EQUIPMENT: PI Meter Explosive Gas Y Avail. Oxygen Y 2 SCALE 1 INCH=\_\_\_ OVA Other HOCIBA CROSS SECTION OF STRUCTURE Photographs, Roll \_ YES Exposure \_\_\_\_ Disokui NE @ Looking NW HEALTH AND SAFETY V// Protection Level \_\_ Initial PI O Initial O<sub>2</sub>\_\_\_\_ Liano Blech 560.W DIL SHOON SCALE 1 INCH= 2 FEET Logged by T. Longity SOLID BUTTOM, CRAVELLY Checked by\_\_\_ 9107099T

SUMP/DRY WELL/S	TRUCTURE SAMPLI	NG RECORD	
WANTED CHARACT		PAGE 2 O	3
SITE HANNA FURNACE STRUCTURE ID CD/CL -101 DATE	STRUCTURE TYPE	CONCRETE SUMP	
STRUCTURE ID CD/CL TIST DATE	TIME	(0:02 END	1:40
		-	<del></del>
LIQUID DATA:			
	General	- 540 817.014	_
Liquid Depth ~5 ft. from Temperature See p.3 Degree	Sample l	D See Berow Observations	<del>\</del>
pHUnits			
pHUnits Specific Conductivityumhor	/cm [] C	Color Butch	\
	[ ] L	ayered	\
	[ ] _		— <i>†</i>
PI Meter (Headspace) ppm Field GC Screening ( ) Yes (') No		4 FCL 101XXX94 XX H FCL 101 XXX 94 XI	(PLKE M
Equipment Used for CollectionBA	LER - SINGLE	use	
	2.5		
Decontamination Fluids Used <u>لـ ١٩٧١ه &gt; ٢</u>	TOTATPLE		·
<u> </u>			•
SLUDGE/SEDIMENT DATA:	•		<b>:</b> ,
Depth to Sediment5 ft. from	GROUND Sample I	HECD 101 XXX 94	XX (plus
Depth to Structure Bottom^5	ft. from GRoun	UD HECD 101 XXX 94	KD
Property of Sample Callested [ ] Diagram	01- (	)he arm tion a	
Type of Sample Collected [ ] Discrete [ \int Composite		Observations Odor	_
( ) Composite	11 0	olor <u>BeAck</u>	
	[√] -	SHEEN	<del></del>
PI Meter (Headspace)ppm	[]		
Field GC Screening () Yes () No			
	1		
Equipment Used for Collection	LIQUINOX P	TABLE	<del></del>
Decontamination Fluids Used B	ichet AUCER	i S.S. Bucket ;	Spoon
Secondarianiadon Fidido Osed			·
	<u> </u>		
ANALYTICAL PARAMETERS:	SEDIMENT	_	SEDIMENT
· Ωin	<u>W</u>	<u> </u>	<u>M</u>
" "	038	aınðn	360
JTCL VOC [기	[/] []TCLP		[]
ATCL SVOC [7]		PEST/PCBs [ ]	ાં તે
] TPH [ ]	[] [V] <u>INO</u>	<del></del>	1-1
TAL METALS [ ]	. , , . , <u> </u>	K, REAG. [V]	14
10000T		os, IGNIT	
107099T	ABB Envir	ronmental Services	inc.

SUMP/DRY WELL/STRUCTURE SAMPLING RECORD	
PAGE	3 OF 3
SITE HANNA STRUCTURE TYPE Compare SALS STRUCTURE ID 60/CL-101 DATE 10-12-14 TIME 10:00 END	ump
STRUCTURE ID DATE 10-12-44 TIME 10:00 END _	10:40
COMMENTS:	
pH = 7.8 - 8.18 units	·····
Cond. = 3.93 - 3.27 m5/cm	
TURE = 5 - 5	
DO = 2.85 - DROPPING mg/L	
Tan = 10°C - 10'C	
Tamo = 10°C - 10°C Sal = 0.1 70 - 0.08 75	
324 20.1 16 20.08 15	<del></del>
Used HORIBA WATER OWN Meter	<del></del>
	<del></del>
	<del></del>
	<u>:</u>
BRIAN & TOM AT LEVEL C DURING Collection	
BRIAN & TOM AT LEVEL C DURING Collection  KATH & Ashley Lovel C Derman only As Suppo	irt
	<del></del>
ABB Environmental Service	ces, Inc

#### SUMP/DRY WELL/STRUCTURE SAMPLING RECORD

PAGE 1 OF 2 STRUCTURE TYPE UNKNOWN (Manhole) SITE Hanna Furnace STRUCTURE ID CD/CL-102 DATE 10112194 TIME 1115 COORDINATES NIA PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS **CREW MEMBERS:** Ground Foundation 1 BButler 2. Thongley Fire Brick 3. A Foster Pile 4. A. Peterson 5. manhole 6. Foundation MONITORING EQUIPMENT: 6round PI Meter Explosive Gas N N Avail. Oxygen Y SCALE 1 INCH= FEET OVA Other .... CROSS SECTION OF STRUCTURE Photographs, Roll #1 1-2.5-Exposure\_\_ 0.7 HEALTH AND SAFETY 9.0 Protection Level Cdermal Busevert? Initial PI O ppm unknown Initial LEL NIA lateral boundaries Initial O<sub>2</sub> N/A £1.7' 10,0 -SCALE 1 INCH= NTS FEET Logged by BKButh

9107099T

Checked by\_\_

SUMP/DRY WELL/STRUCTURE	E SAMPLING RECORD
SITE HOMA FUMACE STRUCTURE STRUCTURE ID CD/CL-102 DATE 10/12/9	PAGE 2 OF Z E TYPE UNKNOWN (Manhole) 4 TIME 1115 END 1150
LIQUID DATA:	
Liquid Depth 7.3' ft. from 6 round  Temperature 7.3 Degrees C.  pH 8.28 Units  Specific Conductivity 7.40 m5/m/mhos/em  Do = NA Tuesio.m = 2  Salin = 0.10  PI Meter (Headspace) D ppm  Field GC Screening () Yes (1) No	Sample ID 1+FCLIO2XXX94XX  Sample Observations  [ ] Odor [ ] Color [ ] Layered [X] Clear [ ]
Equipment Used for Collection Disposable ba	iler
Decontamination Fluids Used N/A	
SLUDGE/SEDIMENT DATA:  Depth to Sediment 9.0 ft. from Ground  Depth to Structure Bottom 10' (5000) ft. fr	Sample ID HFCDIOZXXX94XX
Type of Sample Collected [X] Discrete  [ ] Composite	Sample Observations [ ] Odor [X] Color light gray (crave) brown [X] concrete rubble, organics, (ronpelle
PI Meter (Headspace) ppm Field GC Screening ( ) Yes (X) No	
Equipment Used for Collection Bucket Aucer	
Decontamination Fluids Used Liquinox/Potab	e HzO, DI
ANALYTICAL PARAMETERS:  Q D D D D D D D D D D D D D D D D D D	LIGUID
[X] TCL VOC       [X]       [X]         [X] TCL SVOC       [X]       [X]         [] TPH       []       []         [X] TAL METALS, CN-       [X]       [X]	[]TCLP [] [] [X]TCL PEST/PCBs [X] [X] [X] EP TOX Metals [Z] [X] [X] GO. WORCS/ [] [X]
9107099T	ABB Environmental Services, Inc.

			P/DRY W							PAGE 1 OF 2
SITE _	Hanna	Fuce	x ce		STRUC	TURE T	YPE _	Base	ment	END 1245
			CL-103	_ DATE	12101	94	TIME.	1218	<u> </u>	_END 1245
COORD	INATES					•				
	PLAN	VIEW	OF STRUCT	URE SIT	EW/DI	MENSIC	ONS			•
ì				<del></del>		1		7	CREW	MEMBERS:
			;							sutler
٨									, Ti	ongley
<b>/</b> \\				Des	troyed Floor					
_ _							<u></u>			oster
N			TAN	Floor	tac t	FORME			4. A.	Peterson
	·	F	777	N.W.	Just 1	HOUSE			5.	
			(COKL-	/ En 7	2			]	6.	
			D 24 %	<del>\</del>	=	·				
WIND				Roc	dway	T		1 1		ORING EQUIPMENT:
$\bigcirc$		-		<del>    -</del>	:				PI Mete Explosi	r Ŷ N ve Gas Y N oxygen Y N Y N
į,	SCALE	1 DICE	#= NTS	FEE	~T	<u> </u>		┛ ╽	Avail. C	xygen Y N
*;	SCALE	1 IIVCF	7=	ree	51	i .			OVA Other_	Y N
		CRO	SS SECTION	OF STR	UCTUR	E			Photogr	raphs, Roll #1
	Γ			•					Exposit	re
	ĺ									
						/			HEALT	H AND SAFETY
	-				/				Protect	on Level C Dormal
										PI <u>O</u> ppm .EL — %
						ĺ				%
		·			***					
						1				
		/				l				
						1				
	sc	ALE :	INCH=	NTS	_ FEEI	•				by 3kButh
									Logged	by Lisus

Checked by.

SUMP/DRY WELL/STRUCTURE	SAMPLING RECORD
SITE Hanna Furnace STRUCTURE STRUCTURE ID CO/CL-103. DATE 10/12/94	TYPE Basement PAGE 2 OF 2
LIQUID DATA:	
Liquid Depth Oto > 2' Doth ft. from  Temperature No value Degrees C.  pH 8.1 Units  Specific Conductivity 3.13 m5 ymhos/cm  Salinity = 0.08  Turbid = 13	Sample ID HFCLIO3XXX94XX  Sample Observations  [ ] Odor
PI Meter ( <del>Headspace</del> ) ppm Field GC Screening ( ) Yes (X) No	
Equipment Used for Collection	·
Decontamination Fluids Used N/A	
SLUDGE/SEDIMENT DATA:	·.
Depth to Sediment NA ft. from NA  Depth to Structure Bottom NA ft. from	Sample ID HFCD103xxx94 xx
Type of Sample Collected [X] Discrete  [ ] Composite	Sample Observations [X] Odor <u>Sweet Fuel-like</u> [X] Color <u>13/9CK fire, Soft raterial</u>
(scuple collected bereath tank- Water ~ 5'deep)	[X] Breck oily texture.
PI Meter (Headspace) ppm Field GC Screening ( ) Yes (X) No	sedinent thickness @ tank~3-4'
Equipment Used for Collection Liquinox/Potable	-
Decontamination Fluids Used 55. Bucket Au	xer
ANALYTICAL PARAMETERS:  GOOD  OTION   LIGUID	
[]TCL VOC [X] [X] []TCL SVOC [X] [X] []TPH [] [] [] []TAL METALS + CN - [X] [X]	[]TCLP [] [] [X]TCL PEST/PCBs [X] [X] [X] EP TOX Metals [] [X] [X] Ign / Feact/ ( ) [X]

## SUMP/DRY WELL/STRUCTURE SAMPLING RECORD PAGE 1 OF 2 SITE HAMA FUMACE STRUCTURE TYPE Trench STRUCTURE ID CD/CL-104 DATE 10/12/44 TIME 1300 END 1320 COORDINATES\_\_\_\_\_ PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS **CREW MEMBERS:** DOOKL-103 1. BButler 2. Thorseley 3. A. Peterson coke-bi CD/CL-104 5. Pile RR. Ties MONITORING EQUIPMENT: PI Meter N Explosive Gas Y N Avail. Oxygen Y SCALE 1 INCH= NTS FEET OVA Other \_\_\_\_\_ CROSS SECTION OF STRUCTURE Photographs, Roll Y. #1 Exposure \_\_\_\_\_ \_\_\_\_2,5"-I-Beam HEALTH AND SAFETY - concrete Protection Level Cdormal. Initial PI O ppm Initial LEL 4,5 Initial O<sub>2</sub> Water 5.5 Sedinent 7.0 SCALE 1 INCH= NT5 FEET

9107099T

Checked by\_\_\_

Logged by BKButh

SUMP/DRY WELL/STRUCTURE	SAMPLING RECORD
	PAGE 2 OF Z
SITE HANDA FULDALE STRUCTURE	
STRUCTURE ID CDICL-104 DATE 10/12/94	TIME 1300 END 1320
	** <b>≢</b> Comment
LIQUID DATA:	<del>.</del>
115	UECHNUVVVGIIVV
Liquid Depth 4.5 ft. from ground Temperature Not Working Degrees C.	Sample ID HFCLIOUXXXQUXX
Degrees C.	Sample Observations  Odor
pH 8.8 Units Specific Conductivity 1.8 MS pumbos/cm	[] _ Color <u>Yellow - Clear</u>
x11/1/14 0.04%	[ ] Layered
TOUBLE 49	[ ]
DO not working	
PI Meter ( <del>Headspa</del> ce) ppm	
Field GC Screening () Yes (X) No	
Equipment Used for Collection 55 Bucket	
•	
Decontamination Fluids Used Liquinox Pota	ble Hzo, DI Hzo
SLUDGE/SEDIMENT DATA:	• • • • • • • • • • • • • • • • • • •
Depth to Sediment 5.5 ft. from ground  Depth to Structure Bottom 7.0 ft. from	Sample ID HFCD104xx84XX
Type of Sample Collected [X] Discrete	Sample Observations
[ ] Composite	[] Odor
	[X] Color Brown [X] Faint Petroleum odor?
	[1] Partit Fetto Cort Soci
PI Meter (Headspace) ppm	
Field GC Screening () Yes (X) No	
~	
Equipment Used for Collection Bucket Augur	
- Linguay /Date	ble HzO, DI HzO
Decontamination Fluids Used	WE HOU! DE HOU
ANALYTICAL PARAMETERS:	Ä
TO S	D D
ANALYTICAL PARAMETERS:  1 00 011	LIQUID
	SE CIÉ
MITCL VOC [X] [X]	[]TCLP [] []
[X] TCL SVOC [X] [X]	[X] TCL PEST/PCBs [X]
[]TPH []	[X] EPTOK Hetals []
[X] TAL METALS & CN - [X] [X]	[X] <u>lapot/corr/red</u> [] [X]
9107099T	

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# SUMP/DRY WELL/STRUCTURE SAMPLING RECORD PAGE 1 OF 2 HANNA FURNACE STRUCTURE TYPE. Sump STRUCTURE ID CD/CL-105 DATE 10-13-14 TIME 10: 30 COORDINATES\_\_\_ PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS CREW MEMBERS: 1. Tom Logicy 2. Askley Foster 3. Elise Peterson (NYSDEC) Exist & DG. 5. Samp MONITORING EQUIPMENT: PI Meter LOCATION Explosive Gas Avail. Oxygen Y SCALE 1 INCH= 10 FEET OVA Other\_ HORIBA WHEN Meter CROSS SECTION OF STRUCTURE Photographs, Roll Exposure \_\_\_\_\_ HEALTH AND SAFETY Protection Level C Der med Initial PI Bles, ppm Initial LEL Initial O2\_\_\_\_\_ SCALE 1 INCH= FEET Logged by \_\_\_\_ Checked by\_\_\_

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SUMP/DRY WELL/ST	RUCTUR	SAMP)	LING REC	ORD	
				PAGE 2	2 OF2
	STRUCTUR				
STRUCTURE ID SHE DATE	10-13-44	TIME_	10:30	END	11.00
CD/CL-105			· ` z		
LIQUID DATA:					
Liquid Depth 3 ft. from	Top of wister	Sample	D HFC	L 105 XXX9	4XX
Temperature N/k Degree		Sample	e Observation	15	
pH Units		[-1	Odor		<del></del>
Specific Conductivity 0.805 76 pumber	/cm	14	Color CLou	10y, mus	ky
Salinity 0.0190		[ ]	Layered Fome F	1	
Turbidity 8 NTU Do 6.15		1 1	SURFA		<i>L 0, J</i>
PI Meter (Headspace) Bkg. ppm		ιı			
Field GC Screening ( ) Yes ( No					
Equipment Used for Collection ONE - USE	TEFLOR	BALLER			
Decontamination Fluids Used	Rumox,	P. TABIC	·		·
- 1.	·				
SLUDGE/SEDIMENT DATA:					
Depth to Sediment 3 ft. from	ft. fr	Sample	of waster	105×XX	14xx
Type of Sample Collected [ ] Discrete		Comple	Observation		
[ ] Composite			Odor Hya		<b>;</b>
( ) Composite		M	Color Bi	ach	
		ij			
71.		[ ]			
PI Meter (Headspace) Bkg/ppm Field GC Screening () Yes (V) No					
Equipment Used for Collection 5.5. 5pm	& Buch	x, 5.5	5. Builest	Auger	
Decontamination Fluids Used	nbove				
	<del>-</del>				
ANALYTICAL PARAMETERS:	EN				EN N
<b>"</b> "	Σ			UI	Σ
i nôn	Sediment			ainðin	SEDIMENT
TTCL VOC 11	লৈ ৷	[]TCI	.P	[ ]	[]
[ TCL SVOC [ ]	N	. ,	PEST/PCBs	ij	iri
[ ] TPH [ ]	ij	- I	. N	_i~i	M
[ TAL METALS [ ]	[ <b>1</b> ]	NE	PTOR IGNITY	_[]	[Y
		Co	fros. , React.		

# SUMP/DRY WELL/STRUCTURE SAMPLING RECORD PAGE 1 OF \_2 SITE HANNA FURNACE Sump \_\_\_ STRUCTURE TYPE STRUCTURE ID \_ CD/CL-106 0945 09:30 COORDINATES\_ PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS CREW MEMBERS: Concrete Wells Rise Above Surpounding Ashley Foster 5. 6. RUBBLE MONITORING EQUIPMENT: Rubble STANDING WESTER PI Meter Explosive Gas Y Avail. Oxygen Y SCALE 1 INCH= OVA Other \_\_\_ CROSS SECTION OF STRUCTURE Photographs. Roll 465 1 Locking NE Exposure \_\_\_ TOP of work HEALTH AND SAFETY Concretewai Protection Level C Dormel ~ 14 HIGH Initial PI 0.9 ppm Initial LEL\_\_\_\_ Apove wister WUD WOOD CORON D Initial O<sub>2</sub> water SED .-BoTTOM SCALE 1 INCH= 10 FEET

Cou

Checked by\_

SUMP/DRY WELL/ST	TRUCTURE	SAMP	LING RECO	ORD	
11.				PAG	E 2 OF _2
SITE HANNA FURNICE	STRUCTURE	TYPE _	JUMP 40 9:30		00.45
STRUCTURE ID CD/CL-106 DATE	10-13-1-1	_TIME_		_END -	09:45
	· · · · · · · · · · · · · · · · · · ·			<del></del>	
LIQUID DATA:					·
	TND NG SEED.		- 11501	ا المامد د	44 1- 1.
Liquid Depth ft. from			D HFCLIC		7 4 2
Temperature Degree pH 9.89 Units	s C.		Observation Odor		-
Specific Conductivity 1.81 M5/c jumbos	/cm	· ·	Color		
Salinity 0.04%	•		Layered		* 0.
Turkedity 2 NTU  DO N/A NOT working					
PI Meter (Headspace) BLG. ppm		[ ]			
Field GC Screening () Yes (YNo					
•					
Equipment Used for Collection 5.5- Te	Flow one-	cese B	ailer		
Decontamination Fluids Used	LIDINOX	D.T.40	ه سلایت		
Decontamination Fiditis Osed		PSCAE			
	<del></del>	<del></del>			
·	·				
SLUDGE/SEDIMENT DATA:	all				<b>*</b> ,
Depth to Sediment ~ 6 Beleur ft. from	l	Sample	D HECD	106 xx x	94 x x
Depth to Structure Bottom _~6.5	ft. from	m Nort	a wall		
The of Samula Callested I. A. Diagram		C1-	Ob	_	
Type of Sample Collected [ ] Discrete			Observation: Odor	S	
[1] Composite		i	Color BL	rck	
		[]			
Bloc		[ .]			
PI Meter (Headspace) bks ppm Field GC Screening ( ) Yes ( ) No					
ried GC Screening ( ) les (v) No			_		_
Equipment Used for Collection <u>\$.5.</u> 3	poor & Bu	but,	5.5. Bu	bet t	tuger
Decontamination Fluids Used AS AS	5V C	•			
Decontamination Fluids UsedAS _AS	04.0				
	<del></del>	·			
ANALYTICAL PARAMETERS:	SEDIMENT				SEDIMENT
	M			Œ	<u>X</u>
" ngui	ED			Į.	(E)
MTCL VOC M	<u>v</u>	[ ]TC	· D	<u> </u>	1 1
['] TCL SVOC [']	[7]		l LPEST/PCBs	M	M
[ ] TPH [ ]	ii	M C	<b>N</b>	_ [ ]	M
[ ] TAL METALS [ ]	[~]	V 5P	70 X CORR.	_[]	[4]
			ect. Ignit		
9107099T	A!	BB Env	rironmenta	ıl Servi	ices, Inc.

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# SUMP/DRY WELL/STRUCTURE SAMPLING RECORD PAGE 1 OF 2 STRUCTURE TYPE SUMP / UNLINOWY SITE HANDA FUEDAGE STRUCTURE ID HE CD/CL 107 DATE 10/13/94 TIME 13/5 COORDINATES\_\_ PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS **CREW MEMBERS:** RR Cor Bldg 1. BBUtter 7000 2. Thongley Asphalt Ramp 3 A Peterson/NYSDEC - Down Structure 3'X4' ID, 13' deep. 5. water ~ 6' bas 6. MONITORING EQUIPMENT: PI Meter N N Explosive Gas N Avail. Oxygen Y SCALE 1 INCH= NTS FEET OVA Other Horiba U-10 DH paper CROSS SECTION OF STRUCTURE Photographs, Roll #2 Exposure \_\_\_\_ Brick HEALTH AND SAFETY Protection Level Level Comal Initial PI \_\_\_\_\_\_ Initial LEL\_\_\_\_ Initial O<sub>2</sub>\_\_\_\_ inlet Pipe. wywid size unt. Presumed school bottom SCALE 1 INCH= NTS FEET Logged by BButh Checked by\_\_\_

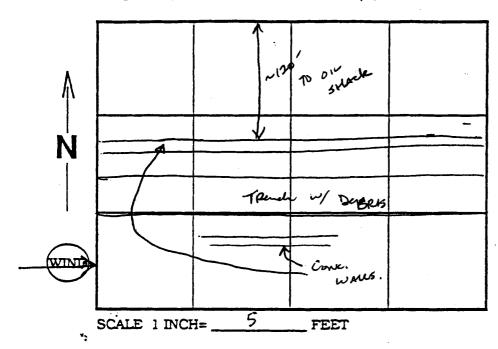
SUMP/DRY WELL/STRUCTURE	E SAMPLING RECORD
	PAGE 2 OF 2
SITE Hanna Furnace STRUCTUR	ETYPE SUMP /UNKNOWN
STRUCTURE ID HF CD/CLIOT DATE 10/13/44	TIME 1315 END (350
	<b>#</b>
LIQUID DATA:	
/	11/00/10/2014 1/ 9/14 1/
Liquid Depth 6 ft. from ground Temperature Not masured Degrees C.	Sample ID HFCLIOTKXX 94XX
Temperature 12.3 Degrees C.  pH 12.3 Units (meter)	Sample Observations [X] Odor 504-15446-
Specific Conductivity 2.10 m5 jumbos/cm	[ ] Color
Turbidity = 5 NTUS	Layered
D0 = 16.3	
Salin = 0.06 %	
PI Meter (Headspace)ppm	
Field GC Screening () Yes (X) No	
and the second base	ر م
Equipment Used for Collection <u>disposable bail</u>	<u> </u>
Decontamination Fluids Used NA	
SLUDGE/SEDIMENT DATA:	
	·
Denth to Sediment (2 ft from Ground	Sample ID HECDIOTXXX94XX
Depth to Sediment 12 ft. from Ground  Depth to Structure Bottom 13 ft. from	Sample ID HFCD107KXX94XX
Depth to Sediment 12 ft. from Ground  Depth to Structure Bottom 13 ft. from	Sample ID HFCD107XXX9YXX
Depth to Sediment 12 ft. from Ground  Depth to Structure Bottom 13 ft. from  Type of Sample Collected M Discrete	Sample Observations
Depth to Structure Bottom 13 ft. fro	Sample Observations [X] Odor Sweet petroleum
Type of Sample Collected   Discrete	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown
Type of Sample Collected   Discrete	Sample Observations [X] Odor Sweet petroleum
Type of Sample Collected [ ] Composite	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown
Depth to Structure Bottom 13 ft. from Type of Sample Collected 1 Discrete  [ ] Composite  PI Meter (Headspace) ppm	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown
Type of Sample Collected [ ] Composite	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown
Depth to Structure Bottom 13 ft. from Type of Sample Collected 1 Discrete  [ ] Composite  PI Meter (Headspace) ppm	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown
Type of Sample Collected   Discrete  [ ] Composite  PI Meter (Headspace) ppm Field GC Screening ( ) Yes (X) No  Equipment Used for Collection Byout auxor	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown  [X] Sheer  []
Type of Sample Collected   Discrete   Composite  PI Meter (Headspace)	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown  [X] Sheer  []
Type of Sample Collected   Discrete  [ ] Composite  PI Meter (Headspace) ppm Field GC Screening ( ) Yes (X) No  Equipment Used for Collection Byout auxor	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown  [X] Sheer  []
Depth to Structure Bottom 13 ft. from Type of Sample Collected M Discrete [ ] Composite  PI Meter (Headspace) ppm Field GC Screening () Yes (N No  Equipment Used for Collection By Cut auxor  Decontamination Fluids Used Liquinox/Potable	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown  [X] Sheen  []  HzO, DI 11zO
Depth to Structure Bottom 13 ft. from Type of Sample Collected M Discrete [ ] Composite  PI Meter (Headspace) ppm Field GC Screening () Yes (N No  Equipment Used for Collection By Cut auxor  Decontamination Fluids Used Liquinox/Potable	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown  [X] Sheen  []  HzO, DI 11zO
Depth to Structure Bottom 13 ft. from Type of Sample Collected M Discrete [ ] Composite  PI Meter (Headspace) ppm Field GC Screening () Yes (N No  Equipment Used for Collection By Cut auxor  Decontamination Fluids Used Liquinox/Potable	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown  [X] Sheen  []  HzO, DI 11zO
Depth to Structure Bottom	Sample Observations  [X] Odor Sweet/petroleum  [X] Color black/brown  [X] Sheer  []
Depth to Structure Bottom 13 ft. from Type of Sample Collected M Discrete [ ] Composite  PI Meter (Headspace) ppm Field GC Screening () Yes (N No  Equipment Used for Collection By Cut auxor  Decontamination Fluids Used Liquinox/Potable	Sample Observations  [X] Odor Sweet petroleum  [X] Color black /brown  [X] Sheen  [] HzO, DI HzO  Ground  Ground  Ground  [X] Odor Sweet petroleum  [X] Odor Sweet /petroleum  [X] Sheen  [] I I I I I I I I I I I I I I I I I I I
Depth to Structure Bottom	Sample Observations  [X] Odor Sweet / petroleum  [X] Color black / brown  [X] Sheen  []  HzO, DI HzO  GEOUTH  GEOUTH  GEOUTH  IX COLOR Sweet / petroleum  [X] Sheen  []  []  []  []  []  []  []  []  []  [
Depth to Structure Bottom 15 ft. from Type of Sample Collected N Discrete  [ ] Composite  PI Meter (Headspace) ppm Field GC Screening () Yes (N No  Equipment Used for Collection Bullet auxor  Decontamination Fluids Used Uquinox Potable  ANALYTICAL PARAMETERS:  [ ] G G G G G G G G G G G G G G G G G G	Sample Observations  [X] Odor Sweet / petroleum  [X] Color black / brown  [X] Sheen  []  HzO, DI 11zO  Gin Gin  Gin  Gin  Gin  Gin  Gin  Gin
Depth to Structure Bottom	Sample Observations  [X] Odor Sweet / petroleum  [X] Color black / brown  [X] Sheen  []  HzO, DI HzO  GEOUTH  GEOUTH  GEOUTH  IX COLOR Sweet / petroleum  [X] Sheen  []  []  []  []  []  []  []  []  []  [

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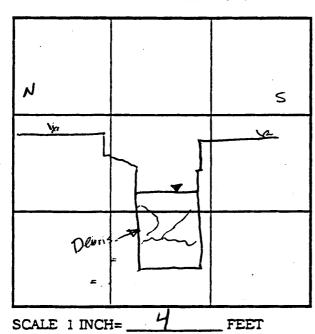
## SUMP/DRY WELL/STRUCTURE SAMPLING RECORD

PAGE 1 OF 2 SITE HANNA FURNACE Concrete TRench \_ STRUCTURE TYPE. END /2:35 STRUCTURE ID CD/CL-108 DATE 10-13-94 TIME COORDINATES\_

## PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS



### CROSS SECTION OF STRUCTURE



### **CREW MEMBERS:**

- 1. T. Longly
  2. A. FOSTER
  3. A. Peterson (NYSDEE)
- 5.

## MONITORING EQUIPMENT:

PI Meter	(2)	N
Explosive Gas	Y	N
Avail. Oxygen	Y	N
OVA	Y	N
Other		

Photographs, Roll

Exposure \_\_\_\_\_

### HEALTH AND SAFETY

Protection Level	
Initial PI	ppm
Initial LEL	
Initial O <sub>2</sub>	%
-	

Logged by T. Logley Checked by-

SUMP/DRY WELL/STRUCTURE	SAMP	LING RECORD	
SITE CD/ci-108 STRUCTURE STRUCTURE ID HANNA FAC. DATE DATE DATE	E TYPE _	Mench P.	AGE 2 OF <u>2</u>
STRUCTURE ID HANNA FAC. DATE 10-1394	_TIME_	ENI	·
		· · · =	
LIQUID DATA:			
Liquid Depth	Sample Sample [ ] [ ] [ ] [ ]	e ID HECLIOS X e Observations Odor None Color Clear Layered	
Equipment Used for Collection Single -use Teplan	bailer		
Decontamination Fluids Used DI, Liquidox, R.	MALE		
SLUDGE/SEDIMENT DATA:			
Depth to Sediment ~8 R from The WARER  Depth to Structure Bottom ? ~6 ft. from	Sample m <u>Su</u>	D HFCD 108 XX	×94 × ×
Type of Sample Collected [ / Discrete VoA  [ / Composite Red  PI Meter (Headspace)   Discrete VoA  Pield GC Screening ( ) Yes ( ) No	[ ]	Color SILTY W/ STA	
Equipment Used for Collection S.S. Spran, Bucket, a	uger		
Decontamination Fluids UsedA5About	<del></del>		
ANALYTICAL PARAMETERS:  OD		alugu	SEDIMENT
[   TCL VOC	[V] <u>(</u>		

SUMP/DRY WELL/STRUCTURE SAMPLING RECORD
SITE Hong Furnace STRUCTURE TYPE Catch basin STRUCTURE ID CO Ca-109 DATE 10/11/64 TIME 1040 END 1320
LIQUID DATA:
Liquid Depth 10 ft. from 6 road Suf. Sample ID HECLIOGXXXGYXX  Temperature 10 Degrees C. Sample Observations  pH 019 Units 1 Odor 10 O
PI Meter (Headspace) NA ppm (PID NO+ Working)- Field GC Screening () Yes (W) No
Equipment Used for Collection Stainless Steel Pack-bomb Sampler w disposable co
Decontamination Fluids Used <u>Deicnizad</u> Water, Liquinax
SLUDGE/SEDIMENT DATA:
Depth to Sediment 12.0 ft. from Ground Suff Sample ID HF CD 109XXX 94XX  Depth to Structure Bottom 12.5' ft. from Ground Suff.
Type of Sample Collected [X] Discrete Sample Observations
[] Composite [] Odor [] Color Black oily silt w som [] rags, fibrous waterial, gra
PI Meter (Headspace) N/A ppm (PID Not Working) Field GC Screening () Yes M No
Equipment Used for Collection steinless Steel bucket auxer
Decontamination Fluids Used Deicnized Water liquinox
E
ANALYTICAL PARAMETERS:  GINORI  GINORI  SEDIMENL

ABB Environmental Services, Inc.

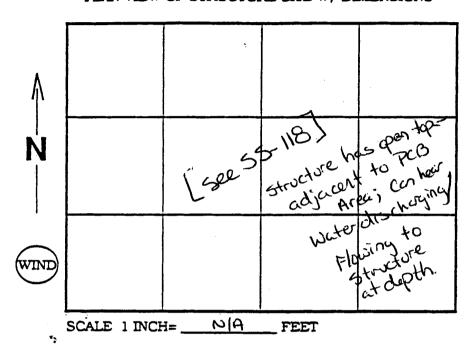
9107099T

# SUMP/DRY WELL/STRUCTURE SAMPLING RECORD PAGE 1 OF 2 \_ STRUCTURE TYPE <u>Catch basin</u>

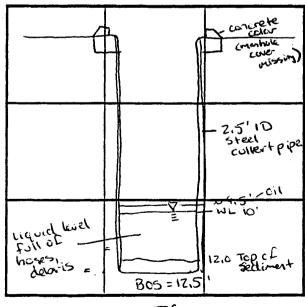
SITE Hanna Furnace STRUCTURE ID CO/CL-109 DATE 10/11/94 TIME 1040 END 1320

COORDINATES.

## PLAN VIEW OF STRUCTURE SITE W/ DIMENSIONS



### CROSS SECTION OF STRUCTURE



SCALE 1 INCH= NTS

### CREW MEMBERS:

- 1. BButler
- 2. Klakey

- 5.

## MONITORING EQUIPMENT:

PI Meter	<b>(</b>	N
Explosive Gas	$\mathfrak{D}$	N
Avail. Oxygen	$\odot$	N
OVA	Y	N
Other		

Photographs.	, Roll	 
<u>Nes</u>		 
<b>5</b>		

### HEALTH AND SAFETY

Protection 1	Level <u>C</u>	
Initial PI		_ ppn
Initial LEL		
Initial O2_		

Logged by BKBut

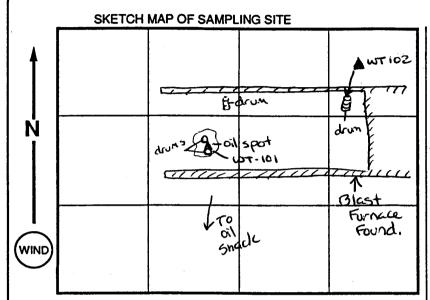
Checked by\_

# SURFACE SOIL SAMPLING RECORD FUTURE Project No. 7169-40

Site: Henry Furnace Project No. 7169-40

Location No. HEWTIOIXXX94XXXD Date 1013/94 Time 0930 End 1040

Coordinates AOC Oil Shack Area



SCALE 1" = NT5 FT.

SAMPLE PROFILE



No.	Sample No.	Depth (ft.)
S-1 S-2	HFWT101	-0-
S-3		1

Sampling Equipment:

55 5000

55 bocket

Decon. Materials:

Liquinok

Deionized HzO

SAMPLE DESCRIPTION: Black tor/oil scatted soil
due to ady leaking expanded drum;
due to ady leaking expanded drum; Soil is gravely sand. V. sticky.
PID breathing zone 0-10 ppm.
NOTES: Collected sample, dup, MS/MSD

for VOC, SVOC, pest (PCB, inorgenics eptox metals, ignit react rarros.

aralysis.

Crow	Members:
Crew	members:

- 1. BButler
- 2. KGross
- 3.
- 4.
- 5.
- 6.

Monitor Equipment:

Pl Meter
<b>Explosive Gas</b>
Avail. Oxygen
OVA

$\langle \mathcal{Y} \rangle$	N
$\bigcirc$	N
$\bigcirc$	N
$\overline{\mathbf{v}}$	

no management proportion defend

Other	 	 

Photographs: (Roll Exposure)

100		

References: \_\_\_\_\_\_ Field Book #: 3 Page #: 15-16

Attachments:

Signature: PE F Buth

	site: Hana F		Pı	roject No. 7169-40
		TIOZXXX94XX Date	013/44	·
	coordinates			ADO Dil Shark Area
	SKETCH MAI	P OF SAMPLING SITE		
A				Crew Members:
				1. BButler .
		MOP)	[	2. K 6055
N		See WT. 101 Map)		3.
		300		4.
				5.
(WIND				6.
				Monitor Equipment:
	SCALE 1" =_	NTS FT.		Explosive Gas N
	SAMPLE PRO	OFILE	]	Avail. Oxygen N N
	٥	No. Sample No. Dept	th (ft.)	Other
·		S-1 HEWTICZ Dru	~	
	FEET	S-3		Photographs: (Roll Exposure)
	SCALE IN FEET	Sampling Equipment:		NA
	SCA	55 Spoon		
	2	Decon. Materials:  N/A. 50000 disp	osed	
		- Divis		
	PLE DESCRIPTION:			References:
	of chemica	al product-consist sutter. Drum is full,	ercy	Page #:
		No visible writing		Attachments:
	( 2 0 0	callected from one		Signature: P-K 3tl
1	es: <u>Sauple</u> drum lying	collected from one		
	voc, svoc,	pest/PCB inorg, EPT	TOX	
	metals, iq	nit/react/corrosily		
				ARR Environmental Services Inc.

SURFACE SOIL SAMPLING RECORD

#### **WELL DEVELOPMENT RECORD** Project: Well Installation Date: Project No. HANNA FURNICE 7169-40 10-20-94 Logged by: Client: Well Development Date: Checked by: NYSDEC 10-25-94 TOL Weather: Start Date: Well/Site I.D.: Finish Date: MW-101 PTLY. SUNNY BREEZY, COOL 10-25-94 10-25-94 Start Time: Finish Time: initial Water Level (ft): 7.1' Below TOP PVC. 08:00 09:11 Water Level during Initial Pumping/Purging (ft): Water Level at Termination of Pumping/Purging (ft): GALLINIS Approximate -Total Number of Well-Pumping Rate Turbidity Volumes Conductivity TIME TEMP. рΗ (gal/min) (NTU's) 13.7 5 13.3 12.2 0.77 >999 18:00 12.3 10 15.3 14.8 0.9 18:06 12.2 15 08:16 16.6 13.4 0.8 13.5 08:37 15.1 12.1 25 08:45 0.7 15.7 12.1 11.6 /( 10.8 490 08:52 15.0 12.1 0.6 35 10.7 15.2 09:00 12.3 0.6 120

70 SALWITY

0.6

370

## NOTES:

09:08

09:11

Developed using centrifical pump w/ hose i Foot-value assembly down the hole.

Turned pump off @ 18:17 i 09:05 to allow Reclarge.

Water is frothy/bubbly throughout.

Development is consplite based on stabilization of parameters

12.3

10.5

15.5

Well Developer's Signature

Hud. Tyly

FIGURE 4-13 WELL DEVELOPMENT RECORD NYSDEC QUALITY ASSURANCE PROGRAM PLAN

		WELL D	EVELOPME	NT RECORD			
Project: HAA	INA FURN	Well Installation	Date: 10-20-94			Project No. 7169-40	
Client: NY	7560		Well Developme	nt Date: /ロ・35 ーダイ		Logged by:	Checked by:
Well/Site I.D.:	W-102		Weather: RAIN V.	WINDY, 50's		Start Date: /0-75-94	Finish Date:
Initial Water Level (ft):	7 BE	Low TOP		,		Start Time:	Finish Time:
Water Level during Initia	l Pumping/Purgin	g (ft): ~//					
Water Level at Terminat	ion of Pumping/P	urging (ft):					
GALLA TOTAL Number of Well- Volumes	us .	TEMP.	На	Conductivity	Pumpli	ximate ng Rate min)	Turbidity (NTU's)
7	16:43	14.4	7.8	<u>0.53</u> <u>0.53</u>		02 7	688
17	16:52	16.0	7.7 7.7	0.57 0.55	0.	02	350 216
29	17:05	15.6	7.6	0.51	0.	02	140

% SALINITY

# NOTES:

Developed using centrifical pung, we have is Fort-value assembly inserted at bottom of well.

Well is considered developed based on stabilization of paremeters

Well Developer's Signature

FIGURE 4-13 WELL DEVELOPMENT RECORD

NYSDEC QUALITY ASSURANCE PROGRAM PLAN

### WELL DEVELOPMENT RECORD Well Installation Date: Project No. Project: HANNA FURNINGE 7169-40 10-20-94 Client: Well Development Date: Logged by: Checked by: NYSDEC 10-26-94 TOL Well/Site I.D.: Start Date: Finish Date: MW-103 PTLY. SUNNY BREEZY COOL 10-26-94 10-26-94 Initial Water Level (ft): Start Time: Finish Time: Water Level during Initial Pumping/Purging (ft): 09:29 09:57

Water Level at Termination of Pumping/Purging (ft): 5.78 Beliuw TOP PVC

GALLON TOTAL Number of Welt	J\$	. •			Approximate Pumping Rate	Turbidity
Volumes	TIME	TEMP.	pН	Conductivity	(gal/min)	(NTU's)
	0931	14.5	8-8	2.9	. 0.14	683
15	0935	14.7	7.5	2.9	0.15	527
. Jo	0939	14.9	8.5	3.0	0.15	432
25	0442	15.1	8-5	3.0	0.15	730
30	0945	13.3	8.5	3. v	0.15	299
35	0947	15.0	8.5	30	0.15	106
40	0950	15.3	8.5	3.≎	0.15	80
45	0957	15.3	8.5	3.1	0.15	150
50	0955	15.4	8.5	3.1	0.15	69
55	0957	15.3	8.5	3.1	0.15	34
		<u> </u>			21	

6 SALWITY

# **NOTES:**

Developed using centrifical pump w/ hore is Fort value assembly placed at bottom of well.

The S. Z.C.

Development is complete based on stabilization.

Well Developer's Signature

**FIGURE 4-13** 

WELL DEVELOPMENT RECORD NYSDEC QUALITY ASSURANCE PROGRAM PLAN

		WELL D	DEVELOPMEN	NT RECORD					
Project:			Well Installation I	Date:				ct No.	
HANN	A FURNACE	<u> </u>	_	10-21-94			716	9-40	
Client: Well Development Date:						Logged by	y: Che	cked by:	
NYS D	EC		10	7-25-94	_	TDL			
Well/Site I.D.:			Weather:			Start Date	: Fini:	Finish Date:	
M	W-104	RAINY, V.	RAINY, V. WINDY, 50's F			94 10-	25-94		
Initial Water Level (ft):					•	Start Time		h Time:	
		N/A				14:3	0 /	5:00	
Water Level during Initial F	Pumping/Purging	; (ft):	[A						
Water Level at Termination	n of Pumping/Pu	rging (ft):	N/A					<del></del>	
ToTAL Number of Well		°C		m5/cm		oximate ping Rate	Turbidit	у 5	
GALLONS	TIME	TEMP.	pН	Conductivity		l/min)	(NTU's		
10	14:34	13.6	10.6	0.56	~	GPM	434	D.	
15	14:40	13.6	11.0	0.68			101		
20	14:45	14.3	/1./	0.73			282	0	
25	14:47	سبهنز							
		2.4.23							

NOTES:

Developed w/ centrifizal\_i foot-value/hose assembly placed
a bottom of well

Considered developed @ 15:00 based on NTUS

Well Developer's Signature

FIGURE 4-13 WELL DEVELOPMENT RECORD NYSDEC QUALITY ASSURANCE PROGRAM PLAN

WELLD	EVELOPMENT RECORD		
Project: HANNA FURNACE		Project No. 7-169-40	
Client: NYSDE C	Well Development Date:	Logged by:	Checked by:
Well/Site I.D.:  MW-105	Weather: RAINY, V, WW: NY, 50'5	Start Date: 10 - 25 14	Finish Date:
Initial Water Level (ft): 8.86 BELOW TOF		Start Time: 12: 32	Finish Time: 13:55
Water Level during Initial Pumping/Purging (ft):			-

Water Level at Termination of Pumping/Purging (ft): 8.9 BELOW PVC @ 13:55

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	02 00 00 00 00 00 00 00 00 00 00 00 00 0
55 13:53 14.0 11.1 0.76 12 0.	03 .03

## NOTES:

Used centifized pump of foot value @ bottom y will to develope. Continually surged of home i foot - value assembly during development procedure.

At 13:40, charged pump assembly i increased flow considerably from the well.

Considered well developed @ 13:55 based on NTUs B. J. B. = 17.46 Belan PVC = 8.9

Well Developer's Signature

The D. La

FIGURE 4-13 WELL DEVELOPMENT RECORD NYSDEC QUALITY ASSURANCE PROGRAM PLAN

				TRECORD		
roject:		٠.	Well Installation Da			Project No.
	+ Furum			- 24-94	1.11	7169-40
ilient: ハイシンモ	C		Well Development	Date: - み6 - 9 🗸	Logged by:	Checked by:
			Weather:	c+6 - 74	Start Date:	Flaint Dat
Vell/Site I.D.: 	1.01			Barra / 1		
				BREEZY, Cool	Start Time:	* 1 - 1 - 7
nitial Water Level (ft):	8.5	l'Belan	TOP OF	-PV'C	10:16	13:40
Vater Level during Initial			1 0			1 13.10
/ater Level at Terminatio	n of Pumping/Pu	rging (ft):	1 Pt		<del>,,</del>	
C		Α,	<i>   </i>		Approximate	
GALL Number of Well		•			Pumping Rate	Turbidity
Volumes	TIME	TEMP.	pΗ	Conductivity	( <del>gal/min)</del>	(NTU's)
··· <del></del>			<del></del>			
	1020			- 7 7		
<u> </u>	1055	11.7	/0.3	0.73	0.03	958
- <u>-                                  </u>	1109	11.4	10.85	0.70	0.02	999
16	1127	11.4	9.87	0.7	0.02	999
<del></del>	1141	17.2	9.7	0.68	0.03	999
23	1201					
76	1206	11.9	9. 8	0.68	0.02	7999
31	1270	11.9	/0.5	ماها. ٥	0.02	999
36	1235	11.7	10.4	0.65	0.63	999
41	1250	11.4	/o. <b>5</b>	0.67	0,03	999
NOTES: 40	1300	11.7	10.5	0.66	0.02	999
51	1340	12.0	10.4	0.66	0.03	999
					76 SALWITY	
					•	
		,•				
ALYSE Peterso Dave Loce	~ >	i				•
72/02 (0.5/00	. ( NAS	oec b	, th agne	e that	wared on	
DAUF LOCE	٦	C-1	A-BILL 2 A-1.	5.3 AF 14.0	= 40. W = The	a_T T11.00
		٦,	A DICK SATIR	on or we	TADINGS THA	Li IWIZ
		We	?LL 15 D	eveliped	2	
						•
This well w	on hand b	miled to s	uniped alt	ernateh	- the a	M. N
. 1		1			A THE LAWY	of nenglob
		11	. 1			
		11 1	- La			
Well Developer's Sig	nature		· rayla			

FIGURE 4-13 WELL DEVELOPMENT RECORD NYSDEC QUALITY ASSURANCE PROGRAM PLAN

		WELL D	EVELOPMENT	RECORD			
Project:			Well Installation Da	· · · · · ·		Project N	
HANNA F	UKNACE		10-24-			7169-1	40
Client: NYSDEC	-		Well Development I		Logged		i by:
Well/Site I.D.:			Weather:		Start D	ate: Finish Da	ate:
Mu	1-107	•	PRLY, SUNNY,	BREEZY COO	x 10/36	194 10/36	194
Initial Water Level (ft):	7.a	8 Belo	ur TOP OF	PVC	Start Ti	ime: Finish Ti	
Water Level during Initia			N/A		———— <u>I.,</u>		
Water Level at Terminati	on of Pumping/Pu	rging (ft):	N/A				
Total Number of Well- Volumes 3 5 6	TIME  10:35  11:35  11:49  12:5	TEMP. 12.1 12.0 11.8	pH 6.8 47.6.7 6.9	Conductivity 1.3 1.2 1.2 1.2	Approximate Pumping Rate (gal/min) 0.00 0.1 0.05		
\$ \$.5 9	1330 1330 1330	11.9	6.9 6.9 7.0	1.2	0.05	300 670 570	•
NOTES:		1 6	builed for		% SALIN 17	ሃ	
		•	both ago based a	nes this s		denduped of	

Well Developer's Signature

Ch D. ha

FIGURE 4-13 WELL DEVELOPMENT RECORD NYSDEC QUALITY ASSURANCE PROGRAM PLAN

		WELL D	EVELOPMEN	AL RECORD				
Project:			Well Installation [			Project		
	A Fulwac	E .	<u> </u>	10-20-94		7169	-40	
Client:			Weil Developmen		Logged b	•	d by:	
NYS	DEC			10-25-94	70			
Well/Site I.D.:	W-108		Weather:	Access to the second	Start Date		Finish Date:	
			KAINY, V.	wwdy 50's				
Initial Water Level (ft):	2.6	£ 60.	u TOP OF	PVC	Start Time			
			o ior or	770	15:3	3 16:	30	
Water Level during Initia	il Pumping/Purging	g (π): //	4					
Water Level at Terminat	ion of Pumping/Pu	raina (ft):						
		N	A					
GAM		,0,	<u> </u>	m 5/0 m	Approximate			
GAM.		°E.		m5/cm	Pumping Rate	Turbidity		
Gam Total Number of Well Volumes	TIME	°E TEMP.	рН	Conductivity		(NTU's)	5.	
GATA TOTAL Number of Well Volumes 5	TIME _/5:37	*C TEMP.	pH 7.6	Conductivity 0.57	Pumping Rate	(NTU's) >999		
GALL TOTAL Number of Well Volumes  5  10	TIME 15: 37 15: 41	°E TEMP.	рН	Conductivity	Pumping Rate	(NTU's)	5. -	
GALL ToTAL Number of Well Volumes  5  10  15	TIME /5:37 /5:41 /5:44	*C TEMP.	pH 7.6 7.4	0.57 0.58	Pumping Rate	(NTU's) >999 7999	 5, - -	
CALL ToTAL Number of Well Volumes  5  10  15  20	TIME /5: 3:7 /5: 41 /5: 44 /5: 49	TEMP. 15.4 15.9	pH 7.6	Conductivity 0.57	Pumping Rate	(NTU's) >999	5. - -	
GALL ToTAL Number of Well Volumes  5  10  15	TIME /5:37 /5:41 /5:44	TEMP. 15.4 15.9	pH 7.6 7.4	0.57 0.58	Pumping Rate	(NTU's) >999 7999	5. - - - -	
Total Number of Well Volumes  5  10  15  20  25	TIME /5: 3:7 /5: 41 /5: 44 /5: 49 /5: 53	70,0 TEMP. 15.4 15.9	pH 7.6 7.4 7.3	0.57 0.58 0.56	Pumping Rate	(NTU's) >999 >999 ->999	5.	
GALLS TOTAL Number of Well Volumes  5 10 15 20 25 32	TIME /5: 3:7 /5: 41 /5: 44 /5: 49 /5: 53 /5: 57	70,0 TEMP. 15.4 15.9	pH 7.6 7.4 7.3	0.57 0.58 0.56	Pumping Rate	(NTU's) >999 >999 ->999	5. - - - - -	
GALL TOTAL Number of Well Volumes  5 10 15 20 25 30 35	TIME  15: 37  15: 41  15: 49  15: 53  15: 57  16: 01  16: 22	76.1 16.7	pH 7.6 7.4 7.3 7.4	0.57 0.58 0.56 0.58	Pumping Rate	(NTU's) >999 7999 651 483	5. - - - - - -	
GALL TOTAL Number of Well Volumes  5 10 15 20 25 30 35	TIME  15: 37  15: 41  15: 49  15: 53  15: 57  16: 01	70,0 TEMP. 15.4 15.9	pH 7.6 7.4 7.3	0.57 0.58 0.56	Pumping Rate	(NTU's) >999 >999 ->999	5. - - - - - - -	

# NOTES:

Denvioped w/ Centrifigal pump i frot-value/hore assembly placed @ battern of well.

Considered dendoped @ 16:30 based on stabilization of readings over though NTU not below 50 NTU.

Well Developer's Signature.

FIGURE 4-13

WELL DEVELOPMENT RECORD NYSDEC QUALITY ASSURANCE PROGRAM PLAN

WELL	DEVELOPMENT RECORD		t i de garage de service de servi
Project: Hanna Furnace	Well Installation Date: ૧૯૧૬ દિવ		Project No.
Client: NイラフモC	Well Development Date:	Logged by: Jr (ADI)	Checked by:
Well/Site I.D.: Mルーに9	Weather:	Start Date:	Finish Date:
Initial Water Level (ft): 용,숙용		Start Time: いつけ	Finish Time:
Water Level during Initial Pumping/Purging (ft):			
Water Level at Termination of Pumping/Purging (ft):			

Number of Well	TIME	TEMP.	-U	Considerable ibs	Approximate Pumping Rate (gal/min)()>	Turbidity
Volumes	TIME	_	pΗ	Conductivity	(gavinin) v	(NTU's)
20g1	<u>0920</u>	1.12	11.32	1.12	24	> <u>1000</u>
4981	0923	1.90	11.45	1,40	FE 40	71000
(2 2 2)	0 928	3.0%	11.44	1.52	20	71000
Each	0933	5,8%	11.44	1.73	20	71000
10 691	0936	1.1	11.28	1.28	20	71000
12 941	0943	5.80	ાાત છ	1,08	20	20015
14 901	9-4-1-45	11,12		1766		> 1000

# NOTES:

Initial purp water black filt.

\*see attached Sheet

3

Well Developer's Signature

1 612,0 10143 100 John 172 60. 13,45 11,05 -10 ,7/2 10 -0.00 2709 10,89 \$155 1586 -10 10% 0,00 28,7 :. 00 .545 -10 10.84 ,00 0.00 565 14.03 10,00 248 607 10 \_ 0,00 1,05 ,560 10,80 107 29,7 -10 :0009 10,79 0,00 2918 ,564 -/0 50, 11/4 10176 0,00 30,3 1555 600 -10 14:17 00,00 10173 .55> 0,03 -10 30,6 1,20 30.7 102 10170 100 1549 -10 124 ,00 .545 60, -10 10170 30.9 1557 -10 , 60 14 27 ,02 10170 30,2 ,552 1,31 ,00 102 -10 3007 10.70 €ο, 30,4 4 36 めいてひ 1597 (0) -10 e 0 J 11.90 10.68 1542 30 à , 00 -0 106 4 544 30,6 00 -10 4,43 10, 67 ,02 10,66 14,46 31,0 110 . 548 \_/6 102 14,49 10,66 -1909 102 1597 27.9 601 10,65 452 1548 -10 109 3014 11155 10/4 .09 ,00 -10 30,7 1549 10,69 458 7560 -10 17 30,2 ,07

H'Q

1.45

WELL D	EVELOPMENT RECORD		
Project: HANNA FURNACE	Well Installation Date:		Project No. 7169-40
Client:	Well Development Date:	Logged by:	Checked by:
NYSDEC	10-19-94	TOL	
Well/Site I.D.:  MW-109	Weather:  DYERCAST / DTLY. SUNNY, 60'S	Start Date: /0-21-94	Finish Date:
Initial Water Level (ft): 8.98 Belev	s TOP AVC	Start Time:	Finish Time: 0943
Water Level during Initial Pumping/Purging /ff\	1/A		
Water Level at Termination of Pumping/Purging (ft):	<del>'                                    </del>		
GMLS.VS  TOTAL Number of Well- Valumes TIME TEMP.  2 0920 1.1  4 0923 1.9  6 0928 3  8 0933 5.8  10 0938 1.1  12 0943 5.8  NOTES:	pH Conductivity (s /1.38 /.12 /1.45 /.40 /1.44 /.52 /1.44 /.73 /1.38 /.38 /1.18 /.08	al/min) (N 0.04 // 0.05 // 0.05 > 0.06 //	Irbidity ITU's)  DOC  IDOC  ID
<b>&gt;</b>			
Well Developer's Signature			

FIGURE 4-13
WELL DEVELOPMENT RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

Project:	+ FURNACÉ	. \	Well Installation Da	ate: 19-94		Project No	40
Client:			Well Development	<u> </u>	Logged by		<u> </u>
Weil/Site I.D.:	W-110	1	Weather: RANY 6 000	neast; Bree-	-60: Start Date		
Initial Water Level (ft):	15.01 B			194;15.94	/ Start Time	Finish Tim	ie:
Water Level during Initia							
Water Level at Termina	tion of Pumping/Pur	ging (ft): NA					
GALLA TITAL Number of Well- Volumes		TEMP.	рН	mS/cn. Conductivity	Approximate Pumping Rate (gal/min)	Turbidity (NTU's)	6
2	10/21 08:50	2.5	7.16	0.605		651 >999	<b>8</b>
DRY @ 4							4
DRY @ 4 6 8	10/25 15:53	12.9	7.1 7.3	1.49		960	l
· 6	10/25 15:53						_

# NOTES:

Hand bouiled this much w/ Teflow Bouiler on 3 different days. On 10/26/94, Alysie Peterson of NYSDEC Agrees that based on all Readings, this well is developed.

Well Developer's Signature

Hu S. Zly

FIGURE 4-13
WELL DEVELOPMENT RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

WELL	DEVELOPMENT RECORD		
Project:	Well Installation Date:		Project No.
Hanna Furnace	10/19/194		7169-40
Client:	Weil Development Date:	Logged by:	Checked by:
NYSDEC	10/21/94		
Well/Site I.D.:	Weather:	Start Date:	Finish Date:
MW-110 Hanna Furnace	Overcest	10/2/194	
Initial Water Level (ft):	· •	Start Time:	Finish Time:
Water Level during Initial Pumping/Purging (ft):		950	
Water Level at Termination of Pumping/Purging (ft):			
Number of Well Volumes TIME TEMP. 2 GAILONS QUEST 2.5 CAILONS QUEST CONTROL CO	Pun pH Conductivity (9 7.16 0.605 B	gal/min) (f	urbidity NTU's)  51
			÷
<del>-</del>			•
Well Developer's Signature		BB Environmenta	ıl Services

	the state of the state of	GROUNDW	ATER SAMPLE	FIELD DAT	TA RECORD	Carrier And Milanes (1999) 1999
F	Project: Hanna F	urnace		Site: 1+ an	חנ דטרחבנ	MW-101
F	Project Number:	9-40		Date: 11/2		
	_			Time: Start:		End: 1730
8	Sample Location ID:[H]	FMWIDIX	XXPIVXX	Signature of	Sampler: P	K But 1
-						
1	Well Depth 17.42		Y Top of Well		ick-up 2.46 FL	Protective C. 24 Ft.
1		Historical	Top of Protect	ive (from ground)		Casing/Well Difference
- B				_	₹	Protective 2.70 FL
ğ						Casing
=	Depth to Water 6.73	Ft. Well Material:	Well Locked?:	Well Dia. 🔀	· 2 inch	Water Level Equip. Used:
₹		_X PVC	<u> </u>		4 inch	XElect. Cond. Probe
<b>8</b>		ss	No	_	_6 inch	Float ActivatedPress. Transducer
ا ۾		<del></del>		_		Fress. Transquoer
Water Level/Well Data		X .16 GaVFt. (2 in.)	-17		Az 11 1	
🜋	Height of Water Column	X65 GaVFt. (4 in.)	- F	Sal/Vol. \	Well Integrity: Prot. Casing Secure	Yes No
	12.64 FL	1.5 GaVFt. (6 in.) GaVFt. ( in.		uni Cal Burnad	Concrete Collar Intact	* =
		Gavet (in.	.)		Other	<del>-</del>
-	- <del>2::::::::::::::::::::::::::::::::</del>				<del></del>	<u></u>
ے ا	Duraina	/Sampling Equipment U	leed :		Decontamination	s Elvido Haad
Equipment Documentation	Epignio	Zambing Eddibineit C	seu.	•	Decontamination	r Muias Osea:
l fa	( If Used For)					•
E	Purging Sampling	Peristaltic Pump	Equipment ID AGC # 65910	-r:70	All That Apply at Loc Methanol (100	
8		Submersible Pump			25% Methanol	/75% ASTM Type II water
ă		Bailer PVC/Silicon Tubing	BAR		Deionized War	
But	= =	Teflor/Silicon Tubing	VIA		Hexane	ion
Ē		Airlift Hand Pump			HNO <sub>3</sub> /D.I. Wa	
		In-line Filter			None	
ш		Press/Vac Filter				<del></del> -
		<u></u>				
	· · · · · · · · · · · · · · · · ·		^ı	_		bservations:
a a	PID: Ambient Air	ppm Well Mouth C	ppm Purge Da		-lineTurbi Container ★Color	
ysis Data	· ·	\ -1	2 11			
8	Purge Data	@ 1.7_			_Gai. @ <u>&amp; . S</u> _	Gal. @Gal.
	Temperature, Deg. C	10.7	11.2	11,5		
A A	pH, units	штіоs/cm) 5.1	12.2	5.3	- 12.3 5.8	
Fleid Anai	Specific Conductivity ( Turbidity (NTUS)	Lumnos/cm)	30	12	_ =	
표	Oxidation - Reduction, Dissolved Oxygen, pp		0.96	1.2	112	
]	Dissolved Oxygen, pp	0.20	0.26	0.27	0.3	
	Analytical Parameter		reservation	Volume	Sample Bottle ILo	t Nos.
ş		Collected	Method	Required		
] E _	V VOCs V SVOCs			x40 ml x1 liter AG	376 E40 373632	
<u>a</u> <u>ig</u>	✓ SVOCS ✓ Metals			x1 liter P	415 7016	
<b>1</b> 20 80		V !	NaOH,4°C 1	x500mLP x1 liter P	415 7012	
B 글	Nitrate/Phosphate		-1,S0,,4°C 1:	x1 liter P		
<u>6</u> #	✓ Pest/PCB		1°C 7.8	x1 liter AG	373632	
15 g	_ TPH _ TOC		7 4	x1 liter AG x1 liter P		
5 5			_		i	
ole Collection Requiren	Notes: <u>Calcated</u>	Extra volum	e for Duc	hicate a	nd MS/M	5D
ᅙ		· · · · · · · · · · · · · · · · · · ·				·····
Sample Collection Requirements (/ If Required at this Location)						····
"						

	•		VATER SAM	PLE FIELD DA	TA RECORD	and the mila Manier Chen Service
P	Project: NYSDEC 1	JA #14			mitorice	mw.102
P	roject Number: 716	4-30		Date:		
					t: <u>1505</u>	End: 1545
S	ample Location ID: 4	- 120 1 MM	x x x 9 4 12	Signature of	of Sampler: 2	Kisuth
Ē.	Well Depth 17.35 F	t Measured Historical	Top of Casing	Protective (from groun	Stick-up Z.62 Ft.	Protective <u>C.23</u> Ft. Casing/Well Difference Protective <u>2.85</u> Ft.
Water Level/Well Data	Depth to Water 6.35 F	t. Well Material:PVCSS	Well Locked?YesNo		2 inch 4 inch 6 inch	Casing  Water Level Equip, Used:  X Elect. Cond. Probe  Float Activated  Press. Transducer
Water	Height of Water Column	X.16 Gal/Ft. (2 X65 Gal/Ft. (4 1.5 Gal/Ft. (6 Gal/Ft. (_	in.) =		Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes No
atlon	Purging/	Sampling Equipmen	ıt Used :		Decontamination	on Fluids Used:
Equipment Documentation	(/ If Used For) Purging Sampling	Peristaltic Pump Submersible Pum Bailer PVC/Silicon Tubin Teflon/Silicon Tub Airlift Hand Pump In-line Filter Press/Vac Filter	<u> </u>	P 0-620 	( All That Apply at Lo	0%) ol/75% ASTM Type II water ater ation ater Solution
Jata	PID: Ambient Air	ppm Well Mouth			In-lineTurb In ContainerCold	ored Odor
lysis Data	Purge Data Temperature, Deg. C	@ <u>_1,8</u> 		し Gal. @ <u>らい</u> 11.14	1 Gal. @ <u>6.6</u> 11,5	Gal. @Gal.
Field Anal	pH, units	8.1	7.	7 7.5	7.5	
Þ	Specific Conductivity () Turbidity (NTUS)	umhos/cm) Octo	<u> </u>	100	- 0,0	
듄	Oxidation - Reduction,					
	Dissolved Oxygen, ppn	0,5			D.62	
	Analytical Parameter	✓ If Sample	Preservation	Volume	Sample Bottle IL	ot Nos.
ø		Collected	Method	Required		
e i	✓ VOCs		4°C	2x40 ml	376840	)
E F	SVOCs Metals	V	4°C HN0,,4°C	2x1 liter AG 1x1 liter P	373637 4757c1c	
	✓ Cyanide	<u> </u>	NaOH,4°C	1x500mLP	4157012	
R S L	Nitrate/Sulfate Nitrate/Phosphate	10 01 B	H,S0,,4°C H,S0,,4°C	1x1 liter P 1x1 liter P		
e g	Pest/PCB		4°C	Zax1 liter AG	37363	۲
<b>E S</b>	_ TPH _ TOC		H,S0,,4°C H,S0,,4°C	2x1 liter AG 1x1 liter P		<del></del>
Sample Collection Requirements ( / If Required at this Location)	Notes:	<del></del>	₹ 4' -			
<u> </u>						
Sar			-			
					ABB En	vironmental Services

			V. 1101(15).1011	JE RIELU DA	I A RECURD	aranga ang Afrikatika Arika Piri
	Project: <u>NYODEC</u>		mac Furnace		nou Furnace	MW-103
F	Project Number:	24-40		Date:\\		
1					: <u>.1545</u>	End: 1635
S	Sample Location ID: H	-MW1031	xxxquxx	Signature of	f Sampler:	Buth
-	17 55		· · · · · · · · · · · · · · · · · · ·			
	Well Depth 17,55 F				Stick-up 2,29 Ft.	Protective O.76 Ft.
Ì	•	Historical	Top of Prot	ective (from ground	d) -	Casing/Well Difference
1 2					-	Protective 2155 Ft.
Water Level/Well Data						Casing
9	Depth to Water 4.35 Fi	t. Well Material:	Well Locked?:	Well Dia. 🔿	<u>L</u> 2 inch	Water Level Equip. Used:
₹		PVC SS	Yes No		4 inch 6 inch	Elect. Cond. Probe
\$					6 Inch	Float ActivatedPress. Transducer
1 -				_		
ate		★.16 GaVFt. (2 i)	in.) _ 2.1	Gal/Vol	Well Integrity:	Yes No
≥	Height of Water Column	X65 GaVFt. (4 i	in.) =	<del></del>	Prot. Casing Secure	<del>*</del> =
	13.2 Ft.	1.5 GaVFt. (6 i	<sup>(n.)</sup> L <u>63</u>		Concrete Collar Intact Other	-X -
			,			
	:			<u> </u>		
=	Puraina/	Sampling Equipment	t Used :		Decontamination	n Fluids Used :
l €						
Ĭ	( If Used For)		Faula-110		d All The A A e it and	
Ĕ	Purging Sampling	Peristaltic Pump	Equipment ID ひうり10-02	oo oo	✓ All That Apply at Loc  Methanol (100)	
ខ	<u> </u>	Submersible Pump Bailer	ABB-ES		25% Methanol	75% ASTM Type II water
0		PVC/Silicon Tubing	9		Deionized Wa	
5	<u> </u>	Teflon/Silicon Tubi	ng P/A		Hexane	
Equipment Documentation		Airlift Hand Pump			HNO <sub>3</sub> /D.I. Wa	
3		In-line Filter			None	:
W		Press/Vac Filter				
l						
	PID: Ambient Air O	pom Well Mouth	O pom Purge	Data Collected II	Sample C	Observations:
ata	PID: Ambient Air O	ppm_ Well Mouth _	O ppm Purge		Sample C	d XClear Cloudy
s Data					n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor
ysis Data	Purge Data	@ 2.1	Gal. @		n-lineTurbin ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor
nalysis Data	Purge Data Temperature, Deg. C	@ <u>Z.1</u>	Gal. @		n-lineTurbin ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor
	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ	@ 2.1 10.4 8.4 unhos/cm) 2.8	Gal. @ 4.2 10 b 5.09 7.74	Gal. @ 6,2 10,5 10,5 2,72	n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor
	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS)	@ Z.1 10.4 8.4 unhos/cm) 2.8	Gal. @ 4.2 106 8 89 2.74 2	Gal. @ 6.7 10.6 10.6 2.72	n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor
Field Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	@ Z.1 10.4 8.3 unhos/cm) 2.8 10	Gal. @ 4.2	Gal. @ 6.2 10.6 10.6 2.72 5 2.52	n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor
	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction,	@ Z.1 10.4 8.4 2.8 10 4-mv	Gal. @ <u> </u>	Gal. @ 6,2 10,6 10,6 2,72	n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor
	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	@ 2.1 10.4 2.7 2.8 10 4-mv	Gal. @ 4,2 10.6 6.00 2.74 2	Gal. @ 6.7 10.0 10.0 2.72 5 0.52 0.13	n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor Gal. @ Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	@ Z.1 10.4 8.3 unhos/cm) 2.8 10	Gal. @ 4.2	Gal. @ 6.2 10.6 10.6 2.72 5 2.52	n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor Gal. @ Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	@ 2.1 10.4 8.4 2.8 10 4-mv 0.59 0.13	Gal. @ 4.2	Gal. @ 6,3  10,6  2.72  2.72  5  0,52  C.15	n-lineTurbi n ContainerXColor	d <u>X</u> Clear _Cloudy ed <u>X</u> Odor Gal. @ Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm ->	@ 2.1 10.4 8.4 2.8 10 4-mv 0.59 0.13	Gal. @ 4.2 10.6 5.09 2.74 2 0.53 0.13	Gal. @ 6.7 10.0 2.72 5 2.52 0.13	Sample Bottle ILo	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	@ 2.1 10.4 8.4 2.8 10 4-mv 0.59 0.13	Gal. @ 4.2  10.6  2.74  2  0.53  0.13  Preservation Method  4°C 4°C HN0,,4°C	Volume Required  2x40 ml 2x1 liter P	Sample Bottle ILo	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm ->	#/ If Sample Collected	Gal. @ U.2  IC. 6  8 8 9 7 7.74  2 7.74  2 7.74  2 7.74  4 C 4 C 4 C HN0 , 4 C NaOH	X	Sample Bottle ILo	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data  Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm ->	#/ If Sample Collected	Gal. @ U.Z  IC.L 6.99 2.74 2.74 2.74 2.75 0.13  Preservation Method  4°C 4°C HN0,,4°C NaOH,4°C HS0, 4°C HS0, 4°C HS0, 4°C HS0, 4°C	Volume Required  2x40 ml 2x1 liter P 1x1 liter P 1x1 liter P	Sample Bottle ILo  376840  1137615  4137615	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr  Yellovy  Analytical Parameter	@ 2.1 10.4 8.4 2.8 10 4-mv 0.59 0.13	Gal. @ 4.2  10.6  2.74  2  0.53  0.12  Preservation Method  4°C 4°C HN0, 4°C NaOH, 4°C HS0, 4°C H'S0, 4°C HS0, 4°C HS0, 4°C	X	Sample Bottle ILo	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data  Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm ->-1-0-1-1  Analytical Parameter  X VOCs X SVOCs X Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate V Pest/PCB	#/ If Sample Collected	Gal. @ U.Z  IC.L 6.99 2.74 2.74 2.74 2.75 0.13  Preservation Method  4°C 4°C HN0,,4°C NaOH,4°C HS0, 4°C HS0, 4°C HS0, 4°C HS0, 4°C	Volume Required  2x40 ml 2x1 liter AG 1x1 liter P 1x1 liter P 5x1 liter AG	Sample Bottle ILo  376840  1137615  4137615	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr Yellovy Analytical Parameter  X VOCs X SVOCs X Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate V Pest/PCB TPH TOC	@ 2.1 10.4	Gal. @ 4.2  10.6  2.74  2  0.53  0.12  Preservation Method  4°C 4°C HN0, 4°C NaOH, 4°C HS0, 4°C H'S0, 4°C HS0, 4°C HS0, 4°C HS0, 4°C HS0, 4°C HS0, 4°C	Volume Required  2x40 ml 2x1 liter P 1x5 liter P 1x1 liter P 5x1 liter AG 2x1 liter AG 2x1 liter AG 1x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P	Sample Bottle ILo  376840  1137615  4137615	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr Yellovy Analytical Parameter  X VOCs X SVOCs X Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate V Pest/PCB TPH TOC	#/ If Sample Collected	Gal. @ U.2  ICLE  1CLE	Volume Required  2x40 ml 2x1 liter P 1x5 liter P 1x1 liter P 5x1 liter AG 2x1 liter AG 2x1 liter AG 1x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P	Sample Bottle ILo  376840  1137615  4137615	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr Yellovy Analytical Parameter  X VOCs X SVOCs X Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate V Pest/PCB TPH TOC	@ 2.1 10.4	Gal. @ U.2  ICLE  1CLE	Volume Required  2x40 ml 2x1 liter P 1x5 liter P 1x1 liter P 5x1 liter AG 2x1 liter AG 2x1 liter AG 1x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P	Sample Bottle ILo  376840  1137615  4137615	d Clear Cloudy ed X Odor  Gal. @Gal.
nents Field Anal	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr Yellovy Analytical Parameter  X VOCs X SVOCs X Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate V Pest/PCB TPH TOC	@ 2.1 10.4	Gal. @ U.2  ICLE  1CLE	Volume Required  2x40 ml 2x1 liter P 1x5 liter P 1x1 liter P 5x1 liter AG 2x1 liter AG 2x1 liter AG 1x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P	Sample Bottle ILo  376840  1137615  4137615	d Clear Cloudy ed X Odor  Gal. @Gal.
Fleid Anai	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr Yellovy Analytical Parameter  X VOCs X SVOCs X Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate V Pest/PCB TPH TOC	@ 2.1 10.4	Gal. @ U.2  ICLE  1CLE	Volume Required  2x40 ml 2x1 liter P 1x5 liter P 1x1 liter P 5x1 liter AG 2x1 liter AG 2x1 liter AG 1x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P	Sample Bottle ILo  376840  1137615  4137615	d Clear Cloudy ed X Odor  Gal. @Gal.

		GROUNDW	ATER SAN	APLE FIELD	DATA RECORD	化二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十
	Project: NYSDEC V			Site:	tanna Furnace	MW-104
F	Project Number:নাডণ	1-30 -56W			11/29/44	
	·				Start: 1015	End: 1200
S	Sample Location ID: [4] (	MWI O 4X	X X 9 4	人 X Signatu	re of Sampler:	KButh
fa	Well Depth 17,60 Fi	Measured Historical	Top of Top of Casin	Protective (from g	iser Stick-up <u>254</u> Ft. round)	Protective 0.30 Ft. Casing/Well Difference Protective 2.84 Ft.
Water Level/Well Data	Depth to Water 8.71 Ft	. Well Material: PVC SS	Well LockedYesNo	?: Well Di	a. <u>Y. 2 inch</u> 4 inch 6 inch	Water Level Equip. Used: X Elect. Cond. Probe Float Activated Press. Transducer
Water	Height of Water Column <u>음.안</u> 요 Ft.	16 GaVFt. (2 in X65 GaVFt. (4 in1.5 GaVFt. (6 in GaVFt. (i	1.) =	Gal/Vol.  D Total Gal Purge	Well Integrity: Prot. Casing Secure Concrete Collar Intact ed Other	
tation	<u>Puraina</u> / ( <b>√</b> If Used For)	Sampling Equipment	<u>Used</u> :		<u>Decontaminatio</u>	on Fluids Used :
Equipment Documentation	Purging Sampling	Peristaltic Pump Submersible Pump Bailer K PVC/Silicon Tubing Teftor/Silicon Tubin Airlitt Hand Pump In-line Filter Press/Vac Filter	A OB -E	2	( All That Apply at Lo- Methanol (10 25% Methanol X Deionized Wa Liquinox Solu Hexane HNO <sub>3</sub> /D.I. W. Potable Wate	0%) bV75% ASTM Type II water ater stion later Solution
Data	PID: Ambient Air O	_ppm Well Mouth (		urge Data Collected_	In-lineTurb	ored Odor
Field Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	#- mv5		0.3 10	Gal. @ 5.60  11.7  11.2  11.7  11.7  0.81  0.81  0.64  0.67	Gal. @ 7.0 Gal.  11.27  0.812
s .	Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.
Sample Collection Requirements (  / If Required at this Location)	➤ VOCs ➤ SVOCs ➤ Metals ➤ Cyanide — Nitrate/Sulfate — Nitrate/Phosphate ➤ Pest/PCB — TPH — TOC  Notes:	X X X X X	4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C	2x40 mi 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 2x1 liter AG 2x1 liter AG 1x1 liter P	376840 573632 4157616 4157616 373632	
	·				400.5	viroamaetal Saniasa

		- A-11.3		E FIELD DAY		A. 1 10 mg
	Project: NHSEC ~		<del></del>	Site: 14000 Date: 1/12	k Funkie n	10.5
1 '	10,00, 110,000.	1 -,0 - 0000	<del></del>	Time: Start:		End: 1145
s	ample Location ID: H C	MWINDSX	VIXAUIXI		Sampler: 34-P	
	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	1. 1. 1. 10 10 1			Campier. 13F-1	
	Well Depth <u>17:45</u> FI	X Measured Historical	Top of Well Top of Prote		tick-up <u>2.01</u> Ft.  )	Protective O. 8 Ft. Casing/Well Difference
Water Level/Well Data	Depth to Water 7.79 Ft	. Well Material:	Well Locked?:		2 inch 4 inch	Protective 2.19 Ft. Casing  Water Level Equip. Used:  **Description: The Elect. Cond. Probe**
ter Level/		ss	No	Ξ	6 inch 	Float Activated Press. Transducer
Wa	Height of Water Column 9.66 Ft.	X.16 GaVFt. (2 in X65 GaVFt. (4 in1.5 GaVFt. (6 in GaVFt. (ir	.) - /2.5	Total Cal Buses d	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes No X
ation		Sampling Equipment (	<u>Used</u> :		Decontamination	ı Fluids Used:
Equipment Documentation	(/ If Used For) Purging Sampling X X	Peristaltic Pump Submersible Pump Bailer	Equipment ID ACS ES OS	)10-0 <b>2</b> 0	All That Apply at LocMethanol (10025% MethanolX Deionized Wai	%) /75% ASTM Type II water
<u> </u>	<u> </u>	PVC/Silicon Tubing Teffon/Silicon Tubing	9 14		Liquinox Solut	ion .
Ę		Airlift Hand Pump			HNO <sub>3</sub> /D.I. Wa	
		In-line Filter			None	
иŭ		Press/Vac Filter				**
<u> </u>						·
l			_			
)ata	PID: Ambient Air 0.3	ppm Well Mouth	( ppm Purge		Sample Co- n-lineTurbion ContainerColor	
ils Data	PID: Ambient Air 0.3	ppm Well Mouth 13	· · · · · · · · · · · · · · · · · · ·	X Ir	r-lineTurbi	d <u>X</u> ClearCloudy edOdor
ılysis Data		@ <u>2</u>	Gal. @ 3.5	<u>X</u> Ir _Gal. @ <u>5.0</u> 12.4	TurbineTurbine ColorColo	d <u>X</u> ClearCloudy edOdor Gal. @Gal.
	Purge Data Temperature, Deg. C pH, units	@2 	Gal. @ 3.5 (2.0 9.2	Gal. @ 5.0 12.4 - 91.36	-tineTurbinColorColorColorColor	d <u>X</u> ClearCloudy edOdor 
	Purge Data Temperature, Deg. C	@2 	Gal. @ 3.5 (2.0 9.2	X	TurbineTurbine ColorColo	d <u>X</u> ClearCloudy edOdor 
Fleid Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction,	@ 2 (11.0 8.09 (1.00 (1.00 (1.00) (1.00)	Gal. @ 3:5	Gal. @ 5.0 12.4 	-tineTurbin containerColorColorColor	d <u>X</u> ClearCloudy edOdor 
	Purge Data Temperature, Deg. C pH. units Specific Conductivity (µ Turbidity (NTUS)	@ 2 (1,0 8,09 (1,00 (1,0	Gal. @ 3.5	Gai. @ 5.0 12.4 	1-lineTurbinTurbinColorColorColorColorTurbinColorTurbin _	d <u>X</u> ClearCloudy edOdor 
Field Ana	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	(1.0 8.06 0.00 1.3 mv	Gal. @ 3:5	Gal. @	1-lineTurbinTurbinTurbin	d
Field Ana	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppr	@ 2 UNIO B.UE B.UE INIO	Gal. @ 3.5  12.0 9.2 5	Gal. @ 5.0  12.4	Sample Bottle ILo	d
Field Ana	Purge Data Temperature, Deg. C pH. units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppr	@ 2 IIIIO B.UE B.UE IIIO	Gal. @ 73.5  12.0 9.7 9.7 5. C.146 0.001  Preservation Method  4°C 4°C	X   Ir	1-line Turbin Container Color	d
Field Ana	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppr	# To Sample Collected	Gal. @ 3.5  12.0 9.2 9.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	X   Ir	Sample Bottle ILo	d
Field Ana	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, ppm	# To Sample Collected	Gal. @ 3.5  12.0 9.72 0.10 0.01  Preservation Method  4°C HN0,.4°C NaOH.4°C H_S0,.4°C	Volume Required  2x40 ml 2x1 liter AG 1x5 liter P 1x500mLP 1x1 liter P	Container	d
Field Ana	Purge Data  Temperature, Deg. C pH. units  Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr  Analytical Parameter   VOCs  SVOCs  Metals  Cyanide Nitrate/Sulfate Nitrate/Phosphate  Pest/PCB	@ 2 III.0 B.∪9 B.∪9 III.0	Gal. @ 73.5  12.0 9.7 9.7 9.7 1.0 0.01  Preservation Method  4°C 4°C HN0, .4°C NaOH.4°C HS0, .4°C HS0, .4°C 4°C 4°C 2	X   Ir	Sample Bottle ILo  376840  376840  4157010	d Clear _ Cloudy ed _ Odor  Gal. @ Gal.  t Nos.
Field Ana	Purge Data  Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr Scalinal Parameter  Analytical Parameter  VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH	# Tollected    Collected   Col	Gal. @ 73.5  12.0 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	Volume Required  2x40 ml 2x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P 2x1 liter AG	Container	d Clear _ Cloudy ed _ Odor  Gal. @ Gal.  t Nos.
Field Ana	Purge Data  Temperature, Deg. C pH. units  Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr  Analytical Parameter   VOCs  SVOCs  Metals  Cyanide Nitrate/Sulfate Nitrate/Phosphate  Pest/PCB	# Tollected    Collected   Col	Gal. @ 73.5  12.0 9.7 9.7 9.7 1.0 0.01  Preservation Method  4°C 4°C HN0, .4°C NaOH.4°C HS0, .4°C HS0, .4°C 4°C 4°C 2	Volume Required  2x40 ml  2x1 liter AG  1x1 liter P	Sample Bottle ILo  376840  376840  4157010	d Clear _ Cloudy ed _ Odor  Gal. @ Gal.  t Nos.
Field Ana	Purge Data  Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr Scalinal Parameter  Analytical Parameter  VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH	# Tollected    Collected   Col	Gal. @ 73.5  12.0 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	Volume Required  2x40 ml 2x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P 2x1 liter AG	Sample Bottle ILo  376840  376840  4157010	d Clear _ Cloudy ed _ Odor  Gal. @ Gal.  t Nos.
Field Ana	Purge Data  Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr  CALIDAT  Analytical Parameter   VOCs  SVOCs  Metals  Cyanide Nitrate/Sulfate Nitrate/Phosphate  Pest/PCB  TPH  TOC	# Tollected    Collected   Col	Gal. @ 73.5  12.0 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	Volume Required  2x40 ml 2x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P 2x1 liter AG	Sample Bottle ILo  376840  376840  4157010	d Clear _ Cloudy ed _ Odor  Gal. @ Gal.  t Nos.
Field Ana	Purge Data  Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr  CALIDAT  Analytical Parameter   VOCs  SVOCs  Metals  Cyanide Nitrate/Sulfate Nitrate/Phosphate  Pest/PCB  TPH  TOC	# Tollected    Collected   Col	Gal. @ 73.5  12.0 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	Volume Required  2x40 ml 2x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P 2x1 liter AG	Sample Bottle ILo  376840  376840  4157010	d Clear _ Cloudy ed _ Odor  Gal. @ Gal.  t Nos.
nents Fleid Ana	Purge Data  Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pprr  CALIDAT  Analytical Parameter   VOCs  SVOCs  Metals  Cyanide Nitrate/Sulfate Nitrate/Phosphate  Pest/PCB  TPH  TOC	# Tollected    Collected   Col	Gal. @ 73.5  12.0 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	Volume Required  2x40 ml 2x1 liter P 1x1 liter P 1x1 liter P 1x1 liter P 2x1 liter AG	Sample Bottle ILo  376840  376840  4157010	d Clear _ Cloudy ed _ Odor  Gal. @ Gal.  t Nos.

		GROUND	<b>WATER SA</b>	MPLE FIELD DA	TA RECORD	that musicing a property of the
	roject: <u>N45DEC 心(</u>		· ·			MW-106
P	roject Number: 714	<u>4-30                                    </u>	<del></del>	Date: <u>\\\</u>		
				Time: Start		End: 1000
s	ample Location ID: 4 F	MW106	XX X 9 4	メメ Signature o	f Sampler: 12_1	c Buth
					- 0	
	Well Depth 17.45 Ft.	Measured Historical		of Protective (from groun	Stick-up <u> </u>	Protective 0.39 Ft. Casing/Well Difference
ata			Casi	ng 	· 7	Protective 3.24 Ft.
Water Level/Well Data	Depth to Water 7.37 Ft.	Well Material:PVCSS	Well LockeYesNo		2 inch 4 inch 6 inch	Water Level Equip. Used:  Elect. Cond. Probe Float Activated Press. Transducer
Water	Height of Water Column ) いら、でど Ft.	16 GaVFt. (2 (65 GaVFt. (4 1.5 GaVFt. (6 GaVFt. (	in.) = in.)	C Gal/Vol.  D Total Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes No X
ation		ampling Equipmen	nt Used:		Decontamination	n Fluids Used:
Equipment Documentation	( If Used For) Purging Sampling	Peristaltic Pump Submersible Pum Bailer PVC/Silicon Tubin Tefton/Silicon Tub Airlift Hand Pump In-line Filter Press/Vac Filter	p	#65916~CZC	✓ All That Apply at Loc  Methanol (100  25% Methano  X Deionized Wa  Liquinox Solut  Hexane  HNO <sub>3</sub> /D.I. Wa  Potable Water  None	(%) V75% ASTM Type II water ter ion ter Solution
ysis Data	PID: Ambient Air 6	ppm Well Mouth	0.3 <sub>ppm</sub>		Sample C In-lineTurbi In ContainerColor	Observations: d
S D	Purge Data	@ 2.	O Gal. @ 3	nぢ Gal. @ ち、C	) Gal. @	Gal. @ Gal.
ys	_			10.3		
na Ta		5/cm -10.5		0.19 10.6		
Fleid Ana	Specific Conductivity	nheeren) 0.78			4	
亨	Turbidity (NTUS) Oxidation - Reduction, +	-mv	<del> </del>	<u> </u>	-	
ш.	Dissolved Oxygen, ppm	17		1.2		
	Sainita %	0.0		5.0 0.0	3	
<b></b>	Analytical Parameter	/ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILo	t Nos.
Ĕ.	∨_ VOCs	<u> </u>	4°C	2x40 ml	376840	
ב <u>ַ</u>	∠ SVOCs	V	4°C	2x1 liter AG	373632	
<u> </u>	∠ Metais	V	HN0,,4°C	1x1 liter P	415.70,0	
<b>9</b>	✓ Cyanide Nitrate/Sulfate		NaOH,4°C H,S0,.4°C	1x500mLP 1x1 liter P	4157412	
<b>E</b>	Nitrate/Phosphate		H,S0, 4°C	1x1 liter P		
<u> </u>	Pest/PCB		4°C	Z_6x1 liter AG	373632	
ie d	_ TPH _ TOC		H,S0,,4°C H,S0,,4°C	2x1 liter AG 1x1 liter P		
	<del></del>		·2= -4 · · =	•		
olection Requirer (/ If Required at this Location)	Notes:		, <u>, , , , , , , , , , , , , , , , , , </u>			
Sample Collection Requirements (* Il Required at this Location)						
Sar						
- <b>-</b>	•					

ABB Environmental Services—

	*					the second section of the sect
	Project: Harra Fu			Site: 14000	14 FUTDE	MW-107
P	roject Number: ٦١٤٥	1-40		Date: 11-26	લન્લપ	
	·	<b>.</b>				End: 915
S	ample Location ID: H F	MINIOLIM	<b>オメ611171</b>	Signature of S	ampler: BŁ	Buth
ata	Well Depth <u>iフ.45</u> Ft.	Measured Historical	Top of Well Top of Protect	Well Riser Stick tive (from ground)	K-up <u>2.48</u> Ft.	Protective <u>O,17</u> Ft. Casing/Well Difference  Protective <u>2.15 Ft.</u> Casing
Water Level/Well Data	Depth to Water 5.60 Ft.	Well Material: PVC SS	Well Locked?:No		2 inch 4 inch 6 inch	Water Level Equip. Used: Elect. Cond. Probe Float Activated Press. Transducer
Water	Height of Water Column 1.05 Ft.	X .16 GaVFt. (2 in.)  .65 GaVFt. (4 in.)  1.5 GaVFt. (6 in.)  GaVFt. (in.)	- 65	Pro Co	ell Integrity: ot. Casing Secure encrete Collar Intact her	Yes No
tation	Purging/S  (✔ If Used For)	ampling Equipment U	<u>sed</u> :		Decontamination	Fluids Used :
Equipment Documentation	Purging Sampling	Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Tefton/Silicon Tubing Airlift Hand Pump In-line Filter Press/Vac Filter	Equipment ID		All That Apply at Loc.  Methanol (100' 25% Methanol Deionized Wat Liquinox Soluti Hexane HNO <sub>3</sub> /D.I. Wat Potable Water None	%) /75% ASTM Type II water er on ter Solution
Jata	PID: Ambient Air O			ata CollectedIn-lii	neTurbic containerColore	ed _Odor
alysis Data	Purge Data Temperature, Deg. C		Gal. @ 315 4 10		Gal. @	Gal. @Gal.
Fleid Ana	pH, units Specific Conductivity (µ)	mhos/cm) 1.4	1.3	<u> </u>		
Be	Turbidity (NTUS)	20				
Œ	Oxidation - Reduction, + Dissolved Oxygen, ppm	7- mv	2.4	<u> </u>		
	3/11/11/11	0.1	C.1	L.O.		
s.	Analytical Parameter		eservation Method	Volume Required	Sample Bottle ILot	Nos.
en .	✓ VOCs		•	2x40 ml	370040	
<b>Le</b> (c) Eq.	✓ SVOCs ✓ Metals	<u> </u>		2x1 liter AG Ix1 liter P	4157010	
ocal ocal	∠ Cyanide Nitrate/Sulfate	Z N	aOH.4°C	x500mLP	41570:2	
원 - 등	Nitrate/Phosphate	H	S0 ,4°C	IX1 liter P IX1 liter P		
e i	✓ Pest/PCB TPH	4	°C 27	lx1 liter AG 2x1 liter AG	373632	
lect Like	TOC			x1 liter P		
Sample Collection Requirements ( / If Required at this Location)	Notes: DO highe-	due to cir	- שוממונה זר	hose-la	flow/rec	herymey with.
San						
					ADD East	ironmental Services

			ATER SAMPL	EFIELD DA	TA RECORD	Same a distribution of
F	roject: NYSDEC	<b>に 34 年 正</b>			nni Futhace	MW-108
P	roject Number: 716	-30		Date:		
l		·		Time: Start	: 1415	End: 1505
S	ample Location ID: 145	MW1018X	XX94XX	Signature of	f Sampler: Bk	3 th
-	· · · · · · · · · · · · · · · · · · ·				-	
	Well Depth 17.50 F		Top of Well		Stick-up 2.0 Ft.	Protective 0,5Z Ft.
		Historical	Top of Protect	tive (from groun	d) .	Casing/Well Difference
l a				<u>.</u>	•	Protective 2.52 FL
Water Level/Well Data						Casing
<del> </del>	Depth to Water 6.07 F		Well Locked?:	Well Dia. 🗋	<u>∠</u> 2 inch	Water Level Equip. Used:
₹		PVC SS	<u></u> Yes No	_	4 inch 6 inch	Elect. Cond. Probe Float Activated
8						Press. Transducer
1						
ate		X.16 GaVFt. (2 in.)	- KB	Gai/Vol.	Well Integrity:	Yes No
≥	Height of Water Column いごろ Ft.	X65 Gal/Ft. (4 in.)	-		Prot. Casing Secure	<u>×</u> =
	11/13/PC	1.5 Gal/Ft. (6 in.)		otal Gal Purged	Concrete Collar Intact Other	<u> </u>
	: u*		,			<del></del>
	1					
Ę	Puraina/	Sampling Equipment U	sed:		Decontamination	r Fluids Used:
Equipment Documentation						
<b>E</b>	(✓ If Used For) Purging Sampling	•	Equipment ID	,	✓ All That Apply at Loc	ation)
Ě	Y Z	Peristaltic Pump	Equipment ID <u>みららせころ</u> 1K	-020 '	Methanol (100	
Ö		Submersible Pump Bailer	ABB	•	25% Methanol Deionized Wat	/75% ASTM Type II water
		PVC/Silicon Tubing			Liquinox Soluti	
뒫		Teflon/Silicon Tubing Airlift	NIA		Hexane HNO <sub>3</sub> /D.I. Wa	tor Caluman
툡	· <u></u>	Hand Pump	<del></del>		Potable Water	
n.		In-line Filter Press/Vac Filter			None	•
		Freezy vac milet				
						<del></del>
	PID: Ambient Air O	ppm Well MouthC	ppm Purge D	ata Collected	Sample O In-line Turbio	bservations: d \( \sum \) Clear \( \_ \) Cloudy
ysis Data				<u> </u>	In ContainerColor	edOdor
S D	Purge Data	@ 118	Gal. @ 3. Le	Gal. @ 514	Gal. @	Gal. @ Gal.
ysl		10.3	10,9	11.1		
nai	Temperature, Deg. C pH, units	7.31	7.38	7,4	<u> </u>	
¥ I	Specific Conductivity (µ	mhos/cm) 0.79	0,85	0,895		
Fleld Anal	Turbidity (NTUS) Oxidation - Reduction,	1. my 250		_ <u> </u>		
111	Dissolved Oxygen, ppn	0.4	0,20	<i>ا</i> 5،5		
		<u> </u>	0.0	0.02	<b></b>	
	Analytical Parameter	✓ If Sample Pr	reservation	Volume	Sample Bottle ILo	t Nos.
60	, and a second	-	Method	Required	Gampio Bottlo (Co	
ent.	火 vocs	V 4	•°C	2x40 ml	4376840	
Ē.	X SVOCs	<u></u>	rc :	2x1 liter AG	3 136 32	
ulr	X Metals X Cyanide	<u></u>	laOH.4°C	x1 liter P	4157010	
Zeq Zeq	Nitrate/Sulfate		1,S0 ,4°C	x1 liter P		
	Nitrate/Phosphate  ½ Pest/PCB	<u> </u>	1,50, ,4°C	x1 liter P Ix1 liter AG	373632	· · · · · · · · · · · · · · · · · · ·
35 a a	TPH		1,S0, 4°C	tx1 liter AG		
<b>lle</b> c	TOC	H	1,S0, .4°C	x1 liter P		
ole Collection Requiren ( If Required at this Location)	Natar					
음 5	Notes:		<del></del>	····		
Sample Collection Requirements (  / If Required at this Location)		···	<del></del>	<del></del>		
Ö						
						ironmental Services

# SECTION 3.0

# TEST PIT RECORDS

	· · · · · · · · · · · · · · · · · · ·	TE	ST PIT REC	ORD				
Profile Alond	Test Pit: —	4F PS101			Project I	vo.:_71	69-40201	2
	a Furnace		Landfill		Date:	olible	ત્વ	-
								-
SKETCH MAP OF	TEST PIT PROFI	LE			<b>=</b>			<
	0		0000					
,		৽ ③	0 0				•	
		6	5-1 BOTP=9.9	S <sup>1</sup>				
SCALE 1" =	<u>З</u> . FT.							'
Soil, Sompored Company (Stag frag frag frag frag frag frag frag fr	Collected N9' bys	nics (rooted stage reple), son	DID=0 ich sand, efire damp, rays sky		Sample ID	Depth (Ft.)	LHD. 3P. PID (PPM)	
tr. Wood	cicles (p			· REFE	RENCE: FIEL		: <u>2</u> : <u>34-35</u>	
				SIGN	ATURE: P			
							mastal Sanjigas	

			ST PIT REC	CILD		···
Profile Alone	g Test Pit: —	1FP5102			Project No. <u>: ½</u>	7169-40012
		Debris			_Date: 1016	
SKETCH MAP O	F TEST PIT PROF	II F	K- 81		7	
	1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ç (.	0 0 0	<del>-&gt; </del>
	ļ					+ 1
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					_/	
				$O_{i}$	/	
				[]		
				5.1		
				130TP-5	<u> </u>	
					·	
SCALE 1" =	<u>3</u> _гт.					<del></del>
NOTES: (1)	0 - ~1' has	- brown	Sandy			
aravel c	over soil	dolomie	fragments	No.	Sample ID Depth (Ft.)	HO: SP. PID (PPM)
ڄآهم.		<del> </del>	<del></del>	S-1 14 S-2	FPSIZMS 5	0
	,	act grave		- S-3		
Diffici	51ag, wo	och fragr ccavate t	ents, dans	S-4 S-5		+
		from bo		S-6 S-7		
	/w buch		<u> </u>	S-8		
,						
				•		11
				-		
	<u> </u>	<del></del>		REFERE	ENCE: FIELD BOOK	#: 2
	<del></del>	<del></del>	<del>, ,,,-,, ,,,,, ,,</del>	-	Page	#: 36-37
				SIGNAT	URE: 12	3utl
				•		
			<del></del>	-		
					•	
· · · · · · · · · · · · · · · · · · ·			<del></del>			
			<del></del>	•		
					ABB Enviro	nmental Services-

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			TE	ST PIT REC	ORD			
	Profile Alono	Tast Pit	HEPSIO3			Project N	10 · 7116	9-40 2 of 2
			- Debris I			Date:		
2	SKETCH MAP OF	TEST PIT PROF	ILE B	3 /	,	<b>H</b> 9		5
2			5 7	40 4				
			\ ♦ <sub>o</sub>	(2) (				
			, e	3	<b>v</b> /			
			0	5-1 TP="95"				
	SCALE 1" =	3 FT.	00	TP: 40				
			cuated @	أراناهم لمحمد	L.			
			by surface		≤. No.	Sample ID	Depth (Ft.)	H <del>D: SP</del> . PID (PPM)
		cs. 1205			- S-1	HEPS103XX	7	0
			own to bl		- S-3 S-4			
	(2) 0.5-~		^		S-5			
			stic, cloth		S-6 S-7			
		d slag -			S-8			
	(3) >3'- 1	olack fin	<u>e material</u>	<u>lu soire</u>				
			wood, to		<del></del>	<del></del>	<u>-l</u>	
			<u>Collecte</u>		-			
•			<u>lu backh</u> 3xx794		- REFER	ENCE: FIELD	BOOK #:	2
	<u> occuer</u>	171- 7-310	JACK 1 (S)	~~~	-		Page #:	37-38
					SIGNA	TURE: 😅	7-3-72	-KButh
		·			_	3619	હાંધ્ય	
					-			
-	<del></del>			<del></del>	-			
•		· · · · · · · · · · · · · · · · · · ·	<u>-</u>		-			
•					-			
					-	ADD	Eaulas -	ental Services-

9406046D L 3

			ST PIT RECO	חחט			-
Profile Alon	g Test Pit: —	HFP5104			Project No	.: <u>71</u>	64-40 2012
Site: Hann	a Furnace	Debris	(andfill		Date:IC	11719	14
SKETCH MAP O	F TEST PIT PROFI		·		7		
	0.5	0	<del>  </del>		<i>/</i> 1		
	2.5	2					
	13	3					
							·
				/			
			5-1	BOTT	7= 9.5 '		
SCALE 1" =							
NOTES: BO	tton of te	St Pit @	9.51 bgs			Depth	HD. SP: PID
	encounter		<del></del>	No.	Sample ID HEPSIDHXX9	(Ft.)	(PPM)
roots	. Cover &	iei ary,	some	S-2	HEY JIVAK I		
	· COVO	2011				i l	
(2) Dark	prown fi	re-sand to	sailt sizad	S-3 S-4	···		
			d clocks.	S-4 S-5		·	
<u>materia</u>		e cemente	d ciocls,	S-4			
materia some f	il/w son Vrnce brid st.	e conente uk fragre	d ciocls, its, dry	S-4 S-5 S-6			
madeico sone f to moi	ullu son vinae bri st. moist to	e conente ik fragne wat fine	d clocks, its, dry	S-4 S-5 S-6 S-7			
material some f to mai Black Material	ullu son vinae bri st. moist to al, tr. w	e cenente ik fragne wet fine	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7			
material some f to mai Black Material	ullu son vinae bri st. moist to al, tr. w	e cenente ik fragne wet fine	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7			
material some for to main and a material water (a) Called	who son which so we coming into	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d clocks, its, dry	S-4 S-5 S-6 S-7 S-8	RENCE: FIELD	BOOK #	2
material some for to main and a material water (a) Called	ullu son vinae bri st. moist to al, tr. w	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7 S-8	RENCE: FIELD		: <u>2</u> : <u>28-30</u>
material some for to main and a material water (a) Called	who son which so we coming into	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7 S-8	RENCE: FIELD	Page #	28-30
material some for to main and a material water (a) Called	who son which so we coming into	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7 S-8		Page #	28-30
material some for to main and a material water (a) Called	who son which so we coming into	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7 S-8		Page #	28-30
material some for to main and a material water (a) Called	who son which so we coming into	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7 S-8		Page #	28-30
material some for to main and a material water (a) Called	who son which so we coming into	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7 S-8		Page #	28-30
material some for to main and a material water (a) Called	who son which so we coming into	e cenente ix fragre wet fine ood, tr. 1 to pit 0 c of thi	d ciocls, its, dry grained wire Fill	S-4 S-5 S-6 S-7 S-8		Page #	28-30

. 9406046D L3

	TEST PIT RECOR	D ·	
	Profile Along Test Pit: HFPS105	Project No.:	169-40 2012
	Site: Hanna Furnace Debris Landfill	Date:10/1	7/94
W	SKETCH MAP OF TEST PIT PROFILE	7.	• F
		(6,0)	
	7.0		
	SCALE 1" = 3.0 FT.		
	MOTES: 10 brawn, loose, chry fire topsoil, some roots, some gravel.	No. Sample ID Depth (Ft.)	HD: SP-PID (PPM)
•	(2) to k brown to black fine	S-1 HFP5105XX7 7	5
	contract in the contract	S-2 S-3	
		S-4 S-5	
	Charges to made said to	S-6	
•	1 1 N. 2	S-7 S-8	<del> </del>
•	Scrape below water table.		
•			
	<u> </u>		
-		REFERENCE: FIELD BOOK	#: 2
-		Page	#: <u>30-31</u>
•		SIGNATURE:	Buth
-			_
-		••	
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-			
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9406046D L 3

	IESI F	TRECORD		
Profile Along Tes	t Pit:HEPS106X119	14××	Project No.: 71	69-40 201
Site: Hanna			Date: 10/17	lou
Site: Han in	700 mese		Date:(O\1 /	199
SKETCH MAP OF TEST	PIT PROFILE	4- 2	20'→	
	Part -	0	7 6 0	15-1-1
		2		
			1	-/4
		4 5		
		<b>5</b> .		
				1
:		7		8
1				
		BOTE	=11,5	
SCALE 1" = 4		1 00		<u> </u>
,				
	2.8'- bran gravell		Sample ID Depth	HD. SP. PID
	ed naterial, some a	S-1	HFPSIO6XI( +)	(PPM)
	ver soil.  Dk brown fine an	S-2		
	some wire, I'd			
	rains of corrodod	5-5 S-5		
hucket oka	die vollan hocket	S-6		
Becomes in	outer saturated (9	N 81 /45. 5-8		
Excavated	sample from as	deep		
as backho	e could grab.		<u>.:</u>	<u></u>
	<del></del>			
		REFE	RENCE: FIELD BOOK #	#: 2
			Page #	: 31-33
	1	SIGN	ATURE: Z K	3. 41
***************************************		<del>,</del>		<u> </u>
		·		
	· · · · · · · · · · · · · · · · · · ·	<del> </del>		
6046D L3			ABB Environ	mental Services-

TEST PIT REC	
Profile Along Test Pit: HFP5107	Project No.: 7169-40 2 of 2
site: Hanna Furnace Debris Landfill	Date: 101/8/94
SKETCH MAP OF TEST PIT PROFILE	,
A5-1 2 ZWL	
SCALE 1" = 3FT.	
NOTES: @ Soft/1005e brown/gray/black	
Sordy Slag/w some iron ore. dry.	
(2) Black sand (w some mica,	S-1 HFPS107XX6 6 0
tr. slag, tr. wood. Oily sheer.	S-2
"Odor"?" PID-O. Wet.	S-4
Water satid @ 5' approx.	S-5
Collected scuple approx 6'bgs in water	S-7 S-8
m water.	
<u> </u>	REFERENCE: FIELD BOOK #: 2
	Page #: 38-39
	SIGNATURE: Z L'BUTL
	•
	•
	•
5046D L 3	ABB Environmental Services—

		TE	ST PIT REC	ORD			
Profile Along	g Test Pit: —	TP-108	LASFS	108)	Project N	lo.:	1169-4520
Site:					Date:	10/18	194
SKETCH MAP O	F TEST PIT PRO	FILE			· <del>-</del>		
	:				- i	j	
	1				٦ /		
	F			23	. 6.	4' bg	Þ
			4		./		
•							
SCALE 1" =	FT.	<u> </u>	<u>L</u>		<u>-</u>		<u> </u>
NOTES:					·		<b></b>
1 pron	- ١٥١٥١ مد	root zone	orgen.	No.	Sample ID	Depth (Ft.)	HD, SP, PID (PPM)
(5)	make, a	15 ker al		- S-1 S-2	HFPSIONXI	10	NR
bl.	acic. 50:1	Martin		- S-3			
(3) 1°	in de	/ infilting		S-4 S-5		<del> </del>	
(2) live	o WUTT	1 1014. H14?	301	- S-6			
(d) 2			·····	_ S-7			
(4) 5ar	re astw	<u> </u>		<u>S-8</u>		-	
······································	<del></del>			-			
		_		-			
				-			
	<del></del>			- REFE	RENCE: FIELD	BOOK #	#: <u>2</u>
				-		Page #	: <u>39-40</u>
<del></del>				- CICN	ATURE:		
· · · · · · · · · · · · · · · · · · ·		<del></del>		- 31314	ATORIE.		5.300
		<del></del>	· <del></del>	-	,		
	· · · · · · · · · · · · · · · · · · ·		······································	•			
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				-			
				-			
				-			
				-	4.00	<b>.</b> .	mental Services

### **SECTION 4.0**

## TEST BORING LOGS AND OVERBURDEN MONITORING WELL CONSTRUCTION DIAGRAMS

						Test Bor	lig	Log						
Proje	a na Fu	<u>- ۱</u> د	æ					Boring/Well M いして			roject l			
Clien				Sit	te	nafornace- Ba	ile-	House !	Sheet N	lo		of	(	
Logge	ed By ئالايىت					d Elevation 584.0	Star	t Date			Date 21 G	1		
Drillin	a Contract	or	lling Inv	ost.		Driller's Name Brich Lumber			Rig Typ	De	B-5			·
Drillin	g Method	<u> </u>	1110	<u> </u>		Protection Level	<del> </del>	P.I.D. (eV)	Casing	Size		Auge	Size	
Soil C			Rock Drille	d			Depth	to Groundwater/			Piez	Weil		_
			%			<u> </u>				. Đ	Мо	nitoring	,	
Feet)	No. & ation/ (Feet	Турв	ws/6"	-N /Ft.)	Log	S. S.	ampl	e	SS symbo	Drillin	(bt	om)		ests
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Des	crip		USCS Group Symbol	Notes on Drilling	PI Meter Field Scan	PI Meter Head Space		Lab Tests
0	5-1 1.0 /2.0	spt	6. 8. 76.	26		Moist to dark Silty sunch h Fragments	ہ دو	d brick	Fill		0			
- L	5-2	Spt	24- 12- 12- 12	24		Red brick, bri Sand/wrish to black/cyray in spoon t	five-rect airing change ded sand ill		:	0	· ·			
	5-3 Reford	Spt	Refush			convete/1 4-6' h		ok.		1	٥			
\(\begin{align*} \begin{align*} \beg						No sant	oline	<i>t</i>		(11)				
ر ارا	5-4 1.1/ /2,0	spt	10-	3		Blue and whi sand his ye wet. Peut Possible calo	llow in S	poontip.	77	1111	0	O		14FB51G5 X1094KX
2	5-5 1.0/ 12.0	spt	1- 2- WOH- WOH	2		Dark bran Peat. Wel	77 A	o black	* 1	11 (11)	0			
14 —	5-60 1.0/ 2.0	spt	1- 2- 2	3		As above to Change to a Spean top	jou	rsiltin.	(10	1101	0			
1						Advenced h to 1511	x s	scupling	ML					

			Test Bo	uug	Log						
Project HAN	NA FULL	N ACE			Boring/Well I		F	Project I	No. 69-6	10	
Client NYSDE	C	Site	HANNA	Fu	2 NACE	Sheet N	o		of	1	
Logged By T. L	ongley	Groun	nd Elevation 583.8	Star	t Date 10-24-94		Finisl	n Date /ひーぱ	14-9	4	
Drilling Contractor ADVANCED DR	ILLING I	۷۷	Driller's Name BRIA	N LA	MBERT	Rig Typ	Ю	BILE	B-	57	-
Drilling Method	5. A.		Protection Level C DERMA		P.I.D. (eV) /O. <i>O</i>	G <del>asing</del> 4.	Size 25		Auger	Size エ.カ	
Soil Drilled	Rock Drilled	<b>F</b>	Total Depth	Depth 5.	to Groundwater/ 35′B公ら	Date 10/25	194	Piez	Well	Boring	9
Depth(Feet) Sample No. & Penetration/ Recovery (Feet) Sample Type	SPT Blows/6" or Core Rec./Rqd. %	(Blows/Ft.)	<b>-</b>	Sampl escript		USCS Group Symbol	Notes on Drilling	<del></del>	PI Meter 3 ozi	]	Lab Tests
Sis Rea	Corr		J .			g	N <sub>O</sub>	P! Me Field	PI Me Head		
5-1 1-20 SPT	14-	39	VARIABLE BLACK, BRO SAND, SILA DRY	ww, R	usty, Blue.	FILL		WORKING &	NA		
3-22	5-7	//	AS ABOVE PIEC		SRICK.			NOT W	•.		
5-3 20 57		10	AS ABOU SATURA	E BO	uT .			PLD			
1 2.0 521 1.3	5- 12- 5- 6	7	0-0,8 A= 0.8-1.3 - PI FINE TO MEI CHALMY, S	NKISH							
9 2.0	5~	10	45 ABOVE +0 TAN ?		KISH WITTE ACE ASH						
11 - 2.3 571	6-	11	AS ABI	vE		-					HFBS 106 X1294XX
13 3.0 SP1	2	4	AS ABOVE SPOON HA ASH-LIK	40 B	hack.	FILL					
15			NO SAM	nple							
			B.O. B.	15	B65		DD E.	vironm	ental S	envice	

1. V.,			Test Bo	ring	Log						
Project HAN,	va Fur	NACÉ	-		Boring/Well	No. 10:7-	P	roject l 7/	No. 69-4	60	:
Client NYSDE		Site	HANNA F	ロベン		Sheet N	o.	1	of	1	
Logged By T. Lo	milal EY	Grou	nd Elevation		t Date 10-34-9	]	Finish		-24	-9J	
<b>Drilling Contractor</b>	•	<del></del>	579.6 Driller's Name			Rig Typ	DB A1		B-1		<u></u>
Drilling Method	ED DRILLIA		Protection Level		P.I.D. (eV)	Casing		06,16	Auger	Size	
Soil Drilled	Flock Drilled	4,	Total Depth	Depth	to Groundwater	/Date		Piez	Well	80rino	
15	N/A	, <del></del>	15		8.4' BGS 10	25/14	10:15		nitoring		
on/ on/ eet)	% .bt		60 P			lodi	illing		m)	,	ی
Depth(Feet) Sample No. & Penetration/ Recovery (Feet) Sample Type	SPT Blows/6* or Core Rec./Rqd.	(Blows/Ft.)		Sampl script		USCS Group Symbol	Notes on Drilling	PI Meter Field Scan	PI Meter Head Space		Lab Tests
1 - 5"/5" SPT	BIACK TO DARK BROWN  6"/5"  BIACK TO DARK BROWN  6RAVEL & SAND, METALIC &  DRY - DK. GREEN AND SANT  W MATRIX										
3-20 1.3 SPT	3-16-15-15	31	BLACK TO B GRAVELLY A SILTY, MET GRAVEL-SIT	st, s allic LED	LAG, ETC LUSTRE TD PIECES	- FILL-		ר שסמבומק			
5-3	1-1-1-2 3	2	0-0.2' AS PEAT-BLA FIBERS	ck, n Moist	محودا	PY		PID NOT			
7-20 50	3-3-3-2	6	PEAT AS		recovery	<del>-</del> <del>-</del> <del>-</del> <del>-</del>		, p. 4.			
9 - 2.0 0.1 SPT	- 1-1-1-2	2	PEAT ,	<del>1</del> 5	ABOJE	PT		!			
0.8	2-3-3-4	6	BLUE GM SILT, MOIST TR. ORGANIC NON-PLAS	T, TR	. SAND, DENSE	OL					
13- 20 114 SPT	3-12-15-17	17	BLUE GRAY VERY DENS MASSIVE	₹ B1 €,41	lown silt. Hrd, Dry,	ML					HF85107 XIH 94 XX
15			NO SAM	PLE							
			B.O.B. 11	5 B	.6	^	BB En	vironm	ental S	ervice	S

						Test Bo	un6	Log						
Proje		FJ	mace					Boring/Well I			roject l		5	
Clien				Site	8	na Furnece /S	irera		Sheet N		1	of		
Logg	ed By みらいせん					d Elevation		t Date 10-19-94		Finish	Date	-9u		
Drillin	g Contract	or	illing h	0.1061		Driller's Name	be-t		Rig Ty	De	B-:			
Drillin	g Method		may i	iloe 5 i	- 1	Price Lem Protection Level Cde-mal	De C	P.I.D. (eV)	Casing	Size	<u> </u>	Auge	r Size	
Soil E			Rock Drille		1	Total Depth	Depth	to Groundwater/ きとうりゅう	Date		Piez	Well		
	5	<u>_</u>	N/A %			15	ωц	9 C-1 104-2				nitoring		
9et)	to. & ion/ (Feet)	ype	vs/6"	<b>→ £</b>	Log	,	`omn!	•	S mbol	Jilling	(bt	om)		sts
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	. De	Sampl		USCS Group Symbol	Notes on Drilling	PI Meter Field Scan	P! Meter Head Space		Lab Tests
0	5-1	spt	6. 7- 15- 5	22		Black gray, 1 Silt, little	scacl	noist.	fill					
2-	5-2 0.8 /2.0	spt	19- 12- 11- 12	23		Black fines Coal, brick doup								
S	5-3	spt	432-1	5		Black fire a tr slag, so moist/wet	<b>t</b>		7	冒	•			
]	5-4 0.8/ 12.0	spt	2755	7		As Above, V	sute:	satid.		11.11				HFB'3108
6	5-5	spt	1-2-15	3		5114 to 1 0-0,8 blac 0,8-0,9-04	korg et gr	an siltyfi	Sin	1111				
5	5-6	Spł	2-225	4		gruy silty s down to end and brown	ine e Hed	sand grading	Say Mc	1111				
	3/60	Spt	4557	10		Gray silt/ (anime.	اک در ا	one sordy Saroling	S.Y ML	111				
الله ا						Advanced to 1		वेट्योगिक हाँ खेंथे।१५४						
								•	J ,					

						Test Bo	ring	Log			,	*******		
Proje		na	Furnac	٤_				Boring/Well			Project	No. 9-4	0	
Clien	t NYS	DE	2	s	Site	Sirenango St	eet		Sheet N	۷o	1	_ of	2	
Logg	ed By BKB	منط	or_	G	roun	nd Elevation 585.2	Star	t Date 10/19/94			h Date	લપ		
	ng Contrac		illing In	V		Driller's Name Brian Lank	sert	,	Rig Ty	pe bile	B-9	57		
	ng Method 4.25"				_	Protection Level Cdemal		P.I.D. (eV)	Casing			Auge	r Size 25"	ID.
	Orilled		Rock Drille い)の	d		Total Depth 2ら	Depth (၁	to Groundwate	r/Date		Piez	Well		
										1	_	nitorin	g	
(Feet)	No. 8 ation/ y (Fee	Type	ows/6	SPT-N (Blows/Ft.)	)   0 	[]   S	Sampl	e	USCS up Symbo	Drilli		om)	-	ests
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SP (Blow	Graphic Log	De	ion	USCS Group Symbol	Notes on Drilling	Pl Meter Field Scan	PI Meter Head Space		Lab Tests	
						Concrete Rubble - No Souple								
-	5-1 2.0 1.2	Spt	8/21/32/22			0-0.8'= brown to gray gravely silt/wsome originis, moist. 0.8-1.2'= black fire loose ash-like material Black fire-med sand/w					0	NR		
3-	52 2.0 1.3	59+	20/20/18/0	·		Biack fine tr. gravel.	æd s	sand/w	Fill		0	NR		
7	5-3	Spt	4			AS Aloove.			Fini		0	NR		HFBSIO9- KX794KX
	2.0	5pt	147/2/7			Black silty wet, loose of slag fra	Gran Gren	iei composei its, angular	FILL		0	NR		
1	7		Refusal			Auget Reform	abov abov	ing reurilled e	where	te!				
5	5-5 2.0 0.7	5pt	5/5/3/5			Biack to 1. d silt/w trac metallic fia	2500	d, truce	FILL		0	Nic		
12- 14-	رة الم الم الم الم	Spt	3/5/2/0			NO RECOVE	٦٦		3.		NR	NR		
14	5-7	Spt	9/17/17			Brown silthwarey mottling, trace to little fine sand.			ML		0	NR	_	
									A	BB Ec	vironm	ental S	ervice	لــــــــــــــــــــــــــــــــــــــ

							Test Bol	ma	rog			:				
Projec		γa.	Furno	œ					Boring/We Mω-		lo. G	Р	roject l	No. 1169-	40	
Client	NYS	DEC	;		Site	51	henango S	teel		Г	Sheet No	0	2	of	2	
Logge	d By BKR	ربر	مح		Grou	ind	Elevation 685.2	Star	1 Date 10119 194			Finish	Date 10/19	194		
Drillin	g Contract ducince d	or		inu.		D	riller's Name Brich Len	nber			Rig Typ Ma	e Soile	B-	57		
	g Method		H Cli		_	P	rotection Level C desmal		P.I.D. (eV)		Casing りル			Auger 4,2	Size	
Soil D			Rock Drill りに	ed		T	otal Depth	Depth	to Groundwat	er/	Date		Piez	Weil	Boring	,
								<u> </u>			0	ing	}	nitoring		
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Ocre Rec./Rad. 9	N-14S	(Blows/Ft.)	Graphic Log	De	Sampl script	ion		USCS Group Symbol	Notes on Drilling	PI Meter Field Scan	Pl Meter 3 Head Space		Lab Tests
,,,,,	5-8	\$pt	19/1/15/10				Grey silt, to tr. root he fragments	-	ML		0	NR.				
18-1	5-9	<b>S</b> pt	2/2/2/0				As Above		_	ML		0	NR			
20-	5-10 2.0 1.9	Spt	2/2				Grey silt, vey soft,	50F1 We	to t.	•	ML		0	NR	·	
22-							NO SAMP	CE								
24-	5-11	Spt	3/4/5/6				Grey silt/i mottling			•	<b>™</b> L		0	NR		-
25							B08=1	z5 '	bgs	•						
1										-				·		
												00 F				

							lest Bor	1116	Log							
Proje	et Han	na	Furna	æ					Boring/We				Project !	₩. 19 <b>-</b> 4	0	
Client	NYS	DEC		S	ite Si	re	unango Ste	ul		s	sheet N	lo		_ of	2	
Logg	ed By Bk	Bu	Her	Gr		nd I	Elevation 685.0		t Date 10118(94				h Date	.4		
Drillin	a Contract	tor	rilling	low.	,	Di	riller's Name Brich La	mbe			Rig Typ	oe ile ī	3-57			
Drillin	g Method			<del></del>		Pr	rotection Level Cde-mal		P.I.D. (eV)	_	Casing			Auger	Size	<u> </u>
Soil D	orilled		Rock Drille	d		To		Depth じる!!	to Groundwate	er/C		• • • • • • • • • • • • • • • • • • • •	Piez	Weil		
						٦					-	ng.		nitoring	3	
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Pranhir 1 og	Judying Log		ampl script			USCS Group Symbol	Notes on Drilling	Pl Meter Field Scan	Pl Meter (3) Head Space		Lab Tests
	R. B.	S	Con								9	ž	PI Me Field	P! Me Head		
	5-1 2.0/1.5	spt	(n) =  x)				Black fine-n Fines, mois	Fill		NR	NR					
2-	52 2.1/1.4	Spt	22				Biack fine-r tr. gravel, tr tr. rust sta dry. Color	FILL		NR	NR					
	2.0/1.3	Spt	82				Brack to silv and finesh fragments, e Comented. 10	2 50: 2/4.0 2/12/12	ne metal Dry, 11 to 1042/6	:/1	Fill		NR	NR		
— فا 	5-4 2.0/1.5	Spt	22/37/27/27				0-1.0= blac 110-1.5= light fine sand1 M graded. 10	tgrev oist yRlb	roff whit pocyy In to 104R/7	h	Fill		NR	NR		
8-	5.5 2.0/1,5	Spt	13/5/				Dark grey-b tr. 4. sand, fraguents, c	lang	۶.		Պ∟		NR	NR		1294 XX
10-	3.6	Spt	16				Dark grey si tr. fine sand	1+/w , da	tr. cyravel,	Ĭ.	WL		NR	NR		HFBSIIOXIZ44XX
12-	5-7 20/ 1.8	Spt	8/8/6/6				0-0.9 = 6 rea cs above. Silt/w som Matter, dam	0.9- e wa P	·1.8= Black cod/origonic	ر .	ML 0L		NR	NR		
14-	5-8 2.0/ 4.5	Spt	3/5/				0-0:3-4rey wet, peory 0:3-1:5= 9~ hdes, frect	ey si	14/22 root		3m ML		NR	NR		
16			<del></del>		<u> </u>						<u> </u>	BB E	nvironm	ental S	Service	s

						Test Bo	ring	Log				31 3 27 2 11			
Projec	Hann	a F	ردمودو					Boring/We Mω-			Р	roject l	Vo. 9-Ц(	)	
Client	NYS	DEC		Sit		herango St	eel	-	9	Sheet N	ه	2	of _2	<u>,                                    </u>	_
Logge	ed By らんら	بالمو		Gro	ound	d Elevation 585.0	IStar	Date 10118 44			Finish (0	Date  19 41	1		
Drillin	a Contract	or	Drillin	g Inv		Driller's Name Brich Lew	nbert			Rig Typ <b>Y</b> \c	e bile	_ීල-	57		
Drillin	g Method 4,25"			3		Protection Level C dermal		P.I.D. (eV)		Casing			Auger	Size	
Soil D			Rock Drille いか	d	1	Total Depth 20		to Groundwate		Date		Piez	Well	Boring	,
		<u>'</u>						-)	•		Ō	Мо	nitoring		
eet)	lo. & ion/ (Feet	уре	vs/6"	≥ <u>£</u>	Log	٠	ample			Sode	Orillin	(bt	om)		sts
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	. De			USCS Group Symbol	Notes on Drilling	Pl Meter Field Scan	PI Meter Head Space		Lab Tests	
	5-9		15			Grey silt as	ve, moist								
	2.0/0.5	spt	5/8/8/5							Wr		NR	NR		
	5-10		9/2			Grey silt/u	tr.	ine scacl,			. '				
باليين	2.0/1.4	Spt	9/12/13/21			tr. olive-browet.	<i>:</i>	mottling;	-	ML		0	NR		
						808=2	0, p	95							
7									-						
									-		:				
					-				-						
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4				•		-			-						
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1		i l	ļ	1	Į.	1			_			<b>'</b> ,	' 1 <i>C</i>		<u>'</u>

OVERBURDEN MONITOR	ING WELL CONSTRUCTION DIAGRAM
Project Hanne Furnale Study Area Fil-	le-Cake Area Driller Advanced Drilling
	0-101 Drilling Method 4,25" 10 H5A
Date Installed <u>I</u>	0/20194 Development Method Pump + Surge
Field Geologist BB: Her	
	7
	Elevation of Top of Surface Casing: 585.4  Stick-up of Casing Above Ground Surface:
*	Elevation of Top of Riser Pipe: 585-17
Ground Elevation 583.8	Type of Surface Seal: cenert/best 6:00+
Elevation 580.0	Type of Surface Casing: <u>Stee I</u>
	/-"
	ID of Surface Casing:
	Diameter of Borehole: 8.25
	Riser Pipe ID: 2"
	Type of Riser Pipe:
	Type of Backfill: 95:5 Cenest/bestunite
	Groot
	ab ic raw
	-Elevation of Top of Seal: 3455 579.8
	Depth of Top of Seal: Re 3' bas Type of Seal: Purp Gold hert. Chips
•	-0.5
<b>■</b>	-Elevation of Top of Sand: 575.8  Depth of Top of Sand: 4'665
	Depth of Top of Sand: 4'655  Elevation of Top of Screen: 577-8
	Depth of Top of Screen: 51 bgs
<b>∷</b>  ≣ ∷	Type of Screen: 2" (D 7 )C
<b>∷</b>  ≣ ;	Slot Size x Length: ID' X 0.006
<u>" ≣ "</u>	ID of Screen: Z" PVC
<b>.</b>  ≣ <b> </b> .  -	Type of Sandpack: # CO Morie
<u>`</u>  ≣ \'	Elevation of Bottom of Screen: 15-66-5-5-7-8
-   -	Depth of Bottom of Screen: 15
	Depth of Sediment Sump with Plug: DIA
<b>1</b>	
	- Flournian of Bottom of Borohola: 567.8
	-Elevation of Bottom of Borehole: 5' 15' 165
	ABB Environmental Services

### OVERBURDEN MONITORING WELL CONSTRUCTION DIAGRAM Project Harris Firmer Study Area Debris Lindfill Driller B. Lumbert Drilling Method 4.25" ID HSA 7164-40 MW-102 Boring No. Project No. Date Installed Pump & Surge Development Method Field Geologist BY BUHERT Elevation of Top of Surface Casing: Stick-up of Casing Above Ground Surface: Elevation of Top of Riser Pipe: Type of Surface Seal: Conert/best areu Ground Elevation 580.3 6" ID Steet Type of Surface Casing: 6110 ID of Surface Casing: **&.25**" Diameter of Borehole: Riser Pipe ID: Pic Type of Riser Pipe: Type of Backfill: 95% Perflexed Count 5% Bestonite Elevation of Top of Seal: Depth of Top of Seal: Type of Seal: Bertanite Elevation of Top of Sand: Depth of Top of Sand: Elevation of Top of Screen: Depth of Top of Screen: Type of Screen: # (c Slot Size x Length: ID of Screen: #00 Morie Silica Soud Type of Sandpack: 565.3 Elevation of Bottom of Screen: Depth of Bottom of Screen: Depth of Sediment Sump with Plug: 565.3 Elevation of Bottom of Borehole: Depth of Bottom of Borehole:

Project Henry Fornace Study	Area Debris Luxuful Driller B. Lumbet
Project No. 7169-40 Boring	
Date II Field Geologist <u>BK Butter</u>	nstalled ic 2014 Development Method Pump 1 Surge
Tible Coologist	
<b>6</b>	7
	Elevation of Top of Surface Casing: 583.81 Stick-up of Casing Above Ground Surface: +2,5'
	Elevation of Top of Riser Pipe: 583.54
Ground - 3 3	Type of Surface Seal: Conunt / Der curet
elevation 580.3	Type of Surface Casing:
(37)	~~~
	ID of Surface Casing:
	Diameter of Borehole: 25"
	<b></b>
	Riser Pipe ID: 2"
	Type of Riser Pipe: PVC
	Type of Backfill: 95% Cement, 5% Bentonite
	5
	Elevation of Top of Seal:
	Depth of Top of Seal: 3 bgs Type of Seal: Bestonite Chips
	Type of Seal: Bestonite Cnips
	Elevation of Top of Sand: 577.3
	Depth of Top of Sand: 4'645
<b>1</b> <del>  -   -   -   -   -   -   -   -   -   </del>	Elevation of Top of Screen: 575.3
	Depth of Top of Screen: 5'bg5
:   ≣   :	Type of Screen: PVC
"   ≣   " '	Type of Screen: YVC  Slot Size x Length: #(0 x 10)
	ID of Screen: Z'
	ID of Scienti.
	- Type of Sandpack: #OO Morie Silica
	Elevation of Bottom of Screen: 565.3
	Depth of Bottom of Screen: 15 65
i LJi	Depth of Sediment Sump with Plug:
[ 1	
<u> </u>	Elevation of Bottom of Borehole: 565.3
_	Depth of Bottom of Borehole: 15' bq5
	·
V.	
	ABB Environmental Service

OVERBUR	DEN MONITORING WELL CONSTRUCTION DIAGRAM
Bridge Hanne French	Study Area South UPG Driller B. Lambet
Project Hanna Furnace	44
Project No. 71169-40	
Field Geologist Bk Butl	Date Installed   Development Method   PUMP   SURGE
Fleid Geologist 19C Case	
	2
Ø	Elevation of Top of Surface Casing: 587.19
	Stick-up of Casing Above Ground Surface: +2.51  Elevation of Top of Riser Pipe: 586.90
Ground and	Type of Surface Seal: Conent Bent Grout
Ground 584.4 Elevation	Type of Surface Casing: Steet
THE REPORT OF THE PERSON OF TH	初 · · · · · · · · · · · · · · · · · · ·
	ID of Surface Casing: 6"
	Diameter of Borehole: 8, 25 "
	<b>3</b>
	Riser Pipe ID: 2"  Type of Riser Pipe: PVC
	Type of Backfill: 95% Covert, 5% Bestonite
	<del></del>
	<del></del>
22	Elevation of Top of Seal: 581.4
	Depth of Top of Seal: 3 logs
	Type of Seal: 13extonite Chips
	Elevation of Top of Sand: 580.4
	Depth of Top of Sand:
	Elevation of Top of Screen: 579.4
	Depth of Top of Screen: 5'
	Type of Screen:
	Slot Size x Length: #6×10'
	ID of Screen: 2"
	Type of Sandpack: #OO Morie
	Type of Sandpack.
	Elevation of Bottom of Screen:
	Depth of Bottom of Screen: 15'
	Depth of Sediment Sump with Plug: <u>N(A</u>
l l	*1
	Elevation of Bottom of Borehole: 569.4
	Depth of Bottom of Borehole: 15'

		ORING WELL CONSTRUCTION DIAGRAM
Project Hanna	Furnace Study Area	Boiler House Driller B. Lambert
Project No		MW-105 Drilling Method 4,75 HSA
		10/21/44 Development Method PUMP & SURSE
Field Geologist <u>C</u>		
ζ.	<b>*</b>	Elevation of Top of Surface Casing: 586.32
		Stick-up of Casing Above Ground Surface: +2.5  Elevation of Top of Riser Pipe: 586.03
O		Type of Surface Seal: Ceret Bost 6-00+
Ground Elevation 584.0		Type of Surface Casing: 5+eet
(2)		
		ID of Surface Casing:
		0 254
L'		Diameter of Borehole: 8,25"
· Ł		Riser Pipe ID: Z"
		Type of Riser Pipe: PNC, Sch 40
į.		
		Type of Backfill: 95% Portland Correlt,
		5°10 bertanite
6		
E		
	<b>2 2 4 −</b> −	Elevation of Top of Seal: 58
		Depth of Top of Seal: 3 bas
		Type of Seal: Bert. Chips
	,	T
		Depth of Top of Sand: 4'1045
		Depth of Top of Sand: 4'045  Elevation of Top of Screen: 579
		Depth of Top of Screen: 5'645
		Type of Screen: PVC, Sch 40
		Slot Size x Length: FC LO'
		ID of Screen: Z"
		Type of Sandpack: # Co Morie Silica
ľ		Type of Sandpack: World Silicu
ı		Elevation of Bottom of Screen:
		Depth of Bottom of Screen: 151 bas
l		Depth of Sediment Sump with Plug: 014
ĺ		
1	1	
		— Flevation of Bottom of Borehole: 569
444		Depth of Bottom of Borehole: 569  Depth of Bottom of Borehole: 151045
		ABB Environmental Services

Project HANNA Fully	ਲਾਓ Study Area		Driller A, D I.
Project No. 7169-40	Boring No/	MW-106	Drilling Method 4.35" H.S. A.
_	Date Installed	10-24-94	Development Method HAND BAILED
Field Geologist	m Longley	<del></del> '	CENTRIFICAL PUN
		1.00	
Ø	<b>-</b>		p of Surface Casing:
· 1	7		ing Above Ground Surface: 3.4"
11			p of Riser Pipe: 585.67
around SR2.8	I A	Type of Surface	
eround 583.8		Type of Surface	e Casing: <u>Concrete</u> STEEL
<b>V</b>		ID of Confeed C	e vi
		ID of Surface C	
		Diameter of Bo	rehole:
		Riser Pipe ID:	a
		Type of Riser F	Pipe: PVC
		Type of Backfill	: CEMENT/BENTONITE
	<i>Y</i> //	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	GROUT
	<i>V</i> //		
<b>(/</b> )			
			50,0
		Elevation of To	·
-		Depth of Top of	BENT. CHIPS - MEDIUM
		Type of Seat.	DENT: CHIPS - THEOLUM
		Elevation of To	p of Sand: 579.8
		Depth of Top of	
I		Elevation of To	
ill≡		Depth of Top of	· · · · · · · · · · · · · · · · · · ·
		Type of Screen	: PVC
		Slot Size x Len	
		ID of Screen:	2*
		Type of Sandpa	ack: SIUCA SAUD 0.0 GRADE
		Elevation of Bo	ttom of Screen:
		Depth of Bottor	<del> </del>
			nent Sump with Plug:
	J 1	20p 0. 200m	
	1		
		Flevation of Bo	ttom of Borehole: 567.8
<del></del>			n of Borehole: 15

FIGURE 4-11 OVERBURDEN MONITORING WELL CONSTRUCTION DIAGRAM NYSDEC QUALITY ASSURANCE PROGRAM PLAN

-ABB Environmental Services, Inc.-

:							Test Bo	ing	Log							14 (2.7.)
Proje	Project Boring/Well No. Project No. Henna Furnace MW-103 7169-40															
Client	NYS	DEC	;	-   3	Site	\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	n Fornace-	Lan	1:11		Sheet N	0.	1	of	1	
Logge	ed By もらっ	را بان	er	-		Fround Elevation Start Date						Finish Date				
Drillin Adu	a Contract	or	ny lyves	t.		Di	riller's Name Brian Lan	be-t			Rig Typ	Э	B-6			
Drillin	g Method H,5,A					Pı	rotection Level C De-Mal		P.I.D. (eV)		Casing	Size		Auger	Size	G
Soil D			Rock Drille い(み	d		To	otal Depth	Depth ∼७、○	to Groundwate	) ()	Date 10/20/	94	Piez		Borin	
			8		T	ו				_			Мо	nitoring	]	
30t)	lo. & ion/ Feet	<b>8</b>	rs/6"	- í	3   3	3					abol N	)rillin	(pp	m)		sts
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd.	SPT-N (Riows/Et)	oidocas,	Graphic Lug	De	ampl script	ion		USCS Group Symbol	Notes on Drilling	PI Meter Field Scan	PI Meter Head Space		Lab Tests
, 0	5-1 12/20	sot	7- 30- 64- 34	94			0-09'- V.dk fire to grow Yellow ton ce 1.0-64 - dk bo metallic frage	والمر و سولاور تندیم ا	jlag. 0,4-1.0 Lwaterial. 10 bkck 5 kg	j	Fill		NA			
۲	52/20	spt	24/12/	29			0-0.3 as ab green cronable Dk brown/lake slag, fire to	ck/p ck/p	j. 0,5-1,2- urpk moist e graired.	-			AU			
اساسا	5-3	spt	12- 10- 24- 54	34			wetgrayto angular slav blade silt-l V. loose.	black i fra ike v	cand white merts/w natrix.	e -			NA			
-	5 5/N	Spt	78 - 46 - (1 - 4	59			As Alowe, w	ಬೇಲ್	satoreted	-		111	AN		1000	
8	ار ا ازار	Spt	3-23-4	5			Black to Dk organic sil roots.	1000 t/w	n micaceco, tr wood,	د - -	8	111	RU	ı	K	HF 1351014 X109 4XX
	2/20	spt	4- 4- 10-	14			its Above gr grey-brown	n si'	if, wet.	-		131	NA			
12-	5-7	Spt	10- 11- 26- 27	37			Gray-brew Oxide Stair fractured.	ing <sub>t</sub>	root hole	د جر		11 111	NA			
(y-							Adwincedly to 151 b		upliny			=		 		
10_							BOB	7		-	] 	BB En	vironm	ental S	Service	S

	:: 		, i kan i .			Test Boring	Log						
Proje	ici Hanr	الد	Furnac	ع			Boring/Well			Project I		 ر	
Clien	t NYS	DEC		S	ite دے،	na Furnace Ba	ckeround	Sheet N	lo	l	_ of		
Logg	ed By ცვა₩	لعن				d Elevation Star	t Date p(Z)(4)		Finish	h Date	ч		
Drillin	ng Contrac	tor	ling Inve	st.		Driller's Name Brian Lambert		Rig Ty	De	G-5			
Drillin	ng Method	<u> </u>				Protection Level	P.I.D. (eV)	Casing	Size		Auger Size		
Soil [	Drilled الاربية,		Rock Drille りん	d			to Groundwater			Piez		Borin	
<u></u>		- Talon				123 to the cluster			6	Мо	nitoring	<del></del>	
eet)	No. & tion/ (Feel	Type	ws/6"	Z (j.	2 ا	Sample	۵	S	Drillin	(bt	om)		sts
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Descripti		USCS Group Symbol	Notes on Drilling	PI Meter Field Scan	PI Meter Head Space		Lab Tests
0	5-1	Spt	3- 12- 18	18		0-0,7-black sil coal ash, organic >1.7- Yellow tan Sandlw some grav	is. fire-cs	الة ——		0			
7 -	5-2 17, 12.0	spt	21- 37- 33- 24	70		Ton to yellow ten / fine-cs sound, an little growel. Mois (TR Ballo	igular, w st			O			
ر ا	5-3	Spŧ	7-627	17		whiteorence / bki sond/w little cs wet.	sench, gravel,		11	0			
ا اساست	5-4 1.7/ /2.0	Spt	7- 11- 15- 16	26		0-0.4'- As Above, 0.4-1.2 - Write, as conested. 1.2-1.7- write as Above	s above, wet, blackly reev		1111	0			HFBSSOY XXEGYX
	5-5 1.3/ /2.0	Spt	5-74-17	21		Black / Blue / white Little cs sund, tr. Party graded.	e med. strok gravel, wet,	Fill		0			
	5-6 14 2.0	spt	ч- ч- ч- з	8		Part. De brown, Soft organicm	wet atter	Pt	1111	О			
الماما	5-7	spt	2373	5		0-0.3. Peut as f xc.3 - évey sandy	sill, wet.	(E)	1	0		,	
14 - 1 1 - 1 1 - 1	5-ઇ	Spt	7- 3- 6- 8	٩		6-ey surdy sil	t, wet			0			

						Test Bo	ring	Log						
Proje		ce Fr	بدامدو					Boring/Well MW-10	<b>40.</b> ) (	Ρ	roject I	Vo. ૦લ-પ	0	
Client	t NYSDEC Site					Sheet N	lo	ı	af	1				
Logg	ed By ცცაჯ	loc		Gr	Finish Date   Start Date   Star								=	
Drillin	g Contract	or	illia. la			Driller's Name Brich Lank		21201-1	Rig Ty	oe .	B-5			
	g Method		illing M	الاعد		Protection Level	JE -C	P.I.D. (eV)	Casing	Size		Auger Size		
Soil C	H.5.9 C Derwood (0.0 4.25" ID -> Soil Drilled Rock Drilled Total Depth Depth to Groundwater/Date Piez Well Boring								g					
	1415		NA		<del>                                     </del>	<u> 1415 </u>	8'	trising 10/2	વિષ		Mo	nitoring	<u> 12</u>	
et)	o. & on/ Feet)	ype	.s/6"	_ <del>_</del> _ <del>_</del> _	8				loge	rilling	(bt	om)		sts
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log		Sampl script	ion	USCS Group Symbol	Notes on Drilling	Pl Meter Field Scan	PI Meter Head Space		Lab Tests
0 - 0	5-1	spt	3. 5- 8. 36	13		0 0,5'- black grivel/w 51 moist. 0-0,9'- Grey dry	te V. 1+, Sk Grave	durk grey ig, coal ash el/w silt,	Fill		NR	2R		
2	5.2	Spt	11- 18- 36	29		material w u	unite ing @ ck cr	ol'foctork oundry maderal	1 1		NR	NR		
7	5-3	5pt.	20- 38- 39- 32	17		0-0.5' blad as above, 0: meterial as a totan. Day	cours 5-1,5° above	nout materil - grey country grading			NR	NR		14683101 XX694XX
8	5-4	spt	25- 25- 36- 42	61		50.2CS. Sax	cue. Lue	five sud/w-		11:1	NR	NR		
	5-5 2.0/2.0	spt	13- 17- 21- 47	38		Fire coverte like material Cs. sand to blackly even	him 5 fired to Lto	oft"rotter" gravel frags. grey/baan.		1111	NR	NR		
10	5-6 6.4/ 0.4	spt	100 fa- 0.4'	Rehal		As above. ( coated/w f Flecky coate some bright	riper	thin white.		131	NR	ろの		
	5-7 2.0/ 12.0	5Pt	14- 12- 7- 17	19		175 Above, Co black/Dkg greg. Wet.	clar ch reen	nanging fierd down to		111	175	UR		
N						Advanced w to 15' ?		-pling		1111				
-	· · · · · · · · · · · · · · · · · · ·					1:	303	_						
110		•		•	•	•		•	•	00 6-		4-1 6	ن <i>-</i>	

						Test Bo	ring	Log			71 - 141 -		1.72	****
Proje	et Hann	د (	ش: الدو	_				Boring/Well		F	Project I	No. 1-4(	)	٠.
Client				l ca	te kan	nefunce	Buc		Sheet N	lo		_ of		
Logge	Logged By  Brown Ground Elevation  Brown Start Date  Start Date  Finish Date  10 70 44													
Drillin	Drilling Contractor Advanced Drilling Invest. Brian Lambert Rig Type Rig Type Rig Type													
	g Method けらい		3			Protection Level		P.I.D. (eV)	Casing				Size	O
Soil C	Soil Drilled Rock Drilled Total Depth Depth to Groundwater/Date Piez Well Boring									g				
		1	%					10 10 = 0		l		nitorin	3	
Feet)	No. & ation/	Туре	ows/6' ./Rqd.	S/Ft.)	c Log	`  	Sampl	e	USCS up Symbo	Dailli	(pr	om)		Lab Tests
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd.	SPT-N (Blows/Ft.)	Graphic Log	. De	script	ion	USCS Group Symbol	Notes on Drilling	Pl Meter Field Scan	PI Meter Head Space		Lab 1
0	5-1 1.5 -2.0	spt	4- 10- 28- 10	38	Fil	fix sint/w	51 ag 70.7 serve 12.00 a	kush, some '-greysilty slag fragi,	Fill		0	NA		
4	5-2	*pt	15. 30- 12- 11	42	-	o.c.lo = grey gravel, more write/red/ to becomes we	scali to Oil	slugiditi			0	NA		
ر اد	5-3 0.8/ /2.0	Spt	14- 11- 3- 4	14		Black graves fuel odlor	'ِځن	et),		=	45	765C Hexis	pec	COIND COST BOYLKX
8	5.4 1.3/2.0	50t	7- 4- 2- 2-	<i>ھ</i> ا		As Above, (Sweet)				=	95			HEOSIO ZKK
	5-5 1.2/ /2.0		4- 8- 12- 20	20		0-0,3-450 03-1.2-900 511+10 11+10	y bro e fine	cun mottled sand	G:N-	11 11	PID Problem			
12	5-6 1.5/ /2.0	Spit	4- 6- 12- 20	18		5-0.5- locs grivel grad grively sit to brigh me some fine	ing to the or their sone	5-1.5-95mg 5-1.5-95mg	ML	111 111				
	5-7	Spt	10-113	21		brown to a la littlega wet.	iral civel,	mottledsilt root holes,		11				
<u>y</u> –						Advenced to 15'b	۵/0 / م	drilling	1	=	1			
						300	S			88.5	wirener			

Project <u>HANNA FURNAC</u> E St Project No. <u>7169-40</u> Bo	oring No Driller ADVANCED DRILLING  Drilling Method H. S. A.
	ate Installed 10 24-94 Development Method HAND BAILED
Field Geologist	
Tool Goologist	<del>,</del>
•	
<b>⊘</b>	Elevation of Top of Surface Casing: 582.27 Stick-up of Casing Above Ground Surface: 2.8'
[	Elevation of Top of Riser Pipe: _582.09
Ground	Type of Surface Seal: CONCRETE
Elevation 579.6	Type of Surface Casing: STEEL
(37) PA	
	, , ,
<b>199</b> 1991	ID of Surface Casing: 5'X6"
	Diameter of Borehole: ~9* (4.25*H5A)
	Diameter of Borehole: $\frac{\sim 9^{-1} (4.25 \text{ HSA})}{}$
	Riser Pipe ID:
	Type of Riser Pipe: PVC
	Type of Backfill: Cement BENTONITE
	GROUT
	Elevation of Top of Seal: 576.6
	Depth of Top of Seal:
	Type of Seal: PURE GOLD MED. BENT. CHIPS
	Elevation of Top of Sand: <u>575.6</u>
	Depth of Top of Sand:
<del>  -   -   -   -   -   -   -   -   -</del>	Elevation of Top of Screen: 574.6
	Depth of Top of Screen: 5
'∥≣∥∷	Pol Car
	Type of Screen:
	Slot Size x Length: 0.006" X 10"
	ID of Screen: 2"
	Type of Sandpack: SIUCA SAND 0.0 GRADE
	Elevation of Rottom of Corpora
	Elevation of Bottom of Screen:
	Depth of Bottom of Screen:
	Deput of Sediment Sump with Flog.
I 1	
[ ]	
1_	Elevation of Bottom of Borehole: 564.6
	Depth of Bottom of Borehole:
	FIGURE 4-11
OVI	RBURDEN MONITORING WELL CONSTRUCTION DIAGRAM

—ABB Environmental Services, Inc.-

### OVERBURDEN MONITORING WELL CONSTRUCTION DIAGRAM

Project Harmy Furnace Driller Brian Lembert Study Area Shererye Steel Project No. 7169-40 Drilling Method 4.75" ID HSA Boring No. Development Method Pump & Succe Date Installed Field Geologist B. B. Her Elevation of Top of Surface Casing: Stick-up of Casing Above Ground Surface: + Elevation of Top of Riser Pipe: 584.88 Type of Surface Seal: cerent/bent. accet Elevation 582.9 Type of Surface Casing: ID of Surface Casing: Diameter of Borehole: Riser Pipe ID: Type of Riser Pipe: Type of Backfill: 95% Portland Coment 5% Bertonite 579.9 Elevation of Top of Seal: Depth of Top of Seal: Type of Seal: hentenite Elevation of Top of Sand: Depth of Top of Sand: **b**46 Elevation of Top of Screen: Depth of Top of Screen: Type of Screen: Slot Size x Length: 2-inch ID of Screen: #00 Murie Sund Type of Sandpack: Elevation of Bottom of Screen: Depth of Bottom of Screen: Depth of Sediment Sump with Plug:

> Elevation of Bottom of Borehole: Depth of Bottom of Borehole:

OVERBURDEN MONI	TORING WELL CONSTRUCTION DIAGRAM
Project Hank Funkle Study Area	Stenanco Steel Driller B. Lambert
Project No. 7169-40 Boring No.	MW-109 Drilling Method 4,75" ID HSA
Date Installe	
Field Geologist <u>Bk Butler</u>	O TOTT 1144 Development Wethout 1 They; Suid 2
-leid Geologist	
	7
A	Elevation of Top of Surface Casing: 587.74
9	Stick-up of Casing Above Ground Surface: 7.5 ft.
	Elevation of Top of Riser Pipe: 587.60
	Type of Surface Seal: Cem. / Best. Grout
around 585.2	Type of Surface Casing: <u>Steet</u>
ievalion in the second	
	ID of Surface Casing: 6-inch
	ID of ourface dasing.
	Diameter of Borehole: 8.25-inch
<i>V</i> /3 <i>V</i> /3	Diameter di Derendie.
· <b>//</b>	Riser Pipe ID: 2-inch ID
	Type of Riser Pipe:
	Type of hiser ripe.
	Type of Backfill: 95/5 Comest-bestonite
	Type of Backfill: 95/5 Coment-Dentonite
	grout
	Elevation of Top of Seal:
	Depth of Top of Seal:
	Type of Seal: Bentanite Pellets
<b>→</b>	Elevation of Top of Sand: 579.2
	Depth of Top of Sand:
l <del>                                    </del>	Elevation of Top of Screen: 577.2
	Depth of Top of Screen:
<b>"</b>    <b>=  </b>	
	Type of Screen: PVC
<b>∭                                     </b>	Slot Size x Length: # 15' X 0,006 510+
	ID of Screen: 2-inch
	Type of Sandpack: #00 Morie Filter Pack
	· · · · · · · · · · · · · · · · · · ·
	Elevation of Bottom of Screen:
	Depth of Bottom of Screen: 23
	Depth of Sediment Sump with Plug:
1_	Elevation of Bottom of Borehole: 560.2
	Depth of Bottom of Borehole: 25
	APP Environmental Convice

### OVERBURDEN MONITORING WELL CONSTRUCTION DIAGRAM Project Hanna Furnace Study Area Sherango Steel Driller B. Lanhert 4.25" HSA Project No. 7169-40 Boring No. Drilling Method Date Installed 10/19/44 Development Method Pump & Suka & Field Geologist Brica k Butter Elevation of Top of Surface Casing: Stick-up of Casing Above Ground Surface: 2.5 fact Elevation of Top of Riser Pipe: 587.38 Type of Surface Seal: 95% Coment/5% Bentonite Elevation 585.0 Type of Surface Casing: Stea 6 inch ID of Surface Casing: 6,25 inch Diameter of Borehole: Riser Pipe ID: Type of Riser Pipe: 95% Crest -5% Type of Backfill: Bertonite Elevation of Top of Seal: Depth of Top of Seal: Type of Seal: Bentonite Elevation of Top of Sand: Depth of Top of Sand: 575 Elevation of Top of Screen: Depth of Top of Screen: 10 Type of Screen: -0,006 -inch Slot Size x Length: ID of Screen: 2-1nch #00 grade Morie Type of Sandpack: Elevation of Bottom of Screen: Depth of Bottom of Screen: Depth of Sediment Sump with Plug: N/A Elevation of Bottom of Borehole: Depth of Bottom of Borehole:

### SECTION 5.0 ANALYTICAL DATA



# ABB Environmental Services Data Usability Report Hanna Furnace April 18, 1995

### Introduction

This memo summarizes the usability of the analytical results generated for the Hanna Furnace Site. Laboratory analyses were performed in accordance with the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP), and the data were validated using the criteria specified by U.S. Environmental Protection Agency (USEPA) Region II, modified to include NYSDEC requirements. A detailed evaluation of the laboratory quality control (QC) results is provided in the Data Validation Report.

Usability is based on validated sample results. Rejected results ("R" qualifier) represent unusable data since the analyte presence or absence is uncertain. In general, sample results with qualifiers other than "R" are considered usable. Laboratory data from the Hanna Furnace Site will be used to determine whether hazardous wastes have been disposed at the site and to evaluate the potential threat to human health and the environment.

The data validation summary attached indicates which laboratory results are considered non-compliant when compared to the ASP requirements. However, the majority of these non-compliant results represent minor quality control problems and do not affect data usability. The cases where quality control problems affected usability and/or resulted in the rejection of data are discussed in the following sections. In most cases these problems are typical analytical difficulties or are the result of sample matrix problems.

### **Volatile Organics**

The volatile organic compounds (VOCs) analyses were acceptable and may be considered suitable for their intended use. Methylene chloride and acetone, common laboratory contaminants, were detected in the laboratory method blank and the equipment blank. All sample results less than the action level (i.e., 10 times the blank concentration for common contaminants, 5 times for other contaminants) were reported as non-detect. Some calibration problems (continuing calibration percent differences outside acceptance limits) were observed, which represent typical laboratory performance. The affected compounds were qualified as estimated, and this minor deficiency does not affect usability. Samples HFCD101XXX94XD, HFCD103XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSD102XXX94XD, HFBS106X1294XX, HFBS107X1494XX, HFBS101XX694XX, and HFBS105X1094XX were qualified as estimated because of their low total solids content. This qualification does not affect the usability of these volatile data. One system monitoring compound recovery for sample HFCD109XXX94XX RE was below the acceptance range, indicating a potential low bias. Positive and non-detected results for this sample were qualified as estimated. One system monitoring compound recovery for sample HFPS104XX994XD was above the

acceptance range, indicating a potential high bias. positive results for this sample were qualified as estimated.

For spiked compounds in the matrix spike/matrix spike duplicate (MS/MSD) performed on sample HFCL101XXX94XX, relative percent difference (RPD) were above QC limits. Positive and non-detected results for spiked compounds in this sample and its field duplicate were qualified as estimated. A low internal response for clorobenzene-d5 was observed in samples HFSS116XXX94XX, HFCD109XXX94XX, and HFSS109XXX94XX. Positive and non-detected results for all associated compounds were qualified as estimated in these samples. Bromochloromethane response was low for sample HFPS104XX994XD. Positive and nondetected results for associated compounds were qualified as estimated in this sample. This does not affect the useability of this data. Toluene did not meet the field duplicate RPD criteria in soil sample HFSS111XXX94XX and its field duplicate. Positive results for toluene were qualified as estimated in these samples. Acetone and benzene exceeded RPD criteria in soil sample HFPS104XX994XX and its field duplicate. Positive results for acetone and benzene were qualified as estimated in this sample and its field duplicate. Ethylbenzene and total xylenes exceeded RPD criteria in sample HFWT101XXX94XX and its field duplicate. Positive results for ethylbenzene and total xylenes were qualified as estimated in this sample and its field duplicate.

### Semivolatile Organics

The semivolatile organic compounds (SVOCs) analyses provided acceptable results, and the values may be used as presented. Bis(2-ethylhexyl)phthalate, phenol, and naphthalene, common laboratory contaminants, were detected in the laboratory method blank. All sample results less than the action level (i.e., 10 times the blank concentration for common contaminants, 5 times for other contaminants) were reported as non-detect. Samples HFBS102XXX94XX, HFBS103X1094XX, HFBS104XX894XX, HFBS105X1094XX, HFBS108XX894XX, HFBS110X1294XX, HFBS110X1294XD, HFCD105XXX94XX, HFCD106XXX94XX, HFCD107XXX94XX, HFCD108XXX94XX, HFPS101XX994XX, HFPS102XX594XX, HFPS103XX794XX, HFPS107XX694XX, HFPS108X1094XX, and HFWT102XXX94XX were extracted and/or analyzed beyond the required holding times. Positive and non-detected results for these samples were qualified as estimated.

Some calibration problems (continuing calibration percent differences outside acceptance limits) were observed, which represent typical laboratory performance. The affected compounds were qualified as estimated, and this minor deficiency does not affect usability. However, hexachlorocyclopentadiene did not meet relative standard deviation (RSD) or relative response factor (RRF) criteria for several initial calibrations associated with soil samples. Therefore, positive hexachlorocyclopentadiene results in associated samples were qualified as estimated and non-detected results were rejected. The rejected results should not be used to determine the absence of this compound in associated samples.

Samples HFCD101XXX94XD, HFCD103XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFSD107X1494XX,

HFBS101XX694XX, HFBS104XX894XX, and HFBS105X1094XX were qualified as estimated, for all compounds, because of their low total solids content. This qualification does not affect the usability of these semivolatile data.

For samples HFSW102XXX94XX, HFCL101XXX94XX, HFCL101XXX94XD, HFPS101XX994XX, HFPS102XX594XX, HFPS106X1194XX, and HFSS103XXX94XX, at least one acid surrogate recovery was less than 10%. Acid and base neutral compounds are defined in the ASP (p. E-80). Positive results were qualified as estimated and non-detected results were rejected for the acid fraction compounds for those samples. The rejected results should not be used to determine the absence of these compounds in associated samples. At least one base/neutral surrogate recovery was below 10% for sample HFSS108XXX94XX. Positive results were qualified as estimated and non-detected results were rejected for the base/neutral fraction compounds for this sample. For sample HFCL107XXX94XX at least one acid and one base/neutral surrogate recovery was below 10% and positive results were qualified as estimated and non-detected results were rejected for both fractions in this sample. At least two acid surrogate recoveries in sample HFWT101XXX94XX were below acceptance limits but were greater than 10%. Therefore, positive and non-detected results were qualified as estimated for the acid fraction compounds in this sample. At least two base/neutral surrogate recoveries in samples HFSS103XXX94XX, HFSS115XXX94XD, HFSS122XXX94XX were below acceptance limits but greater than 10%. Positive and nondetected results were qualified as estimated for the base neutral fraction compounds in these samples. For samples HFCD105XXX94XX, HFCD107XXX94XX, HFCD108XXX94XX, HFWT101XXX94XD, HFSS101XXX94XX, HFSS102XXX94XX, HFSS104XXX94XX, HFSS105XXX94XX, HFSS106XXX94XX, HFSS107XXX94XX, HFSS117XXX94XX RE, HFSS119XXX94XX RE, HFSS120XXX94XX RE, HFSS124XXX94XX RE, and HFSS125XXX94XX RE, at least two acid and two base/neutral surrogate recoveries were below acceptance limits but greater than 10%. Therefore, positive and non-detected results were qualified as estimated for compounds in both fractions in these samples.

The MS/MSD performed on aqueous sample HFCL101XXX94XX had percent recoveries for acenaphthene; phenol; and 4-chloro-3-methylphenol outside of QC limits. Positive and non-detected results for these compounds were qualified as estimated for this sample and its field duplicate. Positive pentachlorophenol results were qualified as estimated for sample HFMW101XXX94XX because percent recovery of pentachlorophenol in the MS/MSD performed on this sample was above QC limits. In the MS/MSD performed on sample HFCD101XXX94XX, recovery of acenaphthene and pyrene was below 10%. Therefore, positive results for these compounds were qualified as estimated and non-detected results were rejected in this sample and its field duplicate. The rejected results should not be used to determine the absence of these compounds in associated samples. In the same MS/MSD, percent recoveries for phenol; 1,4-dichlorobenzene; N-nitroso-di-propylamine; 1,2,4-trichlorobenzene; and 4-chloro-3-methylphenol were outside of QC limits. Positive and non-detected results for these compounds were qualified as estimated in sample HFCD101XXX94XX and its field duplicate. For sample HFPS104XX994XX and its field

duplicate, the recovery and RPD were above QC limits for pyrene in the MS/MSD. Therefore, positive and non-detected pyrene results were qualified as estimated in this sample and its field duplicate. For sample HFWT101XXX94XX and its field duplicate, the recoveries were below OC limits for phenol; 2-chlorophenol; 1.4-dichlorobenzene; N-nitroso-di-n-propylamine; 1.2.4-trichlorobenzene: 4-chloro-3-methylphenol; acenaphthene: 2.4-dinitrotoluene: pentachlorophenol; and pyrene in the MS/MSD performed. Therefore, positive and nondetected results for these compounds were qualified as estimated in this sample and its field duplicate. In the MS/MSD for sample HFSS111XXX94X, percent recoveries were outside QC limits for pyrene and 2,4-dinitrotoluene. Positive and non-detected results were qualified as estimated for these compounds in sample HFSS111XXX94XX RE and its field duplicate. Percent recovery for pentachlorophenol was below 10% in the same MS/MSD. Therefore, non-detected results were rejected for this compound in sample HFSS111XXX94XX RE and its field duplicate. The rejected results should not be used to determine the absence of pentachlorophenol in these samples. Also in the same MS/MSD, the RPD for acenaphthene, pentachlorophenol, and pyrene was above OC limits. Positive and non-detected results for these compounds were qualified as estimated in sample HFSS111XXX94XX RE and its field duplicate. For sample HFSD102XXX94XX and its field duplicate, N-nitroso-di-npropylamine; 1,2,4-trichlorobenzene; pyrene; phenol; 1,4-dichlorobenzene; 4-chloro-3methylphenol; and acenaphthene did not meet QC criteria. Therefore, positive and nondetected results for these compounds were qualified as estimated in sample HFSD102XXX94XX and its field duplicate. For sample HFSS101XXX94XX, percent recovery for pentachlorophenol was less than 10% in its associated MS/MSD. Positive results for this compound were qualified as estimated and non-detected results were rejected in this sample and its field duplicate. The rejected results should not be used to determine the absence of pentachlorophenol in these samples. In the same MS/MSD, recoveries were below OC limits for 1,4-dichlorobenzene; N-nitroso-di-n-propylamine; 1,2,4-trichlorobenzene; 4chloro-3-methylphenol; acenaphthene; and 2,4-dinitrotoluene. Positive and non-detected results for these compounds were qualified as estimated in sample HFSS101XXX94XX and its field duplicate. This does not affect the useability of this data.

Some precision problems (field duplicate RPD out of criteria) were observed. The affected compounds were qualified as estimated. This minor deficiency does not affect useability.

Some problems were observed with the internal standard response criteria not being met. Table A in the Data Validation Report summarizes the qualifications. Results were qualified as either estimated or rejected. The rejected results should not be used to determine the absence of those compounds in associated samples.

### Pesticides/PCBs

The pesticides/PCBs results are acceptable and may be used as presented. Samples HFCD101XXX94XD, HFCD103XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFBS106X1294XX, HFBS107X1494XX, HFBS101XX694XX,

HFBS104XX894XX, and HFBS105X1094XX were qualified as estimated because of their low total solids content.

Samples HFCL101XXX94XX, HFSW103XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSD102XXX94XD, HFSS101XXX94XX RE, HFSS102XXX94XX RE, HFSS103XXX94XX RE, HFSS105XXX94XX RE, HFSS105XXX94XX RE, HFSS106XXX94XX, HFSS107XXX94XX RE, HFSS108XXX94XX RE, HFSS115XXX94XD RE, HFSS115XXX94XX RE, HFSS116XXX94XX RE, HFSS117XXX94XX RE, HFSS117XXX94XX RE, HFSS120XXX94XX RE, HFSS122XXX94XX RE, HFSS124XXX94XX RE, and HFSS125XXX94XX RE were extracted and/or analyzed beyond the required holding times. Therefore, positive and non-detected results for these samples were qualified as estimated.

During Validation, field equipment blank results were reviewed to assess whether there was potential for cross-contamination of samples from field activities. Equipment blank results show Aroclor-1260 was reported in equipment blanks HFQSXX2XXX94XX (associated with surface water [SW] samples), HFQSXX3XXX94XX (associated with sediment [SD] samples), and HFQSXX7XXX94XX (associated with sump liquid [CL] sample HFCL109XXX94XX). Action levels are calculated at 5 times the concentration in the associated blank in accordance with U.S. Environmental Protection Agency (USEPA) National Functional Guidelines for Organic Data Review (June 1991). Sample results below this action level are considered attributable to blank contamination.

Due to Aroclor-1260 contamination in equipment blank HFQSXX2XXX94XX (2.6  $\mu$ g/L), positive Aroclor-1260 results for samples HFSW102XXX94XD and HFSW105XXX94XX (reported by the laboratory) were qualified as non-detect (U) during validation because their values are below the calculated action level (13  $\mu$ g/L).

Aroclor-1260 contamination was detected in equipment blank HFQSXX3XXX94XX. However, all associated positive sample results were below the corrected action level for soil samples and results were qualified by validation as non-detect (U). To correct units from  $\mu g/L$  to  $\mu g/Kg$  a factor of 33 is employed (1000ml / 30g = 33.3 which is rounded to 33). In this case, the equipment blank HFQSXX3XXX94XX had an Aroclor-1260 value of 0.6 eeg/L. The action level is 99  $\mu g/Kg$  (  $0.6 \times 5 \times 33 = 99$ ). Aroclor-1260 results for samples HFSD101XXX94XX; HFSD102XXX94XD; HFSD102XXX94XX; and HFSD104XXX94XX, which are associated with equipment blank HFQSXX3XXX94XX, were all below this corrected action level. These samples were reported as non-detect in validation at the SQLs (Sample Quantitation Limit). SQLs are derived by dividing the CRQLs (Contract Required Quantitation Limit) by the individual sample percent solids.

Aroclor-1260 was also detected in equipment blank HFQSXX7XXX94XX (1.1  $\mu$ g/L). However, the associated sample (HFCL109XXX94XX) has an estimated concentration of 28  $\mu$ g/L which is above the action level of 5.5  $\mu$ g/L and is unaffected by this blank contamination.

During instrument performance check, endrin; 4,4'-DDT; and methoxychlor did not meet %D criteria. Positive and non-detected results for these compounds were qualified as estimated in associated samples. Due to method blank contamination, aroclor-1260 results were qualified as non-detected in associated samples whose results were below the calculated action level. Some calibration problems (initial and continuing calibration percent differences outside of criteria) were observed, which represent typical laboratory performance. The affected compounds were qualified as estimated, and this does not affect useability.

Surrogate recoveries were below acceptance limits for one column in samples HFCL106XXX94XX, HFPS104XX994XD, HFSD102XXX94XX, HFSD102XXX94XD, HFSS111XXX94XD, HFSS123XXX94XX, HFSS124XXX94XX RE, and HFSS125XXX94XX RE. Positive and non-detected results were qualified as estimated in associated samples. Because all surrogate recoveries were below acceptance limits, indicating a potential low bias, positive and non-detected results were qualified as estimated for samples HFBS101XX694XX, HFBS102XX694XX, HFBS103XX694XX, HFBS104XX694XX, HFBS105XX694XX, HFBS108XX694XX, HFBS109XX694XX, HFCD107XXX94XX, HFMW101XXX94XX, HFMW102XXX94XX, HFMW103XXX94XX, HFMW104XXX94XX, HFMW105XXX94XX, HFMW106XXX94XX, HFMW107XXX94XX, HFMW108XXX94XX, HFMW109XXX94XX, HFMW110XXX94XX, HFSD101XXX94XX, HFSD104XXX94XX, HFSS110XXX94XX, HFSS121XXX94XX, HFSS103XXX94XX RE, HFSS107XXX94XX RE, HFSS119XXX94XX RE, and HFSS122XXX94XX RE. Surrogate recoveries were less than 10% for at least one column in samples HFCL101XXX94XX, HFCL101XXX94XD, HFCL107XXX94XX, HFCD101XXX94XX, HFCD101XXX94XD, HFCD102XXX94XX, HFCD103XXX94XX, HFCD104XXX94XX, HFSD103XXX94XX, HFSD105XXX94XX, HFSD107XXX94XX, HFPS104XX994XX, HFWT101XXX94XX, HFWT101XXX94XD, HFWT102XXX94XX, HFCD109XXX94XX, HFSS109XXX94XX, HFSS111XXX94XX, HFSS113XXX94XX, HFSS113XXX94XX, and HFSS118XXX94XX. Positive results for compounds using this column were qualified as estimated in associated samples and nondetected results were rejected. The rejected results should not be used to determine the absence of these compounds in associated samples.

Heptachlor; aldrin; and 4,4'-DDT RPDs were above the QC limits in the MS/MSD performed on sample HFCL101XXX94XX. Positive and non-detected results for these compounds were qualified as estimated in this sample. For sample HFMW101XXX94XX, percent recoveries and/or RPD were outside of acceptance limits for gamma-BHC, aldrin, heptachlor, dieldrin, and endrin. Positive and non-detected results for these compounds were qualified as estimated in this sample. Positive results for endrin were qualified as estimated in sample HFCD101XXX94XX because percent recovery (%R) was below acceptance limits in the MS/MSD. Dieldrin %R in this same MS/MSD was below 10%. Positive results were qualified as estimated and non-detected results for dieldrin were rejected in this sample. The rejected results should not be used to determine the absence of dieldrin in this sample. For sample HFSD102XXX94XX, gamma-BHC; aldrin; dieldrin; and endrin %R were below 10%.

Therefore, positive results were qualified as estimated and non-detected results were rejected for these compounds in this sample. RPD was above the QC limits for gamma-BHC; heptachlor; aldrin; dieldrin; endrin; and 4,4'-DDT in this same MS/MSD. Positive and nondetected results for these compounds were qualified as estimated in sample HFSD102XXX94XX. For sample HFSS111XXX94XX, endrin %R was below 10% in the MS/MSD. Positive results for endrin were qualified as estimated and non-detected results were rejected for this sample. The rejected results should not be used to determine the absence of endrin in this sample. Also for sample HFSS111XXX94XX, dieldrin %R was below the acceptance range and positive results for dieldrin were qualified as estimated in this sample. Also for this sample, RPD was above acceptance limits for gamma-BHC; heptachlor; aldrin; dieldrin; endrin; and 4,4'-DDT. Positive and non-detected results for these compounds were qualified as estimated in this sample. For sample HFSS101XXX94XX RE, gamma-BHC; aldrin; dieldrin; and endrin %R were below 10% in the MS/MSD. Therefore, positive results for these compounds were qualified as estimated and non-detected results were rejected for this sample. The rejected results should not be used to determine the absence of these compounds in affected samples. Also in sample HFSS101XXX94XX RE, RPD was above the QC limits for gamma-BHC; heptachlor; aldrin; dieldrin; and 4,4'-DDT. Positive and non-detected results were qualified as estimated for these compounds in this sample.

Some precision problems (RPD out of criteria) were observed in the field duplicates on samples HFCD101XXX94XX, HFSS111XXX94XX, HFSS101XXX94XX, and HFSS115XXX94XX. The affected compounds were qualified as estimated. This does not affect the useability of this data.

Some retention time problems (%D between primary and confirmation columns) were observed. Table B in the Data Validation Report summarizes the qualifications taken due to %D being out of criteria. The affected samples were qualified as estimated or were rejected. The rejected results should not be used to determine the absence of these compounds in the affected samples.

### **Inorganics**

The majority of the inorganics analyses are acceptable and may be used as presented. Some calibration problems (%R for CRDL standards out of acceptance range) were observed, which represent typical laboratory performance. The affected analytes were qualified as estimated, and this deficiency does not affect useability. Spike recoveries for manganese and cyanide were below 30% in one matrix spike analysis. Positive and non-detected results for cyanide and manganese were rejected in associated samples. The rejected results should not be used to determine the absence of these analytes in the affected samples. Percent recoveries for arsenic, lead, selenium, and thallium were outside of acceptance limits. Positive and non-detected results were qualified as estimated in associated samples. Percent recoveries for iron and silver were above 150%, indicating a potential high bias. Positive results for iron and silver were rejected in associated samples. The rejected results should not be used to determine the absence of these analytes in associated samples. Percent recoveries for silver,

selinium, and cyanide in soil matrix spike analyses were less than 10%, indicating a potential low bias. Positive and non-detected results were rejected for these analytes in associated samples. Percent recoveries for antimony, arsenic, cadmium, copper, lead, mercury, selinium, silver, and cyanide in soil matrix spike analyses were outside of acceptance limits. Positive and non-detected results were qualified as estimated for these analytes in associated samples. Percent recoveries for copper and cyanide in soil matrix spike analyses were above acceptance limits, indicating a potential high bias. Positive results for these analytes were qualified as estimated in associated samples. Percent recovery for copper in one soil matrix spike analysis was above 200%. Positive results for copper were rejected in associated samples. The rejected results should not be used to determine the absence of copper in associated samples.

Some precision problems in Graphite Furnace Atomic Absorption (GFAA) analysis (post digestion % recoveries out of acceptance limits) were observed. The affected analytes were qualified as estimated, and this deficiency does not affect useability. The correlation coefficient of the method of standard additions (MSA) used to obtain the arsenic result in sample HFCL101XXX94XD was below 0.990, the result was rejected. The rejected result should not be used to determine the absence of arsenic in this sample. The correlation coefficient of the MSA used to obtain the selenium results for samples HFMW101XXX94XD, HFSS101XXX94XD, HFSS116XXX94XX, HFBS106X1294XX, and HFSS111XXX94XD were outside of acceptance limits. The selenium results were qualified as estimated in these samples. The correlation coefficient for the MSA used to obtain the selinium result for sample HFBS101XX694XX was below 0.990 and the selinium result was rejected in this sample. The rejected result should not be used to determine the absence of selinium in this sample.

Aluminum, cadmium, iron, lead, manganese, and zinc aqueous serial dilution results did not meet QC criteria. Positive and non-detected results for those analytes in associated samples were qualified as estimated. Cadmium, chromium, iron, and zinc soil serial dilution results did not meet QC criteria. Positive and non-detected results for these analytes in associated samples were qualified as estimated. This does not affect the useability of this data.

Positive and non-detected results for all analytes were qualified as estimated in samples HFCD101XXX94XD, HFCD103XXX94XX, HFBS101XX694XX, HFBS104XX894XX, HFBS105X1094XX, HFBS106X1294XX, HFBS107X1494XX, HFSD101XXX94XX, HFSD102XXX94XX, and HFSD102XXX94XD because the percent solids in these samples was between 10% and 50%.

Some precision problems for field blank analyses (RPD outside of acceptance criteria) were observed, which represent typical laboratory performance. The affected analytes were qualified as estimated, and this deficiency does not affect useability.

EP Toxicity/ Hazardous waste characteristics

Samples HFCD105XXX94XX, HFCD106XXX94XX, HFCD107XXX94XX, HFCD108XXX94XX, HFWT101XXX94XX, HFWT101XXX94XD, and HFWT102XXX94XX were analyzed beyond the required hold time for mercury analysis. Positive mercury results for these samples were qualified as estimated and non-detected results were rejected. The rejected results should not be used to determine the absence of mercury in these samples.

Cadmium contamination was found in a method blank. All sample results less than the action level (10 times the IDL) were qualified as estimated.

Laboratory duplicate results were not within acceptance limits for antimony, barium, cadmium, chromium, lead, and silver. Positive and non-detected results for these analytes were qualified as estimated.

Some precision problems (matrix spike percent recoveries outside of acceptance criteria) were observed. The affected analytes were qualified as estimated. This minor deficiency does not affect useability.

Field duplicate criteria were not met for cadmium and chromium in sample HFCD101XXX94XX and its field duplicate. Positive and non-detected results for cadmium and chromium were qualified as estimated in this sample and its field duplicate. For sample HFWT101XXX94XD and its field duplicate, QC criteria were not met for lead. Positive and non-detected results for lead were qualified as estimated for this sample and its field duplicate. For sample HFSS111XXX94XX and its field duplicate, QC criteria were not met for barium, cadmium, and lead. Positive and non-detected results for these analytes were qualified as estimated in this sample and its field duplicate.

All QC criteria were met for corrosivity, ignitability, reactive cyanide, and reactive sulfide.

#### Tentatively Identified Compounds (TICs)

The ASP analytical procedures for volatile and semivolatile organics may also detect the presence of additional compounds which are not included on the Target Compound List. The mass spectra of these non-target compounds (up to 10 VOCs and 20 SVOCs) are compared to library spectra using a computerized search routine, and the best matches are evaluated by the laboratory. If a good library match can not be made the compound is reported as "unknown". The concentrations are estimated by comparing the compound's response to the that of the closest internal standard. Uncertainty exists when using TICs and care must be used when using this data.

#### Data Quality Objectives (DQOs)

DQOs are based on the premise that different data uses require different levels of data quality. Data quality refers to the degree of uncertainty of analytical data with respect to precision, accuracy, representativeness, completeness, and comparability (PARCC). These objectives are

established based on site conditions, the purpose of the field program, and the knowledge of the measurement systems used for generation of the analytical data.

No major quality control problems were observed during the data validation process which would affect the usability of the sample results. A discussion of the laboratory data quality as it relates to the PARCC objectives is presented below.

# Precision and Accuracy.

Precision refers to the reproducibility of a measurement under certain specified conditions, and accuracy measures the bias associated with the sampling and analysis process. Precision and accuracy are affected by both field and laboratory conditions. Precision was monitored through the analysis of field and laboratory duplicate samples; accuracy was measured through the analysis of field and laboratory blanks, matrix spikes, and surrogate spikes. The ASP protocols used for the analysis of samples define the criteria for acceptable precision and accuracy. No major precision and accuracy problems were observed which would affect usability. Some matrix spike recoveries (listed previously) were outside of acceptance criteria, indicating a potential accuracy problem. In general these deficiencies are considered minor and do not affect usability.

Several target analytes were reported at concentrations less than the CRQL (and were qualified as estimated, "J"). Uncertainty exists for the quantitation of concentrations less than the CRQL. While these results provide information on the presence of contamination, these values should be qualified for use in decisions. In some cases precision between the two columns used for pesticides/PCBs analyses was outside the acceptance limit, and the results were qualified with a "P" by the laboratory. While these concentrations should be considered as estimated, they provide an indication of contamination and are suitable for use.

# Representativeness.

Measurements are made so that the results obtained are representative of the sampling population, the medium (e.g. soil and groundwater), and the site conditions. The sampling protocols were developed to ensure that the samples were representative of the media, that sampling locations were properly selected, and that a sufficient number of samples were collected. Sample handling protocols (chain-of-custody, storage, and transportation) were adequate to preserve the sample integrity. Proper documentation established that the correct protocols had been followed. Co-located samples (field duplicates) were also collected to assess representativeness, and no major problems were observed which would affect usability.

# Completeness.

The characteristic of completeness is defined as the percent of valid data obtained as compared to what would be expected under normal conditions. The USEPA has found that CLP protocols typically generate data that is 80% complete. Because sampling activities are often influenced by field conditions the Hanna Furnace Site Work Plan provided estimates of the number of samples to be collected during the field program. There were no significant

deviations from the proposed field program. Corrosivity, ignitability, reactive cyanide, and reactive sulfide were 100% complete. VOC and SVOC analyses were 99% complete, pesticide analyses were 96% complete, EPTOX analyses were 97% complete, and inorganic analyses were 95% complete.

# Comparability.

The characteristic of comparability reflects both the internal consistency of measurements and the expression of results in units which are consistent with other organizations reporting similar data. Each value reported for a given measurement should be similar to other values within the same data set and with other related data sets. Comparability was assured through the use of standardized sampling procedures and ASP analytical methods.



# ABB Environmental Services Data Validation Report PSA-14 Hanna Furnace April 25, 1995

#### I. INTRODUCTION

This report summarizes the data validation results for the data packages generated by Nytest Environmental Inc. concerning the water and soil samples collected from October 10, 1994 to November 29, 1994. Review was performed in accordance with the U.S. Environmental Protection Agency (USEPA) National Functional Guidelines for Organic Data Review (June 1991) and Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses (October 1989), along with the appropriate USEPA Region II validation SOPs and New York State Department of Environmental Conservation (NYSDEC) revision to these Region II SOPs. The data tables referred to in this memo consist of the following:

Table 1: Laboratory Report of Analysis Table 2: Validation / Summary Table

Table 1 presents the analytical results as reported by the laboratory. Table 2 presents the validated results with the appropriate data qualifiers. The laboratory qualifiers used on Table 1 are defined in Attachment I; data validation qualifiers used on Table 2 are defined in Attachment II. For all analyses, sample results qualified with a "U" due to blank contamination were treated as positive results when further qualification was needed (i.e., when validation action applied to positive results), except in the case of field duplicated evaluation, which was done after blank evaluation, and where results qualified with a "U" were considered non-detected. For all organics analyses, compound results below the contract required quantitation limit (CRQL) were flagged with a "J" by the laboratory on Table 1. These results were considered estimated and flagged with a "J" on Table 2. Compound results greater than the calibration range were flagged with an "E" by the laboratory and on Table 1. Samples containing these compounds were diluted and reanalyzed, and the diluted results flagged with a "D" by the laboratory and on Table 1. On Table 2, the diluted results for all compounds beyond calibration range were inserted into the original results and the remainder of the diluted analysis deleted from Table 2. Pesticides/PCBs that had greater than 25% difference between the two analytical columns were flagged with a "P" by the laboratory. On Table 2, compounds qualified by the lab with a P were qualified with "J", "JN", or "R", depending on the percent difference (%D). In cases where samples were reanalyzed due to a quality control (QC) failure during the original analysis of the sample, the results of the analysis requiring less rigorous qualification was reported on Table 2. For all inorganic analyses, analyte results below the contract required detection limit (CRDL) were flagged with a "B" by the laboratory on Table 1. These results were considered estimated and were flagged with a "J" on Table 2.

The samples were analyzed using the following methods:

- Target Compound List (TCL) Volatile Organic Compounds (VOCs) NYSDEC Analytical Services Protocol (ASP) 91-1
- TCL Semivolatile Organic Compounds (SVOCs) NYSDEC ASP 91-2
- TCL Pesticides/PCBs NYSDEC ASP 91-3
- TCL Inorganics NYSDEC ASP Contract Laboratory Program Superfund Methods
- EP Toxicity metals (USEPA SW-846: 1310/Superfund CLP-M)
- Ignitability, corrosivity, and reactivity (USEPA SW-846: 1010, 9045, and Section 7.3, respectively)

This narrative presents a summary of the laboratory QC deficiencies and the resulting qualification of the data.

#### II. VOLATILE ORGANIC COMPOUNDS

# A. Holding Times

Holding times are evaluated to address the validity of the results based on the elapsed time from Validated Time of Sample Receipt (VTSR) to analysis. All samples were analyzed within the required 7 day holding time.

B. Gas Chromatograph/Mass Spectrometer (GC/MS) Instrument Performance Check

Bromofluorobenzene (BFB) is analyzed every 12 hours to verify the instrument's mass resolution, identification, and sensitivity. All BFB ion abundance criteria were met.

#### C. GC/MS Initial and Continuing Calibration

Initial calibration demonstrates instrument linearity and ensures that the instrument can produce acceptable qualitative and quantitative results. The initial calibration percent relative standard deviation (%RSD) must be less than 30%, and the relative response factor (RRF) must be greater than 0.05. If %RSD is between 30% and 50% only positive results are qualified as estimated. If %RSD is greater than 90%, or if any RRF is less than 0.05, positive results are qualified as estimated and non-detected results are rejected. Relative standard deviation for methylene chloride, acetone, and chloromethane was between 30% and 50% for several initial calibrations associated with aqueous samples; therefore, positive results for those compounds were qualified as estimated in associated aqueous samples. Relative standard deviation for acetone and 2-butanone was between 30% and 50% for several initial calibrations associated with soil samples; therefore, positive results for those compounds were qualified as estimated in all associated soil samples. Relative standard deviation for methylene chloride was between 50% and 90% for

several initial calibrations associated with soil samples; therefore, positive and non-detected methylene chloride results were qualified as estimated in associated soil samples.

Continuing calibration checks are performed every 12 hours to demonstrate that the instrument can produce acceptable qualitative and quantitative results as established by the initial calibration. The continuing calibration %D must be less than 25%, and the RRF must be greater than 0.05. If the %D is between 25% and 50%, only positive results are qualified as estimated. If the %D is between 50% and 90%, positive and non-detected results are qualified as estimated. If the %D is greater than 90%, or if any RRF is less than 0.05, positive results are qualified as estimated and non-detected results are rejected. The %D for methylene chloride was above 90% for one continuing calibration standard associated with aqueous samples; therefore, positive methylene chloride results were qualified as estimated and non-detected results were rejected in associated aqueous samples. The %D for methylene chloride was between 25% and 50% in one continuing calibration standard; therefore, positive methylene chloride results were qualified as estimated in associated aqueous samples. The %D was between 25% and 50% for methylene chloride, acetone, and 2-butanone in several continuing calibration standards associated with soil samples; therefore, positive results for these compounds were qualified as estimated in associated soil samples. The %D was between 50% and 90% for chloroethane, methylene chloride, and 4methyl-2-pentanone, each in one continuing calibration standard associated with soil samples; therefore, positive and non-detected results for those compounds were qualified as estimated in associated soil samples.

#### D. Blanks

Laboratory (method) and field (trip/equipment) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank (10 times for methylene chloride, acetone, and 2-butanone). Sample results below this action level are considered attributable to blank contamination; results greater than this level are considered to be acceptable. Due to trip, equipment, or laboratory method blank contamination, methylene chloride, acetone, toluene, ethylbenzene, and total xylene results were qualified as non-detect in associated samples where the results were below the calculated blank action level.

# E. System Monitoring Compounds Recoveries

System monitoring compounds are added to all samples and blanks prior to analysis to assess recovery (accuracy). If a system monitoring compound percent recovery (%R) is below the acceptance range (as stated in the NYSDEC ASP) but greater than 10% for a sample, positive and non-detected results for that sample are qualified as estimated. If %R is below 10%, positive results are qualified as estimated and non-detected results are rejected for the affected sample. If %R is above acceptance range, only positive results are qualified as estimated. One system monitoring compound recovery for HFCD109XXX94XX RE was below the method acceptance range but above 10%, indicating a potential low bias; therefore, positive and non-detected results

for this sample were qualified as estimated. One system monitoring compound recovery for HFPS104XX994XD was above the method acceptance range, indicating a potential high bias; therefore, positive results for this sample were qualified as estimated.

# F. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses are performed at a frequency of 5% to assess method precision and accuracy. Action is taken if recoveries are outside the acceptance range (as stated in the NYSDEC ASP), or if the relative percent difference (RPD) for spiked compounds is above the control limit (also stated in the NYSDEC ASP). Ten MS/MSD analyses were performed: two for medium level soil samples, five for low level soil samples, and three for aqueous samples. Relative percent difference were above QC limits for all spiked compounds in the MS/MSD performed on aqueous sample HFCL101XXX94XX; therefore, positive and non-detected results for the spiked compounds in sample HFCL101XXX94XX and its field duplicate HFCL101XXX94XD were qualified as estimated.

# G. Field Duplicates

Field duplicate samples are collected and analyzed to assess sampling and analytical precision. Field duplicate control limits are: RPD of less than 30% for water samples and 50% for soil samples. When action is necessary, only positive results in the original sample and its field duplicate are qualified. Toluene did not meet the RPD control limit in soil sample HFSS111XXX94XX and its field duplicate HFSS111XXX94XD. Positive result for this compound in HFSS111XXX94XD was qualified as estimated. No action was required for sample HFSS111XXX94XX, because toluene was not detected in that sample. Acetone and benzene exceeded the RPD control limit in soil sample HFPS104XX994XX and its field duplicate HFPS104XX994XD. Positive results for these compounds in HFPS104XX994XX were qualified as estimated. No action was required for the field duplicate, because these compounds were not detected in that sample. Ethylbenzene and total xylenes exceeded the RPD control limit in soil sample HFWT101XXX94XX and its field duplicate HFWT101XXX94XD; therefore, positive results for these compounds in HFWT101XXX94XX were qualified as estimated, and positive total xylene result in sample HFWT101XXX94XD was qualified as estimated. Ethylbenzene was not detected in sample HFWT101XXX94XD.

#### H. Internal Standard Response

The internal standard response is monitored for each sample to verify GC/MS sensitivity and the stability of the detector's response. The internal standard area must be >50% and <100%, and the retention time must be within  $\pm30$  seconds of the associated calibration standard. If the internal standard area count in the sample is above the upper limit, positive results for compounds quantitated with this internal standard are qualified as estimated. If the internal standard area count in a sample is below the lower limit but above 25%, positive and non-detected results for compounds quantitated with this internal standard are qualified as estimated. If the internal

standard area count in the sample is below 25% of the internal standard area in the associated calibration standard, positive results are qualified as estimated and non-detected results are rejected for compounds quantitated with this internal standard. Chlorobenzene-d5 response was low, but greater than 25% of the associated continuing calibration standard response, for samples HFSS116XXX94XX, HFCD109XXX94XX, and HFSS109XXX94XX; therefore, positive and non-detected results for all compounds (i.e., 2-hexanone; 4-methyl-2-pentanone; tetrachloroethene; 1,1,2,2-tetrachloroethane; toluene; chlorobenzene; ethylbenzene; styrene; and total xylene) quantitated with chlorobenzene-d5 were qualified as estimated in samples HFSS116XXX94XX, HFCD109XXX94XX, and HFSS109XXX94XX. Bromochloromethane response was low, but greater than 25% of the associated continuing calibration standard response, for sample HFPS104XX994XD. Positive and non-detected results for all compounds [i.e., chloromethane; bromomethane; vinyl chloride; chloroethane; methylene chloride; acetone; carbon disulfide; 1,1-dichloroethene; 1,1-dichloroethane; 1,2-dichloroethene (tot.); chloroform; 1,2-dichloroethane; and 2-butanone] quantitated with bromochloromethane were qualified as estimated in sample HFPS104XX994XD.

# I. Target Compound Identification

Chromatograms and mass spectra are reviewed to minimize the reporting of false positive and false negatives. For each compound detected, the relative retention time must be within  $\pm 0.06$  units and the qualitative criteria for mass spectral identification must be met. No problems were observed.

# J. Compound Quantitation

Laboratory calculations were checked to verify that reported concentrations and CRQLs were accurate. The calculations which were reviewed were performed correctly, and the CRQLs were adjusted for sample size, percent solid content for soil samples, and dilution factor. Soil sample percent solid content is evaluated to determine whether the sample was correctly classified as a soil. If solid content falls between 10% and 50% positive and non-detected results are estimated. If solid content is less than 10% results are calculated and reported as an aqueous sample. Samples HFCD101XXX94XD, HFCD103XXX94XX, HFSD101XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFBS106X1294XX, HFBS101XX694XX, HFBS104XX894XX, and HFBS105X1094XX have solid content between 10% and 50%; therefore, positive and non-detected results for all compounds in those samples were qualified as estimated.

#### K. Tentatively Identified Compounds (TICs)

All TIC spectra were reviewed to verify that the identifications were acceptable, laboratory contamination was taken into account, and the correct assignments of compound classes were made. Reported concentrations are estimated (J) values.

#### III. SEMIVOLATILE ORGANIC COMPOUNDS

# A. Holding Times

Holding times are evaluated to address the validity of the results based on the elapsed time from VTSR to analysis. Sample extraction must be performed within 5 days of VTSR (re-extractions are allowed a 10-day holding time), and sample analysis must done within 40 days of VTSR. Samples HFBS102XX894XX, HFBS103X1094XX, HFBS104XX894XX, HFBS105X1094XXX, HFBS108XX894XX, HFBS110X1294XD, HFCD105XXX94XX, HFCD106XXX94XX, HFCD107XXX94XX, HFCD108XXX94XX, HFPS101XX994XX, HFPS101XX994XX, HFPS102XX594XX, HFPS103XX794XX, HFPS107XX694XX, HFPS108X1094XX, and HFWT102XXX94XX were extracted and/or analyzed beyond the required holding time; positive and non-detected results for those samples were qualified as estimated.

#### B. GC/MS Instrument Performance Check

Decafluorotriphenylphosphine (DFTPP) is analyzed every 12 hours to verify the instrument's mass resolution, identification, and sensitivity. All DFTPP ion abundance criteria were met.

# C. GC/MS Initial and Continuing Calibration

Initial calibration demonstrates instrument linearity and ensures that the instrument can produce acceptable qualitative and quantitative results. The initial calibration %RSD must be less than 30%, and the RRF must be greater than 0.05. If %RSD is between 30% and 50%, associated positive results are qualified as estimated. If %RSD is between 50% and 90%, associated positive and non-detected results are qualified as estimated. If %RSD is greater than 90%, or if any RRF is less than 0.05, associated positive results are qualified as estimated and non-detected results are rejected. No action was necessary for aqueous samples due to initial calibration standards outside of acceptance limits. Hexachlorocyclopentadiene did not meet %RSD or RRF criteria for several initial calibrations associated with soil samples; therefore, positive hexachlorocyclopentadiene results in associated samples were qualified as estimated, and non-detected results were rejected. Diethylphthalate and benzo(k)fluoranthene %RSD was greater than 30%, but less than 50%; therefore, positive results for those compounds in associated samples were qualified as estimated

Continuing calibration checks are performed every 12 hours to demonstrate that the instrument can produce acceptable qualitative and quantitative results as established by the initial calibration. The continuing calibration %D must be less than 25%, and the RRF must be greater than 0.05. If the %D is between 25% and 50%, only positive results are qualified as estimated. If the %D is between 50% and 90%, positive and non-detected results are qualified as estimated. If the %D is greater than 90%, or if any RRF is less than 0.05, positive results are qualified as estimated and non-detected results are rejected. Pentachlorophenol positive results were qualified as estimated for aqueous samples associated with continuing calibrations whose %D for this compound were

between 25% and 50%. Hexachlorocyclopentadiene, 3,3'-dichlorobenzidine, and 2,4dinitrophenol positive and non-detected results were qualified as estimated for aqueous samples associated with continuing calibrations whose %D for these compounds were between 50% and 90%. Hexachlorocyclopentadiene positive results were qualified as estimated and non-detected results were rejected for aqueous samples associated with continuing calibrations with an RRF below 0.05 for that compound. 2-Methylnaphthalene; carbazole; bis (2-ethylhexyl)phthalate di-noctylphthalate; benzo(k)fluoranthene; indeno(1,2,3-cd)pyrene; and benzo(g,h,i)perylene positive results were qualified as estimated for soil samples associated with continuing calibrations whose %D for these compounds were between 25% and 50%. Hexachlorocyclopentadiene; 2,4dinitrophenol; 4-nitroaniline; 4,6-dinitro-2-methylphenol; and 3,3'-dichlorobenzidine positive and non-detected results were qualified as estimated for soil samples associated with continuing calibrations whose %D for these compounds were between 50% and 90%. 2,4-Dinitrophenol positive results were qualified as estimated and non-detected results were rejected for soil samples associated with continuing calibrations whose %D for that compound was above 90%. Hexachlorocyclopentadiene; 2,4-dinitrophenol; and 4,6-dinitro-2-methylphenol positive results were qualified as estimated and non-detected results were rejected for soil samples associated with continuing calibrations with an RRF below 0.05 for those compounds.

#### D. Blanks

Laboratory (method) and field (equipment) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank (10 times for phthalates). Sample results below this action level are considered attributable to blank contamination; results greater than this level are considered to be acceptable. Due to equipment or laboratory method blank contamination, phenol; naphthalene; and bis(2-ethylhexyl)phthalate results were qualified as non-detected in associated samples where the results were below the calculated blank action level.

#### E. Surrogate Recoveries

Surrogates are added to all samples and blanks prior to extraction to assess recovery (accuracy). If any two acid or base/neutral surrogates are below the acceptance range (as stated in the NYSDEC ASP) but above 10% for a sample, positive and non-detected results for all compounds of the same fraction are qualified as estimated. If %R is below 10% for any acid or base/neutral surrogate in a sample, positive results are qualified as estimated and non-detected results are rejected for compounds in that fraction. If %R is above acceptance range for two acid or base/neutral surrogates in a sample, only positive results for compounds in that fraction are qualified as estimated. All actions apply to the sample with surrogate %R outside of acceptance limits only. At least one acid surrogate recovery was below 10% for samples HFSW102XXX94XX, HFCL101XXX94XX, HFCL101XXX94XX, HFPS101XX994XX, HFPS102XX594XX, HFPS106X1194XX, HFSS103XXXY94XX; therefore, positive results were qualified as estimated and non-detected results were rejected for the acid fraction compounds for those samples. At least one base/neutral surrogate recovery was below 10% for sample

HFSS108XXX94XX; therefore, positive results were qualified as estimated and non-detected results were rejected for the base/neutral fraction compounds for this sample. At least one acid and one base/neutral surrogate recovery was below 10% for sample HFCL107XXX94XX; therefore, positive results were qualified as estimated and non-detected results were rejected for both fractions in the sample. At least two acid surrogate recoveries in sample HFWT101XXX94XX were below acceptance limits but greater than 10%; therefore, positive and non-detected results were qualified as estimated for the acid fraction compounds in the sample. At least two base/neutral surrogate recoveries in samples HFSS103XXX94XX HFSS115XXX94XD, HFSS122XXX94XX were below acceptance limits but greater than 10%; therefore, positive and non-detected results were qualified as estimated for the base/neutral fraction compounds in those samples. At least two acid and two base/neutral surrogate recoveries in samples HFCD105XXX94XX, HFCD107XXX94XX, HFCD108XXX94XX, HFWT101XXX94XD, HFSS101XXX94XX, HFSS102XXX94XX, HFSS104XXX94XX, HFSS105XXX94XX, HFSS106XXX94XX, HGSS107XXX94XX, HFSS117XXX94XX RE, HFSS119XXX94XX RE, HFSS120XXX94XX RE, HFSS124XXX94XX RE, and HFSS125XXX94XX RE were below acceptance limits but greater than 10%; therefore, positive and non-detected results were qualified as estimated for compounds from both fractions in those samples.

#### F. Matrix Spike/Matrix Spike Duplicate

MS/MSD analyses are performed at a frequency of 5% to assess method precision and accuracy. Action is taken if recoveries are outside the acceptance range (as stated in the NYSDEC ASP), or if the RPD for spiked compounds is above the control limit (also stated in the NYSDEC ASP). Nine MS/MSD analyses were performed, three for aqueous samples, five for low level soil samples, and one for medium level soil samples. Percent recovery for acenaphthene in the MS/MSD performed on aqueous sample HFCL101XXX94XX was below QC limits, but above 10%, therefore, positive and non-detected acenaphthene results were qualified as estimated for sample HFCL101XXX94XX and its field duplicate HFCL101XXX94XD. In the same MS/MSD, RPD for phenol; 4-chloro-3-methylphenol; acenaphthene; and pyrene was above QC limits; therefore, positive and non-detected results for those compounds in sample HFCL101XXX94XX and its field duplicate HFCL101XXX94XD were qualified as estimated. Percent recovery for pentachlorophenol in the MS/MSD performed on aqueous sample HFMW101XXX94XX was above QC limits; therefore, positive pentachlorophenol results were qualified as estimated for sample HFMW101XXX94XX. Pentachlorophenol was not detected in field duplicate HFMW101XXX94XD; therefore, no action was required. Recovery was below 10% for acenaphthene and pyrene in the MS/MSD performed on soil sample HFCD101XXX94XX; therefore, positive results for these compounds were qualified as estimated, and non-detected results were rejected for sample HFCD101XXX94XX and its field duplicate HFCD101XXX94XD. In the same MS/MSD, %R for phenol; 1,4-dichlorobenzene; N-nitroso-dipropylamine; and 1,2,4-trichlorobenzene was below QC limits, but above 10%, therefore, positive and non-detected results for those compounds were qualified as estimated for sample HFCD101XXX94XX and its field duplicate HFCD101XXX94XD. Also in the same MS/MSD,

RPD for 1,4-dichlorobenzene; 1,2,4-trichlorobenzene; and 4-chloro-3-methylphenol was above QC limits; therefore, positive and non-detected results for those compounds were qualified as estimated for sample HFCD101XXX94XX and its field duplicate HFCD101XXX94XD. Recovery and RPD were above the OC limits for pyrene in the MS/MSD performed on soil sample HFPS104XX994XX; therefore, positive and non-detected pyrene results were qualified as estimated for sample HFPS104XX994XX and its field duplicate HFPS104XX994XD. Recovery was below the QC limit for phenol; 2-chlorophenol; 1,4-dichlorobenzene; N-nitroso-di-npropylamine; 1,2,4-trichlorobenzene; 4-chloro-3-methylphenol; acenaphthene; 2,4-dinitrotoluene; pentachlorophenol; and pyrene in the MS/MSD performed on soil sample HFWT101XXX94XX; therefore, positive and non-detected results for those compounds in sample HFWT101XXX94XX and its field duplicate HFWT101XXX94XD were qualified as estimated. Percent recovery was above the QC limits for pyrene in the MS/MSD performed on soil sample HFSS111XXX94XX; therefore, positive pyrene results were qualified as estimated for sample HFSS111XXX94XX RE and its field duplicate HFSS111XXX94XD RE. In the same MS/MSD, the %R was low for 2.4dinitrotoluene; therefore, positive and non-detected results for this compound in sample HFSS111XXX94XX RE and its field duplicate HFSS111XXX94XD RE were qualified as estimated. Percent recovery for pentachlorophenol was below 10% in the same MS/MSD; therefore, non-detected results were rejected for this compound in sample HFSS111XXX94XX RE and its field duplicate HFSS111XXX94XD RE. Also in the same MS/MSD, RPD for acenaphthene; pentachlorophenol; and pyrene was above QC limits. Positive and non-detected results for those compounds in sample HFSS111XXX94XX RE and its field duplicate HFSS111XXX94XD RE were qualified as estimated. Recovery was below QC limits but above 10% for N-nitroso-di-n-propylamine; 1,2,4-trichlorobenzene; and pyrene, and RPD was above QC limits for phenol; 1,4-dichlorobenzene; 1,2,4-trichlorobenzene; 4-chloro-3-methylphenol; acenaphthene; and pyrene in the MS/MSD performed on soil sample HFSD102XXX94XX; therefore, positive and non-detected results for those compounds in sample HFSD102XXX94XX and its field duplicate HFSD102XXX94XD RE were qualified as estimated. Percent recovery for pentachlorophenol was below 10%, and RPD exceeded QC limits in the MS/MSD performed on sample HFSS101XXX94XX; therefore, positive results were qualified as estimated and nondetected results were rejected in sample HFSS101XXX94XX and its field duplicate HFSS101XXX94XD. Recovery was below QC limits but above 10% for 1,4-dichlorobenzene; N-nitroso-di-n-propylamine; 1,2,4-trichlorobenzene; 4-chloro-3-methylphenol; acenaphthene; and 2,4-dinitrotoluene in the same MS/MSD; therefore, positive and non-detected results for those compounds in sample HFSS101XXX94XX and its field duplicate HFSS101XXX94XD were qualified as estimated.

# G. Field Duplicates

Field duplicate samples are collected and analyzed to assess sampling and analytical precision. Field duplicate control limits are: RPD of less than 30% for water samples and 50% for soil samples. Isophorone did not meet the control limit in aqueous sample HFCL101XXX94XX and its duplicate, HFCL101XXX94XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. 4-Methylphenol; 2,4-dimethylphenol;

naphthalene; bis(2-ethylhexyl)phthalate); and pentachlorophenol did not meet the control limit in aqueous sample HFMW101XXX94XX and its duplicate, HFMW101XXX94XD; therefore, positive results for these compounds in the original sample and its field duplicate were qualified as estimated. 2-Methylnaphthalene and dibenzofuran did not meet the control limit in soil sample HFCD101XXX94XX and its duplicate, HFCD101XXX94XD; therefore, positive results for these compounds in the original sample and its field duplicate were qualified as estimated. Bis(2ethylhexyl)phthalate did not meet the control limit in soil sample HFBS110X1294XX and its duplicate, HFBS110X1294XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. Phenanthrene; fluoranthene; pyrene; benzo(a)anthracene; chrysene; benzo(b)fluoranthene; benzo(k)fluoranthene; benzo(a)pyrene; indeno(1,2,3-cd)pyrene; dibenz(a,h)anthracene; benzo(g,h,i)perylene did not meet the control limit in soil sample HFPS104XX994XX and its duplicate, HFPS104XX994XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. Nitrobenzene; acenaphthylene; acenaphthene; pyrene; benzo(a)anthracene; di-noctylphthalate; benzo(b)fluoranthene; dibenz(a,h)anthracene; and benzo(g,h,i)perylene did not meet the control limit in soil sample HFSS111XXX94XX RE and its duplicate HFSS111XXX94XD RE; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. Naphthalene; 2-methylnaphthalene; acenaphthene; fluorene; phenanthrene; fluoranthene; pyrene; benzo(a)anthracene; chrysene; benzo(b)fluoranthene; benzo(k)fluoranthene; benzo(a)pyrene; indeno(1,2,3-cd)pyrene; and benzo(g,h,i)perylene did not meet the control limit in soil sample HFSD102XXX94XX and its field duplicate HFSD102XXX94XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. Naphthalene and 2-methylnaphthalene did not meet the control limit in soil sample HFSS101XXX94XX and its duplicate HFSS101XXX94XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. Naphthalene; dibenzofuran; anthracene; dibenz(a,h)anthracene; and benzo(g,h,i)perylene did not meet the control limit in soil sample HFSS115XXX94XX and its field duplicate HFSS115XXX94XD RE; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated.

# H. Internal Standard Response

The internal standard response is monitored for each sample to verify GC/MS sensitivity and the stability of the detector's response. The internal standard area must be >50% and <100%, and the retention time must be within ±30 seconds of the associated calibration standard. If the internal standard area count in the sample is above the upper limit, positive results for compounds quantitated with this internal standard (as stated in the NYSDEC ASP) are qualified as estimated. If the internal standard area count in a sample is below the lower limit but above 25%, positive and non-detected results for compounds quantitated with this internal standard are qualified as estimated. If the internal standard area count in the sample is below 25% of the internal standard area in the associated calibration standard, positive results are qualified as estimated and non-detected results are rejected for compounds quantitated with this internal standard. Table A

summarizes the action required for samples in this project. Samples and internal standards not listed required no action.

Table A		·		
Sample ID	Acenaphthene-d10	Phenanthrene-d10	Chrysene-d12	Perylene-d12
HFCL109XXX94XX			LOW	LOW
HFCL101XXX94XD	LOW			VERY LOW
HFCL101XXX94XX	VERY LOW		LOW	VERY LOW
HFCL107XXX94XX	LOW		· .	
HFWT102XXX94XX RE			LOW	
HFCD109XXX94XX DL			VERY LOW	VERY LOW
HFSS114XXX94XX			VERY LOW	VERY LOW
HFSS118XXX94XX		LOW	VERY LOW	VERY LOW
HFSS121XXX94XX			LOW	VERY LOW
HFSS115XXX94XD RE				LOW
HFSS115XXX94XX				LOW
HFSS116XXX94XX		LOW	VERY LOW	VERY LOW
HFSS117XXX94XX RE				LOW
HFSS119XXX94XX RE				LOW
HFSS120XXX94XX RE				VERY LOW
HFSS122XXX94XX			VERY LOW	VERY LOW
HFSS124XXX94XX RE				LOW
HFSS125XXX94XX RE				LOW

LOW= Internal standard is lower than the QC limit but greater than 25% of the associated continuing calibration standard response. Action: positive and non-detected results for compounds quantitated with this internal standard are qualified as estimated. VERY LOW= Internal is lower than 25% of the associated continuing calibration standard response. Action: positive results qualified as estimated and non-detected results rejected for compounds quantitated with this internal standard.

# I. Target Compound Identification

Chromatograms and mass spectra are reviewed to minimize the reporting of false positives and false negatives. For each compound detected, the relative retention time must be within  $\pm 0.06$  units and the qualitative criteria for mass spectral identification must be met. No problems were observed.

# J. Compound Quantitation

Laboratory calculations were checked to verify that reported concentrations and CRQLs were accurate. The calculations which were reviewed were performed correctly, and the CRQLs were adjusted for sample size, percent solid content for soil samples, and dilution factors. Soil sample percent solid content is evaluated to determine whether the sample was correctly classified as a soil. If solid content falls between 10% and 50% positive and non-detected results are estimated. If solid content is less than 10% results are calculated and reported as an aqueous sample. Samples HFCD101XXX94XD, HFCD103XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSD102XXX94XD, HFBS106X1294XX, HFBS106X1294XX, HFBS101XX694XX, HFBS104XX894XX, and HFBS105X1094XX have solid content between 10% and 50%; therefore, positive and non-detected results for all compounds in those samples were qualified as estimated. Although, in general, dilutions are treated as explained in the introduction, an exception was made in the case of sample HFCD109XXX94XX. Because the original, undiluted analysis of the sample was more rigorously qualified than the diluted analysis, professional judgement was used and the diluted analysis was reported on Table 2. Positive results from the original, undiluted sample analysis, that were not detected in the diluted analysis, were inserted into the results for the diluted analysis.

#### K. Tentatively Identified Compounds

All TIC spectra were reviewed to verify that the identifications were acceptable, laboratory contamination was taken into account, and the correct assignments of compound classes were made. Reported concentrations are estimated (J) values.

#### IV. PESTICIDES/PCBs

#### A. Holding Times

Holding times are evaluated to address the validity of the results based on the elapsed time from VTSR to analysis. Sample extraction must be performed within 5 days of VTSR (re-extractions are allowed a 10-day holding time), and sample analysis must done within 40 days of VTSR. Samples HFCL101XXX94XX, HFSW103XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSS101XXX94XD RE, HFSS101XXX94XX RE, HFSS103XXX94XX RE, HFSS104XXX94XX RE, HFSS105XXX94XX RE, HFSS106XXX94XX RE, HFSS107XXX94XX RE, HFSS108XXX94XX RE,

HFSS115XXX94XD RE, HFSS115XXX94XX RE, HFSS116XXX94XX RE, HFSS117XXX94XX RE, HFSS119XXX94XX RE, HFSS120XXX94XX RE, HFSS122XXX94XX RE, HFSS124XXX94XX RE, and HFSS125XXX94XX RE were extracted and/or analyzed beyond the required holding time; positive and non-detected results for those samples were qualified as estimated.

#### B. Instrument Performance Check

Performance checks are performed to verify target compound resolution and the instrument's sensitivity. For compound resolution criteria to be met, the resolution between the adjacent peaks in the resolution check mixture must be greater than 60%, and the mixture must be analyzed at the frequency specified by the method. The performance evaluation mixture (PEM) must also be analyzed at the frequency specified by the method; the retention times must be within the windows established by the initial calibration analyses; the %D between the calculated and true concentration must be less than or equal to 25%; and the endrin and 4,4'-DDT breakdown (the amount of decomposition that those compounds undergo when analyzed on the GC column) must be less than or equal to 20% (30% for endrin and 4,4'-DDT combined). Resolution check mixture analyses met acceptance criteria for all samples. Performance evaluation mixture analyses were performed at the required frequency. Endrin; 4,4'-DDT; and methoxychlor did not meet %D criteria in several PEM; therefore, positive and non-detected results for those analytes in associated samples were qualified as estimated.

# C. Initial and Continuing Calibration

Initial calibration demonstrates instrument linearity and ensures that the instrument can produce acceptable qualitative and quantitative results. The individual standard mixtures must be analyzed at the concentrations and frequency specified by the method. For the initial calibration linearity criteria to be met, the %RSD must be less than or equal to 20% for all compounds, except for the two surrogates, for which the %RSD must not exceed 30%. Standards were run at the required frequency. Percent RSD for 4,4'-DDT; heptachlor epoxide; alpha-BHC; and delta-BHC did not meet acceptance criteria; therefore, positive and non-detected results for those compounds were qualified as estimated for associated samples.

Continuing calibration checks are performed to demonstrate that the instrument can produce acceptable qualitative and quantitative results as established by the initial calibration. The %D between the calculated and true concentration of the individual mixtures A and B must be less than or equal to 25%, and the retention times must fall within the windows established by the initial calibration. Standards were run at the required frequency. Percent difference acceptance criteria for beta-BHC; delta-BHC; 4,4'-DDD; 4,4'-DDT; and endrin ketone were not met; therefore, positive and non-detected results for those compounds were qualified as estimated in all associated samples.

#### D. Blanks

Laboratory (method) and field (equipment) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. Action levels are calculated at 5 times the concentration in the associated blank. Sample results below this action level are considered attributable to blank contamination; results greater than this level are considered to be acceptable. Due to equipment or laboratory method blank contamination, aroclor-1260 results were qualified as non-detected in associated samples where the results were below the calculated blank action level.

# E. Surrogate Recoveries

Surrogate compounds are added to all samples and blanks prior to extraction to assess recovery (accuracy). If %R for both surrogates is below the acceptance range (as stated in the NYSDEC ASP) but greater than 10%, on either column, positive results obtained from that column are qualified as estimated, and all non-detected results for the sample are qualified as estimated. If %R is below 10% for any one surrogate, positive results are qualified as estimated and nondetected results are rejected for the affected sample. If %R for both surrogates is above the acceptance range on either column, only positive results obtained from that column are qualified as estimated. Surrogate recoveries were below acceptance limits but above 10% for one column in samples HFCL106XXX94XX, HFPS104XX994XD, HFSD102XXX94XX, HFSD102XXX94XD, HFSS111XXX94XD, HFSS123XXX94XX, HFSS124XXX94XX RE, and HFSS125XXX94XX RE; therefore, positive results for compounds quantitated using that column, and all non-detected results for that sample were qualified as estimated. Positive and non-detected results were qualified as estimated for samples HFBS101XX694XX, HFBS102XX694XX, HFBS103XX694XX, HFBS104XX694XX, HFBS105XX694XX, HFBS108XX694XX, HFBS109XX694XX, HFCD107XXX94XX, HFMW101XXX94XX, HFMW102XXX94XX, HFMW103XXX94XX, HFMW104XXX94XX, HFMW105XXX94XX, HFMW106XXX94XX, HFMW107XXX94XX, HFMW108XXX94XX, HFMW109XXX94XX, HFMW110XXX94XX, HFSD101XXX94XX, HFSD104XXX94XX, HFSS110XXX94XX, HFSS121XXX94XX, HFSS103XXX94XX RE, HFSS107XXX94XX RE, HFSS119XXX94XX RE, HF122XXX94XX RE, because all surrogate recoveries were below acceptance limits but above 10%. Surrogate recoveries were below 10% for at least one column in samples HFCL101XXX94XX, HFCL101XXX94XD, HFCL107XXX94XX, HFCD101XXX94XX, HFCD101XXX94XD, HFCD102XXX94XX, HFCD103XXX94XX, HFCD104XXX94XX, HFSD103XXX94XX, HFSD105XXX94XX, HFSD107XXX94XX, HFPS104XX994XX, HFWT101XXX94XX, HFWT101XXX94XD, HFWT102XXX94XX, HFCD109XXX94XX, HFSS109XXX94XX, HFSS111XXX94XX, HFSS113XXX94XX, HFSS114XXX94XX, HFSS118XXX94XX; therefore, positive results for compounds quantitated using that column (or both columns if both columns were below 10%) for that sample were qualified as estimated and all non-detected results were rejected.

# F. Matrix Spike/Matrix Spike Duplicate

Matrix spike/matrix spike duplicate analyses are performed at a frequency of 5% to assess method precision and accuracy. If %R for a compound in the MS/MSD is outside the acceptance range (as stated in the NYSDEC ASP) but greater than 10%, positive results for the compound are qualified as estimated. If %R for a compound in the MS/MSD is below 10%, positive results are estimated and non-detected results are rejected for that compound. If RPD is above the control limit (as stated in the NYSDEC ASP), positive and non-detected results are qualified as estimated. If action is necessary due to MS/MSD QC failures, only the sample used for spiking and its field duplicate are qualified. Nine MS/MSD analyses were performed, three for aqueous samples and six for soil samples. One MS/MSD for soils was subsequently reanalyzed. Heptachlor, aldrin, and 4,4'-DDT RPD was above the QC limits in the MS/MSD performed on aqueous sample HFCL101XXX94XX; therefore, positive and non-detected results were qualified as estimated. Percent recovery was below and RPD was above the acceptance limits for gamma-BHC; aldrin; heptachlor; dieldrin; and endrin in the MS/MSD performed on aqueous sample HFMW101XXX94XX, and RPD was above QC limits for 4,4'-DDT. Positive and non-detected results for those compounds were qualified as estimated. Endrin %R was below the acceptance limits in the MS/MSD performed on soil sample HFCD101XXX94XX; therefore, positive results for this compound were qualified as estimated. Dieldrin %R was below 10% in the same MS/MSD; therefore, positive results were estimated and non-detected results were rejected for that compound. Gamma-BHC; aldrin; dieldrin; and endrin %R was below 10% in the MS/MSD performed on soil sample HFSD102XXX94XX; therefore, positive results were qualified as estimated and non-detected results were rejected for those compounds. Relative percent difference was above the QC limits for gamma-BHC; heptachlor; aldrin; dieldrin; endrin; and 4,4'-DDT in the same MS/MSD; therefore, positive and non-detected results were qualified as estimated. Endrin %R was below 10% in the MS/MSD performed on soil sample HFSS111XXX94XX; therefore, positive results were qualified as estimated and non-detected results were rejected for that compound. Dieldrin %R was below the acceptance range but greater than 10% in the same MS/MSD; therefore, positive results were qualified as estimated. Relative percent difference was above the QC limits for gamma-BHC; heptachlor; aldrin; dieldrin; endrin; and 4,4'-DDT in the same MS/MSD; therefore, positive and non-detected results were qualified as estimated. Gamma-BHC; aldrin; dieldrin; and endrin %R was below 10% in the MS/MSD performed on soil sample HFSS101XXX94XX RE; therefore, positive results were qualified as estimated and non-detected results were rejected for those compounds. Relative percent difference was above the QC limits for gamma-BHC; heptachlor; aldrin; dieldrin; endrin; and 4,4'-DDT in the same MS/MSD; therefore, positive and non-detected results were qualified as estimated.

#### G. Field Duplicates

Field duplicate samples are collected and analyzed to assess sampling and analytical precision. Field duplicate control limits are: RPD of less than 30% for water samples and 50% for soil samples. Heptachlor epoxide; dieldrin; endrin; aldrin; endosulfan I; and gamma-chlordane did not

meet the control limit in soil sample HFCD101XXX94XX and its duplicate, HFCD101XXX94XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. 4,4'-DDE and aroclor-1260 did not meet the control limit in soil sample HFSS111XXX94XX and its duplicate, HFSS111XXX94XX; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. 4,4'-DDE; endosulfan II; and methoxychlor did not meet the control limit in soil sample HFSS101XXX94XX and its duplicate, HFSS101XXX94XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated. Methoxychlor did not meet the control limit in soil sample HFSS115XXX94XX and its duplicate, HFSS115XXX94XD; therefore, positive results for this compound in the original sample and its field duplicate were qualified as estimated.

# H. Cleanup Checks

Cleanup procedures (gel permeation chromatography [GPC] and florisil) are used to remove interferences from sample extracts. Cleanup checks verify acceptable recovery of pesticides through the cleanup process. Recoveries must be between 80 - 120% (florisil) and 80 - 110% (GPC). These criteria were met.

# I. Target Compound Identification

Chromatograms and mass spectra are reviewed to minimize the reporting of false positive and false negatives. For each compound detected, the retention time must be within the retention time window determined during initial calibration for both the primary and confirmation columns and the %D between the results obtained from each column must be less than 25%. If the%D between the two is between 25% and 50%, the compound result is qualified as estimated. If the %D between the two is between 50% and 90% the compound result is qualified as an analyte that is tentatively identified and whose associated result is an estimated concentration. If the %D between the two is greater than 90% the compound result is rejected. Table B summarizes results that were qualified due to %D between the columns.

Table B							
Sample ID	Compound(s)	Qualifier					
HFCD101XXX94XX	Heptachlor epoxide	JN					
	Dieldrin	R					
	Endrin	JN					
HFCD101XXX94XD	Dieldrin;4,4'-DDE; endrin	R					
	Gamma-chlordane	JN					

Table B (continued)		
HFCD103XXX94XX	Dieldrin	R
	Endrin	JN
HFCD104XXX94XX	Heptachlor epoxide	R
HFSD103XXX94XX	4,4'-DDD	JN
HFSD107XXX94XX	Heptachlor epoxide	R
HFCD105XXX94XX	Endrin ketone	J
	Endrin aldehyde	R
HFCD106XXX94XX	Endrin aldehyde	R
HFCD108XXX94XX	4,4'-DDT	JN
	Endrin aldehyde	R
HFPS101XX994XX	4,4'-DDT	R
HFPS103XX994XX	Endrin ketone; aroclor-1260	J
HFPS105XX994XX	Endrin ketone	J
HFWT102XXX94XX	Endrin	J
HFCD109XXX94XX	4,4'-DDE; 4,4'-DDD; 4,4'-DDT	R
HFSS111XXX94XX	Endrin	R
	Endosulfan II	JN
HFSS112XXX94XX	Endosulfan II	J
HFSS118XXX94XX	4,4'-DDE	R
	4,4'-DDD	R
HFSS101XXX94XX RE	4,4'-DDE; methoxychlor	JN
	Endrin	R
HFSS101XXX94XD RE	Aroclor-1260	J
HFSS102XXX94XX RE	Aroclor-1260	J
HFSS104XXX94XX RE	Aroclor-1260	J

Table B (continued)		
HFSS105XXX94XX RE	Endrin aldehyde	R
HFSS106XXX94XX RE	Endosulfan II; 4,4'-DDT	R
HFSS108XXX94XX RE	Heptachlor	JN
	Methoxychlor	J
HFSS115XXX94XX RE	Endosulfan II; 4,4'-DDT	R
HFSS115XXX94XD RE	Endosulfan II	JN
-	4,4'-DDT	R
HFSS116XXX94XX RE	4,4'-DDT	R
HFSS117XXX94XX RE	4,4'-DDE	R
HFSS125XXX94XX RE	4,4'-DDT	R

# J. Compound Quantitation

Laboratory calculations were checked to verify that reported concentrations and CRQLs were accurate. The calculations which were reviewed were performed correctly, and the CRQLs were adjusted for sample size, percent solid content for soil samples, and dilution factors. Soil sample percent solid content is evaluated to determine whether the sample was correctly classified as a soil. If solid content falls between 10% and 50% positive and non-detected results are estimated. If solid content is less than 10% results are calculated and reported as an aqueous sample. Samples HFCD101XXX94XD, HFCD103XXX94XX, HFSD101XXX94XX, HFSD101XXX94XX, HFSD102XXX94XX, HFSD102XXX94XX, HFBS106X1294XX, HFBS101XX694XX, HFBS104XX894XX, and HFBS105X1094XX have solid content between 10% and 50%; therefore, positive and non-detected results for all compounds in those samples were qualified as estimated.

#### V. INORGANICS

# A. Holding Times

Holding times are evaluated to address the validity of the results based on the elapsed time from VTSR to preparation. Maximum holding time for inorganics analyses are as follows:

metals (excluding mercury) - 6 months

mercury - 26 days

cyanide - 12 days

All samples were analyzed within the allowed holding times.

#### B. Calibration

Calibration demonstrates instrument linearity and ensures that the instrument can produce acceptable qualitative and quantitative results. The minimum number of standards were analyzed by the laboratory as specified by the method. For the initial calibration linearity criteria to be met. the correlation coefficient must be greater than 0.995 for metals analysis by furnace atomic absorption (AA), and analysis for mercury and cyanide. Initial calibration verification (ICV) and continuing calibration verification (CCV) %R must be between 90 -110% (80 - 120% for mercury and 85 - 115% for cyanide). For the CRDL standard, %R must be between 80 -120%. If %R for a CRDL standard is between 50 and 79%, positive and non-detected results within the affected range (i.e., CRDL standard true value ±2 times the CRDL) are qualified as estimated. If %R for a CRDL standard is between 121% and 150%, positive results within the affected range are qualified as estimated. If %R for a CRDL standard is less than 50%, all results within the affected range are rejected. If %R for a CRDL standard is greater than 150%, positive results within the affected range are rejected. All standards were run at the required frequency. Initial calibration linearity criteria were met for aqueous and soil sample analytical runs. Positive and non-detected beryllium, cadmium, and silver results within the affected range were estimated for associated aqueous samples because the CRDL standard recoveries were below the acceptance limits, but above 50%. Positive cadmium, nickel, and lead results within the affected range were estimated for associated aqueous samples because the CRDL standard recoveries were above the acceptance limits, but below 150%. Positive and non-detected beryllium, cadmium, chromium, manganese, and silver results within the affected range were estimated for soil samples associated with CRDL standards whose recoveries were below the acceptance limits, but above 50%. Positive antimony, cadmium, nickel, and lead results within the affected range were estimated for soil samples associated with CRDL standards whose recoveries were above the acceptance limits, but below 150%.

#### C. Blanks

Laboratory (preparation/calibration) and field (equipment) blanks are analyzed to determine the presence and magnitude of contamination resulting from field or laboratory activities. No blank contamination was observed.

# D. Interference Check Sample (ICS)

The ICS verifies the instrument's interelement and background correction factors for inductively coupled plasma (ICP) analyses. The ICS %R must be within 80 - 120%. All results were reviewed and found to be acceptable.

# E. Laboratory Control Sample (LCS)

The LCS monitors the overall laboratory performance from sample preparation through analysis. Aqueous LCS recoveries must fall between 80 - 120%, and solid LCS results must fall within the limits established by USEPA for that LCS. All results were reviewed and found to be acceptable.

#### F. Laboratory Duplicate Analysis

Duplicate results provide a measure of the laboratory's analytical precision. The RPD must be less than 50% (100% for soil) for sample results ≥5 times the CRDL, or ± the CRDL (±2 times the CRDL for soil) for sample results less than 5 times the CRDL. Aluminum, antimony, cadmium, iron, lead, manganese, and zinc duplicate results were not within acceptance limits for aqueous samples; therefore, positive and non-detected results for these analytes in the associated samples were qualified as estimated. Cyanide duplicate results for this analyte in associated samples were qualified as estimated.

# G. Matrix Spike

Matrix spike analyses are performed to assess method accuracy. Spike recoveries must fall within the range of 75 - 125%. Actions are as stated in the USEPA Region II SOP for validation of inorganics data, entitled Evaluation of Metals Data for the Contract Laboratory Program (CLP) based on SOW 3/90. The percent recoveries for manganese and cyanide were below 30% in one aqueous matrix spike analysis. Positive and non-detected results for those analytes were rejected in associated aqueous samples. The percent recoveries for arsenic, lead, selenium and thallium were between 30% and 74% in aqueous matrix spike analyses. Positive and non-detected results for these analytes were qualified as estimated for associated aqueous samples. The percent recoveries for iron and silver were above 150% in aqueous matrix spike analyses. Positive results for those analytes were rejected in associated aqueous samples. The percent recoveries for silver, selenium and cyanide in soil matrix spike analyses were less than 10%; therefore, positive and non-detected results for those analytes were rejected for all associated soil samples. Percent recoveries for antimony, arsenic, cadmium, copper, lead, mercury, selenium, silver, and cyanide in soil matrix spike analyses were less than 75%, but greater than 10%; therefore, positive and nondetected results for those analytes were qualified as estimated for all associated soil samples. Percent recoveries for copper and cyanide in soil matrix spike analyses were between 125% and 200%; therefore, positive copper and cyanide results were qualified as estimated for all associated soil samples. Percent recovery for copper in one soil matrix spike analysis was above 200%; therefore, positive results for this analyte were rejected for associated soil samples.

#### H. Furnace AA QC

Duplicate injections and post digestion spikes provide a measure of precision and accuracy for furnace AA analyses. Duplicate injections must be within 20% RSD, and spike recoveries must

be between 85 - 115%. All %RSDs were reviewed and found to be acceptable. Percent recoveries were below 85% for arsenic in samples HFCL106XXX94XX, HFCL107XXX94XX, HFMW103XXX94XX, HFMW101XXX94XD, HFSS120XXX94XX; for lead in samples HFSW101XXX94XX, HFMW103XXX94XX, HFMW101XXX94XX, HFMW101XXX94XD; for selenium in samples HFCL101XXX94XX, HFCL101XXX94XD, HFMW107XXX94XX, HFMW110XXX94XX, HFMW108XXX94XX, HFMW102XXX94XX, HFMW103XXX94XX, HFCD102XXX94XX, HFWT101XXX94XX, HFWT101XXX94XD, HFSS117XXX94XX, HFBS103X1094XX, HFBS105X1094XX, HFCD105XXX94XX, HFCD107XXX94XX, HFWT101XXX94XD, HFWT101XXX94XX; and for thallium in samples HFCL101XXX94XX HFCL101XXX94XD, HFCD109XXX94XX, HFSS112XXX94XX. Positive and non-detected results for these analytes in these samples were qualified as estimated. Method of standard additions (MSA) is performed for sample quantitation if upon analysis of the sample and its analytical spike the sample absorbance or concentration is greater than or equal to 50% of the spike and the spike recovery is less than 85% or greater than 115%. MSA is evaluated for degree of dependence between concentration and absorbance in the concentration range of the MSA standards. Correlation coefficient must be greater than 0.995. The correlation coefficient of the MSA used to obtain the arsenic result for sample HFCL101XXX94XD and the selenium result for sample HFBS101XX694XX were less than 0.990; therefore, those results were rejected. The correlation coefficient of the MSA used to obtained the selenium results for samples HFMW101XXX94XD, HFSS101XXX94XD, HFSS116XXX94XX, HFBS106X1294XX, and HFSS111XXX94XD were between 0.990 and 0.995; therefore, the results were qualified as estimated.

#### I. ICP Serial Dilution

Serial dilution analyses evaluate the effects of physical or chemical interferences in the sample matrix. Serial dilution results must agree within 10%D of the original sample for results greater than 10 times the instrument detection limit (IDL). Aluminum, cadmium, iron, lead, manganese, zinc aqueous serial dilution results did not meet QC criteria. Positive and non-detected results for those analytes in associated aqueous samples were qualified as estimated. Cadmium, chromium, iron, and zinc soil serial dilution results did not meet QC criteria. Positive and non-detected results for those analytes in associated soil samples were qualified as estimated.

# J. Sample Result Verification

Laboratory calculations were checked to verify that reported concentrations and IDLs were accurate. The calculations which were reviewed were performed correctly, and the CRDLs were adjusted for sample size, percent solid content for soil samples, and dilution factors. Soil sample percent solid content is evaluated to determine whether the sample was correctly classified as a soil. If solid content falls between 10% and 50% positive and non-detected results are estimated. If solid content is less than 10% results are calculated and reported as an aqueous sample. Positive and non-detected results for samples HFCD101XXX94XD, HFCD103XXX94XX, HFBS101XX694XX, HFBS104XX894XX, HFBS105X1094XX, HFBS106X1294XX,

HFSD101XXX94XX, HFSD102XXX94XX, and HFSD102XXX94XD were qualified as estimated due to low solid content.

# K. Field Duplicates

Field duplicate samples are collected and analyzed to assess sampling and analytical precision. The RPD must be less than 50% (100% for soil) for sample results  $\geq 5$  times the CRDL, or  $\pm$  the CRDL (±2 times the CRDL for soil) for sample results less than 5 times the CRDL. Aqueous sample HFSW102XXX94XX and its duplicate HFSW102XXX94XD did not meet the OC criteria for iron, lead, and manganese; therefore, positive and non-detected results for these analytes were qualified as estimated in the sample and its duplicate. Aqueous sample HFCL101XXX94XX and its duplicate HFCL101XXX94XD did not meet the QC criteria for barium, copper, and lead; therefore, positive and non-detected results for these analytes were qualified as estimated in the sample and its duplicate. Soil sample HFCD101XXX94XX and its duplicate HFCD101XXX94XD did not meet the OC criteria for cyanide; therefore, positive and non-detected results for this analyte were qualified as estimated in the sample and its duplicate. Soil sample HFSS101XXX94XX and its duplicate HFSS101XXX94XD did not meet the QC criteria for arsenic; therefore, positive and non-detected results for this analyte were qualified as estimated in the sample and its duplicate. Soil sample HFSD102XXX94XX and its duplicate HFSD102XXX94XD did not meet the QC criteria for iron; therefore, positive and non-detected results for this analyte were qualified as estimated in the sample and its duplicate.

#### V. EP TOXICITY METALS

EP toxicity metals analyses were evaluated for hold times, calibration, blank contamination, interference check sample, laboratory control sample, laboratory duplicate analysis, MS, furnace AA QC (when applicable), ICP serial dilution, sample result verification, and field duplicate. Preparation of soil samples HFCD105XXX94XX, HFCD106XXX94XX, HFCD107XXX94XX, HFCD108XXX94XX, HFWT101XXX94XX, HFWT101XXX94XD, HFWT102XXX94XX for mercury analysis was started beyond the maximum holding time of 26 days; therefore, positive mercury results for these samples were qualified as estimated and non-detected results were rejected. Cadmium contamination above the acceptance criterion (i.e., the IDL) was found in a method blank. Positive cadmium results below the action level (10 times the IDL) were qualified as estimated in associated soil samples because of this blank contamination. Cadmium contamination above the acceptance criterion (i.e., the IDL) was found in a continuing calibration blank. Positive cadmium results below the action level (10 times the IDL) were qualified as estimated in associated soil samples because of this blank contamination. Laboratory duplicate results were not within acceptance limits (acceptance limits are similar to those for laboratory duplicate results in CLP inorganics analysis, but IDL is used instead of CRDL in the criteria) for antimony, barium, cadmium, chromium, lead, or silver; therefore, positive and non-detected results for those analytes in all associated samples were qualified as estimated. One required laboratory duplicate analysis was not performed. Positive results for all analytes for all associated samples were qualified as estimated. Matrix spike %R was below the acceptance limits (criteria

and actions are like those for aqueous spike sample results in CLP inorganics analysis), but above 30%, for arsenic, selenium, and silver in matrix spike analyses; therefore, positive and nondetected results for those analytes in associated samples were qualified as estimated. Matrix spike %R was below 30% for barium in one matrix spike analysis; therefore, positive and non-detected barium results were qualified as estimated in associated samples. Matrix spike %R was above the acceptance limits, but below 150%, for arsenic; therefore, positive results for this analyte were qualified as estimated in associated samples. Field duplicate criteria (criteria and actions are similar to those for field duplicate results in CLP inorganics analysis, but IDL is used instead of CRDL in the criteria) were not met for cadmium or chromium in sample HFCD101XXX94XX and its field duplicate HFCD101XXX94XD; therefore, positive and non-detected cadmium and chromium results in these samples were qualified as estimated. Field duplicate criteria were not met for lead in sample HFWT101XXX94XX and its field duplicate HFWT101XXX94XD; therefore, positive and non-detected lead results in these samples were qualified as estimated. Field duplicate criteria were not met for barium, cadmium, or lead in sample HFSS111XXX94XX and its field duplicate HFSS111XXX94XD; therefore, positive and non-detected barium, cadmium, and lead results in these samples were qualified as estimated.

# VI. CORROSIVITY, IGNITABILITY, REACTIVE CYANIDE, REACTIVE SULFIDE

Corrosivity, ignitability, reactive cyanide and reactive sulfide analyses were evaluated for hold times, calibration, method blank contamination (there is no method blank for ignitability), laboratory control sample, matrix spike, and field duplicate. All QC criteria were met.

#### Attachment I - Definition of Laboratory Qualifiers (for Table 1 - Laboratory Report of Analysis)

#### Organic Data Qualifiers

- J Indicates an estimated concentration below the contract required detection level (CRQL) but greater than 0 or when estimating a concentration for TICs.
- U Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.
- B Indicates analyte was detected in both the sample and the associated laboratory method blank.
- E Indicates that the analyte concentration exceeded the calibration range of the GC/MS and that a re-analysis of a diluted sample is required.
- D Indicates that sample concentration was obtained by dilution to bring result within calibration range.
- N Indicates presumptive evidence of a compound. This flag is used for TICs were the identification is based on a library search and is applied to all TIC results. For general classes of compounds (hydrocarbons, etc.) this flag is not used.
- P This flag is used for pesticides/PCBs when there is greater than 25% difference between the concentrations on the two columns used for analysis. The lower value is reported.
- C This flag applies to pesticide/PCBs results when the identification has been confirmed by GC/MS.
- A Indicates that a TIC is a suspected aldol-condensation product.
- X Laboratory-defined qualifier used to provide additional information not covered by the other qualifiers.

#### **Inorganic Data Qualifiers**

- E The reported concentration is estimated because of the presence of an interference.
- M Duplicate injection precision criteria were not met.
- N Spiked sample recovery not within control limits.
- S The reported concentration was determined by the method of standard additions.
- W Post-digestion spike for furnace atomic absorption analysis is outside control limits.
- B Concentration reported is below CRDL but greater than the IDL.
- \* Duplicate analysis not within control limits.
- + Correlation coefficient for the method of standard additions was less than 0.995
- U Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.

# Attachment II - Definition of Validation Qualifiers (for Table 2 - Validation/Summary Table)

- J Estimated concentration because QC criteria were not met.
- R Results were rejected because of serious QC deficiencies.
- U Indicates that compound was analyzed but not detected. The sample quantitation limit is adjusted for dilution and percent moisture.
- N Indicates presumptive evidence of a compound. This flag is used for TICs were the identification is based on a library search and is applied to all TIC results. For general classes of compounds (hydrocarbons, etc.) this flag is not used.
- UJ Quantitation limit was estimated concentration because QC criteria were not met.
- JN Presence of an analyte was tentatively identified and the associated result represents an estimated concentration.

#### **MEMORANDUM**

TO:

**Brian Butler** 

FROM:

María Crouch-Lindquist

DATE:

April 11, 1995

SUBJECT:

Results from the analysis of sample HFAF101XXX94XX for lead.

This memorandum summarizes the results generated by Nytest Environmental Inc. concerning the air sample HFAF101XXX94XX. This sample was collected on October 19, 1994 using a Gillian Air Filter, and submitted to the laboratory to be analyzed for lead by NIOSH method 7082. The sample was received by the laboratory on October 22, 1994, digested on October 27, 1994, and analyzed on November 17, 1994. Two Gillian Air Filter blanks were also submitted to the laboratory. Lead was not detected in the sample or the blanks. The reporting limit used by the laboratory was 0.3 µg/filter. No validation was done on the data provided by the laboratory.



# **MEMORANDUM**

June 23, 1995

From: Cliff Colby

To: Brian Butler

Subject: Reanalysis of Hanna Furnace samples SS111 and SS111D for EPTOX lead

The original EPTOX lead results for sample SS111 and its duplicate SS111D were 95.6 and 7800 ug/l respectively. The disparity of these results prompted a discussion with the laboratory (NYTEST). Consequently, NYTEST agreed to reanalyze these samples because of the disparity and because the value of 7800 ug/l for the duplicate did not make sense when compared to the total lead value of the same sample. Additionally, the value of 7800 ug/l exceeds the regulatory limit of 5000 ug/l.

Upon reanalysis, NYTEST reported values for EPTOX lead for sample SS111 and SS111D at 580 and 360 ug/l respectively. These numbers appear to be more consistent to the total lead values for these samples.

I feel confident that the original value of 7800 ug/l was due to laboratory error. This value should be disregarded and replaced with the reanalysis value. Finally, because hold times were exceeded for the reanalyses, the values of 580 ug/l and 360 ug/l should be qualified as estimated (J).

CC: Bob Handy
Neil Morin
Cindy Talbot
Lisa Spahr
File

Table 1 Laboratory Report of Analysis

		LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFQT104XXX94XX 2263715 . 11/29/94	QT-XX1 HFQTXX1XXX94XX 2226610 10/11/94 10/22/94	QT-XX2 HFQTXX2XXX94XX 2228012 10/12/94 10/23/94	QT-XX3 HFQTXX3XXX94XX 2229004 10/13/94 10/23/94
ANALYTE	SOW-3/90 -	II CRQL	•			
Chloromethane		10	10 U	10 U	10 U	10 U
Bromomethane		10	10 U	10 U	10 U	10 U
Vinyl Chloride		10	10 U	10 U	10 U	10 U
Chloroethane		10	10 U	10 U_	10 U_	1 <u>0</u> U_
Methylene Chlor	ide	10	8 JB	6 JB	4 JB	3 JB
Acetone		10	10 U	10 U	10 U	19
Carbon Disulfide		10	10 U	10 U	10 U	10 U
1,1-Dichloroeth		10	10 U	10 U	10 U	10 U
1,1-Dichloroetha		10	10 U	10 U	10 U	10 U
1,2-Dichloroeth	ene (total)	10	10 U	10 U	10 U	10 U
Chloroform		10	10 U	10 U	10 U	10 U
1,2-Dichloroetha	ane	10	10 U	10 U	10 U	10 U
2-Butanone		10	10 U	10 U	10 U	10 U
1,1,1-Trichloro	ethane	10	10 U	10 U	10 U	10 U
Carbon Tetrachlo	oride	10	10 U	10 U	10 U	10 .U
Bromodichlorome	thane	10	10 U	10 U	10 U	10 U
1,2-Dichloroprop	oane	10	10 U	10 Ú	10 U	10 U
cis-1,3-Dichlor	opropene	10	10 U	10 U	10 U	10 U
Trichloroethene	• •	10	10 U	10 U	10 U	10 U
Dibromochlorome	thane	10	10 U	· 10 U	10 U	10 U
1,1,2-Trichloro	ethane	10	10 U	10 U	10 U	10 U
Benzene		10	10 U	10 U	10 U	10 U
trans-1,3-Dichle	propropene	10 ·	10 U	10 U	10 U	10 U
Bromoform	• •	10	10 U	10 U	10 U	10 U
4-Methyl-2-Penta	anone	10	10 U	10 U	10 U	10 U
2-Hexanone		10	10 U	10 U	10 U	10 U
Tetrachloroethe	ne	10	10 U	10 U	10 U	10 U
1,1,2,2-Tetrach	loroethane	10	10 U	10 U	10 U	10 U
Toluene		10	10 U	10 U	10 U	10 U
Chlorobenzene		10	10 U	10 U	10 U	10 U
Ethylbenzene		10	10 U	10 U	10 U	10 U
Styrene		10	10 U	10 U	10 ປ	10 U
Total Xylenes		10	10 U	10 U	10 U	10 U
=======================================	2222222222 -:+:.1:0	========= n Factor:	1.00	1.00	1.00	1.00
Sampl	יונענוס e Volume\Weigh		5.00	5.00	5.00	5.00
Asso	ssociated Meth ciated Equipme Associated Fie Associated Tr	ent Blank: eld Blank:	N0543.D - -	N9783.D - - -	N9819.D - - -	N9819.D - - -
			*			

Site: TRIP BLANK U: not detected

B: blank contamination

J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	QS-10 HFQSX10XXX94XX 2263714 11/29/94 12/05/94	QS-XX1 HFQSXX1XXX94XX 2225921 10/10/94 10/17/94	QS-XX2 HFQSXX2XXX94XX 2226609 10/11/94 10/22/94	QS-XX3 HFQSXX3XXX94XX 2226520 10/11/94 10/21/94	QS-XX4 HFQSXX4XXX94XX 2226521 10/11/94 10/21/94	QS-XX5 HFQSXX5XXX94XX 2226522 10/11/94 10/21/94	QS-XX6 HFQSXX6XXX94XX 2227911 10/12/94 10/24/94	QS-107 HFQSXX7XXX94XX 2228010 10/12/94 10/23/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane richloroethane 1,2-Trichloroethane 1,1,2-Trichloroethane 2-Hexanone Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 U U U U U U U U U U U U U U U U U U U	10 UU	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UU	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U	10 UU 10 UU 10 I0 I0 UU 10 UU	10 U U U U U U U U U U U U U U U U U U U
Total Xylenes		10 U 	10 U ====================================	10 U 	10 U ====================================	10 U 	10 · U ===================================	10 U ====================================	10 U  1.00
Sample Volume\Weigh	on Factor: nt (ml\g):	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Associated Metl Associated Equipm Associated Fi Associated Ti	ent Blank: eld Blank:	NO519.D - - -	M0507.D - - -	N9783.D - - -	N9765.D - - -	N9765.D - - -	N9765.D - - -	N9846.D - - -	N9819.D - - -

Site: EQUIPMENT RINSATE

U: not detected
J: estimated B: blank contamination

Table 1 Laboratory Report of Analysis

		LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	10/18/9	4	QS-9 HFQSXX9XXX94XX 2235108 10/19/94 10/27/94		
ANALYTE	·sow-3/90 -	II. CRQL					
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chlorid Acetone Carbon Disulfide 1,1-Dichloroetha 1,2-Dichloroetha 1,2-Dichloroetha 1,1-Trichloroetha 2-Butamone 1,1-Trichloroetha 1,2-Dichlorometha 1,1,2-Trichlorometha 1,1,2-Trichlorometha 1,1,2-Trichlorometha 1,1,2-Trichlorometha 1,1,2-Tetrach 1,1,2-Tetrach 1,1,2,2-Tetrach 1,1,2-Tetrach 1,1,2-Tochlorometha	ene ene ene (total) ene ethane ethane epropene chane ethane enopropene enone enone	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	ר ה ה ה ה ה ה ה ה ה ה ה ה ה ה ה ה ה ה ה	10 10 10 10 10 10 10 10 10 10 10 10 10 1	ר ההרונה ההה הה הה הה הה הה הה החוף B	
Sample	Diluti Volume\Weig	on Factor: ht (ml\g):	1.00 5.00		1.00 5.00		
Asso	sociated Met ciated Equipm Associated Fi Associated T	ent Blank: eld Blank:	N9939.D - - - -		N9939.D - - -		

Site: EQUIPMENT RINSATE

U: not detected B: blank contamination J: estimated

Table 1 Laboratory Report of Analysis

·	LOCATION ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: HFSW101XXX94X : 2226602 : 10/11/94	SW-102 DUP X HFSW102XXX94 2226606 10/11/94 10/21/94		SW-103 4XX HFSW103XXX9 2228008 10/12/94 10/23/94	2226607 10/11/94	2228009 10/12/94	SW-106 XX HFSW106XXX94 2226608 10/11/94 10/22/94	SW-107 XX HFSW107XXX94XX 2228011 10/12/94 10/23/94
ANALYTE SOW-3/90	- II CRQL	_							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 U U B 10 U U U U U U U U U U U U U U U U U U	10 UU	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 10 10 10 10 10 10 10 10 10	U 10 U 10	U 10 L U 10 L JB 2 J JB 10 L U 10 L	10 L	10 U U U U U U U U U U U U U U U U U U U
Styrene Total Xylenes	10 10 =========	10 Ü	10 U	10 (	J 10	U 10	Ŭ 10 U	10 U	10 Ū
Dilu Sample Volume\We	tion Factor: ight (ml\g):	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00
Associated M Associated Equi Associated	ethod Blank: pment Blank: HI Field Blank:	N9646.D QSXX2XXX94XX H	N9783.D FQSXX2XXX94XX	N9783.D HFQSXX2XXX94XX	N9819.D HFQSXX2XXX94XX	N9783.D HFQSXX2XXX94XX	N9819.D HFQSXX2XX94XX	N9783.D HFQSXX2XXX94XX -	N9819.D HFQSXX2XXX94XX
		QTXX1XXX94XX H	FQTXX1XXX94XX	HFQTXX1XXX94XX	HFQTXX2XXX94XX	HFQTXX1XXX94XX	HFQTXX2XXX94XX	HFQTXX1XXX94XX	HFQTXX1XXX94XX

Site: SURFACE WATER

U: not detected
J: estimated B: blank contamination

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	SW-101 HFSW101XXX94XX 2226602 10/11/94 10/17/94	SW-102 DUP HFSW102XXX94X 2226606 10/11/94 10/21/94	SW-102 XD HFSW102XXX94 2226603 10/11/94 10/21/94	SW-103 XX HFSW103XXX9 2228008 10/12/94 10/23/94	2226607 10/11/94	SW- 105 4XX HFSW105XXX94) 2228009 10/12/94 10/23/94	SW-106 XX HFSW106XXX94X 2226608 10/11/94 10/22/94	SW-107 X HFSW107XXX94XX 2228011 10/12/94 10/23/94
ANALYTE SOW-3/90 -	II CRQL					1			
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane rrichloroethane 1,1,2-Trichloroethane 8-romochloromethane 1,1,2-Trichloroethane 8-romoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UU	10 10 10 10 10 10 10 10 10 10 10 10 10 1	21	10 10 10 10 10 10 10 10 10 10 10 10 10 1	U 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10	10 U U 10 U 10 U U 10 U 1	10 UU	10 U
Toluene Chlorobenzene	10 10 10	10 U 10 U 10 U	10 U 10 U 10 U	10 t 10 t 10 t	, ,,	Ū iŏ	J 10 U J 10 U J 10 U	10 U 10 U 10 U	10 U 10 U 10 U
Ethylbenzene Styrene Total Xylenes	10 10 10	10 U 10 U	10 U 10 U	10 t 10 t	•		J 10 U	10 U 10 U 10 U	10 U 10 U
Dilutio Sample Volume\Weigh	on Factor:	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00
Associated Metl Associated Equipm Associated Fid Associated T	ent Blank: HFQ eld Blank:	-	-	N9783.D HFQSXX2XXX94XX - HFQTXX1XXX94XX	N9819.D HFQSXX2XX94XX - HFQTXX2XXX94XX	N9783.D HFQSXX2XXX94XX - HFQTXX1XXX94XX	•	-	N9819.D IFQSXX2XXX94XX - IFQTXX1XXX94XX

Site: SURFACE WATER
U: not detected
J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	MW-101 DUP HFMW101XXX94XI 2263713 11/29/94 12/05/94	MW-101 HFMW101XXX94X 2263710 11/29/94 12/05/94	MW-102 X HFMW102XXX9 <sup>2</sup> 2263708 11/29/94 12/05/94	MW-103 4XX HFMW103XXX9 2263709 11/29/94 12/05/94	2263703 11/29/94	MW-105 4XX HFMW105XXX94) 2263704 11/29/94 12/05/94	MW-106 XX HFMW106XXX94 2263702 11/29/94 12/05/94	MW-107 XXX HFMW107XXX94XX 2263701 11/29/94 12/05/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane Trichloroethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 U U U U U U U U U U U U U U U U U U U	10 L 10 L 10 L 10 L 10 L 10 L 10 L 10 L	10 10 10 10 10 10 10 10 10 10	U 10	10 U	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 U 11 10 U 12 10 U 13 10 U 14 10 U 15 10 U 16 U 17 10 U 18 10 U 18 10 U 19 10 U
Dilutio Sample Volume\Weigh	on Factor:	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00
Associated Metl Associated Equipm Associated Fi Associated Ti	nod Blank: ent Blank: HFQ: eld Blank:	N0519.D SX10XXX94XX H	NO519.D FQSX10XXX94XX H	N0519.D  FQSX10XXX94XX  -	N0519.D HFQSX10XXX94XX - HFQT104XXX94XX	N0519.D HFQSX10XXX94XX - HFQT104XXX94XX	•	NO519.D HFQSX10XXX94XX - HFQT104XXX94XX	N0519.D HFQSX10XXX94XX - HFQT104XXX94XX

Site: MONITORING WELL U: not detected B J: estimated

B: blank contamination

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	: HFMW108XXX : 2263707 : 11/29/9	4	MW-109 FMW109XXX 2263706 11/29/9 12/05/9	94XX 4	MW-110 HFMW110XXX 2263705 11/29/9 12/05/9	94XX  -  4
ANALYTE SOW-3/90 -	II CRQL						
Chloromethane	10	10	U	10	U	10	U
Bromomethane	10	10	U	10	U	10	U
Vinyl Chloride	10	10	U	10	U	10	U
Chloroethane	10	26		10	U	10	U
Methylene Chloride	10	.6	JB	.9	JB	6	JΒ
Acetone	10	10	U	13		120	
Carbon Disulfide	10	10	U	10	U	10	U
1,1-Dichloroethene	10	10	U	10	U	10	U
1,1-Dichloroethane	10	95		10	U	10	U
1,2-Dichloroethene (total)	10	10	U	10	U	10	U
Chloroform	10	10	U	10	U	10	U
1,2-Dichloroethane	10	10	U	10	U	10	U
2-Butanone	10	10	Ų	10	U	10	U
1,1,1-Trichloroethane	10	2	J	10	Ü	10	Ü
Carbon Tetrachloride	10	10	Ü	10	Ü	10	Ü
Bromodichloromethane	10	10	Ü	10	Ü	10	U
1,2-Dichloropropane	10	10	Ü	10	U	10 10	U U
cis-1,3-Dichloropropene	10	10	Ü	10	Ü		_
Trichloroethene	10	10	Ü	10	Ü	10	Ü
Dibromochloromethane	10	10	Ü	10	_	10	U
1,1,2-Trichloroethane	10 10	10 5	Ų	10 10	U U	10 10	U U
Benzene	10	10	J	10	U	10	Ü
trans-1,3-Dichloropropene Bromoform	10	10	Ü	10	Ü	10	Ŭ
4-Methyl-2-Pentanone	10	10	Ü	10	Ü	10	Ü
2-Hexanone	10	10	Ü	10	Ü	10	Ŭ
Tetrachloroethene	10	10	ŭ	iŏ	ŭ	iŏ	ŭ
1,1,2,2-Tetrachloroethane	ĺĎ	10	ŭ	10	Ū	10	ŭ
Toluene	iŏ	10	ŭ	10	Ū	10	ŭ
Chlorobenzene	10	10	Ŭ	10	Ū	10	Ū
Ethylbenzene	10	10	Ū	10	Ū	10	Ū
Styrene	10	10	Ū	10	U	10	U
Total Xylenes	10	10	U	10	U	10	U
			======		====		===
Diluti Sample Volume\Weig	on Factor: ht (ml\g):	1.00 5.00		1.00 5.00		1.00 5.00	
Associated Met Associated Equipm	ent Blank: HF0	NO519.D SX10XXX94XX		NO519.D 10XXX94XX		N0519.D SX10XXX94XX	
Associated Fi Associated T		- 104xxx94xx דב	HFQT1	- 04XXX94XX	HFQ	- т104xxx94xx	

Site: MONITORING WELL

U: not detected B: blank contamination

# PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

# Volatile Organic Aqueous Analysis (ug/L)

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	MW-101 DUP HFMW101XXX94XD 2263713 11/29/94 12/05/94	MW-101 HFMW101XXX94) 2263710 11/29/94 12/05/94	MW-102 XX HFMW102XXX94 2263708 11/29/94 12/05/94	MW-103 4XX HFMW103XXX9 2263709 11/29/94 12/05/94	2263703 11/29/94	2263704 11/29/94	MW-106 XX HFMW106XXX9 2263702 11/29/94 12/05/94	MW-107 4XX HFMW107XXX94XX 2263701 11/29/94 12/05/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethane 2-Butanone 1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U	10	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 10 10 10 10 10 10 10 10 10	U 10 10 10 10 10 10 10 10 10 10 10 10 10	10	10 U
Dilutio Sample Volume\Weigl	on Factor: nt (ml\g):	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00
Associated Metl Associated Equipm Associated Fi	ent Blank: HFQ eld Blank:	•	-	NO519.D HFQSX10XXX94XX	NO519.D HFQSX10XXX94XX	NO519.D HFQSX10XXX94XX	NO519.D HFQSX10XXX94XX	NO519.D HFQSX10XXX94XX	NO519.D HFQSX10XXX94XX
Associated Ti	rip Blank: HFQ	T104XXX94XX HI	FQT104XXX94XX	HFQT104XXX94XX	HFQT104XXX94XX	HFQT104XXX94XX	HFQT104XXX94XX	HFQT104XXX94XX	HFQT104XXX94XX

Table 2 Validation / Summary Table

	LOCATION ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: HFMW108XXX : 2263707 : 11/29/9	94XX 4	MW-109 HFMW109XXX 2263706 11/29/9 12/05/9	94XX 4	MW-110 HFMW110XXX 2263705 11/29/9 12/05/9	94XX 4
ANALYTE SOW-3/90	- II CRQL	_					
Chloromethane	10	10	U	10	U	10	U
Bromomethane	10	10	U	10	U	10	U
Vinyl Chloride	10	10	U	10	Ü	10	U
Chloroethane	10	26		10	U.	10	Ü.
Methylene Chloride	10	10	เก	10	UJ	10	UJ
Acetone Carbon Disulfide	10 10	10 10	U	13 10	U	120 10	U
1,1-Dichloroethene	10	10	Ü	10	Ü	10	Ü
1,1-Dichloroethane	10	95	U	10	Ü	10	Ü
1,2-Dichloroethene (total)	10	10	u	10	ŭ	10	Ü
Chloroform	10	10	ŭ	10	ŭ	10	ŭ
1,2-Dichloroethane	10	10	ŭ	iŏ	Ŭ	iŏ	ŭ
2-Butanone	10	10	ŭ	iŏ	ŭ	iŏ	ŭ
1,1,1-Trichloroethane	10	2	Ĵ	iŏ	ŭ	10	ŭ
Carbon Tetrachloride	10	10	Ŭ	10	Ŭ	10	Ū
Bromodichloromethane	10	10	U	10	U	10	Ū
1,2-Dichloropropane	- 10	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	10	U	10	U	10	U
Trichloroethene	10	10	U	10	U	10	U
Dibromochloromethane	10	10	U	10	U	10	U
1,1,2-Trichloroethane	10	10	Ų	10	U	. 10	U
Benzene	10	.5	J	10	U	10	U
trans-1,3-Dichloropropene	10	10	Ü	10	U	10	U
Bromoform	10	10	U	10	Ü	10	Ü
4-Methyl-2-Pentanone	10 10	10 10	Ü	10 10	Ü	10 10	Ü
2-Hexanone	10	10	U	10	U	10	U
Tetrachloroethene 1,1,2,2-Tetrachloroethane	10	10	Ü	10	Ü	10	Ü
Toluene	10	10	Ü	10	Ü	10	Ü
Chlorobenzene	ĺŏ	10	ŭ	10	ŭ	10	ŭ
Ethylbenzene	10	10	ŭ	iŏ	ŭ	10	ŭ
Styrene	10	iŏ	ŭ	iŏ	ŭ	10	ŭ
Total Xylenes	10	10	Ŭ	10	Ū	10	Ŭ
			=====		=====	=========	===
Dilut Sample Volume\Weig	ion Factor: ght (ml\g):	1.00 5.00		` 1.00 5.00		1.00 5.00	
Associated Met		N0519.D		N0519.D		N0519.D	
Associated Equipm		QSX10XXX94XX	HFQ	SX10XXX94XX	HFQ	SX10XXX94XX	
Associated Fi Associated 1		- QT104XXX94XX	HEO	- T104XXX94XX	HEO	- T104XXX94XX	·.
Associated	ווו יאוואיט קייי	-, . <del></del>	, ,,, 4		4		•

Site: MONITORING WELL U: not detected J: estimated

page 2

tion was

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	CL-101 DUP HFCL101XXX94XD 2228004 10/12/94 10/23/94	CL-101 HFCL101XXX94XX 2228001 10/12/94 10/23/94	CL-102 HFCL102XXX94 2228005 10/12/94 10/23/94	CL-103 XX HFCL103XXX94 2228006 10/12/94 10/23/94	CL-104 XX HFCL104XXX94) 2228007 10/12/94 10/23/94	CL-105 XX HFCL105XXX94X 2229001 10/13/94 10/23/94	CL-106 X HFCL106XXX94 2229002 10/13/94 10/23/94	CL-107 XX HFCL107XXX94XX 2229005 10/13/94 10/24/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane 1,1,2-Tetrachloroethane Toluene Chlorobenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U	10 UU	10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	10 U U U U U U U U U U U U U U U U U U U	10 U U 10 U U 10 U U 10 U U U U 10 U U U 10 U U U 10 U U 10 U U U U	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 U U U U U U U U U U U U U U U U U U U
Ethylbenzene Styrene Total Xylenes	10 10	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U
Dilutic Sample Volume\Weigh	on Factor:	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00
Associated Meth Associated Equipme Associated Fie	ent Blank: HFQ eld Blank:	-	•	-	-	• ,	•	-	N9846.D HFQSXX7XXX94XX - HFQTXX3XXX94XX
Associated Tr	ıb Brauk: Hed	TXX2XXX94XX HI	FQTXX2XXX94XX HF	QTXX2XXX94XX	HFQTXX2XXX94XX	RFWIXXZXXXY4XX	TEGIKKDAKKY4KK H	<b>「╙</b> Iスス♪ススススソႷスス	TEGI XX XXXXY4XX

Site: SUMP LIQUIDS

U: not detected B: blank contamination

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	10/13/94	CL-109 HFCL109XXX94XX 2226601 10/11/94 10/17/94
ANALYTE SOW-	3/90 - II CRQL		
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane Cis-1,3-Dichloropropentrichloroethane Dibromochloromethane	10 10 10 10 10 10 10 e 10 10	10 U 10 U 10 U 3 JB 10 U	10 U U 10 U U U 10 U U U 10 U U U 10 U U U 10 U U U U
Benzene trans-1,3-Dichloroprop Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroeth Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 ene 10 10 10 10 10	10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U
	Dilution Factor: e\Weight (ml\g):	1.00 5.00	1.00 5.00

Associated Method Blank: N9819.D N9646.D
Associated Equipment Blank: HFQSXX7XXX94XX HFQSXX7XXX94XX

Associated Field Blank: - Associated Trip Blank: HFQTXX3XXX94XX HFQTXX1XXX94XX

Site: SUMP LIQUIDS

U: not detected B: blank contamination

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	CL-101 DUP HFCL101XXX94XD 2228004 10/12/94 10/23/94	CL-101 HFCL101XXX94XX 2228001 10/12/94 10/23/94	CL-102 C HFCL102XXX94 2228005 10/12/94 10/23/94	CL-103 XX HFCL103XXX94 2228006 10/12/94 10/23/94	CL-104 XX HFCL104XXX94) 2228007 10/12/94 10/23/94	CL-105 XX HFCL105XXX94XX 2229001 10/13/94 10/23/94	CL-106 HFCL106XXX94XX 2229002 10/13/94 10/23/94	CL-107 CHFCL107XXX94XX 2229005 10/13/94 10/24/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethane 1,2-Trichloroethane 1,2-Trichloropropene Trichloroethane Bromochloromethane 1,1,2-Trichloroethane Bromoform 4-Methyl-2-Pentanone	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 UU	10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	10 U	10 U U 11 U U U 11 U U U U	10 UU	10 UU	10 U U U U U U U U U U U U U U U U U U U
2-Hexanone Tetrachloroethene	10 10	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	) 10 U ) 10 U	10 U 10 U	10 U 10 U	10 U 10 U
1,1,2,2-Tetrachloroethane Toluene	10 10	10 U 10 UJ	10 U 10 UJ	10 U 10 U	10 L 10 L	J 10 U J 10 U	10 U 10 U	10 U 10 U	10 U 10 U
Chlorobenzene	10 10	10 UJ 10 U	10 UJ 10 U	10 U	10 L 10 L	j 10 U J 10 U	10 U 10 U	10 U	10 U 10 U
Ethylbenzene Styrene	10	10 Ū	10 Ū	10 0	10 Ū	j 10 Ū	10 Ū	10 U	10 Ŭ
Total Xylenes	10	10 U	10 U	10 U	10 L	J 10 U	10 U	10 U	10 U
	on Factor:	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00	1.00 5.00
Associated Meth Associated Equipme Associated Fie	ent Blank: HFQ	N9819.D SXX7XXX94XX HF	N9819.D QSXX7XXX94XX HI	N9819.D FQSXX7XXX94XX	N9819.D HFQSXX7XXX94XX	N9819.D HFQSXX7XXX94XX	N9819.D HFQSXX7XXX94XX HF	N9819.D QSXX7XXX94XX HI	N9846.D FQSXX7XXX94XX
Associated Tr		TXX2XXX94XX HF	QTXX2XXX94XX HI	FQTXX2XXX94XX	HFQTXX2XXX94XX	HFQTXX2XXX94XX	HFQTXX3XXX94XX HF	QTXX3XXX94XX H	FQTXX3XXX94XX

Table 2 Validation / Summary Table

·	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFCL108XXX 2229003 10/13/9	4	CL-109 CL109XXX 2226601 10/11/9 10/17/9	94X) 4
ANALYTE SOW-3/	790 - II CRQL				
Chloromethane	10	10	U	10	U
Bromomethane	10	10	U	10	U
Vinyl Chloride	10	10	U	10	U
Chloroethane	10	10	U	10	U
Methylene Chloride	10	10	U	10	UJ
Acetone	10	10	U	24	UJ
Carbon Disulfide	10	10	U	10	U
1,1-Dichloroethene	10	10	U	10	U
1,1-Dichloroethane	10	10	U	10	U
1,2-Dichloroethene (tota	il) 10	10	U	10	U
Chloroform	10	10	U	10	U
1,2-Dichloroethane	10	10	U	10	U
2-Butanone	10	10	U .	10	U
1,1,1-Trichloroethane	10	10	U	10	U
Carbon Tetrachloride	10	10	U	10	U
Bromodichloromethane	10	10	U	10	U
1,2-Dichloropropane	10	10	U	10	U
cis-1,3-Dichloropropene	10	10	U	10	U
Trichloroethene	10	10	U	10	U
Dibromochloromethane	10	10	U	10	U
1,1,2-Trichloroethane	10	10	U	10	U
Benzene _	10	10	U	10	U
trans-1,3-Dichloroproper		10	U	10	U
Bromoform	10	10	U	10	U
4-Methyl-2-Pentanone	10	10	U	10	U
2-Hexanone	10	10	U	10	U
Tetrachloroethene	10	10	U	10	U
1,1,2,2-Tetrachloroethan	ne 10	10	U	10	U
Toluene	10	10	U	10	U
Chlorobenzene	10	10	U	10	U
Ethylbenzene	10	10	Ü	10	Ü
Styrene	10	10	U	10	U
Total Xylenes	10	10	U	10	U
					===
	lution Factor: Weight (ml\g):	1.00 5.00		1.00 5.00	
Acconinto	i Method Blank:	N9819.D		N9646.D	
Associated Ed	i Method Blank: quipment Blank: HFQ ed Field Blank:	SXX7XXX94XX	HFQSXX	7XXX94XX	
		TXX3XXX94XX	HFQTXX	- 1xxx94xx	

page 2

Table 1
Laboratory Report of Analysis

·	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	QS-10 HFQSX10XXX94XX 2263714 11/29/94 12/05/94 12/28/94	QS-XX1 HFQSXX1XXX94XX 2225921 10/10/94 10/13/94 11/04/94	QS-XX2 HFQSXX2XXY94XX 2226609 10/11/94 10/16/94 11/12/94	QS-XX3 HFQSXX3XXX94XX 2226520 10/11/94 10/16/94 11/15/94	QS-XX4 HFQSXX4XXY94XX 2226521 10/11/94 10/16/94 11/15/94	QS-XX5 HFQSXX5XXX94XX 2226522 10/11/94 10/16/94 11/15/94	QS-XX6 HFQSXX6XXX94XX 2227911 10/12/94 10/17/94 11/24/94	QS-107 HFQSXX7XXX94XX 2228010 10/12/94 10/17/94 11/19/94
ANALYTE SOW-3/90 -	II CRQL								
Phenol	10	10	10 U						
bis(2-Chloroethyl)ether	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U 10 U
1,2-Dichlorobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
2-Methylphenol	10	10 U	10 U 10 U	10 U	10 U 10 U	10 U 10 V	10 U 10 U	10 U 10 U	10 ป 10 บ
2,2'-oxybis(1-Chloropropane)	10	10 U 10 U	10 U 10 U	10 U 10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10			10 U					
N-Nitroso-di-n-propylamine	10 10	10 U 10 U	10 U 10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10	10 U	10 U	10 U	10 U	10 U	10 U	10 Ŭ	10 U
2,4-Dimethylphenol bis(2-Chloroethoxy)methane	10	10 U	10 U	10 Ŭ	10 U				
2.4-Dichlorophenol	10	10 Ü	10 U	10 Ŭ	10 U	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ
1,2,4-Trichlorobenzene	10	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ
Naphthalene	10	10 Ŭ	10 Ŭ	10 Ŭ	10 Ū	10 U	10 Ŭ	10 Ŭ	10 Ŭ
4-Chloroaniline	iŏ	iŏ ŭ	iŏ ŭ	10 Ŭ	10 Ŭ	10 Ū	10 Ū	10 Ū	10 Ŭ
Hexachlorobutadiene	10	10 Ū	10 Ū	10 Ŭ	10 Ū				
4-Chloro-3-Methylphenol	10	10 U	10 Ū	10 U					
2-Methylnaphthalene	10	10 Ū	10 Ū	10 Ŭ	10 Ū	10 Ū	10 U	10 U	10 U
Hexachlorocyclopentadiene	10	10 Ū	10 U						
2,4,6-Trichlorophenol	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	10	10 U .	10 U						
Acenaphthylene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
		222222222222							202222222222

Site: EQUIPMENT RINSATE

U: not detected B: blank contamination

Table 1 Laboratory Report of Analysis

ANALYTE COLL 7/00	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	QS-10 HFQSX10XXX94XX 2263714 11/29/94 12/05/94 12/28/94	QS-XX1 HFQSXX1XXX94XX 2225921 10/10/94 10/13/94 11/04/94	QS-XX2 HFQSXX2XXX94XX 2226609 10/11/94 10/16/94 11/12/94	QS-XX3 HFQSXX3XXX94XX 2226520 10/11/94 10/16/94 11/15/94	QS-XX4 HFQSXX4XXX94XX 2226521 10/11/94 10/16/94 11/15/94	QS-XX5 HFQSXX5XXX94XX 2226522 10/11/94 10/16/94 11/15/94	QS-XX6 HFQSXX6XXX94XX 2227911 10/12/94 10/17/94 11/24/94	QS-107 HFQSXX7XXX94XX 2228010 10/12/94 10/17/94 11/19/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline	25	25 U	25 U	25. U	25 U	25 U	25 U	25 U	25 U
Acenaphthene	10	10 U	10 U	10 U	<u>10</u> U	<u>10</u> U	<u>10</u> U	<u>10</u> U	10 U
2,4-Dinitrophenol	25	25 U	25 U	25 U	25 U	25 U	25 U	2 <u>5</u> U	25 U
4-Nitrophenol	25	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran	10	10 U	10 U	. 10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10	10 U	1 <u>0</u> U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10	10 U	7. J	10 U	10 U	10 U	10 U	1 J	10 U
4-Chlorophenyl-phenylether	10	10 U	10 U	10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U	10 U
Fluorene	10 25	10 U . 25 U	10 U 25 U	10 U	10 U 25 U	25 U	10 ປ 25 ປ	10 U	10 U 25 U
4-Nitroaniline	25 25	25 U 25 U	25 U	25 U 25 U	25 U	25 U	25 U	25 U 25 U	25 U 25 U
4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10	10 U	10 Ü	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 U	10 U
Pentachlorophenol	25	25 Ü	25 Ü	25 Ŭ	25 Ŭ	25 Ŭ	25 Ū	25 Ŭ	25 Ŭ
Phenanthrene	10	10 U	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 U	10 Ŭ	10 Ŭ
Anthracene	10	10 Ū	10 Ŭ	10 Ū					
Carbazole	10	. 10 Ū	10 Ŭ	10 Ū					
Di-n-butylphthalate	10	10 U	10 Ū	10 U					
Fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10	10 U	10 U.	10 U					
Benzo(a)Anthracene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10	10 U	10 U	10 U	10 U	10 U	10 U	<u>1</u> 0 U	10 U_
bis(2-Ethylhexyl)phthalate	10	10 U	16	10 U	10 U	10 U	10 U	71	1 JB
Di-n-octylphthalate	10	10 U	10 U 10 U	10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U	10 U
Benzo(b)Fluoranthene	10 10	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U	10 U	10 U 10 U	10 U 10 U
Benzo(k)Fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)Anthracene	10	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ
Benzo(g,h,i)perylene	iŏ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ŭ	10 Ū
======================================						=======================================			• •
Diluti Sample Volume∖Weig	on Factor: ht (ml\g):	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000
Associated Met Associated Equipm	ent Blank:	R2186.D	R1163.D	SWB1016A	s1440.D	\$1440.D	S1440.D	R1528.D	Q1605.D
Associated Fi	eld Blank:	-	-	-	•	•	-	-	

Site: EQUIPMENT RINSATE
U: not detected B: blank contamination
J: estimated

Semivolatile Organic Aqueous Analysis (ug/L)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1 Laboratory Report of Analysis

	DA Date	LAB NUMBER: TE SAMPLED: EXTRACTED:	QS-8 HFQSXX8XXX94XX 2232314 10/18/94 10/20/94	QS-9 HFQSXX9XXX94XX 2235108 10/19/94 10/27/94
		E ANALYZED:	11/26/94	11/29/94
90 -	ΙΙ	CRQL		

ANALYTE SOW-3/90 - II	CRQL		
Phenol	10	10 U	10 U
bis(2-Chloroethyl)ether	10	iŏ ŭ	10 U
2-Chlorophenol	10	iŏ ŭ	10 Ŭ
1,3-Dichlorobenzene	10	10 U	10 Ŭ
1,4-Dichlorobenzene	iŏ	10 Ŭ	10 Ŭ
1,2-Dichlorobenzene	iŏ	10 Ŭ	10 Ŭ
2-Methylphenol	iŏ	iŏ ŭ	10 Ŭ
2,2'-oxybis(1-Chloropropane)	ìŏ	10 Ŭ	10 Ŭ
4-Methylphenol	iŏ	10 Ŭ	10 U
N-Nitroso-di-n-propylamine	10	10 U	10 Ŭ
Hexachloroethane	iŏ	10 U	10 Ŭ
Nitrobenzene	ĺŎ	10 Ŭ	10 Ŭ
Isophorone	1Ŏ	iŏ ŭ	10 Ŭ
2-Nitrophenol	10	iŏ ŭ	10 Ŭ
2,4-Dimethylphenol	10	10 Ū	10 Ŭ
bis(2-Chloroethoxy)methane	10	10 Ū	10 Ŭ
2,4-Dichlorophenol	10	10 Ū	10 U
1,2,4-Trichlorobenzene	10	10 Ŭ	10 Ū
Naphthalene	10	10 Ü	10 Ū
4-Chloroaniline	10	10 Ü	10 U
Hexach Lorobutadiene	10	10 U	10 U
4-Chloro-3-Methylphenol	10	10 U	10 U
2-Methylnaphthalene	10	10 U	10 U
Hexach lorocyclopentadiene	10	10 U	10 U
2,4,6-Trichlorophenol	10	10 U	10 U
2,4,5-Trichlorophenol	25	25 U	25 U
2-Chloronaphthalene	10	10 U	10 U
2-Nitroaniline	25	25 U	25 U
Dimethylphthalate	10	10 U	10 U
Acenaphthylene	10	10 U	10 U
2,6-Dinitrotoluene	10	10 U	10 U
			=======

Site: EQUIPMENT RINSATE
U: not detected B: blank contamination
J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/18/94 10/20/94	QS-9 HFQSXX9XXX94XX 2235108 10/19/94 10/27/94 11/29/94
ANALYTE SOW-3/9	PO - II CRQL		
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylethe Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylpheno N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalat Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	10 25 01 25 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10
Dil	ution Factor:	1.00	1.00
Associated Associated Equ	Weight (ml\g): Method Blank: Jipment Blank: JiField Blank:	1000 \$1682.D - -	1000 R1595.D

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SW-101 HFSW101XXX94XX 2226602 10/11/94 10/16/94 11/12/94	SW-102 DUP HFSW102XXX94XD 2226606 10/11/94 10/16/94 11/12/94	SW-102 HFSW102XXX94XX 2226603 10/11/94 10/16/94 11/12/94	SW-102 HFSW102XXX94XX 2226603 D 10/11/94 10/16/94 11/12/94	SW-102 HFSW102XXX94XX 2226605 R 10/11/94 11/19/95 02/09/95	SW-103 HFSW103XXX94XX 2228008 10/12/94 10/17/94 11/18/94	SW-104 HFSW104XXX94XX 2226607 10/11/94 10/16/94 11/12/94	SW-105 HFSW105XXX94XX 2228009 10/12/94 10/17/94 11/22/94
ANALYTE SOW-3/90 -	II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene	10 10 10 10 10	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	20 U 20 U 20 U 20 U 20 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U
1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine	10 10 10 10 10	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	20 U 20 U 20 U 20 U 20 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U
Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol	10 10 10 10	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	, 10 U 10 U 10 U 10 U	20 U 20 U 20 U 20 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U
2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene	10 10 10 10 10	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	20 U 20 U 20 U 20 U 20 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U
Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene	10 10 10 10 10	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	20 U 20 U 20 U 20 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U
Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene	10 10 25 10	10 U 10 U 25 U 10 U	10 U 10 U 25 U 10 U	10 U 10 U 25 U 10 U	20 U 20 U 50 U 20 U	10 U 10 U 25 U 10 U	10 U 10 U 25 U 10 U	10 U 10 U 25 U 10 U 25 U	10 U 10 U 25 U 10 U
2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	25 10 10 10 10	25 U 10 U 10 U 10 U	25 U 10 U 10 U 10 U	25 U 10 U 10 U 10 U	50 U 20 U 20 U 20 U	25 U 10 U 10 U 10 U	25 U 10 U 10 U 10 U	10 U 10 U 10 U	25 U 10 U 10 U 10 U

Site: SURFACE WATER
U: not detected
J: estimated

B: blank contamination

Table 1 Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBE DATE SAMPLE DATE EXTRACTE DATE ANALYZE	D: HFSW101XXX94X R: 2226602 D: 10/11/94 D: 10/16/94	SW-102 DUP XX HFSW102XXX94 2226606 10/11/94 10/16/94 11/12/94		SW-102 4XX HFSW102XXX9 2226603 D 10/11/94 10/16/94 11/12/94	2226605 R 10/11/94 11/19/95	2228008 10/12/94 10/17/94	SW-104 XX HFSW104XXX94 2226607 10/11/94 10/16/94 11/12/94	SW-105 XX HFSW105XXX94XX 2228009 10/12/94 10/17/94 11/22/94
		 25 !!	25 11	25		25	25	25 11	25 11
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	10 10 10 10 10 10 10 10 10 10 10 10 10 1	20 50 50 50 50 50 50 50 50 50 5	U 10 25 25 10 10 10 10 10 10 10 10 10 10 10 10 10	U 25 U 10 U 25 U 10 U 25 U 10 U 25 U 10	25 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 U U U U U U U U U U U U U U U U U U U
Diluti Sample Volume\Weig	on Factor:	1.00 1000	1.00 1000	1.00 1000	2.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000
Associated Met Associated Equipm Associated Fi	hod Blank: ment Blank: H	Q1481.D	Q1481.D	Q1481.D HFQSXX2XXX94XX	Q1481.D HFQSXX2XXX94XX	S2870.D HFQSXX2XXX94XX	Q1605.D	Q1481.D	Q1605.D HFQSXX2XXX94XX

Site: SURFACE WATER
U: not detected B: blank contamination
J: estimated

Table 1 Laboratory Report of Analysis

	. D	ISIS ID: LAB NUMBER: DATE SAMPLED: PATE EXTRACTED: DATE ANALYZED:	HFSW106XXX94XX 2226608 10/11/94 10/16/94 11/12/94	HFSW107XXX94XX 2228011 10/12/94 10/17/94 11/19/94
ANALYTE	sow-3/90 - I			
Phenol		10	10 U	10 U
bis(2-Chloroet	hyl)ether	10	10 U	10 U
2-Chlorophenol		10	10 U	10 U
1,3-Dichlorobe	nzene	10	10 U	10 U
1,4-Dichlorobe		10	10 U	10 U
1,2-Dichlorobe	nzene	10	10 U	10 U
2-Methylphenol		10	10 U	10 U
2,2'-oxybis(1-	Chloropropane)	10	10 U	10 U
4-Methylphenol		10	2 J	10 U
N-Nitroso-di-n	-propylamine	10	10 U	10 U
Hexachloroetha	ne	10	10 U	10 U
Nitrobenzene		10	10 U	10 U
Isophorone		10	10 Ú	10 U
2-Nitrophenol		10	10 U	10 U
2,4-Dimethylph	enol	10	10 U	10 U
bis(2-Chloroet	hoxy)methane	10	10 U	10 U
2,4-Dichloroph	enol	10	10 U	10 U
1,2,4-Trichlor	openzene	10	10 U	10 U
napri cha cene		10	10 U	10 U
4-Chloroanilin		10 10	10 U 10 U	10 U 10 U
Hexachlorobuta	arene hulmbanal	10	10 U	10 U
4-Chloro-3-Met	nytphenot	10	10 U	10 U
2-Methylnaphth	arene opopeadiono	10	10 U	10 U
Hexachlorocycl 2,4,6-Trichlor	opentadiene	10	10 U	10 U
2,4,5-Trichlor	ophenol	25	25 U	25 U
2-Chloronaphth	al ene	10	10 U	10 U
2-Nitroaniline	4 ( 1 )	25	25 Ü	25 Ü
Dimethylphthal	ate	10	10 Ŭ	10 Ŭ
Acenaphthylene		10	10 Ŭ	10 Ŭ
2,6-Dinitrotol		10	10 Ŭ	10 U

LOCATION:

SW-106

SW-107

Site: SURFACE WATER

U: not detected B: blank contamination

Table 1
Laboratory Report of Analysis

	DA Date	LOCATION: ISIS ID: LAB NUMBER: TE SAMPLED: EXTRACTED: E ANALYZED:		94XX H    4  4	SW-107 FSW107XXX 2228011 10/12/9 10/17/9 11/19/9	4
ANALYTE SOW-	3/90 - 11	CRQL				
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenyle Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylph N-Nitrosodiphenylamine 4-Bromophenyl-phenyle Hexachlorobenzene Pentachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 5,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrer Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	nenol cher cher	25 10 25 25 10 10 10 10 25 10 10 10 10 10 10 10 10 10		000000000000000000000000000000000000000	25 10 25 10 10 10 10 25 10 10 10 10 10 10 10 10 10 10	
	Dilution Fa	ctor:	1.00		1.00	

Dilution Factor: 1.00 1.00 Sample Volume\Weight (ml\g): 1000 1000

Associated Method Blank: Q1481.D Q1605.D Associated Equipment Blank: HFQSXX2XXY94XX HFQSXX2XXX94XX Associated Field Blank:

Site: SURFACE WATER

U: not detected B: blank contamination

# Semivolatile Organic Aqueous Analysis (ug/L)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

ANALYTE         SOW-3/90 - 11         CRQL           Phenol         10         10         U         10         U         R         10         U         10         U		LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFSW101XXX94XX 2226602 10/11/94 10/16/94	SW-102 DUP HFSW102XXX94XD 2226606 10/11/94 10/16/94 11/12/94	SW-102 HFSW102XXX94XX 2226603 10/11/94 10/16/94 11/12/94	SW-103 HFSW103XXX94XX 2228008 10/12/94 10/17/94 11/18/94	SW-104 HFSW104XXX94XX 2226607 10/11/94 10/16/94 11/12/94	SW-105 HFSW105XXX94XX 2228009 10/12/94 10/17/94 11/22/94	SW-106 HFSW106XXX94XX 2226608 10/11/94 10/16/94 11/12/94	SW-107 HFSW107XXX94XX 2228011 10/12/94 10/17/94 11/19/94
bis(2-Chloroethyl)ether       10	ANALYTE SOW-3/90	- II CRQL								
#-Metrytpenol	bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropan 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 RUUUURUUURUUURUUURRUUUURRUUUURRUUUURRUUUU	10 UU	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU

Site: SURFACE WATER
U: not detected
J: estimated

R: unusable

Table 2 Validation / Summary Table

ANALYTE SOW-3/90 -	LAB NUMBER DATE SAMPLED DATE EXTRACTED DATE ANALYZED	: HFSW101XXX94X : 2226602 : 10/11/94 : 10/16/94	SW-102 DUP XX HFSW102XXX94 2226606 10/11/94 10/16/94 11/12/94		SW-103 4XX HFSW103XXX9 2228008 10/12/94 10/17/94 11/18/94	SW-104 4XX HFSW104XXX94 2226607 10/11/94 10/16/94 11/12/94	SW-105 XXX HFSW105XXX94) 2228009 10/12/94 10/17/94 11/22/94	SW-106 (X HFSW106XXX94) 2226608 10/11/94 10/16/94 11/12/94	SW-107 XX HFSW107XXX94XX 2228011 10/12/94 10/17/94 11/19/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 5,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene Benzo(g,h,i)perylene	25 10 25 25 25 10 10 10 10 25 25 10 10 10 10 10 10 10 10 10	25 U 25 U 25 U 25 U 10 U 25 U 10 U 1	25 U U 10 U U U 10 U U U 10 U U U 10 U U U U	10 10 10 10 10 10 10 10 10 10 10 10 10 1	25 R 25 TO	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 U 25 U 25 U 10 U 1		10 U U 25 U U 10 U U U U U U U U U U U U U U U U
Sample Volume\Weig	-	1.00	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00	1.00 1000	1.00
Associated Met Associated Equipn Associated Fi	ment Blank: HF	Q1481.D QSXX2XXX94XX H	Q1481.D HFQSXX2XX94XX -	Q1481.D HFQSXX2XXX94XX	Q1605.D HFQSXX2XXX94XX	Q1481.D HFQSXX2XXX94XX	Q1605.D HFQSXX2XXX94XX	Q1481.D HFQSXX2XXX94XX -	Q1605.D HFQSXX2XXX94XX -

Site: SURFACE WATER
U: not detected
J: estimated R: unusable

Table 1 Laboratory Report of Analysis

·	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	MW-101 DUP HFMW101XXX94XD 2263713 11/29/94 12/05/94 12/28/94	MW-101 HFMW101XXX94XX 2263710 11/29/94 12/05/94 12/27/94	MW-102 HFMW102XXX94XX 2263708 11/29/94 12/05/94 12/27494	MW-103 HFMW103XXX94XX 2263709 11/29/94 12/05/94 12/27/94	MW-104 HFMW104XXX94XX 2263703 11/29/94 12/05/94 12/27/94	MW-105 HFMW105XXX94XX 2263704 11/29/94 12/05/94 12/27/94	MW-106 HFMW106XXX94XX 2263702 11/29/94 12/05/94 12/27/94	MW-107 HFMW107XXX94XX 2263701 11/29/94 12/05/94 12/28/94
ANALYTE SOW-3/90 -	II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobytadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	7 10 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 U U U U U U U U U U U U U U U U U U U

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFMW101XXX94XD 2263713 11/29/94 12/05/94	MW-101 HFMW101XXX94X) 2263710 11/29/94 12/05/94 12/27/94	MW-102 HFMW102XXX94 2263708 11/29/94 12/05/94 12/27/94	MW-103 XX HFMW103XXX94X 2263709 11/29/94 12/05/94 12/27/94	MW-104 X HFMW104XXX94X 2263703 11/29/94 12/05/94 12/27/94	MW-105 X HFMW105XXX94XX 2263704 11/29/94 12/05/94 12/27/94	MW-106 HFMW106XXX94XX 2263702 11/29/94 12/05/94 12/27/94	MW-107 HFMW107XXX94XX 2263701 11/29/94 12/05/94 12/28/94
ANALYTE SOW-3/90	- II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	25 10 25 25 10 10 10 10 25 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 U U 25 U U 10 U U U U	10 U U U U U U U U U U U U U U U U U U U	25 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10
Benzo(g,h,i)perylene	10	10 U	10 U	10 U	10 U	10 U	10 Ū	10 Ū	10 U
	ion Factor:	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000
Associated Met		R2186.D	R2186.D	R2186.D	R2186.D	R2186.D	R2186.D	R2186.D	R2186.D

Associated Equipment Blank: Associated Field Blank:

Site: MONITORING WELL U: not detected J: estimated

HFGSX10XXX94XX HFGSX10XXX94XX HFGSX10XXX94XX HFGSX10XXX94XX HFGSX10XXX94XX HFGSX10XXX94XX HFGSX10XXX94XX

Table 1
Laboratory Report of Analysis

	LOCATION:	MW-108	MW-109	MW-110
	ISIS ID:	HFMW108XXX94XX	HFMW109XXX94XX	HFMW110XXX94XX
	LAB NUMBER:	2263707	2263706	2263705
	DATE SAMPLED:	11/29/94	11/29/94	11/29/94
	DATE EXTRACTED:	12/05/94	12/05/94	12/05/94
	DATE ANALYZED:	12/27/94	12/27/94	12/27/94
ANALYTE SOW-3/90 -	II CRQL			
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene 1sophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene 4-Chlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U	10 UU
Acenaphthylene	10	10 U	10 U	10 U
2,6-Dinitrotoluene	10	10 U	10 U	10 U

En light

Table 1 Laboratory Report of Analysis

	LOCATION ISIS ID LAB NUMBER DATE SAMPLED DATE EXTRACTED DATE ANALYZED	: HFMW108XXXX : 2263707 : 11/29/94 : 12/05/94		MW-109 FMW109XXX 2263706 11/29/9 12/05/9 12/27/9	94XX 4 4	MW-110 HFMW110XXX 2263705 11/29/9 12/05/9 12/27/9	(94XX 5 94 94
ANALYTE SOW-3/90 -	II CRQL	_					
3-Nitroaniline	25	25	U	25	U	25	U
Acenaphthene	10	10	U	10	U	10	U
2,4-Dinitrophenol	25	25	U	25	U	25	U
4-Nitrophenol	25	25	U	25	U	25	U
Dibenzofuran	10		U	10	U	10	U
2,4-Dinitrotoluene	10	10	U	10	U	10	U
Diethylphthalate	10	10	U	10	U	10	U
4-Chlorophenyl-phenylether	10	10	U	10	U	10	U
Fluorene	<u>10</u>	10	U	10	U	10	U
4-Nitroaniline	25	25	U	25	U	25	U
4,6-Dinitro-2-methylphenol	25	25	U	25	Ü	25	U
N-Nitrosodiphenylamine	10	10	U	10	Ü	10	Ü
4-Bromophenyl-phenylether	10 10	10 10	U	10 10	U U	10 10	U
Hexach Lorobenzene	10 25	25	U	25	U	25	U U
Pentachlorophenol Phenanthrene	10	10	Ü	10	Ü	10	Ü
Anthracene	10	10	Ü	10	Ü	10	Ü
Carbazole	10	10	Ü	10	Ü	10	Ü
Di-n-butylphthalate	10	10	Ü	10	Ü	10	Ü
Fluoranthene	10	10	Ü	10	Ŭ	10	ŭ
Pyrene	ĺŏ	iŏ	Ŭ	10	Ŭ	10	ŭ
Butylbenzylphthalate	ĺĎ	iŏ	Ŭ	10	Ŭ	iŏ	ŭ
3,3'-Dichlorobenzidine	iŏ	iŏ	Ŭ	10	Ŭ	10	ũ
Benzo(a)Anthracene	10	10	Ŭ	10	Ŭ	10	Ū
Chrysene	10	10	Ū	10	Ū	10	Ū
bis(2-Ethylhexyl)phthalate	10	10	U	10	U	10	U
Di-n-octylphthalate	10	.10	U	10	U	10	U
Benzo(b)Fluoranthene	10	10	U	10	U	10	U
Benzo(k)Fluoranthene	10	10	U	10	U	10	U
Benzo(a)Pyrene	10	10	U	10	U	10	U
Indeno(1,2,3-c,d)Pyrene	10	10	U	10	U	10	U
Dibenz(a,h)Anthracene	10	10	U	10	U	10	U
Benzo(g,h,i)perylene	10	10	U	10	U	10	U
			=====		====		===
Sample Volume\Weig	on Factor: ht (ml\g):	1.00 1000		1.00 1000		1.00 1000	
Associated Met Associated Equipm Associated Fi	ent Blank: HF	R2186.D QSX10XXX94XX	HFQSX	R2186.D 10XXX94XX -	HFQ	R2186.0 SX10XXX94XX	

Site: MONITORING WELL

U: not detected

# Semivolatile Organic Aqueous Analysis (ug/L)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

LOCATIO ISIS I LAB NUMBE DATE SAMPLE DATE EXTRACTE DATE ANALYZE	D: HFMW101XXX94XD R: 2263713 D: 11/29/94 D: 12/05/94	MW-101 HFMW101XXX94XX 2263710 11/29/94 12/05/94 12/27/94	MW-102 HFMW102XXX94XX 2263708 11/29/94 12/05/94 12/27/94	MW-103 HFMW103XXX94XX 2263709 11/29/94 12/05/94 12/27/94	MW-104 HFMW104XXX94XX 2263703 11/29/94 12/05/94 12/27/94	MW-105 HFMW105XXX94XX 2263704 11/29/94 12/05/94 12/27/94	MW-106 HFMW106XXX94XX 2263702 11/29/94 12/05/94 12/27/94	MW-107 HFMW107XXX94XX 2263701 11/29/94 12/05/94 12/28/94
ANALYTE SOW-3/90 - II CRQL								
Phenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)ether 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 ປ	10 U
1,4-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene 10	10 U	10 U	10 U	10 U	10 ປ	10 U	10 U	10 U
2-Methylphenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane) 10	1 <u>0</u> U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol 10	3 J	2 J	10 U					
N-Nitroso-di-n-propylamine 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol 10	10 U	10 U	10 U	. 10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol 10	1 J	10 U						
bis(2-Chloroethoxy)methane 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene 10 Naphthalene 10	10 U 2 J	10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U
	10 U	10 U 10 U	10 U	10 U	10 U 10 U	10 U 10 U	10 U	10 U
4-Chloroaniline 10 Hexachlorobutadiene 10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	. 10 U
	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene 10 Hexachlorocyclopentadiene 10	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
2,4,6-Trichlorophenol 10	10 U	10 0	10 U	10 U	10 U	10 03	10 U	10 U
2,4,5-Trichlorophenol 25	25 U	25 Ŭ	25 Ŭ ·	25 Ŭ	25 Ŭ	25 Ŭ	25 Ŭ	25 U
2-Chloronaphthalene 10	10 Ü	10 Ü	10 U	10 Ŭ	10 U	10 Ŭ	10 Ŭ	10 U
2-Nitroaniline 25	25 Ŭ	25 Ŭ	25 Ŭ	25 Ŭ	25 Ŭ	25 Ŭ	25 Ŭ	25 Ŭ
Dimethylphthalate 10	10 Ŭ	10 Ŭ	10 u	10 Ŭ				
Acenaphthylene 10	10 Ŭ	10 Ŭ	iŏ ŭ	10 Ŭ				
2.6-Dinitrotoluene 10	10 Ŭ	10 Ū	10 Ū	10 Ū	10 Ū	10 Ŭ	10 Ŭ	iŏ ŭ
	=======================================					=======================================	:==========	

Table 2
Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: ATE EXTRACTED: DATE ANALYZED:	MW-101 DUP HFMW101XXX94XI 2263713 11/29/94 12/05/94 12/28/94	MW-101 HFMW101XXX94X 2263710 11/29/94 12/05/94 12/27/94	MW-102 X HFMW102XXX94 2263708 11/29/94 12/05/94 12/27/94	MW-103 XX HFMW103XXX94: 2263709 11/29/94 12/05/94 12/27/94	MW-104 XX HFMW104XXX94X 2263703 11/29/94 12/05/94 12/27/94	MW-105 X HFMW105XXX94X) 2263704 11/29/94 12/05/94 12/27/94	MW-106 ( HFMW106XXX94X 2263702 11/29/94 12/05/94 12/27/94	MW-107 X HFMW107XXX94XX 2263701 11/29/94 12/05/94 12/28/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	25 10 25 25 10 10 10 10 25 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 10 10 10 10 10 10 10 10 10 10 10 10	J 25 10 10 10 10 10 10 10 10 10 10 10 10 10	J 25 U U U U U U U U U U U U U U U U U U	25 UU	25 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25 10 10 10 10 10 10 10 10 10 10 10 10 10
Dilution Sample Volume\Weight	Factor:	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000
Associated Metho Associated Equipmen Associated Field	t Blank: HFQ	R2186.D SX10XXX94XX H	R2186.D FQSX10XXX94XX H	R2186.D IFQSX10XXX94XX -	R2186.D HFQSX10XXX94XX	R2186.D HFQSX10XXX94XX H	R2186.D FQSX10XXX94XX HI	R2186.D FQSX10XXX94XX H	R2186.D FQSX10XXX94XX

### PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

## Semivolatile Organic Aqueous Analysis (ug/L)

Table 2
Validation / Summary Table

Phenol		LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	MW-108 HFMW108XXX94XX 2263707 11/29/94 12/05/94 12/27/94	MW-109 HFMW109XXX94XX 2263706 11/29/94 12/05/94 12/27/94	MW-110 HFMW110XXX94XX 2263705 11/29/94 12/05/94 12/27/94
Dis(2-Chloroethyl)ether	ANALYTE SOW-3/90 -	II CRQL			
Dis(2-Chloroethyl)ether	Phenol	10	10 U	10 U	10 U
2-Chlorophenol 10 10 U 10 U 10 U 10 U 1,3-Dichlorobenzene 10 10 U 10 U 10 U 10 U 1,4-Dichlorobenzene 10 10 U 10 U 10 U 10 U 1,2-Dichlorobenzene 10 10 U 10 U 10 U 10 U 2-Methylphenol 10 10 U 10 U 10 U 10 U 2,2'-oxybis(1-Chloropropane) 10 10 U 10 U 10 U 10 U 2,2'-oxybis(1-Chloropropane) 10 10 U					
1,3-Dichlorobenzene					
1,4-Dichlorobenzene					
1,2-Dichlorobenzene					
2-Methylphenol 10 10 U 10 U 10 U 2,2'-oxybis(1-Chloropropane) 10 10 U 10 U 10 U 10 U 4-Methylphenol 10 10 U					
2,2'-oxybis(1-chloropropane) 10 10 U					
4-Methylphenol         10         10         U         10         U         10         U           N-Nitroso-di-n-propylamine         10         10         U         10	2.2'-oxybis(1-Chloropropane)				
N-Nitroso-di-n-propylamine 10 10 U	4-Methylphenol	10			
Hexachloroethane					
Isophorone	Hexachloroethane	10	10 Ū	10 U	10 Ú
2-Nitrophenol 10 10 U 10 U 10 U 10 U 2,4-Dimethylphenol 10 10 U	Nitrobenzene	10	· 10 U	10 U	10 U
2,4-Dimethylphenol       10       10       U       10<	Isophorone	10	10 U	10 U	10 U
bis(2-Chloroethoxy)methane         10         10         U         10	2-Nitrophenol				
2,4-Dichlorophenol       10       10       U       10<					
1,2,4-Trichlorobenzene       10       10       U       10       U       10       U         Naphthalene       10       10       U       10       U       10       U         4-Chloroaniline       10       10       U       10       U       10       U         Hexachlorobutadiene       10       10       U       10       U       10       U         4-Chloro-3-Methylphenol       10       10       U       10       U       10       U         2-Methylnaphthalene       10       10       U       10       U       10       U         Hexachlorocyclopentadiene       10       10       U       10       U       10       U         2-4,6-Trichlorophenol       10       10       U       10       U       10       U         2,4,5-Trichlorophenol       25       25       U       25       U       25       U         2-Nitroaniline       25       25       U       25       U       25       U         2-Nitroaniline       25       25       U       25       U       25       U         2-Nitroaniline       25       U       25	bis(2-Chloroethoxy)methane				
Naphthalene       10       10       U       10       U       10       U         4-Chloroaniline       10       10       U       10       U       10       U         Hexachlorobutadiene       10       10       U       10       U       10       U         4-Chloro-3-Methylphenol       10       10       U       10 </td <td>2,4-Dichlorophenol</td> <td></td> <td></td> <td></td> <td></td>	2,4-Dichlorophenol				
4-Chloroaniline       10       10       U       10       U       10       U         Hexachlorobutadiene       10       10       U       10       U       10       U       10       U         4-Chloro-3-Methylphenol       10       10       U       2,6-Dinitrotoluene       10       U       10       U <td< td=""><td>1,2,4-Trichlorobenzene</td><td></td><td></td><td></td><td></td></td<>	1,2,4-Trichlorobenzene				
Hexachlorobutadiene       10       10       U       10       U       10       U         4-Chloro-3-Methylphenol       10       10       U       10       U       10       U       10       U         2-Methylnaphthalene       10       10       U       25       U					
4-Chloro-3-Methylphenol       10       10       U       10       U       10       U         2-Methylnaphthalene       10       10       U       10       U       10       U         Hexachlorocyclopentadiene       10       10       U       10       UJ       10       UJ         2,4,6-Trichlorophenol       10       10       U       10       U       10       U         2-Chloronaphthalene       10       10       U       10       U       10       U         2-Nitroaniline       25       25       U       25       U       25       U         Dimethylphthalate       10       10       U       10       U       10       U         Acenaphthylene       10       10       U       10       U       10       U         2,6-Dinitrotoluene       10       10       U       10       U       10       U					
2-Methylnaphthalene       10       10       U       10       U       10       U         Hexachlorocyclopentadiene       10       10       U       10       UJ       10       UJ         2,4,6-Trichlorophenol       25       25       U       25       U <td></td> <td></td> <td></td> <td></td> <td></td>					
Hexachlorocyclopentadiene       10       10       UJ       10	4-Chloro-3-Methylphenol				
2,4,6-Trichlorophenol       10       10       U       10       U       10       U       10       U       10       U       20       U       25       U       0       10       U       2       2       U       2       0       10       U       10       U       10<	2-Methylnaphthalene				
2,4,5-Trichlorophenol       25       25       U       10       U       10       U       10       U       25       U					
2-Chloronaphthalene       10       10       U       10       U       10       U         2-Nitroaniline       25       25       U       25       U       25       U         Dimethylphthalate       10       10       U       10       U       10       U       10       U         Acenaphthylene       10       10       U       10       U       10       U       10       U         2,6-Dinitrotoluene       10       10       U       10       U       10       U	2,4,6-Trichlorophenol				
2-Nitroaniline       25       25       U       25       U       25       U         Dimethylphthalate       10       10       U       10       U       10       U         Acenaphthylene       10       10       U       10       U       10       U         2,6-Dinitrotoluene       10       10       U       10       U       10       U	2,4,5-Trichlorophenol	25			25 U
Dimethylphthalate         10         10         U         10         U         10         U           Acenaphthylene         10         10         U         10         U <td></td> <td></td> <td></td> <td></td> <td></td>					
Acenaphthylene 10 10 U 10 U 10 U 2,6-Dinitrotoluene 10 10 U 10 U 10 U					
2,6-Dinitrotoluene 10 10 U 10 U 10 U					
	2,0-0 iiii (l'Ototuene				

Table 2 Validation / Summary Table

	LOCATION ISIS ID LAB NUMBER DATE SAMPLED DATE EXTRACTED DATE ANALYZED	: HFMW108XXX94 : 2263707 : 11/29/94 : 12/05/94	MW-109 XX HFMW109XXX9 2263706 11/29/9 12/05/94 12/27/94	2263705 4 11/29/94 4 12/05/94
ANALYTE SOW-3/90 -	II CRQL	_		•
	25 10 25 25 10 10 10 10 10 10 10 10 10 10 10 10 10	25	10	U 25 U 10 U 10 U 25 U 10 U 1
Sample Volume\Weig		1000	1000	1000
Associated Met Associated Equipn Associated Fi	ent Blank: HF	R2186.D QSX10XXX94XX -	R2186.D HFQSX10XXX94XX	R2186.D HFQSX10XXX94XX -

Site: MONITORING WELL U: not detected

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CL-101 DUP HFCL101XXX94XD 2228004 10/12/94 10/17/94 11/18/94	CL-101 HFCL101XXX94XX 2228001 10/12/94 10/17/94 11/18/94	CL-102 HFCL102XXX94XX 2228005 10/12/94 10/17/94 11/18/94	CL-103 HFCL103XXX94XX 2228006 10/12/94 10/17/94 11/18/94	CL-104 HFCL104XXX94XX 2228007 10/12/94 10/17/94 11/18/94	CL-105 HFCL105XXX94XX 2229001 10/13/94 10/19/94 11/18/94	CL-106 HFCL106XXX94XX 2229002 10/13/94 10/18/94 11/18/94	CL-107 HFCL107XXX94XX 2228910 10/13/94 10/18/94 11/23/94
ANALYTE SOW-3/90 -	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	10 10 10 10 10 10 10	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U	10 UU	10 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	10 U U U U U U U U U U U U U U U U U U U	10 U U U U U U U U U U U U U U U U U U U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	10 10 10 10	10 U 10 U 10 U	10 U 10 U 10 U	10 U 10 U 10 U	10 U 10 U 10 U	10 U 10 U 10 U	10 U 10 U 10 U	10 U 10 U 10 U	10 U 10 U 10 U

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFCL101XXX94XI 2228004 10/12/94 10/17/94	CL-101 HFCL101XXX94X) 2228001 10/12/94 10/17/94 11/18/94	CL-102 ( HFCL102XXX94X 2228005 10/12/94 10/17/94 11/18/94	CL-103 X HFCL103XXX94X 2228006 10/12/94 10/17/94 11/18/94	CL-104 X HFCL104XXX94XX 2228007 10/12/94 10/17/94 11/18/94	CL-105 HFCL105XXX94XX 2229001 10/13/94 10/19/94 11/18/94	CL-106 HFCL106XXX94X 2229002 10/13/94 10/18/94 11/18/94	CL-107 CHFCL107XXX94XX 2228910 10/13/94 10/18/94 11/23/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate Fluoranthene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(a)Anthracene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(a,i)perylene	25 10 25 25 10 10 10 10 25 10 10 10 10 10 10 10 10 10 10	25 U U U U U U U U U U U U U U U U U U U	25 U U U U U U U U U U U U U U U U U U U	25 U U U U U U U U U U U U U U U U U U U	25 U U 25 U U 10 U U U U	25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 U U 25 U U 10 U U U U U U U U U U U U U U 10 U U U U	25 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10
: <del></del>	on Factor:	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000
Associated Met Associated Equipm Associated Fi	ment Blank: HFG	Q1605.D RSXX7XXX94XX HI	Q1605.D FQSXX7XXX94XX HI -	Q1605.D FQSXX7XXX94XX H -	Q1605.D FQSXX7XXX94XX H	Q1605.D FQSXX7XXX94XX HF	Q1713.D QSXX7XXX94XX HF	Q1601.D QSXX7XXX94XX Н	Q1601.D FQSXX7XXX94XX -

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CL-107 HFCL107XXX94XX 2228910 R 10/13/94 10/18/94 11/24/94	CL-108 HFCL108XXX94XX 2229003 10/13/94 10/18/94 11/18/94	CL-109 HFCL109XXX94XX 2226601 10/11/94 10/16/94 11/12/94	CL-109 HFCL109XXX94XX 2226601 R 10/11/94 10/16/94 11/12/94
ANALYTE SOW-3/90 -	II CRQL				
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene	10 10 10 10 10 10	10 U U U U U U U U U U U U U U U U U U U	11	20 U U 20 U U 20 U U U 20 U U U 20 U U U 20 U 2	20 U
2-Nitroaniline 2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	25 10 10 10 10	25 U 10 U 10 U 10 U	28 U 11 U 11 U 11 U 11 U	50 U 20 U 20 U 20 U 20 U	20 U 20 U 20 U 20 U 20 U

Table 1
Laboratory Report of Analysis

	LAB NUM DATE SAMP DATE EXTRAC DATE ANALY	ID: HFCL107XXX9 BER: 2228910 R LED: 10/13/94 TED: 10/18/94	2229003 10/13/94 10/18/94	2226601 4 10/11/94 4 10/16/94	94XX HFCL109XXX94XX 2226601 R 4 10/11/94 4 10/16/94
ANALYTE SOW-3/90	- II CRQL				
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorobenzene Carbazole Di-n-butylphthalate Fluoranthene Anthracene Carbazole Di-n-butylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	25 10 25 25 10 10 10 10 25 25 10 10 10 10 10 10 10 10 10	10 25 25 10 10 10 10 10 10 10 10 10 10 10 10 10	U 28 U 11 U 28 U 28 U 11 U 11 U 11 U 28 U 11 U 28 U 11 U 28 U 11 U 11	U 50 U 20 U 20 U 20 U 20 U 20 U 20 U 20 U 2	U
	10 ========= :ion Factor:	• • • • • • • • • • • • • • • • • • • •	1.10		2.00
Sample Volume\Wei		1000	1000	1000	1000
Associated Me Associated Equip Associated F	ment Blank:	Q1601.D HFQSXX7XXX94XX	Q1601.D HFQSXX7XXX94XX	Q1481.D HFQSXX7XXX94XX -	Q1481.D HFQSXX7XXX94XX

# Semivolatile Organic Aqueous Analysis (ug/L)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

·	LOCATION:	CL-101 DUP	CL-101	CL-102	CL-103	CL-104	CL-105	CL-106	CL-107
	ISIS ID:	HFCL101XXX94XD	HFCL101XXX94XX	HFCL102XXX94XX	HFCL103XXX94XX	HFCL104XXX94XX	HFCL105XXX94XX	HFCL106XXX94XX	HFCL107XXX94XX
	LAB NUMBER:	2228004	2228001	2228005	2228006	2228007	2229001	2229002	2228910
	DATE SAMPLED:	10/12/94	10/12/94	10/12/94	10/12/94	10/12/94	10/13/94	10/13/94	10/13/94
	DATE EXTRACTED:	10/17/94	10/17/94	10/17/94	10/17/94	10/17/94	10/19/94	10/18/94	10/18/94
	DATE ANALYZED:	11/18/94	11/18/94	11/18/94	11/18/94	11/18/94	11/18/94	11/18/94	11/23/94
ANALYTE SOW-3/90 -	II CRQL							•	
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene 4-Chlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Nitroaniline Dimethylphthalene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 V R U U U U R U U U U R R U U U U U R R U U U U U R R U U U U R R U U U U R R U U U U R R U U U U R R U U U U D R R U U U U	10 RUUUU 10 10 10 10 10 10 10 10 10 10 10 10 10	10	10	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 10 10 10 10 10 10 10 10 10 10 10 10 1	R R R R R R R R R R R R R R R R R R R
Acenaphthylene	10	10 UJ	R	10 U	10 U	10 U	10 U	10 U	R
2,6-Dinitrotoluene	10	10 UJ	R	10 U	10 U	10 U	10 U	10 U	R

Site: SUMP LIQUIDS U: not detected J: estimated

R: unusable

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFCL101XXX94XD 2228004 10/12/94 10/17/94	CL-101 HFCL101XXX94XX 2228001 10/12/94 10/17/94 11/18/94	CL-102 C HFCL102XXX94 2228005 10/12/94 10/17/94 11/18/94	CL-103 XX HFCL103XXX9 2228006 10/12/94 10/17/94 11/18/94	CL-104 4XX HFCL104XXX94 2228007 10/12/94 10/17/94 11/18/94	CL-105 XX HFCL105XXX94X 2229001 10/13/94 10/19/94 11/18/94	CL-106 X HFCL106XXX94 2229002 10/13/94 10/18/94 11/18/94	CL-107 KX HFCL107XXX94XX 2228910 10/13/94 10/18/94 11/23/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	25 10 25 25 10 10 10 10 25 10 10 10 10 10 10 10 10 10	25 UJ 10 R 10 UJ 10 10 U U U U U U U U U U U U U U U U U	RRRRRRRRRRRRRRRRRRRUUUUUUUUUUUUUUUUUUU	25 L 10 L 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	25 U	10 U 25 U 25 U 10 U 10 U 10 U 25 U 25 U 10 U	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	R R R R R R R R R R R R R R R R R R R
		1.00	1.00		1.00	1.00	======================================		1.00
Sample Volume\Weig		1000	1000	1000	1000	1000	1000	1000	1000
Associated Met Associated Equipm Associated Fi	ent Blank: HFG	Q1605.D RSXX7XXX94XX HF -	Q1605.D :QSXX7XXX94XX HF	Q1605.D FQSXX7XXX94XX -	Q1605.D HFQSXX7XXX94XX	Q1605.D HFQSXX7XXX94XX	Q1713.D HFQSXX7XXX94XX H	Q1601.D FQSXX7XXX94XX -	Q1601.D HFQSXX7XXX94XX -

Site: SUMP LIQUIDS

U: not detected R: unusable

Table 2 Validation / Summary Table

LOCATION: CL-108 CL-109 ISIS ID: HFCL108XXX94XX HFCL109XXX94XX LAB NUMBER: 2229003 2226601 10/13/94 10/18/94 11/18/94 10/11/94 10/16/94 11/12/94 DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:

ANALYTE SOW-3/90 - I	I CRQL		
Phenol	1Ö	11 U	20 U
bis(2-Chloroethyl)ether	10	11 Ū	20 U
2-Chlorophenol	10	11 Ŭ	20 U
1,3-Dichlorobenzene	10	11 Ŭ	20 Ŭ
1,4-Dichlorobenzene	10	11 Ŭ -	20 U
1,2-Dichlorobenzene	10	11 Ū	20 U
2-Methylphenol	10	11 Ū	20 U
2,2'-oxybis(1-Chloropropane)	10	11 Ū	20 U
4-Methylphenol	10	11 Ū	20 U
N-Nitroso-di-n-propylamine	10	11 U	20 U
<b>Hexachloroethane</b>	10	11 U	20 U
Nitrobenzene	10	11 U	20 U
Isophorone	10	11 U	20 U
2-Nitrophenol	10	11 U	20 U
2,4-Dimethylphenol	10	11 U	20 U
2,4-Dimethylphenol bis(2-Chloroethoxy)methane	10	11 U	20 U
2,4-Dichlorophenol	10	11 U	20 U
1,2,4-Trichlorobenzene	10	11 U	10 J
Naphthalene	10	11 U	20 U
4-Chloroaniline	10	11 U	20 U
Hexach l orobutadiene	10	11 U	20 U
4-Chloro-3-Methylphenol	10	11 U	20 U
2-Methylnaphthalene	10	11 V	20 U
Hexachlorocyclopentadiene	10	11 U -	20 U
2,4,6-Trichlorophenol	10	<u>11</u> U	20 U
2,4,5-Trichlorophenol 2-Chloronaphthalene	25	28 U	50 U
2-Chloronaphthalene	10	<u>11</u> U	20 U
2-Nitroaniline	25	28 U	50 U
Dimethylphthalate	10	11 U	20 U
Acenaphthylene	10	11 U	20 U
2,6-Dinitrotoluene	10	11 U	20 U
	=========		222222

Site: SUMP LIQUIDS U: not detected R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/13/94 10/18/94	2226601 10/11/94
ANALYTE SOW-3/90 -	II CRQL		
Diluti	on Factor:	1.10	20 U U U U U U U U U U U U U U U U U U U
Sample Volume\Weig	ht (ml\g):	1000	
Associated Met	hod Blank:	Q1601.D	
Associated Equipm		3001 0007488	пгчэлл <i>і</i> ллху4хх
Associated Fi		-	-

Site: SUMP LIQUIDS U: not detected J: estimated R: unusable

# Pesticides/PCBs Aqueous Analysis (ug/L)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	QS-10 HFQSX10XXX94XX 2263714 11/29/94 12/02/94 12/11/94	QS-XX1 HFQSXX1XXX94XX 2225921 10/10/94 10/13/94 11/20/94	QS-XX2 HFQSXX2XXX94XX 2226609 10/11/94 10/14/94 11/02/94	QS-XX3 HFQSXX3XXX94XX 2226520 10/11/94 10/14/94 11/22/94	QS-XX4 HFQSXX4XXX94XX 2226521 10/11/94 10/14/94 11/22/94	QS-XX5 HFQSXX5XXY94XX 2226522 10/11/94 10/14/94 11/22/94	QS-XX6 HFQSXX6XXX94XX 2227911 10/12/94 10/17/94 11/26/94	QS-107 HFQSXX7XXY94XX 2228010 10/12/94 10/17/94 11/05/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1222 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1254	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.5 0.5 0.05	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U U U U U U U U U U U U U U U U U U U	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U U U U U U U U U U U U U U U U U U U	0.05 U U U U U U U U U U U U U U U U U U U	0.052 U 0.1 U 0.	0.056 U 0.11 U
========================= Dilut Sample Volume\Wei	ion Factor:	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 950	1.00 900
Associated Me Associated Equip Associated F	thod Blank: ment Blank:	PWB1202A	PWB1013B	PWB1014A	PWB1014B - -	PWB1014B - -	PWB1014B - -	PWB1017A1	PWB1017A - -

Site: EQUIPMENT RINSATE

U: not detected J: estimated

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFCL101XXX94XD 2228004 10/12/94 10/17/94	CL-101 HFCL101XXX94XX 2228001 10/12/94 10/17/94 11/18/94	CL-102 C HFCL102XXX94 2228005 10/12/94 10/17/94 11/18/94	CL-103 XX HFCL103XXX9 2228006 10/12/94 10/17/94 11/18/94	CL-104 4XX HFCL104XXX94 2228007 10/12/94 10/17/94 11/18/94	CL-105 XX HFCL105XXX94X 2229001 10/13/94 10/19/94 11/18/94	CL-106 X HFCL106XXX94 2229002 10/13/94 10/18/94 11/18/94	CL-107 KX HFCL107XXX94XX 2228910 10/13/94 10/18/94 11/23/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	25 10 25 25 10 10 10 10 25 10 10 10 10 10 10 10 10 10	25 UJ 10 R 10 UJ 10 10 U U U U U U U U U U U U U U U U U	RRRRRRRRRRRRRRRRRRRUUUUUUUUUUUUUUUUUUU	25 L 10 L 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1	25 U	10 U 25 U 25 U 10 U 10 U 10 U 25 U 25 U 10 U	25 10 25 10 10 10 10 10 10 10 10 10 10 10 10 10	R R R R R R R R R R R R R R R R R R R
		1.00	1.00		1.00	1.00	======================================		1.00
Sample Volume\Weig		1000	1000	1000	1000	1000	1000	1000	1000
Associated Met Associated Equipm Associated Fi	ent Blank: HFG	Q1605.D RSXX7XXX94XX HF -	Q1605.D :QSXX7XXX94XX HF	Q1605.D FQSXX7XXX94XX -	Q1605.D HFQSXX7XXX94XX	Q1605.D HFQSXX7XXX94XX	Q1713.D HFQSXX7XXX94XX H	Q1601.D FQSXX7XXX94XX -	Q1601.D HFQSXX7XXX94XX -

Site: SUMP LIQUIDS

U: not detected R: unusable

Table 2 Validation / Summary Table

LOCATION: CL-108 CL-109 ISIS ID: HFCL108XXX94XX HFCL109XXX94XX LAB NUMBER: 2229003 2226601 10/13/94 10/18/94 11/18/94 10/11/94 10/16/94 11/12/94 DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:

ANALYTE SOW-3/90 -	II CRQL		
Phenol	1Ö	11 U	20 U
bis(2-Chloroethyl)ether	10	11 Ū	20 U
2-Chlorophenol	10	11 Ŭ	20 U
1,3-Dichlorobenzene	10	11 Ŭ	20 Ŭ
1,4-Dichlorobenzene	10	11 Ŭ -	20 U
1,2-Dichlorobenzene	10	11 Ū	20 U
2-Methylphenol	10	11 Ū	20 U
2,2'-oxybis(1-Chloropropane)	10	11 Ū	20 U
4-Methylphenol	10	11 Ū	20 U
N-Nitroso-di-n-propylamine	10	11 U	20 U
Hexachloroethane	10	11 U	20 U
Nitrobenzene	10	11 U	20 U
Isophorone	10	11 U	20 U
2-Nitrophenol	10	11 U	20 U
2,4-Dimethylphenol bis(2-Chloroethoxy)methane	10	11 U	20 U
bis(2-Chloroethoxy)methane	10	11 U	20 U
2,4-Dichlorophenol	10	11 U	20 U
1,2,4-Trichlorobenzene	10	11 U	10 J
Naphthalene	10	11 U	20 U
4-Chloroaniline	10	11 U	20 U
Hexach l orobutadiene	10	11 U	20 U
4-Chloro-3-Methylphenol	10	11 U	20 U
2-Methylnaphthalene	10	11 V	20 U
Hexachlorocyclopentadiene	10	11 U -	20 U
2,4,6-Trichlorophenol	10	<u>11</u> U	20 U
2,4,5-Trichlorophenol 2-Chloronaphthalene	25	28 U	50 U
2-Chloronaphthalene	10	<u>11</u> U	20 U
2-Nitroaniline	25	28 U	50 U
Dimethylphthalate	10	11 U	20 U
Acenaphthylene	10	11 U	20 U
2,6-Dinitrotoluene	10	11 U	20 U
			222222

Site: SUMP LIQUIDS U: not detected R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/13/94 10/18/94	2226601 10/11/94
ANALYTE SOW-3/90 -	II CRQL		
Diluti	on Factor:	1.10	20 U U U U U U U U U U U U U U U U U U U
Sample Volume\Weig	ht (ml\g):	1000	
Associated Met	hod Blank:	Q1601.D	
Associated Equipm		3001 0007488	пгчэлл <i>і</i> ллху4хх
Associated Fi		-	-

Site: SUMP LIQUIDS U: not detected J: estimated R: unusable

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/18/94 10/21/94	QS-9 HFQSXX9XXX94XX 2235108 10/19/94 10/25/94 12/02/94		
ANALYTE SOW-3/90 -					
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Tordane Tordane Aroclor-1214 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.5 0.05 0.0	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U		
Diluti Sample Volume\Weig	on Factor:	1.00 1000	1.00 1000		
Associated Met Associated Equipm Associated Fi	hod Blank: ent Blank:	PWB1021B - -	PWB1025B		

Site: EQUIPMENT RINSATE
U: not detected
J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/18/94 10/21/94	QS-9 HFQSXX9XXX94XX 2235108 10/19/94 10/25/94 12/02/94		
ANALYTE SOW-3/90 -					
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Tordane Tordane Aroclor-1214 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.5 0.05 0.0	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U		
Diluti Sample Volume\Weig	on Factor:	1.00 1000	1.00 1000		
Associated Met Associated Equipm Associated Fi	hod Blank: ent Blank:	PWB1021B - -	PWB1025B		

Site: EQUIPMENT RINSATE
U: not detected
J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SW-101 HFSW101XXX94XX 2226602 10/11/94 10/14/94 11/02/94	SW-102 DUP HFSW102XXX94XD 2226606 10/11/94 10/14/94 11/02/94	SW-102 HFSW102XXX94XX 2226603 10/11/94 10/14/94 11/02/94	SW-103 HFSW103XXX943 2228008 10/12/94 10/25/94 11/05/94	SW-104 XX HFSW104XXX94X 2226607 10/11/94 10/14/94 11/02/94	SW-105 X HFSW105XXX94XX 2228009 10/12/94 10/17/94 11/05/94	SW-106 HFSW106XXX94XX 2226608 10/11/94 10/14/94 11/02/94	SW-107 ( HFSW107XXX94XX 2228011 10/12/94 10/17/94 11/05/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1254	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U U 0.05 U U U U U U U U U U U U U U U U U U U	0.05 U 0.1 U 0.3 U 0.4 U 0.5 U 0.5 U 0.6 U 0.7 U 0.8 U 0.9	0.05 U U 0.05 U U 0.05 U U U U U U 1.0 U U U 1.0 U U 1.0 U U U U U U U U U U U U U U U U U U U	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U 0.1 U 0.1 U 0.1 U 0.1 U 0.1 U 0.1 U 0.1 U 0.1 U 1.0 U 1.0 U 1.0 U	0.05 U 0.1 U 1.0 U 1.0 U 1.0 U	0.052 U 0.1 U 0.21 U 0.21 J	0.05 U U 0.1 U U U 1.0 U U U U U U U U U U U U U U U U U U U	0.052 U 0.1 U 0.
Dilut Sample Volume\Wei	ion Factor:	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 950	1.00 1000	1.00 950
Associated Me Associated Equip Associated F	thod Blank: ment Blank: HFQ:	PWB1014A	PWB1014A	PWB1014A	PWB1025A	PWB1014A	PWB1017A	PWB1014A	PWB1017A QSXX2XXX94XX

Site: SURFACE WATER
U: not detected
J: estimated

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SW-101 HFSW101XXX94XX 2226602 10/11/94 10/14/94 11/02/94	SW-102 DUP HFSW102XXX94XI 2226606 10/11/94 10/14/94 11/02/94	SW-102 D HFSW102XXX94X 2226603 10/11/94 10/14/94 11/02/94	SW-103 X HFSW103XXX94 2228008 10/12/94 10/25/94 11/05/94	SW-104 XX HFSW104XXX94X 2226607 10/11/94 10/14/94 11/02/94	SW-105 X HFSW105XXX94XX 2228009 10/12/94 10/17/94 11/05/94	SW-106 HFSW106XXX94XX 2226608 10/11/94 10/14/94 11/02/94	SW-107 HFSW107XXX94XX 2228011 10/12/94 10/17/94 11/05/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1211 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U 0.1 U	0.05 U U 0.05 U U 0.05 U U U U U U U U U U U U U U U U U U U	0.05 U 0.1 U 1.0 U 1.0 U 1.0 U 1.0 U	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U	J 0.05 U 0.1 U 0.5 U 0.05 U 0	0.052 U 0.1 U 0.	0.05 0.05 0.05 0.05 0.05 0.05 0.10 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.	0.052 U 0.1 U 1.0 U 1.0 U 1.0 U 1.0 U
======================== Dilut Sample Volume\Wei	======================================	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 950	1.00 1000	1.00 950
Associated Me Associated Equip Associated F	thod Blank: ment Blank: HFQ:	PWB1014A	PWB1014A	PWB1014A	PWB1025A	PWB1014A	PWB1017A	PWB1014A	PWB1017A FQSXX2XXX94XX

Site: SURFACE WATER
U: not detected
J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	MW-101 DUP HFMW101XXX94XD 2263713 11/29/94 12/02/94 12/12/94	MW-101 HFMW101XXX94XX 2263710 11/29/94 12/02/94 12/11/94	MW-102 HFMW102XXX94X 2263708 11/29/94 12/02/94 12/11/94	MW-103 X HFMW103XXX94 2263709 11/29/94 12/02/94 12/12/94	MW-104 XX HFMW104XXX94) 2263703 11/29/94 12/02/94 12/11/94	MW-105 XX HFMW105XXX94XX 2263704 11/29/94 12/02/94 12/11/94	MW-106 HFMW106XXX94X 2263702 11/29/94 12/02/94 12/11/94	MW-107 X HFMW107XXX94XX 2263701 11/29/94 12/02/94 12/11/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1232 Aroclor-1248 Aroclor-1254 Aroclor-1260	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U U 0.05 U U U U U U U U U U U U U U U U U U U	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U 0.1 U	0.05 U U U U U U U U U U U U U U U U U U U	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U	0.05 U 0.1	0.05 U 0.1 U 1.0 U 1.0 U 1.0 U 1.0 U	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U
========================= Dilut Sample Volume\Wei	ion Factor:	1.00 1000	1.00 1000	1.00 1000	======================================	1.00 1000	1.00 1000	1.00 1000	1.00 1000
Associated Me Associated Equip Associated F	thod Blank: ment Blank: HFQ	PWB1202B SX10XXX94XX HF	PWB1202A QSX10XXX94XX HF	PWB1202A QSX10XXX94XX H	PWB1202B FQSX10XXX94XX I	PWB1202A HFQSX10XXX94XX H	PWB1202A IFQSX10XXX94XX HF	PWB1202A QSX10XXX94XX H	PWB1202A FQSX10XXX94XX -

Site: MONITORING WELL U: not detected

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	MW-108 HFMW108XXX9 2263707 11/29/94 12/02/94 12/11/94	2263706 11/29/9 12/02/9	2263705 4 11/29/94 4 12/02/94
ANALYTE SOW-3/90	- II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1250	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.5 0.05 0.0	U 0.05 U 0.1 U 0	U 0.05 U U 0.1 U U 0.05 U U 1.0 U
Dilu Sample Volume\We	tion Factor: ight (ml\g):	1.00 1000	1.00 1000	1.00 1000
Associated M Associated Equip	ethod Blank:	PWB1202A SX10XXX94XX	PWB1202A HFQSX10XXX94XX -	PWB1202A HFQSX10XXX94XX

Site: MONITORING WELL U: not detected

## PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

## Pesticides/PCBs Aqueous Analysis (ug/L)

Table 2 Validation / Summary Table

•	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	MW-101 DUP HFMW101XXX94XD 2263713 11/29/94 12/02/94 12/12/94	MW-101 HFMW101XXX94XX 2263710 11/29/94 12/02/94 12/11/94	MW-102 HFMW102XXX94XX 2263708 11/29/94 12/02/94 12/11/94	MW-103 K HFMW103XXX94) 2263709 11/29/94 12/02/94 12/12/94	MW-104 XX HFMW104XXX94X 2263703 11/29/94 12/02/94 12/11/94	MW-105 X HFMW105XXX94XX 2263704 11/29/94 12/02/94 12/11/94	MW-106 HFMW106XXX94XX 2263702 11/29/94 12/02/94 12/11/94	MW-107 HFMW107XXX94XX 2263701 11/29/94 12/02/94 12/11/94
ANALYTE SOW-3/90	- II CRQL							•	
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1256	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.5 0.05 0.0	0.05 UJ 0.05 UJ 0.05 UJ 0.05 UJ 0.05 UJ 0.05 UJ 0.1	0.05 UJ 0.05 UJ 0.05 UJ 0.05 UJ 0.05 UJ 0.05 UJ 0.1 UJ 0.1 UJ 0.1 UJ 0.1 UJ 0.1 UJ 0.1 UJ 0.1 UJ 0.1 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	0.05 UJ 0.1 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	0.05 U. 0.1 U. 1.0 U. 1.0 U. 1.0 U. 1.0 U. 1.0 U.	0.05 UJ 0.1 UJ 1 1.0 UJ 1 1.0 UJ 1 1.0 UJ	0.05 UJ 0.1 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	0.05 UJ 0.1 UJ 1.0 UJ 1.0 UJ 1.0 UJ	0.05 UJ 0.1 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ
Dilut Sample Volume\Wei	ion Factor:	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000	1.00 1000
Associated Me Associated Equip Associated F	ment Blank: HFQ:	PWB1202B SX10XXX94XX HF	PWB1202A QSX10XXX94XX HF -	PWB1202A QSX10XXX94XX HI	PWB1202B FQSX10XXX94XX I	PWB1202A HFQSX10XXX94XX H	PWB1202A FQSX10XXX94XX HF	PWB1202A PSX10XXX94XX HF0	PWB1202A QSX10XXX94XX -

Site: MONITORING WELL U: not detected J: estimated

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	MW-108 HFMW108XXX 2263707 11/29/9 12/02/9 12/11/9	4	MW-109 HFMW109XXX 2263706 11/29/9 12/02/9 12/11/9	94XX 4 4	MW-110 HFMW110XXX 2263705 11/29/9 12/02/9 12/11/9	94XX 4 4
ANALYTE SOW-3/90 -	II CRQL						
alpha-BHC	0.05	0.05	UJ	0.05	UJ	0.05	υJ
beta-BHC	0.05	0.05	UJ	0.05	UJ	0.05	·UJ
delta-BHC	0.05	0.05	UJ	0.05	UJ	0.05	UJ
gamma-BHC (Lindane)	0.05	0.05	UJ	0.05	UJ	0.05	UJ
Heptachlor .	0.05	0.05	UJ	0.05	IJ	0.05	UJ
Aldrin	0.05	0.05	UJ	0.05	NJ	0.05	UJ
Heptachlor Epoxide	0.05	0.05	UJ	0.05	UJ	0.05	UJ
Endosulfan I	0.05	0.05	ÜĴ	0.05	UJ	0.05	UJ
Dieldrin	0.1	0.1	ΩĴ	0.1	UJ	0.1	UJ
4,4'-DDE	0.1	0.1	ΠÌ	0.1	. NJ	0.1	UJ
Endrin	0.1	0.1	เก	0.1	UJ	0.1	บป
Endosulfan II	0.1	0.1	UJ	0.1	UJ	0.1	UJ
4,4'-DDD	0.1	0.1	UJ	0.1	UJ	0.1	UJ
Endrin Aldehyde	0.1	0.1	UJ	0.1	UJ	0.1	UJ
Endosulfan Sulfate	0.1	0.1 0.1	N) N)	0.1	N) N)	0.1	UJ
4,4'-DDT	0.1 0.5	0.1	N)	0.1 0.5	N7 na	0.1 0.5	n) N)
Methoxychlor Endrin Ketone	0.1	0.5	N7 02	0.5	UJ	0.5	nn nn
alpha-Chlordane	0.05	0.05	UJ	0.05	UJ	0.05	N)
gamma-Chlordane	0.05	0.05	UJ	0.05	nn nn	0.05	UJ
Toxaphene	5	5.0	nn on	5.0	UJ	5.0	UJ
Aroclor-1016	· 1	1.0	กา	1.0	n1	1.0	กา
Aroclor-1221	2	2.0	ÜĴ	2.0	ΠŢ	2.0	UJ
Aroclor-1232	1	1.0	UJ	1.0	ΩĴ	1.0	UJ
Aroclor-1242	i	1.0	UJ	1.0	ΠΊ	1.0	UJ
Aroclor-1248	i	1.ŏ	ÜĴ	1.ŏ	UJ	1.ŏ	UJ
Aroclor-1254	i	1.0	ŪĴ	1.0	ŪJ.	1.0	ŨĴ
Aroclor-1260	<u> </u>	1.0	ŪĴ	1.0	ŨĴ	1.0	UJ
Diluti	on Factor:	1.00		1.00	2222	1.00	===

| Dilution Factor: 1.00 1.00 1.00 | Sample Volume\Weight (ml\g): 1000 1000 1000

Associated Method Blank: PWB1202A PWB1202A PWB1202A Associated Equipment Blank: HFQSX10XXX94XX HFQSX10XXX94XX HFQSX10XXX94XX Associated Field Blank:

Site: MONITORING WELL U: not detected

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CL-101 DUP HFCL101XXX94XD 2228004 10/12/94 10/17/94 11/05/94	CL-101 HFCL101XXY94XX 2228001 10/12/94 10/25/94 11/04/94	CL-102 HFCL102XXX94) 2228005 10/12/94 10/17/94 11/05/94	CL-103 XX HFCL103XXX94: 2228006 10/12/94 10/17/94 11/05/94	CL-104 XX HFCL104XXX94; 2228007 10/12/94 10/17/94 11/05/94	CL-105 (X HFCL105XXX94X) 2229001 10/13/94 10/17/94 11/05/94	CL-106 HFCL106XXX94X) 2229002 10/13/94 10/17/94 11/05/94	CL-107 C HFCL107XXX94XX 2229005 10/13/94 10/17/94 11/25/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1254	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.062 U 0.12 U 1.2 U 0.12 U 0.12 U 1.2 U	0.1 U U U U U U U U U U U U U U U U U U U	0.05 U U 0.1 U U U 0.1 U U U U U 0.1 U U U U U U U 0.1 U U U U U U U U U U U U U U U U U U U	0.052 U 0.1 U 1.0 U 1.0 U 1.0 U 1.0 U	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U	0.05 U 0.1 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	0.05 U U 0.1 U U 0.5 U U 0.05 U U 0.05 U U 1.0 U U U 1.0 U 1.	0.056 U 0.11 U
Dilut Sample Volume\Wei	======================================	1.00 800	1.00 500	1.00 1000	1.00 970	1.00 1000	1.00 1000	1.00 1000	1.00 900
Associated Me Associated Equip Associated F	thod Blank: ment Blank: HFQ:	PWB1017A	PWB1025A	PWB1017A	PWB1017A	PWB1017A	PWB1017A	PWB1017A	PWB1019B FQSXX7XXX94XX

Site: SUMP LIQUIDS U: not detected E: interference

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CL-107 HFCL107XXX94XX 2229005 R 10/13/94 12/07/94 12/17/94	CL-108 HFCL108XXX94XX 2229003 10/13/94 10/17/94 11/05/94	CL-109 HFCL109XXX94XX 2226601 10/11/94 10/14/94 11/02/94
ANALYTE SOW-3/90	- II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1260	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U 0.1 U	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U U 0.05 U U U U U U U U U U U U U U U U U U U
	tion Factor: ight (ml\g):	1.00	1.00 1000	1.00 1000

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: PWB1207A PWB1017A PWB1014A HFQSXX7XXX94XX HFQSXX7XXX94XX

Site: SUMP LIQUIDS
U: not detected
E: interference

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CL-101 DUP HFCL101XXX94XD 2228004 10/12/94 10/17/94 11/05/94	CL-101 HFCL101XXX94XX 2228001 10/12/94 10/25/94 11/04/94	CL-102 HFCL102XXX94X 2228005 10/12/94 10/17/94 11/05/94	CL-103 X HFCL103XXX94X 2228006 10/12/94 10/17/94 11/05/94	CL-104 X HFCL104XXX94X 2228007 10/12/94 10/17/94 11/05/94	CL-105 X HFCL105XXX94XX 2229001 10/13/94 10/17/94 11/05/94	CL-106 HFCL106XXX94XX 2229002 10/13/94 10/17/94 11/05/94	CL-107 HFCL107XXX94XX 2229005 10/13/94 10/17/94 11/25/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1250	0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	R R R R R R R R R R R R R R R R R R R	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U 1.0 U 1.0 U 1.0 U	0.052 U 0.1 U 1.0 U 1.0 U 1.0 U 1.0 U	0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.05 U 0.1 U 1.0 U 1.0 U	0.05 U 0.1 U 1.0 U 1.0 U 1.0 U 1.0 U	0.05 UJ 0.1 UJ 1.0 UJ 1.0 UJ	R R R R R R R R R R R R R R R R R R R
	ion Factor:	1.00 800	1.00 500	1.00 1000	1.00 970	1.00 1000	1.00 1000	1.00 1000	1.00 900
Associated Me Associated Equip Associated F	ment Blank: HFQ	PWB1017A SXX7XXX94XX HF -	PWB1025A QSXX7XXX94XX HF -	PWB1017A QSXX7XXX94XX H	PWB1017A FQSXX7XXX94XX H -	PWB1017A FQSXX7XXX94XX H	PWB1017A FQSXX7XXX94XX HF -	PWB1017A QSXX7XXX94XX HF	PWB1019B QSXX7XXX94XX -

Site: SUMP LIQUIDS U: not detected J: estimated R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/17/94	CL-109 HFCL109XXX94XX 2226601 10/11/94 10/14/94 11/02/94
ANALYTE SOM	1-3/90 - II CRQL		
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1232	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.05 U 0.1 U	0.05 U 0.1
Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	- 1 1 1 1	1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 28 J
	Dilution Eactor:		1 00

Dilution Factor: Sample Volume\Weight (ml\g): 1.00 1.00 1000 1000

Associated Method Blank: PWB1017A PWB1014A Associated Equipment Blank: Associated Field Blank: HFQSXX7XXX94XX HFQSXX7XXX94XX

Site: SUMP LIQUIDS U: not detected

R: unusable

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Aqueous Analysis (ug/L)

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	QS-10 HFQSX10XXX94XX 263714 11/29/94	QS-XX1 HFQSXX1XXX94XX 225921 10/10/94	QS-XX2 HFQSXX2XXX94XX 226609 10/11/94	QS-XX3 HFQSXX3XXX94XX 226520 10/11/94	QS-XX4 HFQSXX4XXX94XX 226521 10/11/94	QS-XX5 HFQSXX5XXX94XX 226522 10/11/94	QS-XX6 HFQSXX6XXX94XX 227911 10/12/94	QS-107 HFQSXX7XXX94XX 228010 10/12/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt	200 60 10 200 5 5 5000 10	57.0 U 38.0 U 5.0 U 11.0 U 2.0 U 2.0 U 1390 U 5.0 U	57.0 U 38.0 UN 5.0 U 11.0 U 2.0 U 2.0 U 1390 U 5.0 U* 6.0 U	57.0 U* 38.0 U 5.0 U 11.0 U 2.0 U 2.0 U 1390 U 5.0 U	57.0 U 38.0 UN* 5.0 UN 11.0 U 2.0 U 2.0 UN* 1390 U 5.0 U* 6.0 U	57.0 U 38.0 UN* 5.0 UN 11.0 U 2.0 U 2.0 UN* 1390 U 5.0 U* 6.0 U	57.0 U 38.0 UN* 5.0 UN 11.0 U 2.0 U 2.0 UN* 1390 U 5.0 U* 6.0 U	57.0 U* 38.0 U 5.0 U 11.0 U 2.0 U 2.0 UN 1390 U* 5.0 U 6.0 U	57.0 U 38.0 U* 5.0 UN 11.0 U 2.0 U 2.0 U* 1390 U* 5.0 U 6.0 U
Copper Iron Lead Magnesium Manganese Mercury	25 100 3 5000 15 0.2 40	5.0 U 16.0 U 3.0 U 1550 U 2.0 U 0.20 U 26.0 U	5.0 UN* 37.8 BE 3.0 U 1550 U 2.0 U 0.20 U 26.0 U	5.0 U 16.0 UN* 3.0 UN* 1550 U 2.0 UN* 0.20 U 26.0 U	5.0 U* 16.0 U 3.0 UW* 1550 U 2.0 U 0.20 U 30.9 B	5.0 U* 16.0 U 3.0 UW* 1550 U 2.0 U 0.20 U 26.0 U	5.0 U* 16.0 U 3.0 UH* 1550 U 2.0 U 0.20 U 26.0 U	5.0 UN* 16.0 U 3.0 U 1550 U* 2.0 U 0.20 UN	5.0 U 16.0 UE* 3.0 U 1550 U 2.0 UE* 0.20 U 26.0 U
Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	5000 5 10 5000 10 50 20	26.0 U 840 U 5.0 UN 5.0 U 463 U 5.0 U 17.0 U	840 U 5.0 UN 5.0 UN 463 U 5.0 U 17.0 U 5.0 U 10.0 UN*	840 U 5.0 UN 5.0 U 463 U 5.0 U 17.0 U 5.0 U* 10.0 UN	840 U 5.0 UN* 5.0 UN 463 U 5.0 U 17.0 U 5.0 UE* 10.0 UN	25.0 U 5.0 UN* 5.0 UN 463 U 5.0 U 17.0 U 5.0 UE* 10.0 UN	840 U 5.0 UN* 5.0 UN 463 U 5.0 U 17.0 U 5.0 UE* 10.0 UN	26.0 U 840 U 5.0 UW* 5.0 UN 463 U 5.0 U 17.0 U 5.0 UE 10.0 U	26.0 U 840 U 5.0 UN 5.0 UN 463 U 5.0 UN 17.0 U 5.0 U*

Associated Method Blank:	SDGHANNA8	SDGHANNA1W	MBHANNA3	SDGHANNA2W	SDGHANNA2W	SDGHANNA2W	MBHANNA4	SDGHANNA5
Associated Equipment Blank:	•	-	-	-	-	•	-	-
Accesioted Field Planks	_		_	_	_	_	_	_

Site: EQUIPMENT RINSATE
U: not detected N:
E: interference W: N: spike recovery not met \*: duplicate analysis not met
W: post digestion spike not met B: less than CRDL

Table 1 Laboratory Report of Analysis

LOCATION:	QS-8	QS-9
ISIS ID:	HFQSXX8XXX94XX	HFQSXX9XXX94XX
LAB NUMBER:	232314	235108
DATE SAMPLED:	10/18/94	10/19/94

ANALYTE	SOW-3/90 - II CRDL				
Aluminum	200	57.0	U	57.0	U
Antimony	60	38.0	U	38.0	Ū
Arsenic	10	5.0	UN	5.0	ÜN
Barium	200	11.0	Ü	11.0	Ü
Beryllium	5	2.0	Ū	2.0	Ü
Cadmium	5	2.0	U*	2.0	Ü*
Calcium	5000	1390	U*	1390	U*
Chromium	10	5.0	U*	5.0	Ú*
Cobalt	50	6.0	U	6.0	U
Copper	25	5.0	UN	5.0	UN
Iron	100	16.0	U	16.0	U
Lead	3	3.0	UN*	3.0	UN*
Magnesium	5000	1550	U*	1550	U*
Manganese	15	2.0	U*	2.0	U*
Mercury	0.2	0.20	U	0.20	U
Nickel	40	26.0	U*	26.0	U*
Potassium	5000	840	U	840	U
Selenium	5	5.0	UN	5.0	UN
Silver	10	5.0	UN	5.0	UN
Sodium	5000	463	U	463	U
Thallium	10	5.0	U	5.0	U
Vanadium	50	17.0	U	17.0	U
Zinc	20	5.0	U*	5.0	U*
Cyanide	10	10.0	UN	10.0	UN
=======================================		.==========	=====	========	===

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: MBHANNA6A MBHANNA6A

Site: EQUIPMENT RINSATE U: not detected N: N: spike recovery not met \*: W: post digestion spike not met \*: duplicate analysis not met E: interference B: less than CRDL

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SW-101 HFSW101XXX94X) 226602 10/11/94	SW-102 DUP HFSW102XXX94X 226606 10/11/94	SW-102 D HFSW102XXX94XX 226603 10/11/94	SW-103 HFSW103XXX94XX 228008 10/12/94	SW-104 HFSW104XXX94XX 226607 10/11/94	SW-105 HFSW105XXX94XX 228009 10/12/94	SW-106 HFSW106XXX94XX 226608 10/11/94	SW-107 HFSW107XXX94XX 228011 10/12/94
ANALYTE	`SOW-3/90 - II CRDL								
Aluminum	200	148 B*	225 *	83.9 B*	57.0 U	289 *	57.0 U	21700 *	57.0 U
Antimony	60	38.0 U	38.0 U	38.0 U	38.0 U*	38.0 U	38.0 U*	38.0 U	38.0 U*
Arsenic	10	8.6 BS	5.0 U	5.0 U	5.0 UN	5.0 U	5.0 UN	16.6	.5.0 UN
Barium	200	14.8 B	27.0 B	27.0 B	21.0 B	21.6 B	21.0 B	212	18.0 B
Beryllium :	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.5 B	2.0 U
Cadmium	5	2.0 U	2.0 U	2.0 U	2.0 U*	2.0 U	2.0 U* 34700 *	2.0 B	2.0 U*
Calcium	5000	125000	112000	114000	36000 *	37900	34100	134000	30700 *
Chromium	10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	59.8	5.0 U
Cobalt	50 25	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	18.4 B	6.0 U
Copper		14.7 B	6.4 B	5.0 U 717 N*	5.0 U	5.0 U	5.0 U	127	5.0 U
Iron	100 3	669 N* 4.3 WN*	1610 N* 26.4 SN		48.7 BE* 3.0 U	1440 N* 9.4 N*	56.5 BE*	63300 N*	16.0 UE*
Lead	5000		° 26.4 SN 5820		8770		3.0 U	455	3.0 U
Magnesium	15	2070 B 34.6 N*	457 N*	5840 929 N*	28.6 E*	8220 127 n*	8670 28.0 E*	22800 4560 N*	8710 6.4 BE*
Manganese	0.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U		
Mercury	40	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	0.54 79.9	0.20 U 26.0 U
Nickel Potassium	5000	375000	354000	361000	3510 B	4370 B	3000 B	6140	911 B
Selenium	5	25.0 UN	5.0 UW		5.0 UN				
Silver	10	5.0 U	5.0 U	5.0 U	5.0 UN	5.0 U	5.0 UN	5.0 U	5.0 UN
Sodium	5000	146000	192000	201000	14100	12500	14100	13000	12000
Thallium	10	5.0 UW	5.0 U	5.0 U	5.0 UN	5.0 U	5.0 UN	5.0 U	5.0 UN
Vanadium	50	17.0 U	17.0 U	17.0 Ŭ	17.0 Ü	17.0 U	17.0 U	60.7	17.0 U
Zinc	20	16.1 B*	47.9 *	35.4 *	5.0 U*	65.2 *	5.0 U*	1180 *	5.0 U*
Cyanide	10 	530 N	140 N	180 N	10.0 U	10.0 UN	10.0 U	10.0 UN	10.0 U

Associated Method Blank: Associated Equipment Blank:
Associated Field Blank: MBHANNA3

MBHANNA3

**MBHANNA3** 

SDGHANNA5

MBHANNA3

SDGHANNA5

**MBHANNA3** SDGHANNA5 HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX

Site: SURFACE WATER

U: not detected E: interference N: spike recovery not met

S: method of standard additions

W: post digestion spike not met
ns \*: duplicate analysis not met

B: less than CRDL

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	HFSW101XXX94XX 226602	SW-102 DUP HFSW102XXX94XD 226606 10/11/94	SW-102 HFSW102XXX94XX 226603 10/11/94	SW-103 HFSW103XXX94XX 228008 10/12/94	SW-104 HFSW104XXX94XX 226607 10/11/94	SW-105 HFSW105XXX94XX 228009 10/12/94	SW-106 HFSW106XXX94XX 226608 10/11/94	SW-107 HFSW107XXX94XX 228011 10/12/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	200	148 J	225 J	83.9 J	57.0 UJ	289 J	57.0 UJ	21700 J	57.0 UJ
Antimony	60	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U
Arsenic	10	8.6 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	16.6	5.0 U
Barium	200	14.8 J	27.0 J	27.0 J	21.0 J	21.6 J	21.0 J	212	18.0 J
Beryllium	. 5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.5 J	2.0 U
Cadmium	5	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 UJ	2.0 J	2.0 UJ
Calcium	5000	125000	112000	114000	36000	37900	34700	134000	30700
Chromium	10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	59.8	5.0 U
Cobalt	50 25	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	18 <u>.4</u> J	6.0 U
Copper	25	14.7 J	6.4 J	5.0 U	5.0 U	5.0 U	5.0 U	127	5.0 U
Iron	100	R	, R	R	R	R	, <b>R</b>	, R	16.0 UJ
Lead	3	4.3 J	26.4 J	14.8 J	3.0 UJ	9.4 J	3.0 UJ	455	3.0 UJ
Magnes i um	5000	2070 J	5820	5840	8770	8220	8670	22800	8710
Manganese	15	R	R	R	R	R	R	R	R
Mercury	0.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.54	0.20 U
Nickel	40	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	79.9	26.0 U
Potassium	5000	375000	354000	361000	3510 J	4370 J	3000 J	6140	911 J
Selenium	.5	25.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Silver	10	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U
Sodium	5000	146000	192000	201000	14100	12500	14 <u>1</u> 00	13000	12000
Thallium	10	5.0 U	5.0 U	5.0 U	.5.0 U	5.0 U	5.0 U	5. <u>0</u> U	5.0 U
Vanadium	50	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U	60.7	17.0 U
Zinc	20	16.1 ป	47.9 J	35.4 J	5.0 UJ	65.2 j	5.0 UJ	1180 <u>J</u>	5.0 UJ
Cyanide	10	R	R	R	R	R	. R	R	R
2222222222222				:252222222222	:2222222222222	:=========	22222222222222		22222222222

Site: SURFACE WATER

U: not detected R: unusable

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Aqueous Analysis (ug/L)

Table 1
Laboratory Report of Analysis

LAB	OCATION: MW-101 ( ISIS ID: HFMW101XX) NUMBER: 26371 SAMPLED: 11/29/	K94XD HFMW101 3 263	(XX94X) 710	MW-102 K HFMW102XXX9 263708 11/29/94	94XX H	MW-103 HFMW103XXX 263709 11/29/9	94XX	MW-104 HFMW104XXX9 263703 11/29/94		MW-105 HFMW105XXX9 263704 11/29/94		MW-106 HFMW106XXX 263702 11/29/9		MW-107 HFMW107XXX 263701 11/29/9	94XX
ANALYTE SOW-3/90 - II CR	DL														
Aluminum 20	0 881	7	97	57.0	U	184	В	1600		150	В	991		70.1	В
Antimony 6	0 38.0	U 38	.0 U		U	38.0	U		U	38.0	U	38.0	U	38.0	Ū
Arsenic 1	0 5.0	UW 5	.0 U		U	5.7	BW	5.0	U	5.0	U	5.0	Ū	5.0	Ū
Barium 20	0 104	B 1	00 B	60.4	В	61.3	В	29.4	В	23.2	В	20.1	В	175	В
Beryllium	5 2.0	U 2	.Ο υ	2.0	U	2.0	U		U		Ų	2.0	U	2.0	U
Cadmium	5 2.0		.0 U		U	2.0	U	2.0	Ų		U	2.0	U	2.0	U
Calcium 500	0 114000	1100		97800		<b>78</b> 500		98600		45100		97200		140000	
Chromium 1		12			U		U		U		U	5.0	U	5.0	U
Cobalt	0. 6.0		.0 U		U		U		U		U	6.0	U	6.0	U
Copper 2			.O U		U	5.0	U	5.0	U		U	5.0	U	5.0	U
Iron 10		11		505		1730			В		8	836		280	
	3.0		.O UW	3.0	U	3.3	W	3.0	U	3.0	U	3.4		3.0	U
Magnesium 500				10900		7840			U	11700			U	46800	
Manganese 1			.o u	1220		137		2.0	U		В	46.5		371	
Mercury 0.					U		U		U		U	0.20	U	0.20	U
Nickel 4					U	26.0	U	26.0	U	26.0	Ų	26.0	U	26.0	U
Potassium 500	0 861000	8230		13500		467000		13500		16200		22600		9790	
0010,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5 12.2	+N <u>8</u>	O SN		UWN	5.0	UWN		SN		UN	9.8	SN		UWN
Silver 1			.0 U		U	5.0	U	41.2			U	_5.0	U	5.0	U
Sodium 500		648	00	14900		191000		26300		24600		43600		45100	
Thallium 1			.0 U		ÜM		Ü		U		U		UW	5.0	
Vanadium 5					U	17.0	U		U		U	17.0	U	17.0	
Zinc			.0 U		U	15.4	В		U		U	5.3	В	5.0	U
Cyanide 1	0 2960	30	/U 	10.0	U	510		240		50.0		190		20.0	

Associated Method Blank: SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8
Associated Equipment Blank: HFQSX10XXX94XX HFQSX10XXXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XX HFQSX10X

Site: MONITORING WELL

U: not detected S: method of standard additions +: coefficient < 0.995
N: spike recovery not met W: post digestion spike not met B: less than CRDL

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	MW-108 HFMW108XXX 263707 11/29/9	94XX	MW-109 HFMW109XXX 263706 11/29/9	94XX	MW-110 HFMW110XXX 263705 11/29/9	(94XX
ANALYTE	SOW-3/90 - II CRDL						
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium	200 60 10 200 5 5 5000 10 50 25 100 3 5000 15 0.2 40 5000 5	57.0 38.0 5.6 101 2.0 2.0 129000 5.0 13600 3.0 23800 1730 0.20 26.0 10000 5.0 17300 5.0	UUBBUU UUU UU UWKU U	1240 38.0 5.0 52.6 2.0 2.0 181000 5.0 1370 3.0 1550 35.8 0.20 26.0 26500 5.0 45500	UUBUU UUU UU	71.3 38.0 7.4 297 2.0 2.0 148000 5.0 6.0 5.0 940 3.0 51700 430 0.20 26.0 4270 5.0 54500 55.0	B
Vanadium Zinc Cyanide	50 20 10	17.0 5.0 10.0	U U U	17.0 5.0 20.0	Ü	17.0 5.0 10.0	U U

Site: MONITORING WELL

U: not detected S: method of standard additions +: coefficient < 0.995
N: spike recovery not met W: post digestion spike not met B: less than CRDL

Table 2 Validation / Summary Table

	LOCATION:	MW-101 DUP	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107
	ISIS ID:	HFMW101XXX94XD	HFMW101XXX94XX	HFMW102XXX94XX	HFMW103XXX94XX	HFMW104XXX94XX	HFMW105XXX94XX	HFMW106XXX94XX	HFMW107XXX94XX
	LAB NUMBER:	263713	263710	263708	263709	263703	263704	263702	263701
	DATE SAMPLED:	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver	200 60 10 200 5 5 5000 10 50 25 100 3 5000 15 0.2 40 5000 5	881 38.0 U 5.0 UJ 104 J 2.0 U 2.0 UJ 114000 17.7 6.0 U 5.0 U 1180 3.0 UJ 1550 U 2.0 U 26.0 U 861000 12.2 J 5.0 U	797 38.0 UJ 5.0 U 100 J 2.0 UJ 110000 12.9 J 6.0 U 5.0 U 1100 3.0 UJ 1550 U 2.0 U 0.20 U 26.0 U 823000 8.0 J 5.0 U	57.0 U 38.0 U 5.0 U 60.4 J 2.0 U 2.0 U 97800 5.0 U 5.0 U 505 3.0 U 10900 1220 0.20 U 26.0 U 13500 5.0 U 14900	184 J 38.0 U 5.7 J 61.3 J 2.0 U 2.0 U 78500 5.0 U 6.0 U 1730 3.3 J 7840 137 0.20 U 26.0 U 467000 5.0 UJ 5.0 U 191000	1600 38.0 U 29.4 J 2.0 U 2.0 U 98600 5.0 U 53.5 J 3.0 U 1550 U 2.0 U 26.0 U 13500 8.7 J 41.2 26300	150 J 38.0 U 5.0 U 23.2 J 2.0 U 2.0 U 45100 5.0 U 25.8 J 3.0 U 11700 13.6 J 0.20 U 26.0 U 16200 5.0 U 24600	991 38.0 U 5.0 U 20.1 J 2.0 U 2.0 U 97200 5.0 U 6.0 U 5.0 U 836 3.4 1550 U 46.5 0.20 U 26.0 U 26.0 U 26.0 U	70.1 J 38.0 U 5.0 U 175 J 2.0 U 2.0 U 140000 5.0 U 6.0 U 280 J 280 J 3.0 U 46800 3.71 U 26.0 U 26.0 U 9790 U 5.0 U 45100
Thallium	10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vanadium	50	25.6 J	24.1 J	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U
Zinc	20	5.0 U	5.0 U	5.0 U	15.4 J	5.0 U	5.0 U	5.3 J	5.0 U
Cyanide	10	2960	3090	10.0 U	510	240	50.0	190	20.0

Associated Method Blank: SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 Associated Equipment Blank: HFQSX10XXX94XX HFQSX10XXXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XX HFQSX10XXX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX

Site: MONITORING WELL U: not detected

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	MW-108 HFMW108XXX 263707 11/29/9		MW-109 HFMW109XXX 263706 11/29/9		MW-110 HFMW110XXX 263705 11/29/9	94XX
ANALYTE	SOW-3/90 - II CRDL						
Aluminum	200	57.0	U	1240		71.3	J
Ant imony	60	38.0	U	38.0	U	38.0	U
Arsenic	10	5.6	J	5.0	U	7.4	J
Barium	200	101	J	52.6	J	297	
Beryllium	5	2.0	U	2.0	U	2.0	U
Cadmium	. 5	2.0	U	2.0	U	2.0	U
Calcium	5000	129000		181000		148000	
Chromium	10	5.0	U	5.0	U	5.0	U
Cobal t	<b>50</b>	6.0	U	6.0	U	6.0	U
Copper	25	5.0	U	5.0	U	5.0	U
Iron	100	13600		1370		940	
Lead	3		U	3.0	U	3.0	U
Magnesium	5000	23800		1550	U	51700	
Manganese	15	1730		35.8		430	
Mercury	0.2	0.20	U	0.20	U	0.20	U
Nickel	40	26.0	U	26.0	U	26.0	U
Potassium	5000	10000		26500		4270	J
Selenium	.5	5.0	UJ	5.0	IJ	5.0	UJ
Silver	10	5.0	U	5.0	U	5.0	U
Sodium	5000	17300		45500		54500	
Thallium	10	5.0	Ü	5.0	U	5.0	Ü
Vanadium	50	17.0	U	17.0	U	17.0	Ü
Zinc	20	5.0	Ü	5.0	U	5.0	Ü
Cyanide	10	10.0	U	20.0		10.0	U

Associated Method Blank: SDGHANNA8 SDGHANNA8 Associated Equipment Blank: HFQSX10XXX94XX HFQSX10XXX94XX HFQSX10XXX94XX HFQSX10XXX94XX

Site: MONITORING WELL
U: not detected
J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	CL-101 DUP HFCL101XXX94XD 228004 10/12/94	CL-101 HFCL101XXX94XX 228001 10/12/94	CL-102 HFCL102XXX94XX 228005 10/12/94	CL-103 HFCL103XXX94XX 228006 10/12/94	CL-104 HFCL104XXX94XX 228007 10/12/94	CL-105 HFCL105XXX94XX 229001 10/13/94	CL-106 HFCL106XXX94XX 229002 10/13/94	CL-107 HFCL107XXX94XX 229005 10/13/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	200	35200	25100	88.0 B	57.0 U	522	4260	311	222
Antimony	60	70.1 *	65.0 *	38.0 U*					
Arsenic	10	17.8 +N	14.1 SN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UWN	5.0 UWN
Barium	200	824	602	21.0 B	36.0 B	21.0 B	273	24.4 B	34.1 B
Beryllium	5	8.2	6.8	2.0 U					
Cadmium	5	46.7 *	30.6 *	2.0 U*					
Calcium	5000	491000 *	377000 *	128000 *	77100 *	48600 *	69400 *	87000 *	111000 *
Chromium	10	223	187	5.0 U					
Cobalt	50	28.7 B	19.1 B	6.0 U					
Copper	25	722	380	9.1 B	5.0 U	22.2 B	189	6.4 B	5.0 U
Iron	100	134000 E*	88400 E*	1890 E*	319 E*	1660 E*	18800 E*	1060 E*	56.8 BE*
Lead	3	1570 N	740	18.1	4.0	22.8	189 N	44.7 S	3.0 U
Magnesium	5000	87500	71900	7720	8740	7600	10600	3030 B	1840 B
Manganese	15	10500 E*	7110 E*	55.9 E*	119 E*	191 E*	1150 E*	· 113 E*	13.5 BE*
Mercury	0.2	2.0	1.6	0.20 U	0.74	0.20 U	0.46	0.20 U	0.20 U
Nickel	40	98.4	70.4	27.5 В	26.0 U	26.0 U	36.2 B	26.0 U	26.0 U
Potassium	5000	67300	70200	42900	16600	6750	5300	39300	37000
Selenium	5	5.0 UWN		5.0 UN					
Silver	10	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN
Sodium	5000	29300	30300	30100	<b>288</b> 00	12100	6210	20400	19900
Thallium	10	5.0 UWN	100 UWN	5.0 UN					
Vanadium .	50	378	360	17.0 U					
Zinc	20	3680 *	2230 *	81.0 *	50.5 *	37.0 *	972 *	82.2 *	5.0 บ*
Cyanide	10	10.0 U	10.0 U	140	10.0 U	10.0 U	10.0 U	50.0	70.0

Site: SUMP LIQUIDS

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SW-101 HFSW101XXX94X) 226602 10/11/94	SW-102 DUP HFSW102XXX94X 226606 10/11/94	SW-102 D HFSW102XXX94XX 226603 10/11/94	SW-103 HFSW103XXX94XX 228008 10/12/94	SW-104 HFSW104XXX94XX 226607 10/11/94	SW-105 HFSW105XXX94XX 228009 10/12/94	SW-106 HFSW106XXX94XX 226608 10/11/94	SW-107 HFSW107XXX94XX 228011 10/12/94
ANALYTE	`SOW-3/90 - II CRDL								
Aluminum	200	148 B*	225 *	83.9 B*	57.0 U	289 *	57.0 U	21700 *	57.0 U
Antimony	60	38.0 U	38.0 U	38.0 U	38.0 U*	38.0 U	38.0 U*	38.0 U	38.0 U*
Arsenic	10	8.6 BS	5.0 U	5.0 U	5.0 UN	5.0 U	5.0 UN	16.6	.5.0 UN
Barium	200	14.8 B	27.0 B	27.0 B	21.0 B	21.6 B	21.0 B	212	18.0 B
Beryllium :	2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.5 B	2.0 U
Cadmium	5	2.0 U	2.0 U	2.0 U	2.0 U*	2.0 U	2.0 U* 34700 *	2.0 B	2.0 U*
Calcium	5000	125000	112000	114000	36000 *	37900	34100	134000	30700 *
Chromium	10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	59.8	5.0 U
Cobalt	50 25	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	18.4 B	6.0 U
Copper		14.7 B	6.4 B	5.0 U 717 N*	5.0 U	5.0 U	5.0 U	127	5.0 U
Iron	100 3	669 N* 4.3 WN*	1610 N* 26.4 SN		48.7 BE* 3.0 U	1440 N* 9.4 N*	56.5 BE*	63300 N*	16.0 UE*
Lead	5000		° 26.4 SN 5820		8770		3.0 U	455	3.0 U
Magnesium	15	2070 B 34.6 N*	457 N*	5840 929 N*	28.6 E*	8220 127 n*	8670 28.0 E*	22800 4560 N*	8710 6.4 BE*
Manganese	0.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U		
Mercury	40	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	0.54 79.9	0.20 U 26.0 U
Nickel Potassium	5000	375000	354000	361000	3510 B	4370 B	3000 B	6140	911 B
Selenium	5	25.0 UN	5.0 UW		5.0 UN				
Silver	10	5.0 U	5.0 U	5.0 U	5.0 UN	5.0 U	5.0 UN	5.0 U	5.0 UN
Sodium	5000	146000	192000	201000	14100	12500	14100	13000	12000
Thallium	10	5.0 UW	5.0 U	5.0 U	5.0 UN	5.0 U	5.0 UN	5.0 U	5.0 UN
Vanadium	50	17.0 U	17.0 U	17.0 Ŭ	17.0 Ü	17.0 U	17.0 U	60.7	17.0 U
Zinc	20	16.1 B*	47.9 *	35.4 *	5.0 U*	65.2 *	5.0 U*	1180 *	5.0 U*
Cyanide	10 	530 N	140 N	180 N	10.0 U	10.0 UN	10.0 U	10.0 UN	10.0 U

Associated Method Blank: Associated Equipment Blank:
Associated Field Blank: MBHANNA3

MBHANNA3

**MBHANNA3** 

SDGHANNA5

MBHANNA3

SDGHANNA5

**MBHANNA3** SDGHANNA5 HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX HFQSXX2XXX94XX

Site: SURFACE WATER

U: not detected E: interference N: spike recovery not met

S: method of standard additions

W: post digestion spike not met
ns \*: duplicate analysis not met

B: less than CRDL

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	HFSW101XXX94XX 226602	SW-102 DUP HFSW102XXX94XD 226606 10/11/94	SW-102 HFSW102XXX94XX 226603 10/11/94	SW-103 HFSW103XXX94XX 228008 10/12/94	SW-104 HFSW104XXX94XX 226607 10/11/94	SW-105 HFSW105XXX94XX 228009 10/12/94	SW-106 HFSW106XXX94XX 226608 10/11/94	SW-107 HFSW107XXX94XX 228011 10/12/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	200	148 J	225 J	83.9 J	57.0 UJ	289 J	57.0 UJ	21700 J	57.0 UJ
Antimony	60	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U	38.0 U
Arsenic	10	8.6 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	16.6	5.0 U
Barium	200	14.8 J	27.0 J	27.0 J	21.0 J	21.6 J	21.0 J	212	18.0 J
Beryllium	. 5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.5 J	2.0 U
Cadmium	5	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 UJ	2.0 J	2.0 UJ
Calcium	5000	125000	112000	114000	36000	37900	34700	134000	30700
Chromium	10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	59.8	5.0 U
Cobalt	50 25	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	18 <u>.4</u> J	6.0 U
Copper	25	14.7 J	6.4 J	5.0 U	5.0 U	5.0 U	5.0 U	127	5.0 U
Iron	100	R	, R	R	R	R	, <b>R</b>	, R	16.0 UJ
Lead	3	4.3 J	26.4 J	14.8 J	3.0 UJ	9.4 J	3.0 UJ	455	3.0 UJ
Magnes i um	5000	2070 J	5820	5840	8770	8220	8670	22800	8710
Manganese	15	R	R	R	R	R	R	R	R
Mercury	0.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.54	0.20 U
Nickel	40	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	26.0 U	79.9	26.0 U
Potassium	5000	375000	354000	361000	3510 J	4370 J	3000 J	6140	911 J
Selenium	.5	25.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Silver	10	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U
Sodium	5000	146000	192000	201000	14100	12500	14 <u>1</u> 00	13000	12000
Thallium	10	5.0 U	5.0 U	5.0 U	.5.0 U	5.0 U	5.0 U	5. <u>0</u> U	5.0 U
Vanadium	50	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U	60.7	17.0 U
Zinc	20	16.1 ป	47.9 J	35.4 J	5.0 UJ	65.2 j	5.0 UJ	1180 <u>J</u>	5.0 UJ
Cyanide	10	R	R	R	R	R	. R	R	R
2222222222222				:252222222222	:2222222222222	:=========	22222222222222		22222222222

Site: SURFACE WATER

U: not detected R: unusable

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Aqueous Analysis (ug/L)

Table 1
Laboratory Report of Analysis

LAB	OCATION: MW-101 ( ISIS ID: HFMW101XX) NUMBER: 26371 SAMPLED: 11/29/	K94XD HFMW101 3 263	(XX94X) 710	MW-102 K HFMW102XXX9 263708 11/29/94	94XX H	MW-103 HFMW103XXX 263709 11/29/9	94XX	MW-104 HFMW104XXX9 263703 11/29/94		MW-105 HFMW105XXX9 263704 11/29/94		MW-106 HFMW106XXX 263702 11/29/9		MW-107 HFMW107XXX 263701 11/29/9	94XX
ANALYTE SOW-3/90 - II CR	DL														
Aluminum 20	0 881	7	97	57.0	U	184	В	1600		150	В	991		70.1	В
Antimony 6	0 38.0	U 38	.0 U		U	38.0	U		U	38.0	U	38.0	U	38.0	Ū
Arsenic 1	0 5.0	UW 5	.0 U		U	5.7	BW	5.0	U	5.0	U	5.0	Ū	5.0	Ū
Barium 20	0 104	B 1	00 B	60.4	В	61.3	В	29.4	В	23.2	В	20.1	В	175	В
Beryllium	5 2.0	U 2	.Ο υ	2.0	U	2.0	U		U		Ų	2.0	U	2.0	U
Cadmium	5 2.0		.0 U		U	2.0	U	2.0	Ų		U	2.0	U	2.0	U
Calcium 500	0 114000	1100		97800		<b>78</b> 500		98600		45100		97200		140000	
Chromium 1		12			U		U		U		U	5.0	U	5.0	U
Cobalt	0. 6.0		.0 U		U		U		U		U	6.0	U	6.0	U
Copper 2			.O U		U	5.0	U	5.0	U		U	5.0	U	5.0	U
Iron 10		11		505		1730			В		8	836		280	
	3.0		.O UW	3.0	U	3.3	W	3.0	U	3.0	U	3.4		3.0	U
Magnesium 500				10900		7840			U	11700			U	46800	
Manganese 1			.o u	1220		137		2.0	U		В	46.5		371	
Mercury 0.					U		U		U		U	0.20	U	0.20	U
Nickel 4					U	26.0	U	26.0	U	26.0	Ų	26.0	U	26.0	U
Potassium 500	0 861000	8230		13500		467000		13500		16200		22600		9790	
0010,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5 12.2	+N <u>8</u>	O SN		UWN	5.0	UWN		SN		UN	9.8	SN		UWN
Silver 1			.0 U		U	5.0	U	41.2			U	_5.0	U	5.0	U
Sodium 500		648	00	14900		191000		26300		24600		43600		45100	
Thallium 1			.0 U		ÜM		Ü		U		U		UW	5.0	
Vanadium 5					U	17.0	U		U		U	17.0	U	17.0	
Zinc			.0 U		U	15.4	В		U		U	5.3	В	5.0	U
Cyanide 1	0 2960	30	/U 	10.0	U	510		240		50.0		190		20.0	

Associated Method Blank: SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8
Associated Equipment Blank: HFQSX10XXX94XX HFQSX10XXXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XX HFQSX10X

Site: MONITORING WELL

U: not detected S: method of standard additions +: coefficient < 0.995
N: spike recovery not met W: post digestion spike not met B: less than CRDL

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	MW-108 HFMW108XXX 263707 11/29/9	94XX	MW-109 HFMW109XXX 263706 11/29/9	94XX	MW-110 HFMW110XXX 263705 11/29/9	(94XX
ANALYTE	SOW-3/90 - II CRDL						
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium	200 60 10 200 5 5 5000 10 50 25 100 3 5000 15 0.2 40 5000 5	57.0 38.0 5.6 101 2.0 2.0 129000 5.0 13600 3.0 23800 1730 0.20 26.0 10000 5.0 17300 5.0	UUBBUU UUU UU UWKU U	1240 38.0 5.0 52.6 2.0 2.0 181000 5.0 1370 3.0 1550 35.8 0.20 26.0 26500 5.0 45500	UUBUU UUU UU	71.3 38.0 7.4 297 2.0 2.0 148000 5.0 6.0 5.0 940 3.0 51700 430 0.20 26.0 4270 5.0 54500 55.0	B
Vanadium Zinc Cyanide	50 20 10	17.0 5.0 10.0	U U U	17.0 5.0 20.0	Ü	17.0 5.0 10.0	U U

Site: MONITORING WELL

U: not detected S: method of standard additions +: coefficient < 0.995
N: spike recovery not met W: post digestion spike not met B: less than CRDL

Table 2 Validation / Summary Table

	LOCATION:	MW-101 DUP	MW-101	MW-102	MW-103	MW-104	MW-105	MW-106	MW-107
	ISIS ID:	HFMW101XXX94XD	HFMW101XXX94XX	HFMW102XXX94XX	HFMW103XXX94XX	HFMW104XXX94XX	HFMW105XXX94XX	HFMW106XXX94XX	HFMW107XXX94XX
	LAB NUMBER:	263713	263710	263708	263709	263703	263704	263702	263701
	DATE SAMPLED:	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94	11/29/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver	200 60 10 200 5 5 5000 10 50 25 100 3 5000 15 0.2 40 5000 5	881 38.0 U 5.0 UJ 104 J 2.0 U 2.0 UJ 114000 17.7 6.0 U 5.0 U 1180 3.0 UJ 1550 U 2.0 U 26.0 U 861000 12.2 J 5.0 U	797 38.0 UJ 5.0 U 100 J 2.0 UJ 110000 12.9 J 6.0 U 5.0 U 1100 3.0 UJ 1550 U 2.0 U 0.20 U 26.0 U 823000 8.0 J 5.0 U	57.0 U 38.0 U 5.0 U 60.4 J 2.0 U 2.0 U 97800 5.0 U 5.0 U 505 3.0 U 10900 1220 0.20 U 26.0 U 13500 5.0 U 14900	184 J 38.0 U 5.7 J 61.3 J 2.0 U 2.0 U 78500 5.0 U 6.0 U 1730 3.3 J 7840 137 0.20 U 26.0 U 467000 5.0 UJ 5.0 U 191000	1600 38.0 U 29.4 J 2.0 U 2.0 U 98600 5.0 U 53.5 J 3.0 U 1550 U 2.0 U 26.0 U 13500 8.7 J 41.2 26300	150 J 38.0 U 5.0 U 23.2 J 2.0 U 2.0 U 45100 5.0 U 25.8 J 3.0 U 11700 13.6 J 0.20 U 26.0 U 16200 5.0 U 24600	991 38.0 U 5.0 U 20.1 J 2.0 U 2.0 U 97200 5.0 U 6.0 U 5.0 U 836 3.4 1550 U 46.5 0.20 U 26.0 U 26.0 U 26.0 U	70.1 J 38.0 U 5.0 U 175 J 2.0 U 2.0 U 140000 5.0 U 6.0 U 280 J 280 J 3.0 U 46800 3.71 U 26.0 U 26.0 U 9790 U 5.0 U 45100
Thallium	10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vanadium	50	25.6 J	24.1 J	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U	17.0 U
Zinc	20	5.0 U	5.0 U	5.0 U	15.4 J	5.0 U	5.0 U	5.3 J	5.0 U
Cyanide	10	2960	3090	10.0 U	510	240	50.0	190	20.0

Associated Method Blank: SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 SDGHANNA8 Associated Equipment Blank: HFQSX10XXX94XX HFQSX10XXXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XXX HFQSX10XX HFQSX10XXX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX HFQSX10XX

Site: MONITORING WELL U: not detected

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	MW-108 HFMW108XXX 263707 11/29/9		MW-109 HFMW109XXX 263706 11/29/9		MW-110 HFMW110XXX 263705 11/29/9	94XX
ANALYTE	SOW-3/90 - II CRDL						
Aluminum	200	57.0	U	1240		71.3	J
Ant imony	60	38.0	U	38.0	U	38.0	U
Arsenic	10	5.6	J	5.0	U	7.4	J
Barium	200	101	J	52.6	J	297	
Beryllium	5	2.0	U	2.0	U	2.0	U
Cadmium	. 5	2.0	U	2.0	U	2.0	U
Calcium	5000	129000		181000		148000	
Chromium	10	5.0	U	5.0	U	5.0	U
Cobal t	<b>50</b>	6.0	U	6.0	U	6.0	U
Copper	25	5.0	U	5.0	U	5.0	U
Iron	100	13600		1370		940	
Lead	3		U	3.0	U	3.0	U
Magnesium	5000	23800		1550	U	51700	
Manganese	15	1730		35.8		430	
Mercury	0.2	0.20	U	0.20	U	0.20	U
Nickel	40	26.0	U	26.0	U	26.0	U
Potassium	5000	10000		26500		4270	J
Selenium	.5	5.0	UJ	5.0	IJ	5.0	UJ
Silver	10	5.0	U	5.0	U	5.0	U
Sodium	5000	17300		45500		54500	
Thallium	10	5.0	Ü	5.0	U	5.0	Ü
Vanadium	50	17.0	U	17.0	U	17.0	Ü
Zinc	20	5.0	Ü	5.0	U	5.0	Ü
Cyanide	10	10.0	U	20.0		10.0	U

Associated Method Blank: SDGHANNA8 SDGHANNA8 Associated Equipment Blank: HFQSX10XXX94XX HFQSX10XXX94XX HFQSX10XXX94XX HFQSX10XXX94XX

Site: MONITORING WELL
U: not detected
J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	CL-101 DUP HFCL101XXX94XD 228004 10/12/94	CL-101 HFCL101XXX94XX 228001 10/12/94	CL-102 HFCL102XXX94XX 228005 10/12/94	CL-103 HFCL103XXX94XX 228006 10/12/94	CL-104 HFCL104XXX94XX 228007 10/12/94	CL-105 HFCL105XXX94XX 229001 10/13/94	CL-106 HFCL106XXX94XX 229002 10/13/94	CL-107 HFCL107XXX94XX 229005 10/13/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	200	35200	25100	88.0 B	57.0 U	522	4260	311	222
Antimony	60	70.1 *	65.0 *	38.0 U*					
Arsenic	10	17.8 +N	14.1 SN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UWN	5.0 UWN
Barium	200	824	602	21.0 B	36.0 B	21.0 B	273	24.4 B	34.1 B
Beryllium	5	8.2	6.8	2.0 U					
Cadmium	5	46.7 *	30.6 *	2.0 U*					
Calcium	5000	491000 *	377000 *	128000 *	77100 *	48600 *	69400 *	87000 *	111000 *
Chromium	10	223	187	5.0 U					
Cobalt	50	28.7 B	19.1 B	6.0 U					
Copper	25	722	380	9.1 B	5.0 U	22.2 B	189	6.4 B	5.0 U
Iron	100	134000 E*	88400 E*	1890 E*	319 E*	1660 E*	18800 E*	1060 E*	56.8 BE*
Lead	3	1570 N	740	18.1	4.0	22.8	189 N	44.7 S	3.0 U
Magnesium	5000	87500	71900	7720	8740	7600	10600	3030 B	1840 B
Manganese	15	10500 E*	7110 E*	55.9 E*	119 E*	191 E*	1150 E*	· 113 E*	13.5 BE*
Mercury	0.2	2.0	1.6	0.20 U	0.74	0.20 U	0.46	0.20 U	0.20 U
Nickel	40	98.4	70.4	27.5 В	26.0 U	26.0 U	36.2 B	26.0 U	26.0 U
Potassium	5000	67300	70200	42900	16600	6750	5300	39300	37000
Selenium	5	5.0 UWN		5.0 UN					
Silver	10	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN	5.0 UN
Sodium	5000	29300	30300	30100	<b>288</b> 00	12100	6210	20400	19900
Thallium	10	5.0 UWN	100 UWN	5.0 UN					
Vanadium .	50	378	360	17.0 U					
Zinc	20	3680 *	2230 *	81.0 *	50.5 *	37.0 *	972 *	82.2 *	5.0 บ*
Cyanide	10	10.0 U	10.0 U	140	10.0 U	10.0 U	10.0 U	50.0	70.0

Site: SUMP LIQUIDS

Table 1
Laboratory Report of Analysis

LOCATION: CL-108 CL-109
ISIS ID: HFCL108XXX94XX HFCL109XXX94XX
LAB NUMBER: 229003 226601
DATE SAMPLED: 10/13/94 10/11/94

ANALYTE	SOW-3/90 - II CRDL				
Aluminum	200	1210		15400	*
Antimony	60	38.0	U*	38.0	U
Arsenic	10	5.0	ŪN	6.0	В
Barium	200	60.2	В	236	
Beryllium	5	2.0	Ū	2.0	U
Cadmium	5 5	2.0	Ú*	2.1	В
Calcium	5000	112000	*	171000	_
Chromium	10	5.0	U	27.8	
Cobalt	50	6.0	Ū	6.0	U
Copper	25	14.9	B	226	-
Iron	100	3940	E*	23400	N*
Lead	3	24.6		308	
Magnesium	5000	4430	В	31700	
Manganese	15	915	E*	2010	N*
Mercury	0.2	0.20	Ū	0.40	
Nickel	40	26.0	Ū	26.0	U
Potassium	5000	31700		25200	
Selenium	5	5.0	UN	5.0	UWN
Silver	10	5.0	UN	5.0	U
Sodium	5000	34100		26300	
Thallium	10	5.0	UN	5.0	UW
Vanadium	50	17.0	Ü	21.2	В
Zinc	20	135	*	1380	*
Cyanide	10	10.0	U	10.0	UN
			====		===

Associated Method Blank: SDGHANNA5 MBHANNA3
Associated Equipment Blank: HFQSXX7XXX94XX HFQSXX7XXX94XX
Associated Field Blank:

Site: SUMP LIQUIDS

Table 1
Laboratory Report of Analysis

LOCATION: CL-108 CL-109
ISIS ID: HFCL108XXX94XX HFCL109XXX94XX
LAB NUMBER: 229003 226601
DATE SAMPLED: 10/13/94 10/11/94

ANALYTE	SOW-3/90 - II CRDL				
Aluminum	200	1210		15400	*
Antimony	60	38.0	U*	38.0	U
Arsenic	10	5.0	ŪN	6.0	В
Barium	200	60.2	В	236	
Beryllium	5	2.0	Ū	2.0	U
Cadmium	5 5	2.0	Ú*	2.1	В
Calcium	5000	112000	*	171000	_
Chromium	10	5.0	U	27.8	
Cobalt	50	6.0	Ū	6.0	U
Copper	25	14.9	B	226	-
Iron	100	3940	E*	23400	N*
Lead	3	24.6		308	
Magnesium	5000	4430	В	31700	
Manganese	15	915	E*	2010	N*
Mercury	0.2	0.20	Ū	0.40	
Nickel	40	26.0	Ū	26.0	U
Potassium	5000	31700		25200	
Selenium	5	5.0	UN	5.0	UWN
Silver	10	5.0	UN	5.0	U
Sodium	5000	34100		26300	
Thallium	10	5.0	UN	5.0	UW
Vanadium	50	17.0	Ü	21.2	В
Zinc	20	135	*	1380	*
Cyanide	10	10.0	U	10.0	UN
			====		===

Associated Method Blank: SDGHANNA5 MBHANNA3
Associated Equipment Blank: HFQSXX7XXX94XX HFQSXX7XXX94XX
Associated Field Blank:

Site: SUMP LIQUIDS

PROJECT: NYSDEC-PSA-14 Hanna furnace Site

Inorganic Aqueous Analysis (ug/L)

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	HFCL101XXX94XD 228004	CL-101 HFCL101XXX94XX 228001 10/12/94	CL-102 HFCL102XXX94XX 228005 10/12/94	CL-103 HFCL103XXX94XX 228006 10/12/94	CL-104 HFCL104XXX94XX 228007 10/12/94	CL-105 HFCL105XXX94XX 229001 10/13/94	CL-106 HFCL106XXX94XX 229002 10/13/94	CL-107 HFCL107XXX94XX 229005 10/13/94
ANALYTE	SOW-3/90 - 11 CRDL								
Aluminum	200	35200	25100	88.0 J	57.0 U	522	4260	311	222
Antimony	60	70.1 J	65.0 J	38.0 UJ	38.0 UJ	<b>38.</b> 0 UJ	38.0 UJ	38.0 UJ	<b>38.</b> 0 UJ
Arsenic	. 10	R	14.1 J	5.0 UJ					
Barium	200	824 J	602 J	21.0 J	<b>36.0</b> J	21.0 J	273	24.4 J	<b>34.</b> 1 J
Beryllium	5	8.2 J	6.8 J	2.0 U					
Cadmium	5	46.7 J	30.6 J	2.0 UJ	_2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ 111000
Calcium	5000	491000	377000	128000	77100	48600	69400	87000	111000
Chromium	10	223	187	5.0 U					
Cobalt	50	28.7 J	19.1 J	6.0 U					
Copper	25	722 J	380 J	9.1 J	5.0 U	22.2 J	18 <del>9</del>	6.4 J	5.0 U
1 ron	100	134000 J	88400 J	1890 J	319 J	1660 J	18800 J	1060 J	56.8 J
Lead	3	1570 J	740 J	18.1	4.0	22.8	189 J	44.7	3.0 U
Magnesium	5000	87500	71900	7720	8740	7600	10600	3030 J	1840 J
Manganese	15	10500 J	7110 J	55.9 J	119 J	191 J	1150 J	113 J	13.5 J
Mercury	0.2	2.0	1.6	0.20 U	0.74	0.20 U	0.46	0.20 U	0.20 U
Nickel	40	98.4 J	70.4 J	27.5 J	26.0 U	26.0 U	<b>36.</b> 2 J	_26.0 U	26.0 U
Potassium	5000	6 <b>73</b> 00	70200	42900	16600	6750	5300	39300	37000
Selenium	,5	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Silver	10	5.0 U	5.0 U	5.0 U	5.0 ป	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	5000	29300	30300	30100	28800	12100	6210	20400	19900
Thallium	<u>10</u>	<u>5.0</u> UJ	100 บม	.5.0 UJ	5.0 UJ	5.0 UJ	<u>5.0 UJ</u>	5.0 UJ	5.0 UJ
Vanadium	50	378	360	17.0 U					
Zinc	20	3680	2230	81.0	50.5	37.0	972	82.2	_5.0 U
Cyanide	10	10.0 U	10.0 U	140	10.0 U	10.0 U	10.0 U	50.0	70.0

SDGHANNA5 SDGHANNA5 SDGHANNA5 SDGHANNA5 SDGHANNA5 SDGHANNA5 SDGHANNA5 SDGHANNA5 HFQSXX7XXX94XX HFQSXX7XXX94XX HFQSXX7XXX94XX HFQSXX7XXX94XX HFQSXX7XXX94XX HFQSXX7XXX94XX Associated Method Blank: Associated Equipment Blank: Associated Field Blank:

Site: SUMP SEDIMENTS
U: not detected R R: unusable

Table 2
Validation / Summary Table

LOCATION: CL-108 CL-109
ISIS ID: HFCL108XXX94XX HFCL109XXX94XX
LAB NUMBER: 229003 226601
DATE SAMPLED: 10/13/94 10/11/94

ANALYTE	SOW-3/90 - II CRDL				
Aluminum	200	1210		15400	J
Antimony	60	38.0	UJ	38.0	ŪJ
Arsenic <sup>*</sup>	10	5.0	ŪJ	6.0	J
Barium	200	60.2	Ĵ	236	-
Beryllium	5	2.0	Ŭ	2.0	U
Cadmium	5	2.0	ŪJ	2.1	J
Calcium	5000	112000		171000	-
Chromium	10	5.0	U	27.8	
Cobalt	50	6.0	Ū	6.0	u
Copper	25	14.9	J	226	-
Iron	100	3940	J	23400	J
Lead	3	24.6	_	308	J
Magnesium	5000	4430	J	31700	•
Manganese	15	915	J	2010	J
Mercury	0.2	0.20	ŭ	0.40	•
Nickel	40	26.0	ŭ	26.0	u
Potassium	5000	31700	•	25200	•
Selenium	5	5.0	UJ	5.0	UJ
Silver	10	5.0	Ū	5.0	ŨĴ
Sodium	5000	34100	_	26300	
Thallium	10	5.0	UJ	5.0	UJ
Vanadium	50	17.0	ū	21.2	Ĵ
Zinc	20	135	-	1380	J
Cyanide	10	10.0	U	10.0	Ŭ
=======================================	******		====	=========	===

Associated Method Blank: SDGHANNA5 MBHANNA3
Associated Equipment Blank: HFQSXX7XXX94XX HFQSXX7XXX94XX
Associated Field Blank:

Site: SUMP SEDIMENTS

U: not detected R: unusable

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Aqueous Analysis (ug/L)

14-Apr-95

Table 1 Laboratory Report of Analysis

LOCATION: CL-107 ISIS ID: HFCL107XXX94XX LAB NUMBER: D229005 DATE SAMPLED: 10/13/94

RL	
5.0	5.0 UN
11.0	22.8 B
2.0	2.0 U*
5.0	5.0 U
3.0	3.0 U
0.2	0.20 U
5.0	5.0 UWN
5.0	5.0 UN
	5.0 11.0 2.0 5.0 3.0 0.2 5.0

Associated Method Blank: SDGHANNA5 Associated Equipment Blank: Associated Field Blank:

Site: SUMP LIQUIDS

Note: Inorganic Data - EPTOX Metals
U: not detected N: spike recovery not met B: less than CRDL \*: duplicate analysis not met W: post digestion spike not met

Table 2 Validation / Summary Table

LOCATION: CL-107 ISIS ID: HFCL107XXX94XX LAB NUMBER: D229005 DATE SAMPLED: 10/13/94

ANALYTE	RL	
arsenic	5.0	5.0 UJ
barium	11.0	22.8 J
cadmium	2.0	2.0 UJ
chromium	5.0	5.0 U
lead	3.0	3.0 U
mercury	0.2	0.20 U
selenium	5.0	5.0 UJ
silver	5.0	5.0 U

Associated Method Blank: SDGHANNA5 Associated Equipment Blank: Associated Field Blank:

Site: SUMP LIQUIDS
Note: Inorganic Data - EPTOX Metals
U: not detected J: estimated

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Aqueous Analysis

17-Apr-95

Table 1 Laboratory Report of Analysis

LAI DATE	LOCATION: ISIS ID: NUMBER: SAMPLED: ANALYZED:	QS-XX3 HFQSXX3XXX94XX 2226520 10/11/94 10/24/94	QS-XX4 HFQSXX4XXX94XX 2226521 10/11/94 10/24/94	QS-XX5 HFQSXX5XXX94XX 2226522 10/11/94 10/24/94
ANALYTE	RL			
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm sulfide, Reactive, ppm	0.01 212 1.0 1.0	- 0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Meth		TO		TO THE STREET STREET

Site: EQUIPMENT RINSATE
U: not detected

Table 1 Laboratory Report of Analysis

> LOCATION: CL-107 ISIS ID: HFCL107XXX94XX LAB NUMBER: 2228910 DATE SAMPLED: 10/13/94 DATE ANALYZED: 11/10/94

ANALYTE

RL

Corrosivity, inch/Year	0.01	0.01 U
Ignitability, Degrees F	212	>212
Cyanide, Reactive, ppm	1	1 ປ
sulfide, Reactive, ppm	1	1 U

Associated Method Blank: SDGHANNA5
Associated Equipment Blank: Associated Field Blank: -

Site: SUMP LIQUIDS
U: not detected

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Aqueous Analysis

14-Apr-95

Table 2
Validation / Summary Table

LOCATION: CL-107
ISIS ID: HFCL107XXX94XX
LAB NUMBER: 2228910
DATE SAMPLED: 10/13/94
DATE ANALYZED: 11/10/94

ANALYTE

RL

Corrosivity, inch/Year	0.01	0.01 U
Ignitability, Degrees F	212	>212
Cyanide, Reactive, ppm	1	1 U
sulfide, Reactive, ppm	1	1 Ū

Associated Method Blank: SDGHANNAS

Associated Equipment Blank:
Associated Field Blank:

\*

Site: SUMP LIQUIDS U: not detected

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	SS-101 DUP HFSS101XXX94XD 2225904 10/10/94 10/14/94	SS-101 HFSS101XXX94X 2225901 10/10/94 10/14/94	SS-102 X HFSS102XXX94 2225905 10/10/94 10/14/94	SS-103 XX HFSS103XXX94 2225906 10/10/94 10/14/94	SS-104 XX HFSS104XXX94: 2225907 10/10/94 10/14/94	SS-105 XX HFSS105XXX94X 2225908 10/10/94 10/14/94	SS-106 C HFSS106XXX94 2225909 10/10/94 10/14/94	SS-107 XX HFSS107XXX94XX 2225910 10/10/94 10/14/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 U U U U U U U U U U U U U U U U U U U	12 U U U U U U U U U U U U U U U U U U U	12 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	11 U	12 U		11	11 U
	 on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 84 5.00	1.00 83 5.00	1.00 91 5.00	1.00 86 5.00	1.00 89 5.00	1.00 88 5.00	1.00 87 5.00
Associated Met Associated Equipm Associated Fi Associated T	hod Blank: ent Blank: HFQ eld Blank:	P1198.D	P1198.D	P1198.D	P1198.D	P1198.D	P1198.D	P1198.D	P1198.D HFQSXX1XXX94XX

Site: SURFACE SOILS U: not detected B: blank contamination

J: estimated

Table 1 Laboratory Report of Analysis

		LOCATION ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: HFSS108XXX94XX : 2225911 : 10/10/94	SS-109 HFSS109XXX94 2226502 10/11/94 10/15/94	SS-110 XX HFSS110XXX94 2226501 10/11/94 10/15/94	2226519 10/11/94	4XD HFSS111XXX94 2226516 10/11/94	SS-112 4XX HFSS112XXX94) 2226515 10/11/94 10/18/94	SS-113 X HFSS113XXX94 2226514 10/11/94 10/18/94	SS-114 XX HFSS114XXX94XX 2226513 10/11/94 10/17/94
ANALYTE SOW-	-3/90 -	II CRQL	_							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloromethane 1,2-Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloroproper Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropane trans-1,3-Dichloroproper Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroeth Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	ne pene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	14 UUUUJB 14 74 14 14 14 14 14 14 14 14 14 14 14 14 14	14 U U U U U	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 12 13 14 15 16 17 18 16 17 17 18 19 19 11 11 12 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19	U 12	11	12 U U U U U U U U U U U U U U U U U U U	11 U
Sample Volum	Dilutio Percen	========= n Factor: t Solids: t (ml\a):	1.00 70 5.00	1.00 72 5.00	1.00 90 5.00	1.00 86 5.00	1.00 85 5.00	1.00 88 5.00	1.00 82 5.00	1.00 87 5.00
Associat Associated Associa	ted Meth Equipme ated Fie	od Blank:	P1198.D	P1217.D	P1217.D HFQSXX5XXX94XX - -	P1240.D HFQSXX5XXX94XX	P1240.D HFQSXX5XXX94XX	P1264.D	P1264.D	P1240.D HFQSXX4XXX94XX

Site: SURFACE SOILS
U: not detected B: blank contamination
J: estimated

### Volatile Organic Soil Analysis (ug/kg)

Carrier Se

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFSS115XXX94XD 2225913 10/10/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/15/94	SS-116 HFSS116XXX94) 2225914 10/10/94 10/14/94	SS-116 XX HFSS116XXX94X; 2225914 R 10/10/94 10/15/94	SS-117 K HFSS117XXX94X 2225918 10/10/94 10/17/94	SS-118 K HFSS118XXX94XX 2226505 10/11/94 10/17/94	SS-119 HFSS119XXX94XX 2225919 10/10/94 10/15/94	SS-120 K HFSS120XXX94XX 2225915 10/10/94 10/15/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane	10 10	11 U 11 U	11 U 11 U	10 U 10 U	10 U 10 U	18 U 18 U	17 U 17 U	12 U 12 U	11 U 11 U
Bromomethane Vinyl Chloride	10	11 0	11 U	10 U	10 U	18 U	17 Ŭ	12 0	11 0
Chloroethane	10	11 0	11 0	10 U	10 U	18 U	17 Ŭ	12 0	11 0
Methylene Chloride	10	3 JB	3 JB	7 JI		6 JB	60 B	3 JB	3 JB
Acetone	10	11 0	11 0	10 Ji		18 0	7 JB	12 0	11 0
Carbon Disulfide	10	11 Ŭ	11 Ŭ	1 1	10 Ŭ	18 Ŭ	17 U	12 Ŭ	11 Ŭ
1,1-Dichloroethene	10	11 Ŭ	11 Ŭ	10 Ŭ	10 Ū	18 U	17 Ū	12 Ū	11 Ŭ
1.1-Dichloroethane	10	11 Ū	11 Ŭ	4 J	1 J	18 U	17 U	12 U	11 Ŭ
1,2-Dichloroethene (total)	10	11 Ŭ	11 Ŭ	i j	10 Ŭ	18 U	17 Ū	12 Ū	11 Ŭ
Chloroform	10	11 Ū	11 Ū	10 Ū	10 Ū	18 U	17 Ū	12 U	11 U
1.2-Dichloroethane	10	11 Ū	11 Ū	10 Ū	10 U	18 U	17 U	12 U	11 U
2-Butanone	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U
1,1,1-Trichloroethane	10	11 U	11 ປ	3 J	1 J	18 U	17 U	12 U	11 U
Carbon Tetrachloride	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U
Bromodichloromethane	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U
1,2-Dichloropropane	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U
cis-1,3-Dichloropropene	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U
Trichloroethene	10	11 U	11 U	, 10 U	10 U	18 U	17 U	12 U	11 U
Dibromochloromethane	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U
1,1,2-Trichloroethane	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U 11 U
Benzene	10	11 U	11 U	10 U	10 U	18 U	17 U	12 U	,, ,
trans-1,3-Dichloropropene	10	11 U	11 U	10 U	10 U 10 U	18 U 18 U	17 U 17 U	12 U 12 U	11 U 11 U
Bromoform	10	11 U 11 U	11 U 11 U	10 U 10 U	10 U	18 U 18 U	17 U	12 U 12 U	11 U
4-Methyl-2-Pentanone	10 10	11 U 11 U	11 U	10 U	10 U	18 U	17 U	12 U	11 U
2-Hexanone	10	11 0	11 U	6 1	2 J	18 U	17 U	12 U	11 1
Tetrachloroethene 1,1,2,2-Tetrachloroethane	10	11 0	11 0	10 Ü	10 บั	18 U	17 U	12 0	11 0
Toluene	10	11 0	11 0	5 1	žJ	18 Ŭ	17 Ŭ	12 Ŭ	11 Ŭ
Chlorobenzene	10	11 Ŭ	11 Ŭ	10 Ŭ	10 Ū	18 U	17 Ŭ	12 Ū	11 Ŭ
Ethylbenzene	10	11 Ŭ	11 Ŭ	3 1	10 U	18 U	17 Ŭ	12 Ŭ	11 Ŭ
Styrene	iŏ	11 Ŭ	11 Ŭ	10 Ŭ	10 U	18 · U	17 Ū	12 Ū	11 Ū
Total Xylenes	10	11 U	11 Ū	3 J	10 U	18 U	17 U	12 U	11 Ū
	:========= on Factor:	1.00	1.00	1.00		1.00	1.00	======================================	1.00
	nt Solids:	88	88	95	95	56	59	82	87
Sample Volume\Weigh		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Janpie Witane (Meign	/ /3/•		2.50						
Associated Meth Associated Equipme Associated Fie Associated Tr	ent Blank: HFG eld Blank:	P1217.D RSXX4XXX94XX HF - -	P1217.D QSXX4XXX94XX HF - -	P1198.D QSXX4XXX94XX I - -	P1217.D HFQSXX4XXX94XX HI	P1240.D FQSXX4XXX94XX H - -	P1240.D FQSXX5XXX94XX HF - -	P1217.D QSXX4XXX94XX HI - -	P1217.D FQSXX4XXX94XX - -

Site: SURFACE SOILS

U: not detected B: blank contamination

J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: HFSS121XXX94 : 2226504 : 10/11/94	SS-122 XXX HFSS122XXX9 2225916 10/10/94 10/15/94	2226503 10/11/9	94XX HFSS124XXX 2225917 4 10/10/94	2225920 4 10/10/94
ANALYTE SOW-3/9	0 - II CRQL					
Chloromethane Bromomethane	10 10 10	11 L 11 L 11 L	j 1 <u>2</u>	U 11 U 11 U 11	U 12 U 12 U 12	U 12 U U 12 U U 12 U
Vinyl Chloride Chloroethane Methylene Chloride	10 10 10	11 L		U 11 JB 3	U 12 JB 3	U 12 U JB 2 JB
Acetone Carbon Disulfide	10 10	11 u	J 12	U 11 U 11	U 12 U 12	U 12 U U 12 U
1,1-Dichloroethene 1,1-Dichloroethane	10 10	11 0	12	Ŭ 11 U 11	U 12	Ŭ 12 Ŭ U 12 Ŭ
1,2-Dichloroethene (total Chloroform	10 10	11 u 11 u	J 12 J 12	U 11 U 11	U 12 U 12	U 12 U U 12 U
1,2-Dichloroethane 2-Butanone	10 10	11 u 11 u	j 1 <u>2</u>	U 11 U 11	U 12 U 12	U 12 U 2 J
1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane	10 10 10	11 u 11 u 11 u	j <u>1</u> 2	U 11 U 11 U 11	U 12 U 12 U 12	U 12 U 12 U U 12 U
1,2-Dichloropropane cis-1,3-Dichloropropene	10 10 10	11 u	12	Ŭ 11 U 11	U 12 U 12	U 12 U U 12 U
Trichloroethene Dibromochloromethane	10 10	11 U	j 1 <u>2</u>	U 11 U 11	U 12 U 12	U 12 U 12 U
1,1,2-Trichloroethane Benzene	10 10	11 U 11 U 11 U	12	U 11 U 11 U 11	U 12 U 12 U 12	U 12 U U 12 U U 12 U
trans-1,3-Dichloropropend Bromoform 4-Methyl-2-Pentanone	e 10 10 10	11 U 11 U 11 U	J 12	U 11 U 11	U 12 U 12	U 12 U U 12 U
2-Hexanone Tetrachloroethene	10 10	11 U 11 U	J 12 J 12	U 11 U 11	U 12 U 12	U 12 U U 12 U
1,1,2,2-Tetrachloroethand Toluene	10	11 U	j 1 <u>2</u>	U 11 U 11 U 11	U 12 U 12 U 12	U 12 U 12 U U 12 U
Chlorobenzene Ethylbenzene Styrene	10 10 10	11 L 11 L 11 L	12	U 11 U 11 U 11	U 12 U 12	U 1 JB U 12 U
Total Xylenes	10	11 ŭ	J · 12	ŭ 11	U 12	Ŭ 12 Ŭ
Di	lution Factor: ercent Solids:	1.00 91 5.00	1.00 86 5.00	1.00 91 5.00	1.00 82 5.00	1.00 81 5.00
Associated Equation Associated	Method Blank: uipment Blank: HF d Field Blank: ed Trip Blank:	P1217.D QSXX5XXX94XX - -	P1217.D HFQSXX4XXX94XX - -	P1217.D HFQSXX5XXX94XX - -	P1217.D HFQSXX4XXX94XX - -	P1240.D HFQSXX4XXX94XX

U: not detected B: blank contamination

J: estimated

# Volatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 'Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	10/10/94	SS-101 HFSS101XXX94XX 2225901 10/10/94 10/14/94	SS-102 ( HFSS102XXX94X) 2225905 10/10/94 10/14/94	SS-103 X HFSS103XXX94XX 2225906 10/10/94 10/14/94	SS-104 HFSS104XXX94XX 2225907 10/10/94 10/14/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/14/94	SS-106 HFSS106XXX94X 2225909 10/10/94 10/14/94	SS-107 X HFSS107XXX94XX 2225910 10/10/94 10/14/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethene 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	12 12 12 12 12 12 12 12 12 12 12 12 12 1	11 U U 11 U U U 11 U U U 11 U U U U U 11 U U U U I1 U U I1 U U I1 U U U I1 U U U II U U U II U U U II U U U II U U U U II U	12 12 12 12 12 12 12 12 12 12 12 12 12 1	11	11 UU 11 UU UU UU 11 UU UU 11 UU UU UU 11 UU UU	11
Diluti	on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 84 5.00	1.00 83 5.00	1.00 91 5.00	1.00 86 5.00	1.00 89 5.00	1.00 88 5.00	1.00 87 5.00
Associated Met Associated Equipm Associated Fi Associated T	ent Blank: HFG eld Blank:	P1198.D SXX1XXX94XX HF	P1198.D QSXX1XXX94XX HI - -	P1198.D FQSXX1XXX94XX HI	P1198.D FQSXX1XXX94XX HF	P1198.D QSXX1XXX94XX HF - -	P1198.D QSXX1XXX94XX HFG	P1198.D QSXX1XXX94XX H	P1198.D FQSXX1XXX94XX - -

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFSS108XXX94XX 2225911 10/10/94	SS-109 HFSS109XXX94X 2226502 10/11/94 10/15/94	SS-110 XX HFSS110XXX94 2226501 10/11/94 10/15/94	SS-111 DUP XX HFSS111XXX94 2226519 10/11/94 10/17/94		\$S-112 XX HFSS112XXX94XX 2226515 10/11/94 10/18/94	SS-113 ( HFSS113XXX94) 2226514 10/11/94 10/18/94	SS-114 XX HFSS114XXX94XX 2226513 10/11/94 10/17/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropene Trichloroethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	14 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	14 UU	11 U 11 U 11 U 11 U 11 U 11 U	12 U U 12 U U 12 U U U U	12 U U U U U U U U U U U U U U U U U U U	11 U U U 11 U U U 11 U U U 11 U U U 11 U U U I1 U U U II U U U II U U U II U U U U	12 12 12 12 12 12 12 12 12 12 12 12 12 1	11 Ū 11 U 11 U 11 U 11 U 11 U
Diluti	on Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	11 U 1.00
Perce Sample Volume\Weig	nt Solids: ht (ml\g):	70 5.00	72 5.00	90 5.00	86 5.00	85 5.00	88 5.00	82 5.00	87 5.00
Associated Met · Associated Equipm Associated Fi Associated T	ent Blank: HFG eld Blank:	P1198.D SXX1XXX94XX HF - -	P1217.D GSXX5XXX94XX H - -	P1217.D IFQSXX5XXX94XX - -	P1240.D HFQSXX5XXX94XX - -	P1240.D HFQSXX5XXX94XX - -	P1264.D HFQSXX5XXX94XX HI - -	P1264.D QSXX5XXX94XX I	P1240.D HFQSXX4XXX94XX - -

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Volatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	SS-115 DUP HFSS115XXX94XD 2225913 10/10/94 10/15/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/15/94	SS-116 HFSS116XXX94X 2225914 10/10/94 10/14/94	SS-117 XX HFSS117XXX94X 2225918 10/10/94 10/17/94	SS-118 X HFSS118XXX94XX 2226505 10/11/94 10/17/94	SS-119 ( HFSS119XXX94XX 2225919 10/10/94 10/15/94	SS-120 HFSS120XXX94X 2225915 10/10/94 10/15/94	SS-121 K HFSS121XXX94XX 2226504 10/11/94 10/15/94
ANALYTE SOW-3/90 -	II CRQL						•		
Chloromethane	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
Bromomethane	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
Vinyl Chloride	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
Chloroethane	10	11 U	11 U	10 U	18 U	17 U	12 U	. 11 U	11 U
Methylene Chloride	10	11 U 11 U	11 U	10 U	18 U	60 U	12 U	11 U	11 U
Acetone	10	11 U 11 U	. 11 U 11 U	10 UJ		17 UJ	12 U	11 U	11 U
Carbon Disulfide	10 10	11 0	: · ·	1 J	18 U	17 U 17 U	12 U 12 U	11 U 11 U	11 0
1,1-Dichloroethene	10 10	11 0	11 U 11 U	10 U	18 U	17 U	12 U	11 U 11 U	11 U
1,1-Dichloroethane 1,2-Dichloroethane (total)	10	11 0	11 0	4 1	18 U 18 U	17 U	12 U	11 11	11 0
Chloroform	10	11 0	11 0	10 บั	18 U	17 U	12 0	11 0	11 0
1,2-Dichloroethane	10	11 Ŭ	11 0	10 U	18 U	17 Ŭ	12 Ŭ	11 0	11 Ŭ
2-Butanone	10	· 11 Ŭ	11 ŭ	10 U	18 Ŭ	17 Ŭ	12 Ŭ	11 0	11 0
1,1,1-Trichloroethane	iŏ	11 Ŭ	ii ŭ	3 1	18 Ŭ	17 Ŭ	12 Ŭ	11 ŭ	11 Ŭ
Carbon Tetrachloride	10	11 Ŭ	ii ŭ	10 Ŭ	18 Ŭ	17 Ŭ	12 Ŭ	11 Ŭ	ii ŭ
Bromodichloromethane	10	11 Ŭ	11 Ŭ	10 Ū	18 Ū	17 Ū	12 Ŭ	11 Ū	11 Ŭ
1,2-Dichloropropane	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
cis-1,3-Dichloropropene	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
Trichloroethene	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
Dibromochloromethane	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 Ū
1,1,2-Trichloroethane	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
Benzene	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
trans-1,3-Dichloropropene	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
Bromoform	10	11 U	11 U	10 U	18 U	17 U	12 U	11 U	11 U
4-Methyl-2-Pentanone	10	11 U	11 U	10 UJ		17 U	12 U	11 U	11 U
2-Hexanone	10	11 U	11 U	10 UJ		17 U 17 U	12 U	11 U	11 U
Tetrachloroethene	10 10	11 U 11 U	11 U 11 U	6 J 10 UJ	18 U 18 U	17 U 17 U	12 U 12 U	11 U 11 U	11 U 11 U
1,1,2,2-Tetrachloroethane Toluene	10	11 U	11 0	5 1	18 U	17 U	12 U	11 0	11 0
Chlorobenzene	10	11 0	11 0	10 03		17 U	12 U	11 11	11 0
Ethylbenzene	10	11 0	11 ŭ	3 J	18 0	17 Ŭ	12 U	11 0	11 0
Styrene	10	ii ŭ	11 Ŭ	10 ŬJ		17 Ŭ	12 Ŭ	ii ŭ	11 Ŭ
Total Xylenes	10	11 Ŭ	11 Ŭ	3 J	18 U	17 Ū	12 Ŭ	. 11 Ŭ	11 Ŭ
======================================	on Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	ent Solids:	88	88	95	56	59	82	87	91
Sample Volume\Weig		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
anima a tatalla luci 2	10/*								
Associated Met		P1217.D	P1217.D	P1198.D	P1240.D	P1240.D	P1217.D	P1217.D	P1217.D
Associated Equipm		SXX4XXX94XX HF	QSXX4XXX94XX HF	QSXX4XXX94XX	IFQSXX4XXX94XX H	IFQSXX5XXX94XX HI	QSXX4XXX94XX HF	QSXX4XXX94XX H	FQSXX5XXX94XX
Associated Fi		. •	•	-	•	-	•	•	•
Associated T	LID RISUK:	•	-	•	•	-	-	•	-

Table 2
Validation / Summary Table

		LOCATIO ISIS I LAB NUMBE DATE SAMPLE DATE ANALYZE	D: HFSS122XXX R: 2225916 D: 10/10/9	94XX HFSS1; 22; 4 10;	s-123 23xxx94x 26503 /11/94 /15/94	SS-124 X HFSS124XXX 2225917 10/10/94 10/15/94	2225 <b>9</b> 2 10/10/	X94XX 0 94
ANALYTE	SOW-3/90 -	II CRQL						
Chloromethane		10	12	U	11 U		U 12	
Bromomethane		10	12	U	11 U	12	U 12	
Vinyl Chloride	!	10	12	U	11 U	12	U 12	
Chloroethane		10	12	U	11 .U	12	U 12	
Methylene Chlo	ride	10	12	U ·	11 U	12	U 12	
Acetone		10	12	U	11 U	12	U 12	
Carbon Disulfi		10	12	U	11 U	12	U 12	
1,1-Dichloroet		10	12	U	11 U	12	U 12	
1,1-Dichloroet		10	12	U	11 U	12	U 12	
1,2-Dichloroet	hene (total)	10	12	U	11 U	12	U 12	
Chloroform		10	12	Ü	11 U	12	U 12	
1,2-Dichloroet	hane	10	12	U	11 U	12	U 12	
2-Butanone		10	12	U	11 U	12	U 2	
1,1,1-Trichlor		10	12	U	11 U	12	U 12	
Carbon Tetrach		10	12	U	11 U	12	U 12	
Bromodichlorom		10	12	U.	11 U	12	U 12	
1,2-Dichloropr		10	12	U	11 U	12	U 12	
cis-1,3-Dichlo	ropropene	10	12	U U	11 U	12	U 12	
Trichloroethen		10 10	12 12	U	•	12 12	U 12 U 12	
Dibromochlorom				•	•			
1,1,2-Trichlor	oetnane	10 10	12	Ü	11 U 11 U	12	U 12	
Benzene	Lanannanana	10	12 12	U U	11 U 11 U	12	U 12	
trans-1,3-Dich	Coropropene	10	12	ŭ	11 0	12 12	U 12 U 12	
Bromoform 4-Methyl-2-Per	*-nono	10	12	Ü	11 0	12	U 12	
2-Hexanone	itanone	10	12	Ü	11 0	12	U 12	
Tetrachloroeth		10	12	ŭ	11 0	12	U 12	
1,1,2,2-Tetrac		10	12	ŭ	11 0	12	U 12	
Toluene	intoi vetilane	10	12	ŭ	11 Ŭ	12	U 12	
Chlorobenzene		10	12	ับ	11 ŭ	12	Ŭ 12	
Ethylbenzene		10	12	ŭ	11 ŭ	12	Ŭ 12	
Styrene		10	12	ŭ	ii ŭ	12	Ŭ 12	
Total Xylenes		10	12	ŭ	11 ŭ	12	Ū 12	
=======================================	=========		:=========					_
	Diluti	on Factor:	1.00		1.00	1.00	1.00	1
	Perce	nt Solids:	86	(	91	82	81	
Samp	le Volume\Weig	ht (ml\g):	5.00	5.0	00	5.00	5.00	
Ass	Associated Met ociated Equipm Associated Fi Associated T	ent Blank: I eld Blank:	P1217.D HFQSXX4XXX94XX -	P1: HFQSXX5XX	217.D X94XX H - -	P1217.D FQSXX4XXX94XX -	P1240. HFQSXX4XXX94X	

Table 1 Laboratory Report of Analysis

ANALYTE COL 7/00	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-101 DUP HFSS101XXX94XD 2225904 10/10/94 10/13/94 11/07/94	SS-101 HFSS101XXX94XX 2225901 10/10/94 10/13/94 11/07/94	SS-102 HFSS102XXX94XX 2225905 10/10/94 10/13/94 11/07/94	SS-103 HFSS103XXX94XX 2225906 10/10/94 10/13/94 11/07/94	SS-104 HFSS104XXX94XX 2225907 10/10/94 10/13/94 11/07/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/13/94 11/07/94	SS-106 HFSS106XXX94XX 2225909 10/10/94 10/13/94 11/07/94	SS-107 HFSS107XXX94XX 2225910 10/10/94 10/13/94 11/16/94
ANALYTE SOW-3/90	· II CRQL				•				
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene 1sophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330 330 330 330	400 400 400 400 400 400 400 400	400 400 400 400 400 400 400 400 400 400	400 400 400 400 400 400 400 400 400 400	370 U 370 U	390 U 390 U	370 U 370 U	380 U U U U U U U U U U U U U U U U U U U	380 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene ===================================	330 330 330 	400 U 400 U 400 U	400 U 400 U 400 U	400 U 400 U 400 U	370 U 370 U 370 U	390 U 390 U 390 U	370 U 370 U 370 U	380 U 380 U 380 U	380 U 380 U 380 U

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER DATE SAMPLED DATE EXTRACTED DATE ANALYZED	: HFSS101XXX94XI : 2225904 : 10/10/94 : 10/13/94	SS-101  HFSS101XXX94X3 2225901 10/10/94 10/13/94 11/07/94	SS-102 X HFSS102XXX94XX 2225905 10/10/94 10/13/94 11/07/94	SS-103 ( HFSS103XXX94X) 2225906 10/10/94 10/13/94 11/07/94	SS-104 ( HFSS104XXX94XX 2225907 10/10/94 10/13/94 11/07/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/13/94 11/07/94	SS-106 HFSS106XXX94XX 2225909 10/10/94 10/13/94 11/07/94	SS-107 HFSS107XXX94XX 2225910 10/10/94 10/13/94 11/16/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorobenzene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	800 330 800 800 330 330 330 330	950 400 950 400 400 400 400 950 400 950 400 950 400 950 400 400 180 400 120 400 120 400 120 400 120 400 120 400 400 400 400 400 400 400 400 400 4	950 U 950 U 950 U 400 U 190 J 210 J 240 J 470 U 120 J 52 J 600 U 400 U 70 J	960. U 960 U 960 U 400 U	880 U 880 U 880 U 370 U 370 U 370 U 370 U 880 U 880 U 370 U	930 U 930 U 930 U 930 U 390 U 390 U 390 U 930 U 930 U 930 U 930 U 930 U 930 U 930 U 930 U 170 J 210 J 390 U 170 J 210 J 390 U 170 J 210 J 390 U 390 U 390 U 390 U	900 U 900 U 900 U 370 U 370 U 370 U 370 U 370 U 900 U 900 U 900 U 370 U	910 U 380 U 910 U 910 U 380 U 380 U 380 U 380 U 910 U 910 U 910 U 910 U 380 U 380 U 910 U 380 U	920 U U U U U U U U U U U U U U U U U U U
	on Factor: nt Solids:	1.00 84 30.0	1.00 84 30.0	1.00 83 30.0	1.00 91 30.0	1.00 86 30.0	1.00 89 30.0	1.00 88 30.0	1.00 87 30.0
Associated Met Associated Equipm Associated Fi	ent Blank: HF	S1268.D QSXX1XXX94XX H	S1268.D FQSXX1XXX94XX H -	S1268.D FQSXX1XXX94XX HF	S1268.D FQSXX1XXX94XX HI	S1268.D FQSXX1XXX94XX HF	S1268.D SXX1XXX94XX HFG	S1268.D SXX1XXX94XX HF	\$1268.D GSXX1XXX94XX -

U: not detected E: interference D: diluted result

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 10/10/94 10/13/94 11/18/94	SS-109 HFSS109XXX94XX 2226502 10/11/94 10/14/94 11/09/94	SS-109 HFSS109XXX94XX 2226502 R 10/11/94 10/14/94 11/14/94	SS-110 HFSS110XXX94XX 2226501 10/11/94 10/14/94 11/14/94	SS-111 DUP HFSS111XXX94XD 2226519 10/11/94 10/14/94 11/15/94	SS-111 DUP HFSS111XXX94XD 2226519 R 10/11/94 10/14/94 11/16/94	SS-111 HFSS111XXX94XX 2226516 10/11/94 10/14/94 11/15/94	SS-111 HFSS111XXX94XX 2226516 R 10/11/94 10/14/94 11/16/94
ANALYTE SOW-3/90	- II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate	330 330 330 330 330 330 330 330 330 330	480 U U U U U U U U U U U U U U U U U U U	4600 U 46	4600 U	330 U 330 U	390 U	390 U	390 U	390 U
Acenaphthylene 2,6-Dinitrotoluene	330 330	480 U 480 U	4600 U 4600 U	4600 U 4600 U	39 J 330 U	390 U 390 U	390 U 390 U	44 J 390 U	46 J 390 U

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 10/10/94 10/13/94 11/18/94	SS-109 K HFSS109XXX94 2226502 10/11/94 10/14/94 11/09/94	SS-109 XX HFSS109XXX9 2226502 R 10/11/94 10/14/94 11/14/94	SS-110 4XX HFSS110XXX9 2226501 10/11/94 10/14/94 11/14/94	2226519 10/11/94 10/14/94	4XD HFSS111XXX94) 2226519 R 10/11/94 10/14/94	SS-111 ID HFSS111XXX94 2226516 10/11/94 10/14/94 11/15/94	SS-111 XX HFSS111XXX94XX 2226516 R 10/11/94 10/14/94 11/16/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate	800 330 800 800 330 330 330 330 800 800	1100 U 480 U 1100 U 480 U 480 U 480 U 480 U 1100 U 1100 U 1100 U 480 U	11000 U 3700 J 11000 U 11000 U 4600 U 4600 U 4600 U 700 J 11000 U 4600 U 4600 U 3400 U	3600 11000 11000 4600 4600 4600 4600 11000 11000 4600 46	J 330 U 800 U 800 U 330 U 330 U 330 U 330 U 800 U 800 U 800 U 800 U 800 U 800 U 330 U 330 U 330 U 330 U 330 U 330	U 43 U 930 U 930 U 61 U 390 U 390 U 390 U 555 U 400 U 930 U 930 U 390 U 390 U 390 U 390 U 390 U 390	U 930 U J 390 U U 930 U U 930 U U 930 U U 390 U U 390 U U 390 U J 49 J J 930 U U 390 U	940 U 56 J 940 U 940 U 88 J 390 U 390 U 82 J 270 J 940 U 390 U 390 U 760 J 69 J 390 U	940 U 51 J 940 U 940 U 78 J 390 U 390 U 75 J 940 U 940 U 390 U 390 U 390 U 750 J 63 J 390 U
Fluoranthene Pyrene Butylbenzylphthalate	330 330 330	250 J 340 J 480 U	8000 9700 4600 U	7300 8200 4600 U	300	J 470 J 1400 U 390	640 1000 U 390 U	760 2400 390 U	980 1700 390 U
3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene	330 330 330	480 U 170 J 260 J	4600 U 7600 8500	7800 8100	150 230	J 330 J 410	U 390 U J 290 J 380 J	390 U 580 700	390 U 500 630
bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	330 330 330 330 330 330 330	130 J 480 U 230 J 180 J 150 J 81 J 480 U	4600 U 4600 U 12000 13000 15000 8300 1500 J		U 330 220 J 150 140 110	JB 210 U 52 J 370 J 260 J 220 J 140 U 390	JB 160 JE J 58 J J 360 J J 290 J J 260 J J 92 J U 390 U	300 Ji 390 U 450 380 J 360 J 220 J 390 U	3 240 JB 390 U 610 350 J 410 150 J 41 J
Benzo(g,h,i)perylene	330	82 J	5300	5200	88	J 110	J 58 J	150 J	100 J
	on Factor: nt Solids:	1.00 70 30.0	10.0 72 30.0	10.0 72 30.0	1.00 100 30.0	1.00 86 30.0	1.00 86 30.0	1.00 85 30.0	1.00 85 30.0
Associated Met Associated Equipm Associated Fi	ment Blank: HFC	S1268.D SXX1XXX94XX HI	S1316.D FQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D FQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX -

D: diluted result

Table 1 Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-112 HFSS112XXX94XX 2226515 10/11/94 10/14/94 11/15/94	SS-113 HFSS113XXX94XX 2226514 10/11/94 10/14/94 11/15/94	SS-114 HFSS114XXX94XX 2226513 10/11/94 10/14/94 11/15/94	SS-115 DUP HFSS115XXX94XD 2225913 10/10/94 10/13/94 11/08/94	SS-115 DUP HFSS115XXX94XD 2225913 R 10/10/94 10/13/94 11/18/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/13/94 11/08/94	SS-115 HFSS115XXX94XX 2225912 R 10/10/94 10/13/94 11/18/94	SS-116 HFSS116XXX94XX 2225914 10/10/94 10/13/94 11/08/94
ANALIE 30#-3/70	II CVAL			•					
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2-4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-6,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330 330 330 330	760 U	8100 U 8100 U	380 U	380 U 380 U 38	380 U 380 U 38	380 U	380 U 380 U 38	1800 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330 	760 U 120 J 760 U	8100 U 8100 U 8100 U	380 U 120 J 380 U	380 U 380 U 380 U	380 U 380 U 380 U	380 U 380 U 380 U	380 U 380 U 380 U	1800 U 1800 U 1800 U

U: not detected E: interference D: diluted result

Table 1 Laboratory Report of Analysis

ANALYTE 2001 7 (00	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/14/94	SS-113 ( HFSS113XXX94X 2226514 10/11/94 10/14/94 11/15/94	SS-114 X HFSS114XXX94) 2226513 10/11/94 10/14/94 11/15/94	SS-115 DUP XX HFSS115XXX94) 2225913 10/10/94 10/13/94 11/08/94	SS-115 DUP KD HFSS115XXX94XD 2225913 R 10/10/94 10/13/94 11/18/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/13/94 11/08/94	SS-115 HFSS115XXX94) 2225912 R 10/10/94 10/13/94 11/18/94	SS-116 XX HFSS116XXX94XX 2225914 10/10/94 10/13/94 11/08/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
Acenaphthene	330	83 J	1500 J	380 U	380 U	380 U	380 U	380 U	1800 U
2,4-Dinitrophenol	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
4-Nitrophenol	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
Dibenzofuran	330	110 J	1100 J	64 J	380 บ 380 บ	380 U	39 J 380 U	380 บ 380 บ	1800 U 1800 น
2,4-Dinitrotoluene	330	760 U 760 U	8100 U	380 U 380 U	380 U 380 U	380 U 380 U	380 U 380 U	380 U	1800 U 1800 U
Diethylphthalate	330 330	760 U 760 U	8100 U 8100 U	380 U 380 U	380 U	380 U	380 U	380 U	1800 U
4-Chlorophenyl-phenylether	330 330	760 U 95 J	2100 J	380 U	380 U	380 U	380 U	380 U	1800 U
Fluorene	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
4-Nitroaniline	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	790 J
4-Bromophenyl-phenylether	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 U
Hexach lorobenzene	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 U
Pentachlorophenol	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
Phenanthrene	330	790	14000	220 J	210 J	200 J	260 J	220 J	510 J
Anthracene	330	200 J	3300 J	380 U	380 U	380 U	40 J	380 U	1800 U
Carbazole	330	760 U	1200 J	380 U	380 U	380 U	380 U	380 U	1800 U
Di-n-butylphthalate	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 บ
Fluoranthene	330	940	12000	94 J	530	500	610	520	270 J
Pyrene	330	2000	24000	880	<i>7</i> 50	670	860	700	660 J
Butylbenzylphthalate	330	760 U	8100 U	170 J	380 U	380 U	380 U	380 U	1800 U
3,3'-Dichlorobenzidine	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 U
Benzo(a)Anthracene	330	540 J	4900 J	200 J	460	400	520	400	1800 U
Chrysene	<b>33</b> 0	700 J	5400 J	370 J	640	580	740	570	290 J
bis(2-Ethylhexyl)phthalate	330	280 JB	8100 U	76 JI		82 J	93 J	76 J	270 J
Di-n-octylphthalate	330	760 U	8100 U 2000 J	150 J 330 J	380 U 660	380 U 630	380 U 780	380 U 670	1800 U 270 J
Benzo(b)Fluoranthene	330 730	380 J 400 J	2000 J	330 J	660	440	630	440	1800 U
Benzo(k)Fluoranthene	330 330	260 J	1600 J	210 J	600	460	700	500	1800 U
Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	330 330	180 J	950 J	310 J	300 J	210 J	330 J	240 J	220 J
Dibenz(a,h)Anthracene	330	760 U	8100 U	380 U	380 U	40 J	380 U	44 J	1800 U
Benzo(g,h,i)perylene	330	120 J	8100 U	320 J	270 J	180 J	320 J	210 J	1800 U
=======================================	:==========								
	on Factor:	2.00	20.0	1.00	1.00	1.00	1.00	1.00	5.00
	nt Solids:	_ 88	82	87	88	88	88	88	95
Sample Volume\Weig	nt (ml\g):	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Associated Met Associated Equipm		S1316.D SXX5XXX94XX HI	S1316.D FQSXX5XXX94XX H	S1316.D FQSXX4XXX94XX	S1268.D HFQSXX4XXX94XX	S1268.D HFQSXX4XXX94XX HI	S1268.D FQSXX4XXX94XX HF	S1268.D QSXX4XXX94XX H	S1268.D IFQSXX4XXX94XX
Associated Fi			-	-	-	-	-	i <del>-</del>	-

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 10/10/94 10/13/94 11/18/94	SS-109 HFSS109XXX94XX 2226502 10/11/94 10/14/94 11/09/94	SS-109 HFSS109XXX94XX 2226502 R 10/11/94 10/14/94 11/14/94	SS-110 HFSS110XXX94XX 2226501 10/11/94 10/14/94 11/14/94	SS-111 DUP HFSS111XXX94XD 2226519 10/11/94 10/14/94 11/15/94	SS-111 DUP HFSS111XXX94XD 2226519 R 10/11/94 10/14/94 11/16/94	SS-111 HFSS111XXX94XX 2226516 10/11/94 10/14/94 11/15/94	SS-111 HFSS111XXX94XX 2226516 R 10/11/94 10/14/94 11/16/94
ANALYTE SOW-3/90	- II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate	330 330 330 330 330 330 330 330 330 330	480 U U U U U U U U U U U U U U U U U U U	4600 U 46	4600 U	330 U 330 U	390 U	390 U	390 U	390 U
Acenaphthylene 2,6-Dinitrotoluene	330 330	480 U 480 U	4600 U 4600 U	4600 U 4600 U	39 J 330 U	390 U 390 U	390 U 390 U	44 J 390 U	46 J 390 U

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 10/10/94 10/13/94 11/18/94	SS-109 K HFSS109XXX94 2226502 10/11/94 10/14/94 11/09/94	SS-109 XX HFSS109XXX9 2226502 R 10/11/94 10/14/94 11/14/94	SS-110 4XX HFSS110XXX9 2226501 10/11/94 10/14/94 11/14/94	2226519 10/11/94 10/14/94	4XD HFSS111XXX94) 2226519 R 10/11/94 10/14/94	SS-111 ID HFSS111XXX94 2226516 10/11/94 10/14/94 11/15/94	SS-111 XX HFSS111XXX94XX 2226516 R 10/11/94 10/14/94 11/16/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate	800 330 800 800 330 330 330 330 800 800	1100 U 480 U 1100 U 480 U 480 U 480 U 480 U 1100 U 1100 U 1100 U 480 U	11000 U 3700 J 11000 U 11000 U 4600 U 4600 U 4600 U 700 J 11000 U 4600 U 4600 U 3400 U	3600 11000 11000 4600 4600 4600 4600 11000 11000 4600 46	J 330 U 800 U 800 U 330 U 330 U 330 U 330 U 800 U 800 U 800 U 800 U 800 U 800 U 330 U 330 U 330 U 330 U 330 U 330	U 43 U 930 U 930 U 61 U 390 U 390 U 390 U 555 U 400 U 930 U 930 U 390 U 390 U 390 U 390 U 390 U 390	U 930 U J 390 U U 930 U U 930 U U 930 U U 390 U U 390 U U 390 U J 49 J J 930 U U 390 U	940 U 56 J 940 U 940 U 88 J 390 U 390 U 82 J 270 J 940 U 390 U 390 U 760 J 69 J 390 U	940 U 51 J 940 U 940 U 78 J 390 U 390 U 75 J 940 U 940 U 390 U 390 U 390 U 750 J 63 J 390 U
Fluoranthene Pyrene Butylbenzylphthalate	330 330 330	250 J 340 J 480 U	8000 9700 4600 U	7300 8200 4600 U	300	J 470 J 1400 U 390	640 1000 U 390 U	760 2400 390 U	980 1700 390 U
3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene	330 330 330	480 U 170 J 260 J	4600 U 7600 8500	7800 8100	150 230	J 330 J 410	U 390 U J 290 J 380 J	390 U 580 700	390 U 500 630
bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	330 330 330 330 330 330 330	130 J 480 U 230 J 180 J 150 J 81 J 480 U	4600 U 4600 U 12000 13000 15000 8300 1500 J		U 330 220 J 150 140 110	JB 210 U 52 J 370 J 260 J 220 J 140 U 390	JB 160 JE J 58 J J 360 J J 290 J J 260 J J 92 J U 390 U	300 Ji 390 U 450 380 J 360 J 220 J 390 U	3 240 JB 390 U 610 350 J 410 150 J 41 J
Benzo(g,h,i)perylene	330	82 J	5300	5200	88	J 110	J 58 J	150 J	100 J
	on Factor: nt Solids:	1.00 70 30.0	10.0 72 30.0	10.0 72 30.0	1.00 100 30.0	1.00 86 30.0	1.00 86 30.0	1.00 85 30.0	1.00 85 30.0
Associated Met Associated Equipm Associated Fi	ment Blank: HFC	S1268.D SXX1XXX94XX HI	S1316.D FQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D FQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX -

D: diluted result

Table 1 Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-112 HFSS112XXX94XX 2226515 10/11/94 10/14/94 11/15/94	SS-113 HFSS113XXX94XX 2226514 10/11/94 10/14/94 11/15/94	SS-114 HFSS114XXX94XX 2226513 10/11/94 10/14/94 11/15/94	SS-115 DUP HFSS115XXX94XD 2225913 10/10/94 10/13/94 11/08/94	SS-115 DUP HFSS115XXX94XD 2225913 R 10/10/94 10/13/94 11/18/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/13/94 11/08/94	SS-115 HFSS115XXX94XX 2225912 R 10/10/94 10/13/94 11/18/94	SS-116 HFSS116XXX94XX 2225914 10/10/94 10/13/94 11/08/94
ANALIE 30#-3/70	II CVAL			•					
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2-4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-6,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330 330 330 330	760 U	8100 U 8100 U	380 U	380 U 380 U 38	380 U 380 U 38	380 U	380 U 380 U 38	1800 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330 	760 U 120 J 760 U	8100 U 8100 U 8100 U	380 U 120 J 380 U	380 U 380 U 380 U	380 U 380 U 380 U	380 U 380 U 380 U	380 U 380 U 380 U	1800 U 1800 U 1800 U

U: not detected E: interference D: diluted result

Table 1 Laboratory Report of Analysis

ANALYTE 2001 7 (00	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/14/94	SS-113 ( HFSS113XXX94X 2226514 10/11/94 10/14/94 11/15/94	SS-114 X HFSS114XXX94) 2226513 10/11/94 10/14/94 11/15/94	SS-115 DUP XX HFSS115XXX94) 2225913 10/10/94 10/13/94 11/08/94	SS-115 DUP KD HFSS115XXX94XD 2225913 R 10/10/94 10/13/94 11/18/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/13/94 11/08/94	SS-115 HFSS115XXX94) 2225912 R 10/10/94 10/13/94 11/18/94	SS-116 XX HFSS116XXX94XX 2225914 10/10/94 10/13/94 11/08/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
Acenaphthene	330	83 J	1500 J	380 U	380 U	380 U	380 U	380 U	1800 U
2,4-Dinitrophenol	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
4-Nitrophenol	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
Dibenzofuran	330	110 J	1100 J	64 J	380 บ 380 บ	380 U	39 J 380 U	380 บ 380 บ	1800 U 1800 น
2,4-Dinitrotoluene	330	760 U 760 U	8100 U	380 U 380 U	380 U 380 U	380 U 380 U	380 U 380 U	380 U	1800 U 1800 U
Diethylphthalate	330 330	760 U 760 U	8100 U 8100 U	380 U 380 U	380 U	380 U	380 U	380 U	1800 U
4-Chlorophenyl-phenylether	330 330	760 U 95 J	2100 J	380 U	380 U	380 U	380 U	380 U	1800 U
Fluorene	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
4-Nitroaniline	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	790 J
4-Bromophenyl-phenylether	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 U
Hexach lorobenzene	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 U
Pentachlorophenol	800	1800 U	20000 U	920 U	910 U	910 U	910 U	910 U	4200 U
Phenanthrene	330	790	14000	220 J	210 J	200 J	260 J	220 J	510 J
Anthracene	330	200 J	3300 J	380 U	380 U	380 U	40 J	380 U	1800 U
Carbazole	330	760 U	1200 J	380 U	380 U	380 U	380 U	380 U	1800 U
Di-n-butylphthalate	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 บ
Fluoranthene	330	940	12000	94 J	530	500	610	520	270 J
Pyrene	330	2000	24000	880	<i>7</i> 50	670	860	700	660 J
Butylbenzylphthalate	330	760 U	8100 U	170 J	380 U	380 U	380 U	380 U	1800 U
3,3'-Dichlorobenzidine	330	760 U	8100 U	380 U	380 U	380 U	380 U	380 U	1800 U
Benzo(a)Anthracene	330	540 J	4900 J	200 J	460	400	520	400	1800 U
Chrysene	<b>33</b> 0	700 J	5400 J	370 J	640	580	740	570	290 J
bis(2-Ethylhexyl)phthalate	330	280 JB	8100 U	76 JI		82 J	93 J	76 J	270 J
Di-n-octylphthalate	330	760 U	8100 U 2000 J	150 J 330 J	380 U 660	380 U 630	380 U 780	380 U 670	1800 U 270 J
Benzo(b)Fluoranthene	330 730	380 J 400 J	2000 J	330 J	660	440	630	440	1800 U
Benzo(k)Fluoranthene	330 330	260 J	1600 J	210 J	600	460	700	500	1800 U
Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	330 330	180 J	950 J	310 J	300 J	210 J	330 J	240 J	220 J
Dibenz(a,h)Anthracene	330	760 U	8100 U	380 U	380 U	40 J	380 U	44 J	1800 U
Benzo(g,h,i)perylene	330	120 J	8100 U	320 J	270 J	180 J	320 J	210 J	1800 U
=======================================	:==========								
	on Factor:	2.00	20.0	1.00	1.00	1.00	1.00	1.00	5.00
	nt Solids:	_ 88	82	87	88	88	88	88	95
Sample Volume\Weig	nt (ml\g):	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Associated Met Associated Equipm		S1316.D SXX5XXX94XX HI	S1316.D FQSXX5XXX94XX H	S1316.D FQSXX4XXX94XX	S1268.D HFQSXX4XXX94XX	S1268.D HFQSXX4XXX94XX HI	S1268.D FQSXX4XXX94XX HF	S1268.D QSXX4XXX94XX H	S1268.D IFQSXX4XXX94XX
Associated Fi			-	-	-	-	-	i <del>-</del>	-

Table 1
Laboratory Report of Analysis

DATE ANALYZED: 11/18/94 11/08/94 11/18/94 11/09/94 11/15/94 11/18/94 11/18/94 11.	
ANALYTE SOW-3/90 - II CRQL	
Phemol 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,3-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,4-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,4-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,4-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 60	380 U 380 U
2.4.5-Trichtorophenol 800 4200 U 1400 U 1400 U 1400 U 2700 U 980 U 980 U	920 U
2-Chloronaphthalene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U	380 U
2-Nitroaniline 800 4200 U 1400 U 1400 U 2700 U 980 U 980 U	920 U
Dimethylphthalate 330 1800 U 600 U 560 U 1100 U 410 U 410 U Acepaphthylene 330 1800 U 600 U 84 J 1100 U 410 U 410 U	380 U 380 U
700 H	380 U
2,6-Dinitrotoluene 350 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U	

U: not detected E: interference D: diluted result

Table 1
Laboratory Report of Analysis

DATE ANALYZED: 11/18/94 11/08/94 11/18/94 11/09/94 11/15/94 11/18/94 11/18/94 11.	
ANALYTE SOW-3/90 - II CRQL	
Phemol 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,3-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,4-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,4-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,4-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U 410 U 1,2-Dichlorobenzene 330 1800 U 600 U 60	380 U 380 U
2.4.5-Trichtorophenol 800 4200 U 1400 U 1400 U 1400 U 2700 U 980 U 980 U	920 U
2-Chloronaphthalene 330 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U	380 U
2-Nitroaniline 800 4200 U 1400 U 1400 U 2700 U 980 U 980 U	920 U
Dimethylphthalate 330 1800 U 600 U 560 U 1100 U 410 U 410 U Acepaphthylene 330 1800 U 600 U 84 J 1100 U 410 U 410 U	380 U 380 U
700 H	380 U
2,6-Dinitrotoluene 350 1800 U 600 U 600 U 560 U 1100 U 410 U 410 U	

U: not detected E: interference D: diluted result

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-116 HFSS116XXX94XX 2225914 R 10/10/94 10/13/94 11/18/94	SS-117 C HFSS117XXX94X 2225918 10/10/94 10/13/94 11/08/94	SS-117 (X HFSS117XXX94) 2225918 R 10/10/94 10/13/94 11/18/94	SS-118 (X HFSS118XXX94X 2226505 10/11/94 10/14/94 11/09/94	SS-118 X HFSS118XXX94X) 2226505 D 10/11/94 10/14/94 11/15/94	SS-119 ( HFSS119XXX94XX 2225919 10/10/94 10/13/94 11/18/94	SS-119 HFSS119XXX94X 2225919 R 10/10/94 10/13/94 11/18/94	SS-120 C HFSS120XXX94XX 2225915 10/10/94 10/13/94 11/08/94
ANALYTE SOW-3/90 -	II CRQL		•						
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene	800 330 800 800 330 330 330 330	4200 U 1800 U 4200 U 1800 U 1800 U 1800 U 1800 U 1800 U 4200 U 4200 U 1800 U	1400 U 120 J 1400 U 1400 U 91 J 600 U 600 U 1400 U 1200 300 J 87 J 600 U 1600 J 120 J 600 U 1300 J 120 J 600 U 1300 J	1400 U 120 J 1400 U 1400 U 94 J 600 U 600 U 1400 U 1200 J 780 820	1400 U 200 J 1400 U 1400 U 63 J 560 U 160 J 1400 U	2700 U 180 JD 2700 U 2700 U 1100 U 1100 U 1100 U 130 JD 2700 U 1100 U	980 U U 980 U U 410 U U 666 U U 410 U U 67 U U 67 U U 67 U 67 U 67 U 67 U	980 U U 980 U U 410 U U 54 U 410 U U 54 U 410 U U 54 U 54 U 54 U 54 U 54 U 554 J 552 J	920 U 380 U 920 U 920 U 380 U 380 U 380 U 380 U 920 U 920 U 380 U 920 U 920 U 380 U 150 J 110 J 380 U
Indeno(1,2,3-c,d)Pyrene	330	1800 U	440 J	310 J	420 J	240 JD	410 U	410 U	59 J
Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	330 330	1800 U 1800 U	600 U 400 J	71 J 270 J	90 J 520 J	1100 U 320 JD	410 U 410 U	410 U 410 U	380 U 64 J
	on Factor: nt Solids: ht (ml\g):	5.00 95 30.0 \$1268.D	1.00 56 30.0 \$1268.D	1.00 56 30.0 \$1268.D	1.00 59 30.0 \$1316.D	2.00 59 30.0 S1316.D	1.00 82 30.0 \$1268.D	1.00 82 30.0 S1268.D	1.00 87 30.0 \$1268.D
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ								51266.D FQSXX4XXX94XX -

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-120 HFSS120XXX94XX 2225915 R 10/10/94 10/13/94 11/18/94	SS-121 HFSS121XXX94XX 2226504 10/11/94 10/14/94 11/09/94	SS-121 HFSS121XXX94XX 2226504 D 10/11/94 10/14/94 11/14/94	SS-122 HFSS122XXX94XX 2225916 10/10/94 10/13/94 11/08/94	SS-122 HFSS122XXX94XX 2225916 R 10/10/94 10/13/94 11/18/94	SS-123 HFSS123XXX94XX 2226503 10/11/94 10/14/94 11/14/94	SS-124 HFSS124XXX94XX 2225917 10/10/94 10/13/94 11/08/94	SS-124 HFSS124XXX94XX 2225917 R 10/10/94 10/13/94 11/18/94
ANALYTE SOW-3/90 -	II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330 330 330 330	380 U U U 380 U U 380 U U U 380 U U 380 U U U 380 U U U 380 U U 380 U U U 380 U U 380 U U U U 380 U U U U U U U U U U U U U U U U U U U	370 U 370 U	1800 U	390 U	390 U	370 U 370 U	410 U U 410 U	410 U 410 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330	380 U 380 U 380 U	370 U 370 U 370 U	1800 U 1800 U 1800 U	390 U 390 U 390 U	390 U 390 U 390 U	370 U 46 J 370 U	410 U 410 U 410 U	410 U 410 U 410 U

Site: SURFACE SOILS
U: not detected D: diluted result E: interference

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-120 HFSS120XXX94X 2225915 R 10/10/94 10/13/94 11/18/94	SS-121 X HFSS121XXX94X 2226504 10/11/94 10/14/94 11/09/94	SS-121 X HFSS121XXX94X 2226504 D 10/11/94 10/14/94 11/14/94	SS-122 (X HFSS122XXX94X) 2225916 10/10/94 10/13/94 11/08/94	SS-122 ( HFSS122XXX94XX 2225916 R 10/10/94 10/13/94 11/18/94	\$S-123 HFSS123XXX94XX 2226503 10/11/94 10/14/94 11/14/94	SS-124 HFSS124XXX94XX 2225917 10/10/94 10/13/94 11/08/94	SS-124 HFSS124XXX94XX 2225917 R 10/10/94 10/13/94 11/18/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	800 330 800 800 330 330 330 330	920 U 380 U 920 U 380 U 380 U 380 U 380 U 920 U 380 U 920 U 380 U 380 U 920 U 380 U	880 U 130 J 880 U 880 U 370 U 52 J 370 U 1600 3100 E 370 U 1800 2800 2800 2800 2900 1800 520	4400 U 1800 U 4400 U 1800 U	100 J 390 U 390 U 570 1900 180 J 390 U 440 580 210 J 390 U 650 610 410	930 U U 930 U U 390 U U 390 U U U 390 540 2000 390 549 500 390 320 310 358 J	880 U 880 U 880 U 880 U 370 U 370 U 370 U 370 U 380 U 370 U	980 U J 980 U U 410 U 410 U U	980 U 980 U 980 U 980 U 410 U
	330 on Factor: nt Solids: ht (ml\g): hod Blank: ent Blank: HFQ	1.00 87 30.0 \$1268.D	1400 1.00 91 30.0 \$1316.D	1600 Jb 5.00 91 30.0 S1316.D	1.00 86 30.0 \$1268.D	280 J 1.00 86 30.0 \$1268.D	160 J 1.00 91 30.0 \$1316.D	140 J 1.00 82 30.0 \$1268.D	93 J

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/10/94 10/13/94	HFSS125XXX94XX 2225920 R 10/10/94 10/13/94
ANALYTE SOW-3/90 -	II CRQL		
Phenol	330	410 U	410 U
bis(2-Chloroethyl)ether		410 Ū	410 Ū
7. Ch   h _ h	770	410 U	410 Ū
1.3-Dichlorobenzene	330	410 Ū	410 U
1,4-Dichlorobenzene 1,2-Dichlorobenzene	330	410 U	410 U
1.2-Dichlorobenzene	330	410 U	410 U
2-Methylphenol	330	410 U	410 U
2,2'-oxybis(1-Chloropropane)	330	410 U	410 U
4-Methyl phenol	330	410 U	410 U
N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol	330	410 U	410 U
Hexachloroethane	330	· 410 U	410 U
Nitrobenzene	330	410 U	410 U
Isophorone	330	410 U	410 U
2-Nitrophenol	330	410 U	410 U
2-Nitrophenol 2,4-Dimethylphenol	330	410 U	410 U
2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene	330	410 U	410 U
2.4-Dichlorophenol	330	410 U	410 U
1.2.4-Trichlorobenzene	330	410 U	410 U
Naphthalene	330	-63 J	51 J
4-Chloroaniline	330	410 U	410 U
Hexachlorobutadiene	330	410 U	410 U
4-Chloro-3-Methylphenol	330	410 U	410 U
2-Mathyl narhthal ana	330	65 J	55 J
Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol	330	410 U	410 U
2,4,6-Trichlorophenol	330	410 U	410 U
2,4,5-Trichlorophenol	800	990 U	990 U
2-Chloronaphthalene	330	410 U	410 U
2-Nitroaniline	800	990 U	990 U
Dimethylphthalate	330	410 U	410 U
Acenaphthylene	330	410 U	410 U
2,6-Dinitrotoluene	330	410 U	410 U

Site: SURFACE SOILS U: not detected D: diluted result E: interference

\_\_\_\_\_\_\_\_

B: blank contamination J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/10/94 10/13/94	SS-125 HFSS125XXX94XX 2225920 R 10/10/94 10/13/94 11/18/94
ANALYTE SOW-3/90	II CRQL		
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorobenzene Pi-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene	800 330 800 800 330 330 330 330	990 U 410 U 990 U 410 U	990 U U U U U U U U U U U U U U U U U U
Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	330 330 330	110 J 410 U 110 J	82 J 410 U 71 J

LOCATION

cc-125

cc-125

Associated Method Blank: \$1268.D \$1268

Site: SURFACE SOILS

## PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

## Semivolatile Organic Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

·	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-101 DUP HFSS101XXX94XD 2225904 10/10/94 10/13/94 11/07/94	SS-101 HFSS101XXX94XX 2225901 10/10/94 10/13/94 11/07/94	SS-102 HFSS102XXX94XX 2225905 10/10/94 10/13/94 11/07/94	SS-103 HFSS103XXX94XX 2225906 10/10/94 10/13/94 11/07/94	SS-104 HFSS104XXX94XX 2225907 10/10/94 10/13/94 11/07/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/13/94 11/07/94	SS-106 HFSS106XXX94XX 2225909 10/10/94 10/13/94 11/07/94	SS-107 HFSS107XXX94XX 2225910 10/10/94 10/13/94 11/16/94
ANALYTE SOW-3/90	· II CRQL						*		
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene 4-Chloro-iline Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene	330 330 330 330 330 330 330 330	400 400 400 400 400 400 400 400 400 400	400 UJ 400 UJ	400 UJ 400 UJ	370 UJ 370 UJ	390 UJ 390 UJ	370 UJ	380 UJ 380 UJ 38	380 UJ 380 UJ
2,6-Dinitrotoluene	330	400 U	400 UJ	400 UJ	370 UJ	390 UJ	370 ÚJ	380 UJ	380 UJ

Site: SURFACE SOILS U: not detected J: estimated

R: unusable

Table 2 Validation / Summary Table

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-101 DUP HFSS101XXX94XD 2225904 10/10/94 10/13/94 11/07/94	SS-101 HFSS101XXX94XX 2225901 10/10/94 10/13/94 11/07/94	SS-102 HFSS102XXX94X) 2225905 10/10/94 10/13/94 11/07/94	SS-103 X HFSS103XXX94XX 2225906 10/10/94 10/13/94 11/07/94	SS-104 HFSS104XXX94XX 2225907 10/10/94 10/13/94 11/07/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/13/94 11/07/94	SS-106 HFSS106XXX94XX 2225909 10/10/94 10/13/94 11/07/94	SS-107 HFSS107XXX94XX 2225910 10/10/94 10/13/94 11/16/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	800 330 800 800 330 330 330 330 800 800	950 U U V V V V V V V V V V V V V V V V V	950 UJ 400 UJ 100 UJ 110 J 240 UJ 400 UJ 110 J 240 UJ 400 UJ 120 J 400 UJ	960 UJ 400 UJ 400 UJ 400 UJ 400 UJ 400 UJ 960 UJ 960 UJ 960 UJ 960 UJ 960 UJ 960 UJ 160 J 400 UJ 270 J 400 UJ 270 J 400 UJ 270 J 400 UJ 270 J 400 UJ 400 UJ	880 UJ 370 UJ	930 UJ 390 UJ 390 UJ 390 UJ 390 UJ 390 UJ 930 UJ 930 UJ 930 UJ 930 UJ 200 J 49 UJ 390 UJ	900 UJ 370 UJ 370 UJ 370 UJ 370 UJ 370 UJ 370 UJ 900 UJ 290 UJ 290 UJ 290 UJ 370 UJ	910 UJ 380 UJ 380 UJ 380 UJ 380 UJ 910 UJ 8 UJ 910 UJ 200 J 42 J 380 UJ 910 UJ 200 J 42 J 380 UJ 910 UJ 200 J 42 J 380 UJ 380 UJ	920 UJ 380 UJ 920 UJ 380 UJ 380 UJ 380 UJ 380 UJ 920 UJ 920 UJ 920 UJ 380 UJ
Diluti Perce Sample Volume\Weig	on Factor: nt Solids: ht (ml\g):	1.00 84 30.0	1.00 84 30.0	1.00 83 30.0	1.00 91 30.0	1.00 86 30.0	1.00 89 30.0	1.00 88 30.0	1.00 87 30.0
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	\$1268.D SXX1XXX94XX HF	S1268.D QSXX1XXX94XX HF	S1268.D QSXX1XXX94XX HI	S1268.D FQSXX1XXX94XX HFQ	S1268.D SXX1XXX94XX HFG -	S1268.D SXX1XXX94XX HFQ -	S1268.D SXX1XXX94XX HFC -	\$1268.D SXX1XXX94XX -

Site: SURFACE SOILS U: not detected R: unusable

J: estimated

Semivolatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

ANALYTE SOW-3/90	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 10/10/94 10/13/94 11/18/94	SS-109 HFSS109XXX94XX 2226502 R 10/11/94 10/14/94 11/14/94	SS-110 HFSS110XXX94XX 2226501 10/11/94 10/14/94 11/14/94	SS-111 DUP HFSS111XXX94XD 2226519 R 10/11/94 10/14/94 11/16/94	SS-111 HFSS111XXX94XX 2226516 R 10/11/94 10/14/94 11/16/94	SS-112 HFSS112XXX94XX 2226515 10/11/94 10/14/94 11/15/94	SS-113 HFSS113XXX94XX 2226514 10/11/94 10/14/94 11/15/94	SS-114 HFSS114XXX94XX 2226513 10/11/94 10/14/94 11/15/94
ANALTIE 30W-3/70	- 11 CKAL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene	330 330 330 330 330 330 330 330 330 330	480 U 480 U R R R R 480 U R R R R R 480 U R R R R R R R R R R R R R	4600 U 46	330 U 330 U	390 U 390 U	390 U 390 U	760 U	8100 U 8100 U	380 U
Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 800 330 800 330 330 330	480 U 1100 U R R R R R	4600 U 4600 U 11000 U 4600 U 11000 U 4600 U 4600 U	330 U 330 U 800 U 330 U 800 U 330 U 39 J 330 U	390 U 390 U 930 U 390 U 930 U 390 U 390 U	390 U 390 U 940 U 390 U 940 U 390 U 46 J 390 U	760 U 760 U 1800 U 760 U 1800 U 760 U 120 J 760 U	8100 U 8100 U 20000 U 8100 U 20000 U 8100 U 8100 U 8100 U	380 U 380 U 920 U 380 U 920 U 380 U 120 J 380 U

Site: SURFACE SOILS
U: not detected
J: estimated R: unusable

Table 2 Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFSS108XXX94XX 2225911 10/10/94 10/13/94	SS-109 C HFSS109XXX94X; 2226502 R 10/11/94 10/14/94 11/14/94	SS-110 X HFSS110XXX94) 2226501 10/11/94 10/14/94 11/14/94	SS-111 DUF XX HFSS111XXX94 2226519 R 10/11/94 10/14/94 11/16/94		SS-112 X HFSS112XXX94XX 2226515 10/11/94 10/14/94 11/15/94	SS-113 C HFSS113XXX94X 2226514 10/11/94 10/14/94 11/15/94	SS-114 X HFSS114XXX94XX 2226513 10/11/94 10/14/94 11/15/94
ANALYTE SOW-3/90 -	II CRQL	_							
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorobenzene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene	800 330 800 800 330 330 330 330	1100 U 1100 U 1100 U R R R R R 1100 U 210 J R R R 250 J 340 J 260 J 480 UJ R 230 J	11000 U 3600 J 11000 U 11000 U 4600 U 4600 U 4600 U 4600 U 11000 U 11000 U 11000 U 11000 U 11000 U 3500 J 920 J 4600 U 4600 U 4600 U 7300 8200 4600 U 4600 U 7800 8100 4600 U 12000	800 U 330 U 330 U 330 U 330 U 330 U 800 U 800 U 800 U 160 J 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U 330 U	930 L 930 L 930 L 390 L	JJ 51 J J 940 U J 940 U J 940 U J 78 J J 390 U	1800 U 83 J 1800 UJ 1800 U 110 J 760 U	20000 U 1500 J 20000 U 1100 J 8100 U 8100 U 8100 U 2100 J 20000 UJ 20000 UJ 8100 U 8100 U 8100 U 14000 3300 J 1200 J 8100 U 12000 24000 8100 U 8100 U 12000 24000 8100 U 12000 24000 8100 U 12000 24000 8100 U 12000 24000 U 14000 J 8100 U 8100 U 8100 U	920 U 64 J 380 U 380 U 380 U 380 U 920 UJ
Benzo(a)Pyrene	330	150 J	11000	140 J	260	J 410	260 J	1600 J	210 J
Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	330 330	81 J R	6700 2000 J	110 J 330 U	92 J 390 L	J 150 J	180 J 760 U	950 J 8100 U	310 J
Benzo(g,h,i)perylene	330	82 Ĵ	5200 J	88 J	58	J 100 J	120 J	8100 U	320 Ĵ
	on Factor: nt Solids:	1.00 70 30.0	10.0 72 30.0	1.00 100 30.0	1.00 86 30.0	1.00 85 30.0	2.00 88 30.0	20.0 82 30.0	1.00 87 30.0
Associated Met Associated Equipm Associated Fi	ent Blank: HFG	\$1268.D PSXX1XXX94XX HI	S1316.D FQSXX5XXX94XX H	S1316.D FQSXX5XXX94XX I	S1316.D HFQSXX5XXX94XX	S1316.D HFQSXX5XXX94XX	S1316.D IFQSXX5XXX94XX HI	S1316.D FQSXX5XXX94XX H	S1316.D FQSXX4XXX94XX

Site: SURFACE SOILS
U: not detected R: unusable
J: estimated

Semivolatile Organic Soil Analysis (ug/kg) PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-115 DUP HFSS115XXX94XD 2225913 R 10/10/94 10/13/94 11/18/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/13/94 11/08/94	SS-116 HFSS116XXX94XX 2225914 10/10/94 10/13/94 11/08/94	SS-117 HFSS117XXX94XX 2225918 R 10/10/94 10/13/94 11/18/94	SS-118 HFSS118XXX94XX 2226505 10/11/94 10/14/94 11/09/94	SS-119 HFSS119XXX94XX 2225919 R 10/10/94 10/13/94 11/18/94	SS-120 HFSS120XXX94XX 2225915 R 10/10/94 10/13/94 11/18/94	SS-121 HFSS121xxx94xx 2226504 10/11/94 10/14/94 11/09/94
ANALYTE SOW-3/90 -	II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330 330 330 330	380 U	380 U	1800 U	600 UJ 600 UJ	160 J U U U U U U U U U U U U U U U U U U	410 UJ 410 UJ	380 UJ 380 UJ	370 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330	380 N 380 N 380 N	380 U 380 U 380 U	1800 U 1800 U 1800 U	900 N1 900 N1 900 N1	560 U 84 J 560 U	410 UJ 410 UJ 410 UJ	380 N1 380 N1 380 N1	370 U 370 U 370 U

Site: SURFACE SOILS U: not detected J: estimated R: unusable

Table 2 Validation / Summary Table

		LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFSS115XXX94X	SS-115 D HFSS115XXX94 2225912 10/10/94 10/13/94 11/08/94	SS-116 4XX HFSS116XXX94 2225914 10/10/94 10/13/94 11/08/94	SS-117 4XX HFSS117XXX94 2225918 R 10/10/94 10/13/94 11/18/94	SS-118 XXX HFSS118XXX9 2226505 10/11/94 10/14/94 11/09/94	SS-119 4XX HFSS119XXX94X 2225919 R 10/10/94 10/13/94 11/18/94	SS-120 X HFSS120XXX94; 2225915 R 10/10/94 10/13/94 11/18/94	SS-121 XX HFSS121XXX94XX 2226504 10/11/94 10/14/94 11/09/94
ANALYTE	sow-3/90 -	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phe Fluorene 4-Nitroaniline 4,6-Dinitro-2-meth N-Nitrosodiphenyla 4-Bromophenyl-phen Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalat Fluoranthene Pyrene Butylbenzylphthala 3,3'-Dichlorobenzi Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)p Di-n-octylphthalat Benzo(b)Fluoranthe Benzo(k)Fluoranthe Benzo(k)Fluoranthe Benzo(a)Pyrene Indeno(1,2,3-c,d)P Dibenz(a,h)Anthrace	enylether  sylphenol mine nylether  e  te dine e chthalate e ene eyrene	800 330 800 800 330 330 330 330 800 800	910 UJ 380 UJ 380 UJ 380 UJ 380 UJ 380 UJ 380 UJ 910 U 380 UJ 400 J 580 J 670 J 380 UJ 400 J	380   910   380	1800 to 1800 t	120 J	J 200 JJ 1400 JJ 1400 JJ 1400 JJ 560 JJ 560 JJ 1400 JJ 1400 JJ 1400 JJ 1400 JJ 1400 JJ 560 JJ 560 JJ 560 JJ 560 JJ 560 JJ 1400 JJ 1400 JJ 1400 JJ 1400 JJ 560 JJ 1400 JJ 560 JJ 1400 JJ 560 JJ 1400 JJ 730 JJ 1800	U 980 UJ UJ 980 UJ UJ 980 UJ U 980 UJ U 410 UJ UJ 410 UJ	920 U. 380 U. 38	130 J 131 880 U 1370 U 1370 U 1377 J 14880 U 15370 U
Benzo(g,h,i)peryle	ene	330 ===========	180 J	320	) ====================================	R 270 J	J 520	J 410 UJ	39 J	1400 J
Sample V		on Factor: nt Solids: ht (ml\g):	1.00 88 30.0	1.00 88 30.0	5.00 95 30.0	1.00 56 30.0	1.00 59 30.0	1.00 82 30.0	1.00 87 30.0	1.00 91 30.0
Associa	ociated Met sted Equipm sociated Fi	ent Blank: HFG	\$1268.D \$\$XX4XXX94XX H	S1268.D FQSXX4XXX94XX	S1268.D HFQSXX4XXX94XX	S1268.D HFQSXX4XXX94XX	S1316.D HFQSXX5XXX94XX	S1268.D HFQSXX4XXX94XX H	S1268.D FQSXX4XXX94XX	S1316.D HFQSXX5XXX94XX -

Site: SURFACE SOILS U: not detected R: unusable J: estimated

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 2 Validation / Summary Table

	LOCATION:	SS-101 DUP	SS-101	SS-102	SS-103	SS-104	SS-105	SS-106	SS-107
	ISIS ID:	HFSS101XXX94XD	HFSS101XXX94XX	HFSS102XXX94XX	HFSS103XXX94XX	HFSS104XXX94XX	HFSS105XXX94XX	HFSS106XXX94XX	HFSS107XXX94XX
	LAB NUMBER:	2225904	2225901	2225905	2225906	2225907	2225908	2225909	2225910
	DATE SAMPLED:	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94
	ATE ANALYZED:	10/17/94	10/17/94	10/17/94	10/17/94	10/17/94	10/17/94	10/17/94	10/17/94
ANALYTE	RL			•				,	
Corrosivity, inch/Yea Ignitability, Degrees Cyanide, Reactive, pp Sulfide, Reactive, pp	F 212 m 1	0.01 U >212 1 U 1 U							
Associated Equ	method Blank:	SDGHANNA1							
	ipment Blank:	-	-	-	-	-	-	-	-
	Field Blank:	-	-	-	-	-	-	-	-

Site: SURFACE SOILS
U: not detected

Table 2 Validation / Summary Table

J	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:		SS-109 HFSS109XXX94XX 2226502 10/11/94 10/24/94	SS-110 HFSS110XXX94XX 2226501 10/11/94 10/24/94	SS-111 DUP HFSS111XXX94XD 2226519 10/11/94 10/24/94	SS-111 HFSS111XXX94XX 2226516 10/11/94 10/24/94	SS-112 HFSS112XXX94XX 2226515 10/11/94 10/24/94	SS-113 HFSS113XXX94XX 2226514 10/11/94 10/24/94	SS-114 HFSS114XXX94XX 2226513 10/11/94 10/24/94
ANALYTE	RL								
Corrosivity, inch/Ye Ignitability, Degree Cyanide, Reactive, p Sulfide, Reactive, p	s F 212 pm 1	- 0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 <sup>.</sup> U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
22022222222222	=======================================					100000000000000000000000000000000000000			
Associated Eq	Method Blank: uipment Blank: d Field Blank:	•	SDGHANNA2 - -	SDGHANNA2 - -	SDGHANNA2 - -	SDGHANNA2 - -	SDGHANNA2 - -	SDGHANNA2 - -	SDGHANNA2 - -

Site: SURFACE SOILS
U: not detected

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-115 DUP HFSS115XXX94XD 2225913 R 10/10/94 10/14/94 12/29/94	SS-115 HFSS115XXX94XX 2225912 R 10/10/94 10/14/94 12/29/94	SS-116 HFSS116XXX94XX 2225914 R 10/10/94 10/14/94 12/30/94	SS-117 HFSS117XXX94XX 2225918 R 10/10/94 10/14/94 12/30/94	SS-118 HFSS118XXX94XX 2226505 10/11/94 10/15/94 11/18/94	SS-119 HFSS119XXX94XX 2225919 R 10/10/94 10/14/94 12/29/94	SS-120 HFSS120XXX94XX 2225915 R 10/10/94 10/14/94 12/30/94	SS-121 HFSS121XXX94XX 2226504 10/11/94 10/15/94 11/18/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 3.7 UJ 3.7 UJ 3.7 UJ 3.7 UJ 3.7 UJ 3.7 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 37 UJ 37 UJ 37 UJ	1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 3.7 UJ 3.7 UJ 3.7 UJ 3.7 UJ 3.7 UJ 1.9 UJ 1.9 UJ 1.9 UJ 1.9 UJ 37 UJ 37 UJ 37 UJ 37 UJ	8.9 UJ 8.9 UJ 8.9 UJ 8.9 UJ 8.9 UJ 8.9 UJ 17 UJ 17 UJ 17 UJ 17 UJ 17 UJ 17 UJ 8.9 UJ 8.9 UJ 8.9 UJ 8.9 UJ 170 UJ 170 UJ 170 UJ 170 UJ 170 UJ	15 UJ 15 UJ 15 UJ 15 UJ 15 UJ 15 UJ 15 UJ 29 UJ 29 UJ 29 UJ 29 UJ 29 UJ 29 UJ 150 UJ 290 UJ 290 UJ 290 UJ 290 UJ 290 UJ	R R R R R R R R R R R R R R R R R R R	2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 4.0 UJ 82 UJ 40 UJ 82 UJ 40 UJ 82 UJ 40 UJ 82 UJ 40 UJ 84 UJ	3.9 UJ 7.6 UJ	1.9 UJ 3.6 UJ
	rion Factor: cent Solids: eight (ml\g):	1.00 88 30.0	1.00 88 30.0	5.00 95 30.0	5.00 56 30.0	3.00 59 30.0	1.00 82 30.0	2.00 87 30.0	1.00 91 30.0

Pesticides/PCBs Soil Analysis (ug/kg)

Site: SURFACE SOILS U: not detected R: unusable

Associated Method Blank:

Associated Equipment Blank:
Associated Field Blank:

N: spike recovery not met J: estimated

PBLK07

PBLK07

HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX5XXX94XX HFQSXX5XXX94XX HFQSXX4XXX94XX HFQSXX5XXX94XX

PSB1015B

PBLK07

PBLK07

PSB1015B

PBLK07

PBLK07

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFSS122XXX94XX 2225916 R 10/10/94 10/14/94	SS-123 HFSS123xxx94xx 2226503 10/11/94 10/15/94 11/17/94	SS-124 HFSS124XXX94XX 2225917 R 10/10/94 10/14/94 12/29/94	SS-125 HFSS125XXX94XX 2225920 R 10/10/94 10/14/94 12/30/94
ANALYTE SOW-3/90	- II CRQL				
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan 11 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1211 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1246	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 1.7 1.7 1.7 1.7 1.7 1.7	2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 3.8 UJ 3.	1.9 UJ 3.6 UJ	2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 4.0 UJ 4.	2.1 UJ 4.1 UJ 2.1 UJ
	tion Factor: cent Solids:	•• -	1.00 91 30.0		1.00 1.00 81 30.0

Associated Method Blank: Associated Equipment Blank: Associated Field Blank:

PBLK07 **PSB1015B** HFQSXX4XXX94XX HFQSXX5XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX

PBLK07 PBLK07

Site: SURFACE SOILS

U: not detected R: unusable

N: spike recovery not met J: estimated

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-15 SOIL (ug\kg)

### SEMIVOLATILE

	HFSS101XXX94XX	HFSS101XXX94XD	HFSS102XXX94XX	HFSS103XXX94XX
unknown aromatic	2500 J(9)	4100 J(11)	13000 J(9)	370 J(2)
unknown hydrocarbon unknown	400 J(2) 2400 J(9)	2200 J(9)	1200 J(3) 4200 J(8)	74 J 330 J(3)
	HFSS104XXX94XX	HFSS105XXX94XX	HFSS106XXX94XX	HFSS107XXX94XX
unknown hydrocarbon	1400 J(5)		1300 J(4)	510 J(5)
unknown aromatic unknown	3300 J(9) 1400 J(6)	1600 J(10) 630 J(5)	1200 J(8) 1100 J(8)	730 J(5) 840 J(4)
	HFSS108XXX94XX	HFSS115XXX94XX	HFSS115XXX94XD	HFSS116XXX94XX
unknown hydrocarbon	2500 J(9)	1300 J(2)	1400 J(5)	110000 J(16)
unknown aromatic unknown	840 J(2) 3600 J(8)	1500 J(5) 5700 J(13)	700 J(3) 2900 J(11)	35000 J(4)
	HFSS117XXX94XX	HFSS119XXX94XX	HFSS120XXX94XX	HFSS122XXX94XX
unknown hydrocarbon	4300 J(4)	1000 J(5)	4700 J(10)	1200 J(4)
unknown aromatic unknown unknown PCB	2000 J(4) 3100 J(5) 4400 J(4)	1800 J(8)	480 J(2) 170 J	350 J 6700 J(15)
	HFSS124XXX94XX	HFSS125XXX94XX		
unknown hydrocarbon	2800 J(9)	1900 J(6)		
unknown aromatic unknown	1000 J(3) 1800 J(7)	1200 J(4) 4200 J(9)		

Data Qualifiers: J = estimated

## TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-16 AQUEOUS (ug\L)

## VOLATILE

	HFMW107XXX94XX	HFMW109XXX94XX		
unknown aromatic unknown	94 J(3)	10 J		
NO VOLATILE TIC'S WERE IDENTI	FIED IN THE FOLLOWING	G SAMPLES:		
	HFMW101XXX94XX HFMW101XXX94XD HFMW102XXX94XX HFMW103XXX94XX HFMW104XXX94XX	HFMW105XXX94XX HFMW106XXX94XX HFMW108XXX94XX HFMW110XXX94XX HFQSX10XXX94XX	HFQT104XXX94XX	
SEMIVOLATILE				
	HFMW101XXX94XX	HFMW101XXX94XD	HFMW102XXX94XX	HFMW103XXX94XX
unknown aromatic unknown	4 <sup>'</sup> J 43 J(8)	14 J(4) 87 J(11)	27 J(2)	50 J(11)
	HFMW104XXX94XX	HFMW105XXX94XX	HFMW106XXX94XX	HFMW107XXX94XX
unknown hydrocarbon unknown	17 J(7) 3 J	28 J(2)	40 J(2)	112 J(3)
	HFMW109XXX94XX	HFMW110XXX94XX	HFQSX10XXX94XX	
unknown	23 J(2)	209 J(19)	31 J(8)	

NO SEMIVOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFMW108XXX94XX

Data Qualifiers: J = estimated

Miscellaneous Soil Analysis

14-Apr-95

Table 2 Validation / Summary Table

DA	LOCATION: ISIS ID: LAB NUMBER: TE SAMPLED: E ANALYZED:	SS-115 DUP HFSS115XXX94XD 2225913 10/10/94 10/17/94	SS-115 HFSS115XXX94XX 2225912 10/10/94 10/17/94	SS-116 HFSS116XXX94XX 2225914 10/10/94 10/17/94	SS-117 HFSS117XXX94XX 2225918 10/10/94 10/17/94	SS-118 HFSS118XXX94XX 2226505 10/11/94 10/24/94	SS-119 HFSS119XXX94XX 2225919 10/10/94 10/17/94	\$\$-120 HF\$\$120XXX94XX 2225915 10/10/94 10/17/94	SS-121 HFSS121XXX94XX 2226504 10/11/94 10/24/94
ANALYTE	RL								
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm Sulfide, Reactive, ppm	0.01 212 1 1	 0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U					
Associated Me Associated Equip	ment Blank:	SDGHANNA1 - -	SDGHANNA1	SDGHANNA1	SDGHANNA1	SDGHANNA2 - -	SDGHANNA1	SDGHANNA1	SDGHANNA2 - -

Site: SURFACE SOILS
U: not detected

Table 2 Validation / Summary Table

. DATE	LOCATION: ISIS ID: AB NUMBER: SAMPLED: ANALYZED:	SS-122 HFSS122XXX94XX 2225916 10/10/94 10/17/94	SS-123 HFSS123XXX94XX 2226503 10/11/94 10/24/94	SS-124 HFSS124XXX94XX 2225917 10/10/94 10/17/94	\$\$-125 HF\$\$125XXX94XX 2225920 10/10/94 10/17/94
ANALYTE	RL				
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm	0.01 212 1	- 0.01 U >212 1 U	0.01 U >212 1 U	0.01 U >212 1 U	0.01 U >212 1 U
Sulfide, Reactive, ppm	i	1 0	i ŭ	1 Ŭ	1 Ŭ
22222222222222222222222222222222222222	=======================================			************	**************
Associated Meth		SDGHANNA1	SDGHANNA2	SDGHANNA1	SDGHANNA1
Associated Equipme Associated Fig		-	•	•	• •

Site: SURFACE SOILS U: not detected

Semivolatile Organic Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-122 HFSS122XXX94XX 2225916 10/10/94 10/13/94 11/08/94	SS-123 HFSS123XXX94XX 2226503 10/11/94 10/14/94 11/14/94	SS-124 HFSS124XXX94XX 2225917 R 10/10/94 10/13/94 11/18/94	SS-125 HFSS125XXX94XX 2225920 R 10/10/94 10/13/94 11/18/94
Phenol	330	390 U	370 U	410 UJ	410 UJ
bis(2-Chloroethyl)ether	330	390 UJ	370 U	410 UJ	410 UJ
2-Chlorophenol	<b>33</b> 0	390 U	370 U	410 UJ	410 UJ
1,3-Dichlorobenzene	330	390 UJ	370 U	410 UJ	410 UJ
1,4-Dichlorobenzene	330	390 UJ	3 <u>7</u> 0 U	410 UJ	410 UJ
1,2-Dichlorobenzene	330	390 UJ	370 U	410 UJ	410 UJ
2-Methylphenol	330	390 U	370 U	410 UJ	410 UJ
2,2'-oxybis(1-Chloropropane)	330	390 UJ	370 U	410 UJ	410 UJ
4-Methylphenol	<b>33</b> 0	390 U	370 U	410 UJ	410 UJ
N-Nitroso-di-n-propylamine	330	390 UJ	370 U	410 UJ	410 UJ
Hexachloroethane	330	390 UJ	370 U	410 UJ	410 UJ
Nitrobenzene	330	390 UJ	· 370 U	410 UJ	410 UJ
Isophorone	330	390 UJ	370 U	410 UJ	410 UJ
2-Nitrophenol	330	390 U	370 U	410 UJ	410 UJ
2,4-Dimethylphenol	330	390 U	370 U	410 UJ	410 UJ
bis(2-Chloroethoxy)methane	330	390 UJ	370 U	410 UJ	410 UJ
2,4-Dichlorophenol	330	390 U	370 U	410 UJ	410 UJ
1,2,4-Trichlorobenzene	330	390 N1	370 U	410. UJ	4 <u>10</u> UJ
Naphthalene	330	56 J	210 J	410 UJ	51 J
4-Chloroaniline	330	390 UJ	370 U	410 UJ	410 UJ
Hexachlorobutadiene	330	390 UJ	370 U	410 UJ	410 UJ
4-Chloro-3-Methylphenol	330	390 U	370 U	410 UJ	4 <u>10</u> UJ
2-Methylnaphthalene	330	_79 J	51 J	410 UJ	.55 J
Hexachlorocyclopentadiene	330	390 UJ	370 U	410 UJ	410 UJ
2,4,6-Trichlorophenol	330	390 U	370 U	410 UJ	410 UJ
2,4,5-Trichlorophenol	800	930 U	880 U	980 UJ	990 UJ
2-Chloronaphthalene	330	390 UJ	370 U	410 UJ	410 UJ
2-Nitroaniline	800 330	930 UJ	880 ป 370 บ	980 UJ	990 UJ
Dimethylphthalate		390 UJ		410 UJ	410 UJ
Acenaphthylene	330 330	390 UJ	46 J 370 U	410 UJ	410 UJ
2,6-Dinitrotoluene	_			410 UJ	410 UJ

Site: SURFACE SOILS U: not detected J: estimated R: unusable

Table 2 Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:		1D: HFSS122XXX9 BER: 2225916 LED: 10/10/94 FED: 10/13/94	HFSS122XXX94XX		SS-123 HFSS123XXX94XX 2226503 10/11/94 10/14/94 11/14/94		94XX R 4 4	SS-125 XX HFSS125XXX94XX 2225920 R 10/10/94 10/13/94 11/18/94	
ANALYTE	sow-3/90 -	II CRQL			•					
3-Nitroaniline	• • • • • • • • • • • • • • • • • • • •	800	930	UJ	880	U	980	UJ	990	UJ
Acenaphthene		330	390	ŪĴ	60	J.	90	J	410	ŭĴ
2,4-Dinitropheno	l	800		R	880	Ü	980	ŨJ	990	กา
4-Nitrophenol	-	800	930	Ü ·	880	ŭ	980	ÜĴ	990	ÜĴ
Dibenzofuran		330	40	J	370	ŭ	410	UJ	410	ΠŢ
2,4-Dinitrotolue	ne .	330		ŬJ	370	Ŭ	410	UJ	410	ΩĴ
Diethylphthalate		330		ÜĴ	370	Ŭ	410	UJ	410	ŭĵ
4-Chlorophenyl-pl	envlether	330		UJ	370	ŭ	410	UJ	410	ΩĴ
Fluorene	10117 ( 0 (1101	330	45	j	45	J	410	ÜĴ	410	ÜĴ
4-Nitroaniline		800		ŭJ	880	ŭ	980	UJ	990	UJ
4,6-Dinitro-2-me	thylphenol	800	/50	R	880	ŭ	980	UJ	990	ΩĴ
N-Nitrosodipheny		330	390	ÜJ	370	Ŭ	410	ÜĴ	410	ÜĴ
4-Bromophenyl-ph		330		UJ	370	ŭ	410	UJ	410	UJ
Hexachlorobenzen		330		UJ	370	ŭ	410	UJ	410	UJ
Pentachloropheno		800	• • • •	Ü	880	Ŭ	980	UJ	990	N7
Phenanthrene	•	330	490	Ĵ	290	J	120	J	140	J
Anthracene		330	100	j	42	j	410	ΩJ	410	ΩJ
Carbazole		330		ŭJ	370	ŭ	410	O)	410	N)
Di-n-butylphthal	ate	330		UJ	370	Ü	410	UJ	410	UJ
Fluoranthene	are	330	570	J	490	U	200	J	210	J
Pyrene		330	1900	j	600		290 290	J	320	J
Butylbenzylphtha	l a+a	330	180	J	370	U	410	ΩJ	410	NI
3,3'-Dichloroben		330	100	R	370 370	Ü	410	N7	410	UJ
Benzo(a)Anthrace		330	440	Ĵ	380	U	180	J	140	7
	ie .	330	580	j	550 550		220	J	220	J
Chrysene bis(2-Ethylhexyl	Anhehal aea	330	210	j	370	U	410	กา	140	j
Di-n-octylphthal		330	. 210	Ř	370	Ü	410	N1	410	Ω1·
Benzo(b)Fluoranti		330	650	Ĵ	540	•	280	J	270	J
Benzo(k)Fluoranti		330	610	j	390	J	300	j	220	j
Benzo(a)Pyrene	iciic	330	410	j	390		260	j	150	j
Indeno(1,2,3-c,d)	\Pvrene	330	380	j	190	J	120	j	82	j
Dibenz(a,h)Anthr		330	65	j	49	j	410	ΩJ	410	ΩJ
Benzo(g,h,i)pery		330	420	ŭ	160	ŭ	93	J	71	J
55555555555555555555555555555555555555				====		=====		_		_
	Dilutio	on Factor:	1.00		1.00		1.00	-	1.00	
		nt Solids:	86		91		82		81	
Sample	Volume\Weigh		30.0		30.0		30.0		30.0	
Δε	sociated Meth	hod Blank:	S1268.D		S1316.D		S1268.D		S1268.D	
	iated Equipme		HFQSXX4XXX94XX	HFQ	SXX5XXX94XX	HFQ	SXX4XXX94XX	HFQ	SXX4XXX94XX	
	ssociated Fie		•	=			•	~	-	

Site: SURFACE SOILS
U: not detected R: unusable
J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-101 DUP HFSS101XXX94XD 2225904 10/10/94 10/14/94 11/15/94	SS-101 DUP HFSS101XXX94XD 2225904 R 10/10/94 10/14/94 12/30/94	SS-101 HFSS101XXX94 2225901 10/10/94 10/14/94 11/15/94	SS-101 XX HFSS101XXX94 2225901 R 10/10/94 10/14/94 12/28/94	SS-102 XX HFSS102XXX94 2225905 10/10/94 10/14/94 11/15/94	SS-102 XX HFSS102XXX94X: 2225905 R 10/10/94 10/14/94 12/30/94	SS-103 X HFSS103XXX94 2225906 10/10/94 10/14/94 11/15/94	SS-103 XX HFSS103XXX94XX 2225906 R 10/10/94 10/14/94 12/28/94
ANALYTE SOW-3/90	- II CRQL						•	•	
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1254	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	10 U 20 U 2	2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.9 U 3.9 U 3.9 U 3.9 U 2.0 U 2.0 U 2.0 U 2.0 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U	2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.9 U 4.5 P 5.0 P 8.3 U 3.9 U 2.0 U 2.0 U 2.0 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U	2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 4.0 U 4.0 U 4.0 U 4.0 U 4.0 U	10 U	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.6 U	1.9 U U 1.9 U U U U U U U U U U U U U U U U U U U
	ion Factor: ent Solids:	1.00 84	5.00 84	1.00 84	1.00 84	1.00 83	5.00 83	1.00 91	1.00 91
Sample Volume\Wei		30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ:	PSB1014B SXX1XXX94XX HF0	PBLK07 QSXX1XXX94XX HF -	PSB1014B QSXX1XXX94XX	PBLK07 HFQSXX1XXX94XX -	PSB1014B HFQSXX1XXX94XX -	PBLK07 HFQSXX1XXX94XX HI -	PSB1014B FQSXX1XXX94XX -	PBLK07 HFQSXX1XXX94XX -

E: exceeds calibration range P: > 25% difference between columns
D: diluted result C: confirmed by GC/MS U: not detected

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-104 HFSS104XXX94XX 2225907 10/10/94 10/14/94 11/15/94	SS-104 HFSS104XXX94XX 2225907 R 10/10/94 10/14/94 12/30/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/14/94 11/20/94	SS-105 HFSS105XXX94XX 2225908 R 10/10/94 10/14/94 12/29/94	SS-106 HFSS106XXX94XX 2225909 10/10/94 10/14/94 11/20/94	SS-106 HFSS106XXX94XX 2225909 R 10/10/94 10/14/94 12/29/94	SS-107 HFSS107XXX94XX 2225910 10/10/94 10/14/94 11/20/94	SS-107 HFSS107XXX94XX 2225910 R 10/10/94 10/14/94 12/28/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1250	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.8 U 3.8 U 3.8 U 3.8 U 3.8 U 3.8 U 3.8 U 2.0 U 2.0 U 2.0 U 2.0 U 3.8 U	5.9 U U U U U U U U U U U U U U U U U U U	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.7 U 3.7 U 3.7 U 3.7 U 3.7 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.7 U 3.7 U 3.7 U 3.7 U	1.9 U 3.7 U	1.9 U 3.7 U	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.7 U 3.7 U 3.7 U 3.7 U 5.8 J 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U	2.0 UU 3.8 UU 3.8 UU 3.8 UU 3.8 UU 3.8 UU 2.0 UU 3.8 UU	2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.8 U 3.8 U 3.8 U 3.8 U 3.8 U 20 U 2.0 U 2.0 U 2.0 U 3.8 U
Dilu	tion Factor: cent Solids:	1.00 86 30.0	3.00 86 30.0	1.00 89 30.0	1.00 89 30.0	1.00 88 30.0	1.00 88 30.0	1.00 87 30.0	1.00 77 30.0
Associated M	ethod Blank:	PSB1014B	PBLK07	PSB1014A	PBLK07	PSB1014A	PBLK07	PSB1014A	PBLK07

Associated Equipment Blank:
Associated Field Blank:

HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX

J: estimated D: diluted result C: confirmed by GC/MS

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 10/10/94 10/14/94 11/22/94	SS-108 HFSS108XXX94XX 2225911 R 10/10/94 10/14/94 12/29/94	SS-109 K HFSS109XXX94 2226502 10/11/94 10/15/94 11/18/94	SS-110 XX HFSS110XXX9 2226501 10/11/94 10/15/94 11/17/94	SS-111 DU 4XX HFSS111XXX9 2226519 10/11/94 10/15/94 11/18/94		SS-112 XX HFSS112XXX94 2226515 10/11/94 10/15/94 11/18/94	SS-113 XX HFSS113XXX94XX 2226514 10/11/94 10/15/94 11/18/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC	1.7 1.7 1.7	2.4 U 2.4 U 2.4 U	2.4 U 2.4 U 2.4 U	4.7 U 4.7 U 4.7 U	1.9 (	U 2.0 U 2.0		1.9 L 1.9 L	6.2 U 6.2 U
gamma-BHC (Lindane) Heptachlor Aldrin	1.7 1.7 1.7	2.4 U 2.4 U 2.4 U	2.4 U 2.1 JP 2.4 U	4.7 U 4.7 U 4.7 U	1.9 (	J 2.0 J 2.0	j 2.0 U J 2.0 U	1.9 L 1.9 L 1.9 L	6.2 U 6.2 U
Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE	1.7 1.7 3.3 3.3	2.4 U 2.4 U 4.7 U 4.7 U	2.4 U 2.4 U 4.7 U 4.7 U	4.7 U 4.7 U 9.2 U 9.2 U	• • • • •	U 2.0 U 5.6	3.9 U	1.9 L 1.9 L 3.7 U 3.7 U	
Endrin Endosulfan II 4,4'-DDD	3.3 3.3 3.3	4.7 U 4.7 U 4.7 U	4.7 U 4.7 U 4.7 U	9.2 U 9.2 U 9.2 U	3.7	J 3.8 J 3.8	J 4.2 P J 5.1 P	3.7 U 5.0 P 3.7 U	12 U 12 U
Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT	3.3 3.3 3.3	4.7 U 4.7 U 4.8 P	4.7 U 4.7 U 9.0	9.2 U 9.2 U 9.2 U	3.7 i 3.7 i	3.8 J 3.8	3.9 U J 3.9 U	3.7 U 3.7 U 3.7 U	12 U 12 U 12 U
Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane	17 3.3 1.7 1.7	24 U 4.7 U 2.4 U 2.4 U	26 P 4.7 U 2.4 U 2.4 U	47 U 9.2 U 4.7 U 4.7 U	1.9	3.8 J 2.0	3.9 U J 2.0 U	19 u 3.7 u 1.9 u 1.9 u	12 U 6.2 U
Toxaphene Aroclor-1016 Aroclor-1221	170 33 67	240 U 47 U 96 U	240 U 47 U 96 U	470 u 92 u 190 u	190 (	J 200 J <b>3</b> 8	200 U J 39 U J 79 U	190 U 37 U 76 U	620 U 120 U
Aroclor-1232 Aroclor-1242 Aroclor-1248	33 33 33	47 U 47 U 47 U	47 U 47 U 47 U	92 U 92 U 92 U	37 i 37 i	J 38   J 38	. 39 U	37 U 37 U 37 U	120 U 120 U
Aroclor-1254 Aroclor-1260	33 33	47 U 47 U	47 U 71	92 U 56 J	37 ( P 37 (		J 39 U IP 270	37 U 140	120 U 150 P
	ion Factor: ent Solids: ght (ml\g):	1.00 70 30.0	1.00 70 30.0	2.00 72 30.0	1.00 90 30.0	1.00 86 30.0	1.00 85 30.0	1.00 88 30.0	1.00 82 30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ:	PSB1014A SXX1XXX94XX HF	PBLK07 OSXX1XXX94XX HI	PSB1015B FQSXX5XXX94XX -	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX -

E: exceeds calibration range P: > 25% difference between columns D: diluted result C: confirmed by GC/MS U: not detected

J: estimated

Table 1
Laboratory Report of Analysis

	DATE	LOCATION: ISIS ID: LAB NUMBER: ATE SAMPLED: E EXTRACTED: TE ANALYZED:	SS-114 HFSS114XXX94XX 2226513 10/11/94 10/15/94 11/18/94	SS-115 DUP HFSS115XXX94 2225913 10/10/94 10/14/94 11/20/94		SS-115 XD HFSS115XXX94 2225912 10/10/94 10/14/94 11/22/94	SS-115 XX HFSS115XXX94) 2225912 R 10/10/94 10/14/94 12/29/94	SS-116 (X HFSS116XXX94X) 2225914 10/10/94 10/14/94 11/22/94	SS-116 ( HFSS116XXX94X) 2225914 R 10/10/94 10/14/94 12/30/94	SS-117 ( HFSS117XXX94XX 2225918 10/10/94 10/14/94 11/22/94
ANALYTE	sow-3/90 - II	CRQL		**						
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1254 Aroclor-1254 Aroclor-1260	,	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	2.0 U U 3.8 U U 3.8 U U U 2.0 U U U 3.8 3.8 U 3.8 U U 3.8 U 3.	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.7 U	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U	5.8 L 5.8 L 5.8 L 5.8 L 5.8 L 11 L 11 L 11 L 11 L 58 L 5.8 L 5.8 L 5.8 L	1.9 U 3.7 U	45 U 45 U 45 U 45 U 45 U 45 U 45 U 87 U 87 U 87 U 87 U 87 U 87 U 87 U 87	8.9 U 8.9 U 8.9 U 8.9 U 8.9 U 8.9 U 17 U 17 U 17 U 8.9 U 17 U 8.9 U 17 U 8.9 U 170 U 170 U 170 U 170 U 170 U 170 U	12 U
Sample V	Dilution Fa Percent So Olume\Weight (	olids:	1.00 87 30.0	1.00 88 30.0	1.00 88 30.0	3.00 88 30.0	1.00 88 30.0	25.0 95 30.0	5.00 95 30.0	4.00 56 30.0
Asso	ciated Method I		PSB1015B	PSB1014A	PBLK07	PSB1014A	PBLK07	PSB1014A	PBLK07	PSB1014A

Associated Equipment Blank:

Associated Field Blank:

HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX

J: estimated D: diluted result C: confirmed by GC/MS

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-117 HFSS117XXX94XX 2225918 D 10/10/94 10/14/94 01/04/95	SS-117 HFSS117XXX94X; 2225918 R 10/10/94 10/14/94 12/30/94	SS-118 K HFSS118XXX94: 2226505 10/11/94 10/15/94 11/18/94	SS-118 XX HFSS118XXX94 2226505 D 10/11/94 10/15/94 11/23/94	SS-119 XX HFSS119XXX94 2225919 10/10/94 10/14/94 11/20/94	SS-119 XX HFSS119XXX94) 2225919 R 10/10/94 10/14/94 12/29/94	SS-120 X HFSS120XXX94 2225915 10/10/94 10/14/94 11/20/94	SS-120 XX HFSS120XXX94XX 2225915 R 10/10/94 10/14/94 12/30/94
ANALYTE SOW-3/90	- II CRQL								
	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	150 U 290 U 290 U 290 U 290 U 290 U 290 U 150 U 150 U 150 U 150 U 290 U 290 U 290 U 290 U 2900 U 2500 U	15 U 15 U 15 U 15 U 15 U 15 U 29 U 29 U 29 U 29 U 29 U 29 U 29 U 29	8.6 U 8.6 U 8.6 U 8.6 U 8.6 U 8.6 U 17 U 17 U 17 U 17 U 17 U 17 U 8.6 U 8.6 U 170 U 170 U 170 U 170 U 170 U 170 U	290 U 3000 D 560 U 560 U 560 U 560 U 290 U 290 U 290 U 290 U 290 U 290 U 560 U 560 U 560 U 560 U 560 U 560 U	2.1 L 4.0 L	2.1 U 4.0 U	2.0 L 2.0 L 2.0 L 2.0 L 2.0 L 2.0 L 3.8 L 3.	3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U 3.9 U 3.9 U 3.9 U 3.9 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U
Sample Volume\Wei		30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ	PBLK08 SXX4XXX94XX HF	PBLK07 QSXX4XXX94XX HI -	PSB1015B FQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX -	PSB1014A HFQSXX4XXX94XX	PBLK07 HFQSXX4XXX94XX H	PSB10144 FQSXX4XXX94XX	PBLK07 HFQSXX4XXX94XX -

Site: SURFACE SOILS U: not detected 

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-121 HFSS121XXX94XX 2226504 10/11/94 10/15/94 11/18/94	SS-122 HFSS122XXX94XX 2225916 10/10/94 10/14/94 11/20/94	SS-122 HFSS122XXX94XX 2225916 R 10/10/94 10/14/94 12/29/94	SS-123 HFSS123XXX94XX 2226503 10/11/94 10/15/94 11/17/94	SS-124 HFSS124XXX94XX 2225917 10/10/94 10/14/94 11/20/94	SS-124 HFSS124XXX94XX 2225917 R 10/10/94 10/14/94 12/29/94	SS-125 HFSS125XXX94XX 2225920 10/10/94 10/14/94 11/20/94	SS-125 HFSS125XXX94XX 2225920 D 10/10/94 10/14/94 01/04/95
ANALYTE SOW-3/90	) - II CRQL								·
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1212 Aroclor-1221 Aroclor-1248 Aroclor-1254 Aroclor-1260	1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	1.9 U 3.6 U	2.0 U U U U U U U U U U U U U U U U U U U	2.0 U U U U U U U U U U U U U U U U U U U	1.9 U 3.6 U	2.1 U U U U U U U U U U U U U U U U U U U	2.1 U U U U U U U U U U U U U U U U U U U	2.1 U U U U U U U U U U U U U U U U U U U	8.4 U B.4 U B.4 U U B.4 U U U U U U U U U U U U U U U U U U U
	ution Factor: rcent Solids: eight (ml\g):	1.00 91 30.0	1.00 86 30.0	1.00 86 30.0	1.00 91 30.0	1.00 82 30.0	1.00 82 30.0	1.00 81 30.0	4.00 81 30.0
Associated N	Method Blank:	PSB1015B	PSB1014A	PBLK07	PSB1015B	PSB1014A	PBLK07	PSB1014A	PBLK08

Associated Field Blank:

Associated Equipment Blank: HFQSXX5XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX

J: estimated D: diluted result C: confirmed by GC/MS

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 10/10/94 10/14/94 11/22/94	SS-108 HFSS108XXX94XX 2225911 R 10/10/94 10/14/94 12/29/94	SS-109 K HFSS109XXX94 2226502 10/11/94 10/15/94 11/18/94	SS-110 XX HFSS110XXX9 2226501 10/11/94 10/15/94 11/17/94	SS-111 DU 4XX HFSS111XXX9 2226519 10/11/94 10/15/94 11/18/94		SS-112 XX HFSS112XXX94 2226515 10/11/94 10/15/94 11/18/94	SS-113 XX HFSS113XXX94XX 2226514 10/11/94 10/15/94 11/18/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC	1.7 1.7 1.7	2.4 U 2.4 U 2.4 U	2.4 U 2.4 U 2.4 U	4.7 U 4.7 U 4.7 U	1.9 (	U 2.0 U 2.0		1.9 L 1.9 L	6.2 U 6.2 U
gamma-BHC (Lindane) Heptachlor Aldrin	1.7 1.7 1.7	2.4 U 2.4 U 2.4 U	2.4 U 2.1 JP 2.4 U	4.7 U 4.7 U 4.7 U	1.9 (	J 2.0 J 2.0	j 2.0 U J 2.0 U	1.9 L 1.9 L 1.9 L	6.2 U 6.2 U
Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE	1.7 1.7 3.3 3.3	2.4 U 2.4 U 4.7 U 4.7 U	2.4 U 2.4 U 4.7 U 4.7 U	4.7 U 4.7 U 9.2 U 9.2 U	• • • • •	U 2.0 U 5.6	3.9 U	1.9 L 1.9 L 3.7 U 3.7 U	
Endrin Endosulfan II 4,4'-DDD	3.3 3.3 3.3	4.7 U 4.7 U 4.7 U	4.7 U 4.7 U 4.7 U	9.2 U 9.2 U 9.2 U	3.7	J 3.8 J 3.8	J 4.2 P J 5.1 P	3.7 U 5.0 P 3.7 U	12 U 12 U
Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT	3.3 3.3 3.3	4.7 U 4.7 U 4.8 P	4.7 U 4.7 U 9.0	9.2 U 9.2 U 9.2 U	3.7 i 3.7 i	3.8 J 3.8	3.9 U J 3.9 U	3.7 U 3.7 U 3.7 U	12 U 12 U 12 U
Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane	17 3.3 1.7 1.7	24 U 4.7 U 2.4 U 2.4 U	26 P 4.7 U 2.4 U 2.4 U	47 U 9.2 U 4.7 U 4.7 U	1.9	3.8 J 2.0	3.9 U J 2.0 U	19 u 3.7 u 1.9 u 1.9 u	12 U 6.2 U
Toxaphene Aroclor-1016 Aroclor-1221	170 33 67	240 U 47 U 96 U	240 U 47 U 96 U	470 u 92 u 190 u	190 (	J 200 J <b>3</b> 8	200 U J 39 U J 79 U	190 U 37 U 76 U	620 U 120 U
Aroclor-1232 Aroclor-1242 Aroclor-1248	33 33 33	47 U 47 U 47 U	47 U 47 U 47 U	92 U 92 U 92 U	37 i 37 i	J 38   J 38	. 39 U	37 U 37 U 37 U	120 U 120 U
Aroclor-1254 Aroclor-1260	33 33	47 U 47 U	47 U 71	92 U 56 J	37 ( P 37 (		J 39 U IP 270	37 U 140	120 U 150 P
	ion Factor: ent Solids: ght (ml\g):	1.00 70 30.0	1.00 70 30.0	2.00 72 30.0	1.00 90 30.0	1.00 86 30.0	1.00 85 30.0	1.00 88 30.0	1.00 82 30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ:	PSB1014A SXX1XXX94XX HF	PBLK07 OSXX1XXX94XX HI	PSB1015B FQSXX5XXX94XX -	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX -

E: exceeds calibration range P: > 25% difference between columns D: diluted result C: confirmed by GC/MS U: not detected

J: estimated

Table 1
Laboratory Report of Analysis

	DATE	LOCATION: ISIS ID: LAB NUMBER: ATE SAMPLED: E EXTRACTED: TE ANALYZED:	SS-114 HFSS114XXX94XX 2226513 10/11/94 10/15/94 11/18/94	SS-115 DUP HFSS115XXX94 2225913 10/10/94 10/14/94 11/20/94		SS-115 XD HFSS115XXX94 2225912 10/10/94 10/14/94 11/22/94	SS-115 XX HFSS115XXX94) 2225912 R 10/10/94 10/14/94 12/29/94	SS-116 (X HFSS116XXX94X) 2225914 10/10/94 10/14/94 11/22/94	SS-116 ( HFSS116XXX94X) 2225914 R 10/10/94 10/14/94 12/30/94	SS-117 ( HFSS117XXX94XX 2225918 10/10/94 10/14/94 11/22/94
ANALYTE	sow-3/90 - II	CRQL		**						
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1254 Aroclor-1254 Aroclor-1260	,	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	2.0 U U 3.8 U U 3.8 U U U 2.0 U U U 3.8 3.8 U 3.8 U U 3.8 U 3.	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.7 U	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U	5.8 L 5.8 L 5.8 L 5.8 L 5.8 L 11 L 11 L 11 L 11 L 58 L 5.8 L 5.8 L 5.8 L	1.9 U 3.7 U	45 U 45 U 45 U 45 U 45 U 45 U 45 U 87 U 87 U 87 U 87 U 87 U 87 U 87 U 87	8.9 U 8.9 U 8.9 U 8.9 U 8.9 U 8.9 U 17 U 17 U 17 U 8.9 U 17 U 8.9 U 17 U 8.9 U 170 U 170 U 170 U 170 U 170 U 170 U	12 U
Sample V	Dilution Fa Percent So Olume\Weight (	olids:	1.00 87 30.0	1.00 88 30.0	1.00 88 30.0	3.00 88 30.0	1.00 88 30.0	25.0 95 30.0	5.00 95 30.0	4.00 56 30.0
Asso	ciated Method I		PSB1015B	PSB1014A	PBLK07	PSB1014A	PBLK07	PSB1014A	PBLK07	PSB1014A

Associated Equipment Blank:

Associated Field Blank:

HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX

J: estimated D: diluted result C: confirmed by GC/MS

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-117 HFSS117XXX94XX 2225918 D 10/10/94 10/14/94 01/04/95	SS-117 HFSS117XXX94X; 2225918 R 10/10/94 10/14/94 12/30/94	SS-118 K HFSS118XXX94: 2226505 10/11/94 10/15/94 11/18/94	SS-118 XX HFSS118XXX94 2226505 D 10/11/94 10/15/94 11/23/94	SS-119 XX HFSS119XXX94 2225919 10/10/94 10/14/94 11/20/94	SS-119 XX HFSS119XXX94) 2225919 R 10/10/94 10/14/94 12/29/94	SS-120 X HFSS120XXX94 2225915 10/10/94 10/14/94 11/20/94	SS-120 XX HFSS120XXX94XX 2225915 R 10/10/94 10/14/94 12/30/94
ANALYTE SOW-3/90	- II CRQL								
	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	150 U 290 U 290 U 290 U 290 U 290 U 290 U 150 U 150 U 150 U 150 U 290 U 290 U 290 U 290 U 2900 U 2500 U	15 U 15 U 15 U 15 U 15 U 15 U 29 U 29 U 29 U 29 U 29 U 29 U 29 U 29	8.6 U 8.6 U 8.6 U 8.6 U 8.6 U 8.6 U 17 U 17 U 17 U 17 U 17 U 17 U 8.6 U 8.6 U 170 U 170 U 170 U 170 U 170 U 170 U	290 U 3000 D 560 U 560 U 560 U 560 U 290 U 290 U 290 U 290 U 290 U 290 U 560 U 560 U 560 U 560 U 560 U 560 U	2.1 L 4.0 L	2.1 U 4.0 U	2.0 L 2.0 L 2.0 L 2.0 L 2.0 L 2.0 L 3.8 L 3.	3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U 3.9 U 3.9 U 3.9 U 3.9 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U
Sample Volume\Wei		30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ	PBLK08 SXX4XXX94XX HF	PBLK07 QSXX4XXX94XX HI -	PSB1015B FQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX -	PSB1014A HFQSXX4XXX94XX	PBLK07 HFQSXX4XXX94XX H	PSB10144 FQSXX4XXX94XX	PBLK07 HFQSXX4XXX94XX -

Site: SURFACE SOILS U: not detected 

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-121 HFSS121XXX94XX 2226504 10/11/94 10/15/94 11/18/94	SS-122 HFSS122XXX94XX 2225916 10/10/94 10/14/94 11/20/94	SS-122 HFSS122XXX94XX 2225916 R 10/10/94 10/14/94 12/29/94	SS-123 HFSS123XXX94XX 2226503 10/11/94 10/15/94 11/17/94	SS-124 HFSS124XXX94XX 2225917 10/10/94 10/14/94 11/20/94	SS-124 HFSS124XXX94XX 2225917 R 10/10/94 10/14/94 12/29/94	SS-125 HFSS125XXX94XX 2225920 10/10/94 10/14/94 11/20/94	SS-125 HFSS125XXX94XX 2225920 D 10/10/94 10/14/94 01/04/95
ANALYTE SOW-3/90	) - II CRQL								·
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1212 Aroclor-1221 Aroclor-1248 Aroclor-1254 Aroclor-1260	1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	1.9 U 3.6 U	2.0 U U U U U U U U U U U U U U U U U U U	2.0 U U U U U U U U U U U U U U U U U U U	1.9 U 3.6 U	2.1 U U U U U U U U U U U U U U U U U U U	2.1 U U U U U U U U U U U U U U U U U U U	2.1 U U U U U U U U U U U U U U U U U U U	8.4 U B.4 U B.4 U U B.4 U U U U U U U U U U U U U U U U U U U
	ution Factor: rcent Solids: eight (ml\g):	1.00 91 30.0	1.00 86 30.0	1.00 86 30.0	1.00 91 30.0	1.00 82 30.0	1.00 82 30.0	1.00 81 30.0	4.00 81 30.0
Associated N	Method Blank:	PSB1015B	PSB1014A	PBLK07	PSB1015B	PSB1014A	PBLK07	PSB1014A	PBLK08

Associated Field Blank:

Associated Equipment Blank: HFQSXX5XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX

J: estimated D: diluted result C: confirmed by GC/MS

#### Table 1 Laboratory Report of Analysis

LOCATION: SS-125
ISIS ID: HFSS125XXX94XX
LAB NUMBER: 2225920 R
DATE SAMPLED: 10/10/94
DATE EXTRACTED: 10/14/94
DATE ANALYZED: 12/30/94

ANALYTE	sow-3/90 - II	CRQL		
alpha-BHC		1.7	 2.1	Ü
beta-BHC		1.7	2.1	Ŭ
delta-BHC		1.7	2.1	Ŭ
gamma-BHC (Lindan	e)	1.7	2.1	ŭ
Heptachlor	-,	1.7	2.1	Ŭ
Aldrin		1.7	2.1	Ū
Heptachlor Epoxid	e	1.7	2.1	Ŭ
Endosulfan I		1.7	2.1	Ū
Dieldrin		3.3	4.1	Ū
4,4'-DDE		3.3	4.1	U
Endrin		3.3	4.1	U
Endosulfan II		3.3 3.3 3.3 3.3	4.1	U
4,4'-DDD		3.3	4.1	U
Endrin Aldehyde		3.3	37	
Endosulfan Sulfat	e	3.3 3.3	4.1	U
4,4'-DDT		3.3	4.1	Ρ
Methoxychlor		_17	. 21	U
Endrin Ketone		3.3	4.1	U
alpha-Chlordane		1.7	2.1	U
gamma-Chlordane		1.7	2.1	U
Toxaphene		170	210	U
Aroclor-1016		33	41	U
Aroclor-1221		67	83	U
Aroclor-1232		33	41	U
Aroclor-1242		33	41	U
Aroclor-1248		33 33	41 41	U
Aroclor-1254		33	940	E
Aroclor-1260		<i></i>	94U 	===

Dilution Factor: 1.00
Percent Solids: 81
Sample Volume\Weight (ml\g): 30.0

Associated Method Blank: PBLK07
Associated Equipment Blank: HFQSXX4XXX94XX
Associated Field Blank:

Site: SURFACE SOILS

J: estimated D: diluted result C: confirmed by GC/MS

#### Table 1 Laboratory Report of Analysis

LOCATION: SS-125
ISIS ID: HFSS125XXX94XX
LAB NUMBER: 2225920 R
DATE SAMPLED: 10/10/94
DATE EXTRACTED: 10/14/94
DATE ANALYZED: 12/30/94

ANALYTE	sow-3/90 - II	CRQL		
alpha-BHC		1.7	 2.1	Ü
beta-BHC		1.7	2.1	Ŭ
delta-BHC		1.7	2.1	Ŭ
gamma-BHC (Lindan	e)	1.7	2.1	ŭ
Heptachlor	-,	1.7	2.1	Ŭ
Aldrin		1.7	2.1	Ū
Heptachlor Epoxid	e	1.7	2.1	Ŭ
Endosulfan I		1.7	2.1	Ū
Dieldrin		3.3	4.1	Ū
4,4'-DDE		3.3	4.1	U
Endrin		3.3	4.1	U
Endosulfan II		3.3 3.3 3.3 3.3	4.1	U
4,4'-DDD		3.3	4.1	U
Endrin Aldehyde		3.3	37	
Endosulfan Sulfat	e	3.3 3.3	4.1	U
4,4'-DDT		3.3	4.1	Ρ
Methoxychlor		_17	. 21	U
Endrin Ketone		3.3	4.1	U
alpha-Chlordane		1.7	2.1	U
gamma-Chlordane		1.7	2.1	U
Toxaphene		170	210	U
Aroclor-1016		33	41	U
Aroclor-1221		67	83	U
Aroclor-1232		33	41	U
Aroclor-1242		33	41	U
Aroclor-1248		33 33	41 41	U
Aroclor-1254		33	940	E
Aroclor-1260		<i></i>	94U 	===

Dilution Factor: 1.00
Percent Solids: 81
Sample Volume\Weight (ml\g): 30.0

Associated Method Blank: PBLK07
Associated Equipment Blank: HFQSXX4XXX94XX
Associated Field Blank:

Site: SURFACE SOILS

J: estimated D: diluted result C: confirmed by GC/MS

04/14/95

## Pesticides/PCBs Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-101 DUP HFSS101XXX94XD 2225904 R 10/10/94 10/14/94 12/30/94	SS-101 HFSS101XXX94X 2225901 R 10/10/94 10/14/94 12/28/94	SS-102 X HFSS102XXX94X 2225905 R 10/10/94 10/14/94 12/30/94	SS-103 XX HFSS103XXX94 2225906 R 10/10/94 10/14/94 12/28/94	SS-104 XX HFSS104XXX94) 2225907 R 10/10/94 10/14/94 12/30/94	SS-105 (X HFSS105XXX94XX 2225908 R 10/10/94 10/14/94 12/29/94	SS-106 HFSS106XXX94X: 2225909 R 10/10/94 10/14/94 12/29/94	SS-107 K HFSS107XXX94XX 2225910 R 10/10/94 10/14/94 12/28/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1260 ====================================	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	10 UJ 20 UJ 20 UJ 20 UJ 10 UJ 10 UJ 10 UJ 20 UJ	2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 3.9 UJ	10 UJ 20 UJ	1.9 U	J 5.9 U. J 12 U.	1.9 UJ 3.7 UJ 3.7 UJ 3.7 UJ 3.7 UJ 1.9 UJ 3.7 UJ	1.9 UJ 3.7 UJ 3.9 UJ 37 UJ 37 UJ 37 UJ 37 UJ 37 UJ 37 UJ	2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 2.0 UJ 3.8 UJ
	ion factor: ent Solids: ght (ml\g):	5.00 84 30.0	1.00 84 30.0	5.00 83 30.0	1.00 91 30.0	3.00 86 30.0	1.00 89 30.0	1.00 88 30.0	1.00 77 30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ:	PBLK07 SXX1XXX94XX HF	PBLK07 QSXX1XXX94XX H	PBLK07 FQSXX1XXX94XX H	PBLK07 IFQSXX1XXX94XX -	PBLK07 HFQSXX1XXX94XX I	PBLK07 IFQSXX1XXX94XX HI	PBLK07 FQSXX1XXX94XX H	PBLK07 FQSXX1XXX94XX -

Site: SURFACE SOILS
U: not detected
J: estimated N: R: unusable N: spike recovery not met

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SS-108 HFSS108XXX94XX 2225911 R 10/10/94 10/14/94 12/29/94	SS-109 HFSS109XXX94XX 2226502 10/11/94 10/15/94 11/18/94	SS-110 HFSS110XXX94; 2226501 10/11/94 10/15/94 11/17/94	SS-111 DU XX HFSS111XXX9 2226519 10/11/94 10/15/94 11/18/94	4XD HFSS111XXX94 2226516 10/11/94 10/15/94	\$S-112 XX HFSS112XXX94 2226515 10/11/94 10/15/94 11/18/94	SS-113 XX HFSS113XXX94 2226514 10/11/94 10/15/94 11/18/94	SS-114 XX HFSS114XXX94XX 2226513 10/11/94 10/15/94 11/18/94
ANALYTE SOW-3/90	- II CRQL								
alpha-BHC beta-BHC delta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1254	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	2.4 UJ 2.4 UJ 2.4 UJ 2.1 UJ 2.4 UJ 4.7 UJ 4.	R R R R R R R R R R R R R R R R R R R	1.9 U. 3.7 U.	J 2.0 J 2.0 J 2.0 J 2.0 J 2.0 J 2.0 J 3.8 J	UJ	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.7 U 3.7 U 3.7 U 3.7 U 1.9 U 1.9 U 1.9 U 37 U 37 U	150	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
Dilut	ion Factor:		2.00	1.00	1.00	1.00	1.00	1.00	1.00
Perc Sample Volume\Wei	ent Solids: ght (ml\g):	70 30.0	72 30.0	90 30.0	86 30.0	85 30.0	88 30.0	82 30.0	87 30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ	PBLK07 SXX1XXX94XX HF0 -	PSB1015B QSXX5XXX94XX HF	PSB1015B QSXX5XXX94XX -	PSB1015B HFQSXX5XXX94XX -	PSB1015B HFQSXX5XXX94XX	PSB1015B HFQSXX5XXX94XX -	PSB1015B HFQSXX5XXX94XX -	PSB1015B HFQSXX4XXX94XX

Site: SURFACE SOILS
U: not detected R: unusable

J: estimated N: spike recovery not met

Inorganic Soil Analysis (mg/kg)

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SS-101 DUP HFSS101XXX94XD 225904 10/10/94	SS-101 HFSS101XXX94XX 225901 10/10/94	SS-102 HFSS102XXX94XX 225905 10/10/94	SS-103 HFSS103XXX94XX 225906 10/10/94	SS-104 HFSS104XXX94XX 225907 10/10/94	SS-105 HFSS105XXX94XX 225908 10/10/94	SS-106 HFSS106XXX94XX 225909 10/10/94	SS-107 HFSS107XXX94XX 225910 10/10/94
ANALYTE	`SOW-3/90 - 11 CRDL								
Aluminum	40	8670	8500	12600	4010	6450	10100	7330	8440
Antimony	12 .	28.8 N	23.3 N	12.1 N	39.5 N	22.9 N	15.8 N	1 <u>7.4</u> N	15.1 N
Arsenic	2	10.4 S	15.4 S	14.4	20.5 s	15.9	15.4 s	13.7	14.9
Barium	40	109	112	178	52.6	89.5	113	84.0	77.0
Beryllium Cadmium	1	1.9 16.5	2.1 14.9	2.9 12.7	0.88 в 6.2	1.2 17.6	1.4 5.2	0.94 в 3.9	0.91 B
Calcium	1000	42100	42400	54700	27500	33400	50500	3.9 34500	3.1 38900
Chromium	2	164 *	285 *	81.9 *	251 *	149 *	85.1 *	40.2 *	22.4 *
Cobalt	10	19.8	18.4	10.2	33.4	18.1	16.1	12.2	11.5
Copper	5	191 N*	228 N*	79.3 N*	689 N*	290 N*	178 N*	92.9 N*	52.1 N*
Iron	20	181000 E	156000 E	114000 E	343000 E	186000 E	159000 E	124000 E	124000 E
Lead ·	0.6	4460	4460	3240	523	5880	500	294	222
Magnesium	1000	10800	10600	13200	5700	7800	11800	7670	10200
Manganese	3	4860	4720	4220	7540	3670	4940	4310	4430
Mercury	0.1	0.12	0.14	0.12	0.11 U	0.27	0.13	0.26	0.25
Nickel	4000	95.4	. 82.7	37.7	183	87.6	62.4	28.8	15.9
Potassium	1000	1180 1.1 UNW	1220 2.2 SN	3730 2.6 N	691 B 1.0 UN	818 B 2.3 SN	4250	1330	805 B
Selenium Silver	9	1.1 UNW 1.2 UN	2.2 SN 1.2 UN	2.6 N 0.99 UN	0.98 UN	2.3 SN 1.1 UN	1.1 UWN 0.99 UN	1.1 UN 1.1 UN	0.97 UN 1.0 UN
Sodium	1000	542 B	353 B	764 B	301 B	272 B	535 B	404 B	916 B
Thallium	2	6.2	7.3	8.1	1.0 UW	7.7	1.1 UW	1.5 B	0.97 UW
Vanadium	10	67.2	62.2	44.1	85.2	55.5	52.6	45.6	44.4
Zinc	4	4710	4500	3290	942	4860	1010	780	457
Cyanide	11	11.4 N*	4.1 N*	8.7 N*	0.50 UN*	5.8 N*	0.55 UN*	0.58 UN*	0.52 UN*
=======================================	Percent Solids:	84	84	83	91	86	89	88	87

Associated Method Blank: SDGHANNA1S SDGHANNA

Site: SURFACE SOILS

U: not detected N: spike recovery not met W: post digestion spike not met B: less than CRDL

E: interference S: method of standard additions \*: duplicate analysis not met

Table 1
Laboratory Report of Analysis

	LOCATIO ISIS I LAB NUMBE DATE SAMPLE	D: HFSS108XXX94XX R: 225911	SS-109 HFSS109XXX94XX 226502 10/11/94	SS-110 HFSS110XXX94XX 226501 10/11/94	SS-111 DUP HFSS111XXX94XD 226519 10/11/94	SS-111 HFSS111XXX94XX 226516 10/11/94	SS-112 HFSS112XXX94XX 226515 10/11/94	SS-113 HFSS113XXX94XX 226514 10/11/94	SS-114 HFSS114XXX94XX 226513 10/11/94
	DATE OATT EE	10/10/74	10/11/74	10, 11, 74	10/11/74	10/11/74	10/11/74	10/11/74	10/11/74
ANALYTE	SOW-3/90 - II CRDL	•							
Aluminum	40	6590	31300	19900	17200	19400	12500	14100	13900
Antimony	12	10.1 UN	14.6 BN*	40.5 N*	16.6 N*	17.4 N*	14.5 N*	8.7 UN*	22.1 N*
Arsenic <sup>*</sup>	2	19.1 S	5.4 UN	8.8 SN	17.5 SN	16.5 SN	8.7 N	18.4 N	14.8 N
Barium	40	77.8	191	234	308	272	300	311	170
Beryllium	1	0.93 B	5.1	4.1	2.9	3.5	2.3	2.6	2.1
Cadmium	1	4.3	0.92 BN*	4.6 N*	5.6 N*	4.9 N*	8.1 N*	21.7 N*	3.5 N*
Calcium	1000	78600	128000	116000	64900	85900	71900	70700	49000
Chromium	2	23.2 *	23.9 *	26.6 *	38.0 *	38.6 *	45.5 *	71.7 *	41.8 *
Cobalt	10	11.0 B	7.3 B	12.7	14.9	14.6	7.9 B	17.4	15.7
Copper	5	156 N*	65.8 *	1030 *	4880 *	3440 *	3090 *	4100 *	152 *
Iron	20	116000 E	38500	119000	103000	102000	64600	87400	140000
Lead	0.6	337	265	1330	<i>7</i> 57	1290 *	2440	953	263
Magnesium	100 <u>0</u>	11400	11500	13900	8510	8300	17700	12800	<b>764</b> 0
Manganese	3	4260	1860	4780	2840	2550	3600	24800	4160
Mercury	0.1	0.14 U	1.2	0.24	0.30	0.33	9.9	16.0	0.27
Nickel	8	24.5	19.9	19.9	43.5	28.8	25.0	96.3	32.2
Potassium	1000	2650	1410	1790	1260	1430	985 B	1010 B	972 B
Selenium	1	1.3 UN	2.0 SN*	1.2 SN*	2.1 +N*	1.4 SN*	1.1 UWN*		1.0 UN*
Silver	2	1.3 UN	1.4 UN	1.1 UN	1.1 UN	1.0 UN	1.1 UN	1.1 UN	1.1 UN
Sodium	1000	656 B	423 B	810 B	404 B	512 B	670 B	575 B	527 B
Thallium	2	1.3 UW	1.3 U	,1.0 U	,1.1 U	1.0 UW	1.1 UW	1.1 U	1.0 UW
<u>Vanadium</u>	10	39.8	37.1	44.0	44.4	45.4	25.1	67.1	49.9
Zinc	4	729	386 E*	697 E*	1730 E*	1600 E*	1420 E*	19300 E*	728 E*
Cyanide	1	0.72 UN*	0.69 UN	0.53 UN	2.5 N	2.4 N	0.58 UN	0.61 UN	0.68 N
	Percent Solids:	70	72	90	86	85	88	82	87

Site: SURFACE SOILS

U: not detected N: spike recovery not met W: post digestion spike not met B: less than CRDL

E: interference S: method of standard additions \*: duplicate analysis not met

Inorganic Soil Analysis (mg/kg)

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SS-115 DUP HFSS115XXX94XD 225913 10/10/94	SS-115 HFSS115XXX94XX 225912 10/10/94	SS-116 HFSS116XXX94XX 225914 10/10/94	SS-117 HFSS117XXX94XX 225918 10/10/94	SS-118 HFSS118XXX94XX 226505 10/11/94	SS-119 HFSS119XXX94XX 225919 10/10/94	SS-120 HFSS120XXX94XX 225915 10/10/94	SS-121 HFSS121XXX94XX 226504 10/11/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	40	6150	4470	17200	22200	12800	22800	36200	6230
Antimony	12	8.6 UN	8.0 UN	7.7 UN	12.9 UN	14.2 BN*	9.0 UN	8.4 UN	7.2 UN*
Arsenic	2	8.3	6.5 S	2.0 B	1.7 U	6.6 N	2.3 B	2.3 BW	2.8 N
Barium	40	39.8 B	30.4 B	132	238	165	165	243	19.8 B
Beryllium	1	0.82 B	0.76 B	3.0	2.2	0.95 B	3.4	5.6	0.38 U
Cadmium	1	0.71 B	1.4	0.41 U	6.2	5.0 N*	0.47 U	0.65 B	0.74 BN*
Calcium	1000	30800	19000	121000	80400	75700	125000	161000	2420
Chromium	2	20.6 *	20.9 *	10.1 *	37.8 *	29.8 *	13.3 *	20.4 *	11.2 *
Cobalt	10	2.1 B	1.8 B	1.4 B	8.8 B	77.7	1.7 B	1.9 B	1.9 B
Copper	.5	21.7 N*	21.0 N*	23.1 N*	307 N*	76.4 *	26.4 N*	19.0 N*	28.4 *
Iron	20	20800 E	20400 E	10800 E	55300 E	47400	22900 E	16200 E	16300
Lead	0.6 1000	141	157	1830	398	167	89.9	63.5	33.2
Magnesium	1000	8480 1120	6640 982	30400 1670	20200 1900	10100 1830	25600 2230	38800 2630	819 в 280
Manganese Mercury	0.1	0.11 U	0.11 U	0.11 U	1.1	0.17 U	0.12 U	0.23	0.11 U
Nickel	9. I	13.2	16.3	5.8 B	23.6	34.5	7.5 B	8.8 B	7.1 B
Potassium	1000	603 B	363 B	1170	1500 в	1700	1430	1670	601 B
Selenium	1	1.0 UN	1.0 UN	1.6 +N	1.7 UWN	1.6 UN*	1.1 UN	1.1 UWN	0.97 UN*
Silver	Ż	1.1 UN	1.0 UN	1.0 UN	1.7 UN	1.6 UN	1.2 UN	1.1 UN	0.95 UN
Sodium	1000	295 B	246 B	765 B	719 B	597 B	833 B	1050 B	323 B
Thallium	2	1.0 U	1.0 U	0.95 U	1.7 U	1.6 U	1.1 U	1.1 Ú	0.97 U
Vanadi um	10	16.1	16.4	10.4	35.8	26.2	16.0	16.0	10.3
Zinc	4	801	785	141	812	7900 E*	239	143	53.0 E*
Cyanide	· <b>1</b>	0.57 UN*	0.52 UN*	0.54 UN*	0.85 UN*	0.86 UN	0.57 UN*	0.57 UN*	0.49 UN
	Percent Solids:	88	88	95	56	59	82	87	91

Associated Method Blank: SDGHANNA1S SDGHANNA1S SDGHANNA1S SDGHANNA1S SDGHANNA2S SDGHANNA1S SDGHANNA1S SDGHANNA2S HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX5XXX94XX HFQSXX5XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX HFQSXX5XXX94XX Associated Equipment Blank: Associated Field Blank:

Site: SURFACE SOILS

B: less than CRDL U: not detected N: spike recovery not met

S: method of standard additions E: interference

Table 1 Laboratory Report of Analysis

	LOCATION:	SS-122	SS-123	SS-124	SS-125
	ISIS ID:	HFSS122XXX94XX	HFSS123XXX94XX	HFSS124XXX94XX	HFSS125XXX94XX
	LAB NUMBER:	225916	226503	225917	225920
	DATE SAMPLED:	10/10/94	10/11/94	10/10/94	10/10/94
ANALYTE	SOW-3/90 - II CRDL				
Aluminum	40	31700	8190	14700	25400
Antimony	12	8.3 UN	8.0 UN*	8.2 UN	8.8 UN
Arsenic	2	5.8 BS	1.7 BN	6.2 S	9.8 S
Barium	40	313	22.1 B	131	196
Beryllium Cadmium Calcium Chromium Cobalt	1 1000 2 10	6.8 1.8 144000 37.4 * 2.2 B	0.42 U 0.42 UN* 3500 7.7 * 1.3 U	1.5 0.88 B 66700 17.9 * 3.2 B	3.8 1.6 119000 25.0 * 5.3 B
Copper	5	215 N*	5.1 B*	40.6 N*	68.5 N*
Iron	20	16500 E	9860	27300 E	30900 E
Lead	0.6	248	9.9 S*	163	128
Magnesium	1000	37600	520 B	12900	25000
Manganese	3	2220	127	1830	2850
Mercury	0.1	0.52	0.11 U	0.12 U	1.7
Nickel	8	7.0 B	6.0 B	10.6	14.8
Potassium	1000	1800	542 B	1170	1780
Selenium	1	2.2 SN	1.0 UN*	1.1 UWN	1.0 UN
Silver	2	1.1 UN	1.1 UN	1.1 UN	1.2 UN
Sodium	1000	1140	335 B	560 B	818 B
Thallium	2	1.1 U	1.0 U	1.1 U	1.0 U
Vanadium Zinc Cyanide	10 4 1 	15.6 371 1.4 N*	12.9 18.7 E* 0.56 UN	18.9 175 0.59 UN*	25.0 259 0.59 UN*
	Percent Solids:	86	91	82	81

Associated Method Blank: Associated Equipment Blank: SDGHANNA1S SDGHANNA2S SDGHANNA1S SDGHANNA1S HFQSXX4XXX94XX HFQSXX5XXX94XX HFQSXX4XXX94XX HFQSXX4XXX94XX Associated Field Blank:

Site: SURFACE SOILS U: not detected N: spike recovery not met W: post digestion spike not met S: method of standard additions \*: duplicate analysis not met B: less than CRDL

E: interference

## Inorganic Soil Analysis (mg/kg)

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SS-101 DUP HFSS101XXX94XD 225904 10/10/94	\$\$-101 HF\$\$101XXX94XX 225901 10/10/94	\$\$-102 HF\$\$102XXX94XX 225905 10/10/94	SS-103 HFSS103XXX94XX 225906 10/10/94	SS-104 HFSS104XXX94XX 225907 10/10/94	SS-105 HFSS105XXX94XX 225908 10/10/94	SS-106 HFSS106XXX94XX 225909 10/10/94	SS-107 HFSS107XXX94XX 225910 10/10/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Chobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver	40 12 2 40 1 1 1000 2 10 5 20 0.6 1000 3 0.1 8 1000	8670 28.8 J 10.4 J 10.9 16.5 42100 164 19.8 191 J 181000 J 4460 10800 4860 0.12 95.4 1180 1.1 UJ	8500 23.3 J 15.4 J 112 2.1 14.9 42400 285 18.4 228 J 156000 J 4460 10600 4720 0.14 82.7 1220 2.2 J	12600 12.1 14.4 178 2.9 12.7 54700 81.9 10.2 79.3 J 114000 3240 13200 4220 0.12 37.7 3730 2.6 J	4010 39.5 20.5 52.6 0.88 6.2 27500 251 33.4 689 J 343000 523 5700 7540 0.11 183 691 J 1.0 UJ R	6450 22.9 15.9 89.5 1.2 17.6 33400 149 18.1 290 J 186000 J 5880 7800 3670 0.27 87.6 818 J 2.3 J R	10100 15.8 15.4 113 1.4 5.2 50500 85.1 16.1 178 J 159000 J 500 11800 4940 0.13 62.4 4250 1.1 UJ	7330 17.4 J 13.7 84.0 0.94 J 3.9 J 34500 40.2 12.2 92.9 J 124000 J 294 7670 4310 0.26 28.8 1330 1.1 UJ	8440 15.1 J 14.9 77.0 0.91 J 3.1 J 38900 22.4 11.5 52.1 J 124000 J 222 10200 4430 0.25 15.9 805 J 0.97 UJ R
Sodium Thallium Vanadium Zinc Cyanide	1000 2 10 4 1	542 J 6.2 67.2 4710 11.4 J	353 J 7.3 62.2 4500 4.1 J	764 J 8.1 44.1 3290 8.7 J	301 J 1.0 U 85.2 942 0.50 UJ	272 J 7.7 55.5 4860 5.8 J	535 J 1.1 U 52.6 1010 0.55 UJ	404 J 1.5 J 45.6 780 0.58 UJ	916 J 0.97 U 44.4 457 0.52 UJ
	Percent Solids:	84	84	83	91	86	89	88	87

Associated Method Blank: SDGHANNA1S SDGHANNA1S SDGHANNA1S SDGHANNA1S SDGHANNA1S SDGHANNA1S SDGHANNA1S SDGHANNA1S Associated Equipment Blank: Associated Field Blank: HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX HFQSXX1XXX94XX

Site: SURFACE SOILS

U: not detected R: unusable

Table 2 Validation / Summary Table

	LOCATION:	SS-108	SS-109	SS-110	SS-111 DUP	SS-111	SS-112	SS-113	SS-114
	ISIS ID:	HFSS108XXX94XX	HFSS109XXX94XX	HFSS110XXX94XX	HFSS111XXX94XD	HFSS111XXX94XX	HFSS112XXX94XX	HFSS113XXX94XX	HFSS114XXX94XX
	LAB NUMBER:	225911	226502	226501	226519	226516	226515	226514	226513
	DATE SAMPLED:	10/10/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Chromium Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc	40 12 2 40 1 1 1000 2 10 5 20 0.6 1000 3 0.1 8 1000 1 2	6590 10.1 UJ 19.1 77.8 0.93 J 4.3 J 78600 23.2 11.0 J 156 J 116000 J 337 11400 4260 0.14 U 24.5 2650 1.3 UJ 656 J 1.3 U	31300 14.6 J 5.4 UJ 191 J 0.92 J 128000 23.9 7.3 J 65.8 38500 265 11500 1860 1.2 19.9 J 1410 2.0 J 423 J 1.3 U 37.1 386 J	19900 40.5 J 8.8 J 234 4.1 J 4.6 J 116000 26.6 12.7 1030 119000 1330 13900 4780 0.24 19.9 J 1790 1.2 J 810 J 1.0 U 44.0 697 J	17200 16.6 J 17.5 J 308 2.9 5.6 64900 38.0 14.9 4880 103000 757 8510 2840 0.30 43.5 1260 2.1 J 8 404 J 1.1 U 44.4	19400 17.4 J 16.5 J 272 3.5 4.9 J 85900 38.6 14.6 3440 102000 1290 8300 2550 0.33 28.8 1430 1.4 J F12 J 1.0 U 45.4 1600 J	12500 14.5 J 8.7 J 300 2.3 8.1 J 71900 45.5 7.9 J 3090 64600 2440 17700 3600 9.9 25.0 985 J 1.1 UJ 670 J 1.1 UJ 25.1 UJ 25.1 J	14100 8.7 UJ 18.4 J 311 2.6 21.7 J 70700 71.7 17.4 4100 87400 953 12800 24800 16.0 96.3 1010 J 1.1 UJ R 575 J 1.1 U 67.1 19300 J	13900 22.1 J 14.8 170 2.1 3.5 49000 41.8 15.7 152 J 140000 J 263 7640 4160 0.27 32.2 972 J 1.0 UJ R 527 J 1.0 U
Cyanide	1	0.72 UJ	R	R	R	R	R	R	0.68 J
		====================================	====================================	90			====================================	====================================	====================================

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: SDGHANNA1S SDGHANNA2S SDGHANNA2S SDGHANNA2S SDGHANNA2S SDGHANNA2S SDGHANNA2S HFQSXX1XXX94XX HFQSXX5XXX94XX HFQSXX5XXX94XX HFQSXX5XXX94XX HFQSXX5XXX94XX HFQSXX5XXX94XX

Site: SURFACE SOILS U: not detected R: unusable

Inorganic Soil Analysis (mg/kg)

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SS-115 DUP HFSS115XXX94XD 225913 10/10/94	SS-115 HFSS115XXX94XX 225912 10/10/94	SS-116 HFSS116XXX94XX 225914 10/10/94	SS-117 HFSS117XXX94XX 225918 10/10/94	SS-118 HFSS118XXX94XX 226505 10/11/94	SS-119 HFSS119XXX94XX 225919 10/10/94	SS-120 HFSS120XXX94XX 225915 10/10/94	SS-121 HFSS121XXX94XX 226504 10/11/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	40	6150	4470	17200	22200	12800	22800	36200	6230
Antimony	12	8.6 UJ	8.0 UJ	7.7 UJ	12.9 UJ	14.2 J	9.0 UJ	8.4 UJ	7.2 UJ
Arsenic	.2	8.3	6.5	2.0 J	1.7 U	6.6 J	2.3 J	2.3 J	2.8 J
Barium	40	39.8 J	30.4 J	132	238	165	165	243	19.8 J
Beryllium	1	0.82 J	0.76 J	3.0	2.2	0.95 j	3,4	5.6	0.38 UJ
Cadmium	1	0.71 J	1.4 J	0.41 UJ	6.2 J	5.0 J	0.47 UJ	0.65 J	0.74 J
Calcium Chromium	1000 2	30800 20.6	19000 20.9	121000 10.1	80400 37.8	75700 29.8	125000 13.3	161000 20.4	2420 11.2
Cobalt	10	20.6 2.1 J	20.9 1.8 J	1.4 J	37.6 8.8 J	29.6 77.7	13.3 1.7 J	20.4 1.9 J	11.2 1.9 J
	10	21.7 J	21.0 J	23.1 J	307 J	76.4	26.4 J	19.0 J	28.4
Copper Iron	20	20800 J	20400 J	10800 J	55300 J	47400	22900 J	16200 J	16300
Lead	0.6	141	157	1830	398	167	89.9	63.5	33.2
Magnesium	1000	8480	6640	30400	20200	10100	25600	38800	819 J
Manganese	3	1120	982	1670	1900	1830	2230	2630	280
Mercury	0.1	0.11 U	0.11 U	0.11 U	1.1	0.17 U	0.12 U	0.23	0.11 U
Nickel	8	13.2	16.3	5.8 J	23.6	34.5 J	7.5 J	8.8 J	7.1 J
Potassium	1000	603 J	363 J	1170	1500 J	1700	1430	1670	601 J
Selenium	1	1.0 UJ	1.0 UJ	1.6 J	1.7 UJ	1.6 UJ	1.1 UJ	1.1 UJ	0.97 UJ
Silver	2	R	R	R	R	R	R	R	R
Sodium	1000	295 J	246 J	765 J	719 J	597 J	833 J	1050 J	323 J
Thallium	2	1.0 U	1.0 U	0.95 U	1.7 U	1.6 U	1.1 U	1.1 U	0.97 U
<u>Vanadium</u>	10	16.1	16.4	10.4	35.8	26.2	16.0	16.0	10.3
Zinc	4	801	785	141	812 0.85 UJ	7900 J	239	143	53.0 J
Cyanide		0.57 UJ	0.52 UJ	0.54 UJ	0.85 UJ	K	0.57 UJ	0.57 UJ	K
	Percent Solids:	88	88	95	56	59	82	87	91

Associated Method Blank: SDGHANNA1S SDGHANNA

Site: SURFACE SOILS U: not detected R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	HFSS122XXX94XX 225916	SS-123 C HFSS123XXX94XX 226503 10/11/94	SS-124 HFSS124XXX94XX 225917 10/10/94	\$S-125 HFSS125XXX94XX 225920 10/10/94
ANALYTE	SOW-3/90 - II CRDL				
Aluminum	40	31700	8190	14700	25400
Antimony	12	8.3 UJ	8.0 UJ	8.2 UJ	8.8 UJ
Arsenic	2	5.8 J	1.7 J	6.2	9.8
Barium	40	313	22.1 J	131	196
Beryllium	·	6.8	0.42 UJ	1.5	3.8
Cadmi um	. 1	1.8 J	0.42 UJ	0.88 J	1.6 J
Calcium	1000	144000	3500	66700	119000
Chromium	2	37.4	7.7	17.9	25.0
Cobal t	10	2.2 J	1.3 U	3.2 J	5.3 J
Copper	5	215 J	5.1 J	40.6 J	68.5 J
Iron	20	16500 J	9860	27300 J	30900 J
Lead	0.6	248	9.9	163	128
Magnesium	1000	37600	520 J	12900	25000
Manganese	3	2220	127	1830	2850
Mercury	0.1	0.52	0.11 U	0.12 U	1.7
Nickel	8	7.0 J	6.0 J	10.6	14.8
Potassium	1000	1800	542 J	1170	1780
Selenium	1	2.2 J	1.0 UJ	1.1 UJ	1.0 UJ
Silver	2	R	R	R	R
Sodium	1000	1140	335 J	560 J	818 J
Thallium	2	1.1 U	1.0 U	1.1 U	1.0 U
Vanadium	10	15.6	12.9	18.9	25.0
Zinc	4	<b>371</b>	18.7 J	175	259
Cyanide	1	1.4 J	R	0.59 UJ	0.59 UJ
222222222222	Percent Solids:	-=====================================	91	82	81

Site: SURFACE SOILS U: not detected R: unusable

Miscellaneous Soil Analysis (ug/L)

14-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	HFSS101XXX94XD	SS-101 HFSS101XXX94XX E225901 10/10/94	SS-102 HFSS102XXX94XX E225905 10/10/94	SS-103 HFSS103XXX94XX E225906 10/10/94	SS-104 HFSS104XXX94XX E225907 10/10/94	SS-105 HFSS105XXX94XX E225908 10/10/94	SS-106 HFSS106XXX94XX E225909 10/10/94	SS-107 HFSS107XXX94XX E225910 10/10/94
ANALYTE	RL					٠.			
arsenic barium cadmium chromium lead mercury selenium silver	52 11 2.0 5.0 26 0.20 90 5.0	656 N* 50.4 * 5.0 U 352 *	52.0 N 700 N* 52.4 * 5.0 U 410 * 0.20 U 90.0 U 5.0 UN	52.0 UN 864 N* 96.6 * 6.5 B 752 * 0.20 U 90.0 U 5.0 UN	52.0 UN 432 N* 2.0 U* 6.0 B 49.8 * 0.20 U 90.0 U 5.0 UN	52.0 UN 980 N* 144 * 7.7 B 1630 * 0.20 U 90.0 U 6.1 BN	52.0 UN 558 N* 5.0 * 8.4 B 91.2 * 0.20 U 90.0 U 5.0 UN	52.0 UN 529 N* 2.9 B* 5.0 U 26.0 U* 0.20 U 90.0 U 5.0 UN	52.0 UN 546 N* 2.0 U* 7.9 B 85.4 * 0.20 U 90.0 U 5.0 UN
Associa	ciated Method Blank: ted Equipment Blank: ociated Field Blank:	•	SDGHANNA1E - -	SDGHANNA1E -	SDGHANNA1E	SDGHANNA1E - -	SDGHANNA1E - -	SDGHANNA1E -	SDGHANNA1E - -

Site: SURFACE SOILS

Note: Inorganic Data - EPTOX Metals

U: not detected N: spike recovery not met \*: duplicate analysis not met B: less than RL

Table 1 Laboratory Report of Analysis

	LOCATION:	SS-108	SS-109	SS-110	SS-111 DUP	SS-111	SS-112	SS-113	SS-114
	ISIS ID:	HFSS108XXX94XX	HFSS109XXX94XX	HFSS110XXX94XX	HFSS111XXX94XD	HFSS111XXX94XX	HFSS112XXX94XX	HFSS113XXX94XX	HFSS114XXX94XX
	LAB NUMBER:	E225911	E226502	E226501	E226519	E226516	E226515	E226514	E226513
	DATE SAMPLED:	10/10/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94
ANALYTE	RL				٠				
arsenic	52	52.0 UN							
barium	11	436 N*	512	589	724	501	719	710	423
cadmium	2.0	2.0 U*	2.0 U*	4.8 B*	9.6 *	2.0 U*	40.8 *	122 *	2.0 U*
chromium	5.0	5.0 U	7.8 B*	5.0 U*	5.0 U*	5.0 V*	5.0 U*	10.4 *	10.5 *
lead	26	55.7 *	80.9 *	41.6 *	7800 *	95.6 *	809 *	180 *	147 *
mercury	0.20	0.20 U							
selenium	90	90.0 U							
silver	5.0	5.0 UN	5.0 U*	13.3 *					
Associa	ociated Method Blank:	SDGHANNA1E	SDGHANNA2E						
	ated Equipment Blank:	-	-	-	-	-	-	-	-
	sociated Field Blank:	-	-	-	-	-	-	-	-

Note: Inorganic Data - EPTOX Metals

U: not detected N: spike recovery not met \*: duplicate analysis not met B: less than RL

Miscellaneous Soil Analysis (ug/L)

14-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:		SS-115 HFSS115XXX94XX E225912 10/10/94	SS-116 HFSS116XXX94XX E225914 10/10/94	SS-117 HFSS117XXX94XX E225918 10/10/94	SS-118 HFSS118XXX94XX E226505 10/11/94	\$S-119 HFSS119XXX94XX E225919 10/10/94	SS-120 HFSS120XXX94XX E225915 10/10/94	SS-121 HFSS121XXX94XX E226504 10/11/94
ANALYTE	RL								
arsenic barium cadmium chromium lead mercury selenium silver	52 11 2.0 5.0 26 0.20 90 5.0	507 N* 5.0 * 5.0 B 142 * 0.20 U 90.0 U	52.0 UN 565 N* 6.5 * 7.3 B 121 * 0.20 U 90.0 U 6.1 BN	52.0 UN 458 N* 2.0 U* 5.0 U 2080 * 0.20 U 90.0 U 12.2 N	52.0 UN 790 N* 28.6 * 8.6 B 75.3 * 0.20 U 90.0 U	52.0 UN 424 2.0 U* 5.0 U* 26.0 U* 0.20 U 90.0 U 5.0 U*	52.0 UN 518 N* 2.0 U* 5.0 B 53.9 * 0.20 U 90.0 U 5.0 UN	52.0 UN 636 N* 2.9 B* 9.3 B 166 * 0.20 U 90.0 U 5.0 UN	52.0 UN 443 3.2 B* 5.0 U* 83.9 * 0.20 U 90.0 U 5.0 U*
Associa	ciated Method Blank: ted Equipment Blank: ociated Field Blank:	SDGHANNA1E - -	SDGHANNA1E -	SDGHANNA1E - -	SDGHANNA1E - -	SDGHANNA2E - -	SDGHANNA1E - -	SDGHANNA1E - -	SDGHANNAZE - -

Site: SURFACE SOILS

Note: Inorganic Data - EPTOX Metals

U: not detected N: spike recovery not met \*: duplicate analysis not met B: less than RL

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SS-122 HFSS122XXX94XX E225916 10/10/94	SS-123 HFSS123XXX94XX E226503 10/11/94	SS-124 HFSS124XXX94XX E225917 10/10/94	SS-125 HFSS125XXX94XX E225920 10/10/94
ANALYTE	RL				
arsenic	52 11	52.0 UN	52.0 UN 390	52.0 UN	82.3 N 616 N*
barium cadmium	2.0	757 N* 2.0 U*	390 2.0 U*	566 N* 2.2 B*	2.0 U*
chromium	5.0	5.0 U	5.3 B*	8.0 B	11.6
lead	26	26.0 U*	96.0 *	48.0 *	87.4 *
mercury	0.20	0.20 U	0.20 U	0.20 U	0.20 U
selenium	_90	90.0 U	90.0 U	90.0 U	90.0 U
silver	5.0	5.0 UN	11.1 *	5.0 UN	5.0 UN
	iated Method Blank:	SDGHANNA1E	SDGHANNA2E	SDGHANNA1E	SDGHANNA1E
	ed Equipment Blank: ciated Field Blank:	-	-	-	-

Note: Inorganic Data - EPTOX Metals
U: not detected N: spike recovery not met \*: duplicate analysis not met B: less than RL

Miscellaneous Soil Analysis (ug/L)

14-Apr-95

Table 2 Validation / Summary Table

	LOCATION:	SS-101 DUP	SS-101	SS-102	SS-103	SS-104	SS-105	SS-106	SS-107
	ISIS ID:	HFSS101XXX94XD	HFSS101XXX94XX	HFSS102XXX94XX	HFSS103XXX94XX	HFSS104XXX94XX	HFSS105XXX94XX	HFSS106XXX94XX	HFSS107XXX94XX
	LAB NUMBER:	E225904	E225901	E225905	E225906	E225907	E225908	E225909	E225910
	DATE SAMPLED:	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94	10/10/94
ANALYTE	RL					•			
arsenic	52	52.0 U	52.0 J	52.0 U	52.0 U	52.0 U	52.0 U	52.0 U	52.0 U
barium	11	R	R	R	R	R	R	R	R
cadmium	2.0	50.4 J	52.4 J	96.6 J	2.0 UJ	144 J	5.0 J	2.9 J	2.0 UJ
chromium	5.0	5.0 U	5.0 U	6.5 J	6.0 J	7.7 J	8.4 J	5.0 U	7.9 J
lead	26	352 J	410 J	752 J	49.8 J	1630 J	91.2 J	26.0 UJ	85.4 J
mercury	0.20	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
selenium	90	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U
silver	5.0	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	6.1 J	5.0 UJ	5.0 UJ	5.0 UJ
Associated	ted Method Blank: Equipment Blank: ated Field Blank:	SDGHANNA1E	SDGHANNA1E - -	SDGHANNA1E	SDGHANNA1E - -	SDGHANNA1E - -	SDGHANNA1E	SDGHANNA1E - -	SDGHANNA1E - -

Site: SURFACE SOILS
Note: Inorganic Data - EPTOX Metals
U: not detected R: unusable J: estimated

Table 2 Validation / Summary Table

	LOCATION:	SS-108	SS-109	SS-110	SS-111 DUP	SS-111	SS-112	SS-113	SS-114
	ISIS ID:	HFSS108XXX94XX	HFSS109XXX94XX	HFSS110XXX94XX	HFSS111XXX94XD	HFSS111XXX94XX	HFSS112XXX94XX	HFSS113XXX94XX	HFSS114XXX94XX
	LAB NUMBER:	E225911	E226502	E226501	E226519	E226516	E226515	E226514	E226513
	DATE SAMPLED:	10/10/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94
ANAL	YTE RL	_							
arsenic barium cadmium	52 11 2.0	- 52.0 U R 2.0 UJ	52.0 U 512 2.0 UJ	52.0 U 589 4.8 J	52.0 U 724 J 9.6 J	52.0 U 501 J 2.0 UJ	52.0 U 719 40.8 J	52.0 U 710 122 J	52.0 U R 2.0 UJ
chromium	5.0	5.0 U	7.8 J	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	10.4 J	10.5 J
lead	26	55.7 J	80.9 J	41.6 J	7800 J	95.6 J	809 J	180 J	147 J
mercury	0.20	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
selenium	90	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U
silver	5.0	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	13.3 J
	Associated Method Blank:	SDGHANNA1E	SDGHANNA2E	SDGHANNA2E	SDGHANNA2E	SDGHANNAZE	SDGHANNA2E	SDGHANNA2E	SDGHANNA2E

Associated Equipment Blank: Associated Field Blank:

Site: SURFACE SOILS

Note: Inorganic Data - EPTOX Metals
U: not detected R: unusable J: estimated

Miscellaneous Soil Analysis (ug/L)

14-Apr-95

Table 2 Validation / Summary Table

	LOCATION:	SS-115 DUP	SS-115	SS-116	SS-117	SS-118	SS-119	SS-120	SS-121
	ISIS ID:	HFSS115XXX94XD	HFSS115XXX94XX	HFSS116XXX94XX	HFSS117XXX94XX	HFSS118XXX94XX	HFSS119XXX94XX	HFSS120XXX94XX	HFSS121XXX94XX
	LAB NUMBER:	E225913	E225912	E225914	E225918	E226505	E225919	E225915	E226504
	DATE SAMPLED:	10/10/94	10/10/94	10/10/94	10/10/94	10/11/94	10/10/94	10/10/94	10/11/94
ANALYTE	RL								
arsenic	52	52.0 U	52.0 U	52.0 U	52.0 U	52.0 U	52.0 U	52.0 U	52.0 U
barium	11	R	R	R	R	424	R	R	443
cadmium	2.0	5.0 J	6.5 J	2.0 UJ	28.6 J	2.0 UJ	2.0 U	2.9 J	3.2 J
chromium	5.0	5.0 J	7.3 J	5.0 U	8.6 J	5.0 UJ	5.0 J	9.3 J	5.0 UJ
lead	26	142 J	121 J	2080 J	75.3 J	26.0 UJ	53.9 J	166 J	83.9 J
mercury	0.20	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
selenium	90	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U
silver	5.0	5.0 UJ	6.1 J	12.2 J	5.0 UJ				
Associated	ted Method Blank: Equipment Blank: ated Field Blank:	SDGHANNA1E	SDGHANNA1E - -	SDGHANNA1E - -	SDGHANNA1E - -	SDGHANNA2E - -	SDGHANNA1E - -	SDGHANNA1E - -	SDGHANNA2E - -

Site: SURFACE SOILS
Note: Inorganic Data - EPTOX Metals
U: not detected R: unusable J: estimated

Table 2 Validation / Summary Table

	LOCATION:	SS-122	SS-123	SS-124	SS-125
	ISIS ID:	HFSS122XXX94XX	HFSS123XXX94XX	HFSS124XXX94XX	HFSS125XXX94XX
	LAB NUMBER:	E225916	E226503	E225917	E225920
	DATE SAMPLED:	10/10/94	10/11/94	10/10/94	10/10/94
ANALYTE	RL				
arsenic	52	52.0 U	52.0 U	52.0 U	82.3 J
barium	11	R	390		R
cadmium	2.0	2.0 UJ	2.0 UJ	2.2 J	2.0 UJ
chromium	5.0	5.0 U	5.3 J	8.0 J	11.6
lead	26	26.0 UJ	96.0 J	48.0 J	87.4 J
mercury	0.20	0.20 U	0.20 U	0.20 U	0.20 U
selenium	90	90.0 U	90.0 U	90.0 U	90.0 U
silver	5.0	5.0 UJ	11.1 J	5.0 UJ	5.0 UJ

Associated Method Blank: SDGHANNA1E
Associated Equipment Blank: Associated Field Blank: -SDGHANNA2E SDGHANNA1E SDGHANNA1E

Site: SURFACE SOILS

Note: Inorganic Data - EPTOX Metals
U: not detected R: unusable J: estimated

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFSS101XXX94XD 2225904	SS-101 HFSS101XXX94XX 2225901 10/10/94 10/17/94	SS-102 HFSS102XXX94XX 2225905 10/10/94 10/17/94	SS-103 HFSS103XXX94XX 2225906 10/10/94 10/17/94	SS-104 HFSS104XXX94XX 2225907 10/10/94 10/17/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/17/94	SS-106 HFSS106XXX94XX 2225909 10/10/94 10/17/94	SS-107 HFSS107XXX94XX 2225910 10/10/94 10/17/94
ANALYTE	RL								
Corrosivity, inch/Yee Ignitability, Degrees Cyanide, Reactive, py Sulfide, Reactive, py	s F 212 om 1	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Equ	Method Blank: Jipment Blank: Ji Field Blank:	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -

Table 1 Laboratory Report of Analysis

_	LOCATION:	SS-108	SS-109	SS-110	SS-111 DUP	SS-111	SS-112	SS-113	SS-114
	ISIS ID:	HFSS108XXX94XX	HFSS109XXX94XX	HFSS110XXX94XX	HFSS111XXX94XD	HFSS111XXX94XX	HFSS112XXX94XX	HFSS113XXX94XX	HFSS114XXX94XX
	LAB NUMBER:	2225911	2226502	2226501	2226519	2226516	2226515	2226514	2226513
	DATE SAMPLED:	10/10/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94
	ATE ANALYZED:	10/17/94	10/24/94	10/24/94	10/24/94	10/24/94	10/24/94	10/24/94	10/24/94
ANALYTE	RL								•
Corrosivity, inch/Year	F 212	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees		>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppr		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sulfide, Reactive, ppr		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated Equi	Method Blank: ipment Blank: Field Blank:	SDGHANNA1	SDGHANNA2	SDGHANNA2 - -	SDGHANNA2	SDGHANNA2 - -	======================================	SDGHANNA2	SDGHANNA2 - -

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION:	SS-115 DUP	SS-115	SS-116	SS-117	SS-118	SS-119	SS-120	SS-121
	ISIS ID:	HFSS115XXX94XD	HFSS115XXX94XX	HFSS116XXX94XX	HFSS117XXX94XX	HFSS118XXX94XX	HFSS119XXX94XX	HFSS120XXX94XX	HFSS121XXX94XX
	LAB NUMBER:	2225913	2225912	2225914	2225918	2226505	2225919	2225915	2226504
	PATE SAMPLED:	10/10/94	10/10/94	10/10/94	10/10/94	10/11/94	10/10/94	10/10/94	10/11/94
	LTE ANALYZED:	10/17/94	10/17/94	10/17/94	10/17/94	10/24/94	10/17/94	10/17/94	10/24/94
ANALYTE	RL								
Corrosivity, inch/Year	F 212	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees		>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppm		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sulfide, Reactive, ppm		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated Equi	method Blank: pment Blank: Field Blank:	SDGHANNA1 - -	SDGHANNA1	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA2 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA2 - -

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: ATE SAMPLED: IE ANALYZED:	SS-122 HFSS122XXX94XX 2225916 10/10/94 10/17/94	SS-123 HFSS123XXX94XX 2226503 10/11/94 10/24/94	SS-124 HFSS124XXX94XX 2225917 10/10/94 10/17/94	SS-125 HFSS125XXX94XX 2225920 10/10/94 10/17/94
ANALYTE	RL				•
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm Sulfide, Reactive, ppm	0.01 212 1	0.01 U >212 1 U 1 U			
			************	=======================================	**********
Associated Me Associated Equip Associated F	ment Blank:	SDGHANNA1	SDGHANNA2	SDGHANNA1	SDGHANNA1 - - -

Table 1
Laboratory Report of Analysis

	IS		2226511 10/11/94	94XD HFSD102XXX9 2226508 4 10/11/94	2227908 10/12/9	2226512 4 10/11/94	2227909 10/12/9	2227910 4 10/12/94
ANALYTE SOW-3/90	- II CRQL			•				
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane richloroethene Dibromochloromethane 1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropane d-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	23 23 23 23 23 23 23 23 23 23 23 23 23 2	U 20 U 20	U 20 U 20 U 20 U 20 U 20 U 20 U 20 U 20	U 13 U 13 U 13 B 7 U 13 B 7 U 13 U 13 U 13 U 13 U 13 U 13 U 13 U 13	U 12 U 12 U 12 U 12 U 13 U 14 U 12 U 12 U 12 U 12 U 12 U 12 U 12 U 12	U 18 18 18 18 18 18 18 19 18 19 18 19 18 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19	U 18 U U 12 J U 12 J U 18 U
Styrene Total Xylenes	10 10	23 23 	U 20 U 20	U 20 U 20	U 13 U 13	U 12 U 12	U 18 U 18	U 18 U U 18 U
Dilut	ion Factor: ent Solids:	1.00 44	1.00 50 5.00	1.00 49 5.00	1.00 78 5.00	1.00 82 5.00	1.00 57 5.00	1.00 55 5.00
Associated Me Associated Equip Associated F Associated	ment Blank: ield Blank:	HFQSXX3XXX94XX -	P1240.D HFQSXX3XXX94XX - -	P1240.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX - -		P1296.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX - -

Site: SEDIMENTS

U: not detected

B: blank contamination

Table 2
Validation / Summary Table

	LOCAT ISIS LAB NUM DATE SAMP DATE ANALY	ID: HFSD101XXX94 BER: 2226507 LED: 10/11/94	SD-102 DU 4XX HFSD102XXX9 2226511 10/11/94 10/17/94	4XD HFSD102XXX9 2226508 10/11/94	2227908 10/12/94	SD-104 4XX HFSD104XXX9 2226512 10/11/94 10/17/94	SD-105 4XX HFSD105XXX9 2227909 10/12/94 10/19/94	2227910 10/12/94
ANALYTE SOW-3/90	II CRQL							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	23   1 23   1 24   1 25   1 26   1 26		UJ 20	UJ 13	12 U	18 18 18 18 18 18 18 18 18 18 18 18 18 1	U 18
	ion Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Perce Sample Volume\Weig	ent Solids: ght (ml\g):	44 5.00	50 5.00	49 5.00	78 5.00	82 5.00	57 5.00	55 5.00
Associated Me Associated Equip Associated F Associated 1	ment Blank: ield Blank:	P1240.D HFQSXX3XXX94XX	P1240.D HFQSXX3XXX94XX	P1240.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX -	P1240.D HFQSXX3XXX94XX	P1296.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX - -

Site: SEDIMENTS
U: not detected
J: estimated

Table 2 Validation / Summary Table

	LOCATION:	SS-122	SS-123	SS-124	SS-125
	ISIS ID:	HFSS122XXX94XX	HFSS123XXX94XX	HFSS124XXX94XX	HFSS125XXX94XX
	LAB NUMBER:	E225916	E226503	E225917	E225920
	DATE SAMPLED:	10/10/94	10/11/94	10/10/94	10/10/94
ANALYTE	RL				
arsenic	52	52.0 U	52.0 U	52.0 U	82.3 J
barium	11	R	390		R
cadmium	2.0	2.0 UJ	2.0 UJ	2.2 J	2.0 UJ
chromium	5.0	5.0 U	5.3 J	8.0 J	11.6
lead	26	26.0 UJ	96.0 J	48.0 J	87.4 J
mercury	0.20	0.20 U	0.20 U	0.20 U	0.20 U
selenium	90	90.0 U	90.0 U	90.0 U	90.0 U
silver	5.0	5.0 UJ	11.1 J	5.0 UJ	5.0 UJ

Associated Method Blank: SDGHANNA1E
Associated Equipment Blank: Associated Field Blank: -SDGHANNA2E SDGHANNA1E SDGHANNA1E

Site: SURFACE SOILS

Note: Inorganic Data - EPTOX Metals
U: not detected R: unusable J: estimated

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFSS101XXX94XD 2225904	SS-101 HFSS101XXX94XX 2225901 10/10/94 10/17/94	SS-102 HFSS102XXX94XX 2225905 10/10/94 10/17/94	SS-103 HFSS103XXX94XX 2225906 10/10/94 10/17/94	SS-104 HFSS104XXX94XX 2225907 10/10/94 10/17/94	SS-105 HFSS105XXX94XX 2225908 10/10/94 10/17/94	SS-106 HFSS106XXX94XX 2225909 10/10/94 10/17/94	SS-107 HFSS107XXX94XX 2225910 10/10/94 10/17/94
ANALYTE	RL								
Corrosivity, inch/Yee Ignitability, Degrees Cyanide, Reactive, py Sulfide, Reactive, py	s F 212 om 1	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Equ	Method Blank: Jipment Blank: Ji Field Blank:	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA1 - -

Table 1 Laboratory Report of Analysis

_	LOCATION:	SS-108	SS-109	SS-110	SS-111 DUP	SS-111	SS-112	SS-113	SS-114
	ISIS ID:	HFSS108XXX94XX	HFSS109XXX94XX	HFSS110XXX94XX	HFSS111XXX94XD	HFSS111XXX94XX	HFSS112XXX94XX	HFSS113XXX94XX	HFSS114XXX94XX
	LAB NUMBER:	2225911	2226502	2226501	2226519	2226516	2226515	2226514	2226513
	DATE SAMPLED:	10/10/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94	10/11/94
	ATE ANALYZED:	10/17/94	10/24/94	10/24/94	10/24/94	10/24/94	10/24/94	10/24/94	10/24/94
ANALYTE	RL								•
Corrosivity, inch/Year	F 212	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees		>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppr		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sulfide, Reactive, ppr		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated Equi	Method Blank: ipment Blank: Field Blank:	SDGHANNA1	SDGHANNA2	SDGHANNA2 - -	SDGHANNA2	SDGHANNA2 - -	======================================	SDGHANNA2	SDGHANNA2 - -

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION:	SS-115 DUP	SS-115	SS-116	SS-117	SS-118	SS-119	SS-120	SS-121
	ISIS ID:	HFSS115XXX94XD	HFSS115XXX94XX	HFSS116XXX94XX	HFSS117XXX94XX	HFSS118XXX94XX	HFSS119XXX94XX	HFSS120XXX94XX	HFSS121XXX94XX
	LAB NUMBER:	2225913	2225912	2225914	2225918	2226505	2225919	2225915	2226504
	PATE SAMPLED:	10/10/94	10/10/94	10/10/94	10/10/94	10/11/94	10/10/94	10/10/94	10/11/94
	LTE ANALYZED:	10/17/94	10/17/94	10/17/94	10/17/94	10/24/94	10/17/94	10/17/94	10/24/94
ANALYTE	RL								
Corrosivity, inch/Year	F 212	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees		>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppm		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sulfide, Reactive, ppm		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated Equi	method Blank: pment Blank: Field Blank:	SDGHANNA1 - -	SDGHANNA1	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA2 - -	SDGHANNA1 - -	SDGHANNA1 - -	SDGHANNA2 - -

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: ATE SAMPLED: IE ANALYZED:	SS-122 HFSS122XXX94XX 2225916 10/10/94 10/17/94	SS-123 HFSS123XXX94XX 2226503 10/11/94 10/24/94	SS-124 HFSS124XXX94XX 2225917 10/10/94 10/17/94	SS-125 HFSS125XXX94XX 2225920 10/10/94 10/17/94
ANALYTE	RL				•
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm Sulfide, Reactive, ppm	0.01 212 1	0.01 U >212 1 U 1 U			
			************	=======================================	**********
Associated Me Associated Equip Associated F	ment Blank:	SDGHANNA1	SDGHANNA2	SDGHANNA1	SDGHANNA1 - - -

Table 1
Laboratory Report of Analysis

	IS		2226511 10/11/94	94XD HFSD102XXX9 2226508 4 10/11/94	2227908 10/12/9	2226512 4 10/11/94	2227909 10/12/9	2227910 4 10/12/94
ANALYTE SOW-3/90	- II CRQL			•				
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane richloroethene Dibromochloromethane 1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropane d-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	23 23 23 23 23 23 23 23 23 23 23 23 23 2	U 20 U 20	U 20 U 20 U 20 U 20 U 20 U 20 U 20 U 20	U 13 U 13 U 13 B 7 U 13 B 7 U 13 U 13 U 13 U 13 U 13 U 13 U 13 U 13	U 12 U 12 U 12 U 12 U 13 U 14 U 12 U 12 U 12 U 12 U 12 U 12 U 12 U 12	U 18 18 18 18 18 18 18 19 18 19 18 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19	U 18 U U 12 J U 12 J U 18 U
Styrene Total Xylenes	10 10	23 23 	U 20 U 20	U 20 U 20	U 13 U 13	U 12 U 12	U 18 U 18	U 18 U U 18 U
Dilut	ion Factor: ent Solids:	1.00 44	1.00 50 5.00	1.00 49 5.00	1.00 78 5.00	1.00 82 5.00	1.00 57 5.00	1.00 55 5.00
Associated Me Associated Equip Associated F Associated	ment Blank: ield Blank:	HFQSXX3XXX94XX -	P1240.D HFQSXX3XXX94XX - -	P1240.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX - -		P1296.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX - -

Site: SEDIMENTS

U: not detected

B: blank contamination

Table 2
Validation / Summary Table

	LOCAT ISIS LAB NUM DATE SAMP DATE ANALY	ID: HFSD101XXX94 BER: 2226507 LED: 10/11/94	SD-102 DU 4XX HFSD102XXX9 2226511 10/11/94 10/17/94	4XD HFSD102XXX9 2226508 10/11/94	2227908 10/12/94	SD-104 4XX HFSD104XXX9 2226512 10/11/94 10/17/94	SD-105 4XX HFSD105XXX9 2227909 10/12/94 10/19/94	2227910 10/12/94
ANALYTE SOW-3/90	II CRQL							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	23   1 23   1 24   1 25   1 26   1 26		UJ 20	UJ 13	12 U	18 18 18 18 18 18 18 18 18 18 18 18 18 1	U 18
	ion Factor:	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Perce Sample Volume\Weig	ent Solids: ght (ml\g):	44 5.00	50 5.00	49 5.00	78 5.00	82 5.00	57 5.00	55 5.00
Associated Me Associated Equip Associated F Associated 1	ment Blank: ield Blank:	P1240.D HFQSXX3XXX94XX	P1240.D HFQSXX3XXX94XX	P1240.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX -	P1240.D HFQSXX3XXX94XX	P1296.D HFQSXX3XXX94XX - -	P1296.D HFQSXX3XXX94XX - -

Site: SEDIMENTS
U: not detected
J: estimated

Table 1 Laboratory Report of Analysis

Phenol   330   3000   1300   1300   1 1300   1 2700   1 430   1 810   1 810   1 2900   1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SD-101 HFSD101XXX94XX 2226507 10/11/94 10/14/94 11/09/94	SD-102 DUP HFSD102XXX94XD 2226511 10/11/94 10/14/94 11/15/94	SD-102 DUP HFSD102XXX94XD 2226511 R 10/11/94 10/14/94 11/16/94	SD-102 HFSD102XXX94XX 2226508 10/11/94 10/14/94 11/09/94	SD-103 HFSD103XXX94XX 2227908 10/12/94 10/17/94 11/18/94	SD-104 HFSD104XXX94XX 2226512 10/11/94 10/14/94 11/15/94	SD-104 HFSD104XXX94XX 2226512 R 10/11/94 10/14/94 11/16/94	SD-105 HFSD105XXX94XX 2227909 10/12/94 10/17/94 11/19/94
	ANALTE SOW-3/90	11 CKGL								
Dimethylphthalate 330 3000 U 1300 U 1300 U 2700 U 430 U 810 U 810 U 2900 U  Acenaphthylene 330 3000 U 1300 U 1300 U 2700 U 430 U 810 U 810 U 410 J	bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorobyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene	330 330 330 330 330 330 330 330	3000 U	1300 U	1300 U	2700 U	430 U 430 U	810 U 810 U	810 U 810 U	2900 U
	Dimethylphthalate	330 330	3000 U 3000 U	1300 U 1300 U	1300 U 1300 U	2700 U 2700 U	430 U 430 U	810 U 810 U	810 U 810 U	2900 U 410 J

Site: SEDIMENTS

U: not detected

B: blank contamination

Table 1 Laboratory Report of Analysis

Phenol   330   3000   1300   1300   1 1300   1 2700   1 430   1 810   1 810   1 2900   1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SD-101 HFSD101XXX94XX 2226507 10/11/94 10/14/94 11/09/94	SD-102 DUP HFSD102XXX94XD 2226511 10/11/94 10/14/94 11/15/94	SD-102 DUP HFSD102XXX94XD 2226511 R 10/11/94 10/14/94 11/16/94	SD-102 HFSD102XXX94XX 2226508 10/11/94 10/14/94 11/09/94	SD-103 HFSD103XXX94XX 2227908 10/12/94 10/17/94 11/18/94	SD-104 HFSD104XXX94XX 2226512 10/11/94 10/14/94 11/15/94	SD-104 HFSD104XXX94XX 2226512 R 10/11/94 10/14/94 11/16/94	SD-105 HFSD105XXX94XX 2227909 10/12/94 10/17/94 11/19/94
	ANALTE SOW-3/90	11 CKGL								
Dimethylphthalate 330 3000 U 1300 U 1300 U 2700 U 430 U 810 U 810 U 2900 U  Acenaphthylene 330 3000 U 1300 U 1300 U 2700 U 430 U 810 U 810 U 410 J	bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorobyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene	330 330 330 330 330 330 330 330	3000 U	1300 U	1300 U	2700 U	430 U 430 U	810 U 810 U	810 U 810 U	2900 U
	Dimethylphthalate	330 330	3000 U 3000 U	1300 U 1300 U	1300 U 1300 U	2700 U 2700 U	430 U 430 U	810 U 810 U	810 U 810 U	2900 U 410 J

Site: SEDIMENTS

U: not detected

B: blank contamination

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFSD101XXX94XX 2226507 10/11/94 10/14/94	SD-102 DUP K HFSD102XXX94X 2226511 10/11/94 10/14/94 11/15/94	SD-102 DUP KD HFSD102XXX94) 2226511 R 10/11/94 10/14/94 11/16/94	SD-102 KD HFSD102XXX94 2226508 10/11/94 10/14/94 11/09/94	SD-103 6XX HFSD103XXX94) 2227908 10/12/94 10/17/94 11/18/94	SD-104 (X HFSD104XXX94X) 2226512 10/11/94 10/14/94 11/15/94	SD-104 ( HFSD104XXX94) 2226512 R 10/11/94 10/14/94 11/16/94	SD-105 XX HFSD105XXX94XX 2227909 10/12/94 10/17/94 11/19/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(x)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	7300 U 7300 U 7300 U 7300 U 7300 U 3000 U 3000 U 3000 U 7300 U 7300 U 7300 U 3000 U	3200 U 140 J 3200 U 3200 U 1300 U	3200 U 1300 U 3200 U 1300 U	6500 U 370 U 2700 U	430 U   1000 U   1000 U   1000 U   430 U   4	2000 U 810 U 2000 U 810 U 810 U 810 U 810 U 2000 U 2000 U 2000 U 2000 U 810 U 2000 U 810 U 810 U 250 J 810 U	2000 U 810 U 2000 U 810 U 810 U 810 U 810 U 2000 U 2000 U 2000 U 2400 U 810 U	7000 U 2900 U 7000 U 2900 U
Benzo(g,h,i)perylene	330	480 J	200 J	180 J	800 J	J 430 U	180 J	130 J	940 J
Diluti	on Factor: nt Solids:	4.00 44 30.0	2.00 50 30.0	2.00 50 30.0	4.00 49 30.0	1.00 78 30.0	2.00 82 30.0	2.00 82 30.0	5.00 57 30.0
Associated Met Associated Equipm Associated Fi	ent Blank: HF	\$1316.D \$\$XX3XXX94XX H -	S1316.D FQSXX3XXX94XX F	S1316.D HFQSXX3XXX94XX I	S1316.D HFQSXX3XXX94XX	R1342.D HFQSXX3XXX94XX I	\$1316.D IFQSXX3XXX94XX HF	\$1316.D FQSXX3XXX94XX F	R1342.D IFQSXX3XXX94XX -

Site: SEDIMENTS U: not detected

B: blank contamination

LOCATION: SD-107
ISIS ID: HFSD107XXX94XX
LAB NUMBER: 2227910
DATE SAMPLED: 10/12/94
DATE EXTRACTED: 10/17/94
DATE ANALYZED: 11/19/94

ANALYTE SOW	-3/90 - 11	CRQL		
Phenol		330	610	U
bis(2-Chloroethyl)eth	er	330	610	Ū
2-Chlorophenol		330	610	U
1,3-Dichlorobenzene		330	610	U
1,4-Dichlorobenzene		330	610	U
1,2-Dichlorobenzene		330	610	U
2-Methylphenol		330	610	U
2,2'-oxybis(1-Chlorop	ropane)	330	610	U
4-Methylphenol		330	80	J
N-Nitroso-di-n-propyl	amine	330	610	U
Hexachloroethane		330	610	U
Nitrobenzene		330	610	U
Isophorone		330	610	U
2-Nitrophenol		330	610	U
2,4-Dimethylphenol		330	610	U
bis(2-Chloroethoxy)me	thane	330	610	U
2,4-Dichlorophenol		330	610	U
1,2,4-Trichlorobenzen	e	330	760	
Naphthalene		330	340	JB
4-Chloroaniline		330	610	U
<b>Hexachlorobutadiene</b>		330	610	U
4-Chloro-3-Methylphen	ol	330	610	U
2-Methylnaphthalene	_	330	610	U
Hexach Lorocyc Lopentad	iene	330	610	U
2,4,6-Trichlorophenol		330	610	U
2,4,5-Trichlorophenol		800	1400	U
2-Chloronaphthalene		330	610	U
2-Nitroaniline		800	1400	U
Dimethylphthalate		330	610	U
Acenaphthylene		330	630	
2,6-Dinitrotoluene		330	610	U
		:========	=======	===

Site: SEDIMENTS

U: not detected J: estimated

B: blank contamination

u. estimateu

04/14/95

## Table 1 Laboratory Report of Analysis

LOCATION: SD-107
ISIS ID: HFSD107XXX94XX
LAB NUMBER: 2227910
DATE SAMPLED: 10/12/94
DATE EXTRACTED: 10/17/94
DATE ANALYZED: 11/19/94

ANALYTE	SOW-3/90 - II	CRQL		
3-Nitroaniline		800	- 1400 U	
Acenaphthene		330	85 J	
2,4-Dinitrophe	nol	800	1400 U	
4-Nitrophenol	•	800	1400 U	
Dibenzofuran		330	330 J	
2,4-Dinitrotol	uene	330	610 U	
Diethylphthala	te	330	610 U	
4-Chlorophenyl		330	610 U	
Fluorene		330	680	
4-Nitroaniline		800	1400 U	
4,6-Dinitro-2-	methylphenol	800	1400 U	
N-Nitrosodiphe		330	610 U	
4-Bromophenyl-		330	610 U	
Hexach Lorobenz	ene	330	610 U	
Pentachlorophe	nol	800	1400 U	
Phenanthrene		330	3600	
Anthracene		330	1800	
Carbazole		330	96 J	
Di-n-butylphth	alate	330	610 U	
Fluoranthene		330	4000	
Pyrene		330	4800	
Butylbenzylpht	halate	330	610 U	
3,3'-Dichlorob		330	610 U	
Benzo(a)Anthra	cene	330	2700	
Chrysene	.1.5. 1.46 1.4.	330	2800	
bis(2-Ethylhex	yi)phthalate	330	220 J	
Di-n-octylphth	alate	330 330	610 U	
Benzo(b)Fluora		330 330	1600	
Benzo(k)Fluora	ntnene	330 330	1100 1600	
Benzo(a)Pyrene	d\D\mana	330 330	440 J	
Indeno(1,2,3-c		330 330	610 U	
Dibenz(a,h)Ant		330 330	340 J	
Benzo(g,h,i)pe	rytene ===================================			

Dilution Factor: 1.00
Percent Solids: 55
Sample Volume\Weight (ml\g): 30.0

Associated Method Blank: R1342.D Associated Equipment Blank: HFQSXX3XXX94XX Associated Field Blank:

Site: SEDIMENTS

U: not detected J: estimated

B: blank contamination

page 2b

## Semivolatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SD-101 HFSD101XXX94XX 2226507 10/11/94 10/14/94 11/09/94	SD-102 DUP HFSD102XXX94XD 2226511 R 10/11/94 10/14/94 11/16/94	SD-102 HFSD102XXX94XX 2226508 10/11/94 10/14/94 11/09/94	SD-103 HFSD103XXX94XX 2227908 10/12/94 10/17/94 11/18/94	SD-104 HFSD104XXX94XX 2226512 R 10/11/94 10/14/94 11/16/94	SD-105 HFSD105XXX94XX 2227909 10/12/94 10/17/94 11/19/94	SD-107 HFSD107XXX94XX 2227910 10/12/94 10/17/94 11/19/94
ANALYTE SOW-3/90 -	II CRQL							
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol	330 330 330 330 330 330 330 330 330 330	3000 N1 3000 N1	1300 UJ 1300 UJ	2700 UJ	430 U 430 U	810 U 810 U	2900 U	610 U
1,2,4-Trichlorobenzene	330	3000 UJ	1300 UJ	2700 UJ	430 U	810 U	2900 U	760
Naphthalene 4-Chloroaniline	330 330	3000 UJ 880 J	210 J 1300 UJ	570 J 2700 UJ	430 U 430 U	810 U 810 U	2900 U 2900 U	610 U 610 U
Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene	330 330 330 330	3000 UJ 3000 UJ 430 J R	1300 UJ 1300 UJ 1300 UJ 1300 UJ	2700 UJ 2700 UJ 360 J R	430 U 430 U 430 U R	810 U 810 U 86 J 810 U	2900 U 2900 U 2900 U	610 U 610 U 610 U
2,4,6-Trichlorophenol	330	3000 UJ	1300 UJ	2700 ÜJ	430 Ü	810 U	2900 ບິ	610 Û
2,4,5-Trichlorophenol 2-Chloronaphthalene	800 330	7300 UJ 3000 UJ	3200 UJ 1300 UJ	6500 UJ 2700 UJ	1000 U 430 U	2000 U 810 U	7000 U 2900 U	1400 ປ 610 ປ
2-Nitroaniline	800	7300 UJ	3200 UJ	6500 UJ	1000 U	2000 U	7000 U	1400 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330	3000 N1 3000 N1 3000 N1	1300 UJ 1300 UJ 1300 UJ	2700 UJ 2700 UJ 2700 UJ	430 U 430 U 430 U	810 U 810 U 810 U	2900 U 410 J 2900 U	610 U 630 610 U

Site: SEDIMENTS

U: not detected

R: unusable

Table 2
Validation / Summary Table

		PLED: 10/11/94 CTED: 10/14/94	SD-102 DU 4XX HFSD102XXX9 2226511 R 10/11/94 10/14/94 11/16/94	P4XD HFSD102XXX R 2226508 H 10/11/94 H 10/14/94	2227908 10/12/94 10/17/94	2226512 R 10/11/94 10/14/94	SD-105 4XX HFSD105XXX94X 2227909 10/12/94 10/17/94 11/19/94	SD-107 K HFSD107XXX94XX 2227910 10/12/94 10/17/94 11/19/94
ANALYTE SOW-3/90	- II CRQL							
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorobenzene Carbazole Di-n-butylphthalate Fluoranthene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene	800 330 800 800 330 330 330 330 800 330 33	3000 (7300 (	UJ 1300 UJ 3200 UJ 3200 UJ 1300	UJ 6500 UJ 370 UJ 6500 UJ 2700	J 430 UJ 1000 UJ 1000 UJ 430 UJ 430 UJ 430 UJ 430 UJ 430 UJ 430 UJ 1000 UJ 1000 UJ 430	U 2000 U 810 U 810 U 810 U 2000 U 810 U 2000 U 2000 U 2000 U 2000 U 810	J 7000 U J 2900 U J 7000 U J 7000 U J 2900 U	1400 U 85 J 1400 U 1400 U 330 J 610 U 2600 1800 1800 1800 1800 220 J 610 U 1600
Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	330 330	1000 660	J 590 J 310	J 2000 J 1100	J 46	J 690 U 290	J 2400 J J 2900 U	1600 440 J
Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	330 330			UJ 2700 J 800	- :=:	บ 810 เ	2900 U 1 940 J	610 U 340 J
Dilu Dilu Per Sample Volume\We Associated Mo	tion Factor: cent Solids: ight (ml\g): ethod Blank:	4.00 44 30.0 S1316.D	2.00 50 30.0 \$1316.D	4.00 49 30.0 \$1316.D	1.00 78 30.0 R1342.D	2.00 82 30.0 \$1316.D	5.00 57 30.0 R1342.D	1.00 55 30.0 R1342.D
Associated Equip Associated		HFQSXX3XXX94XX	HFQSXX3XXX94XX	HFQSXX3XXX94XX	HFQSXX3XXX94XX	HFQSXX3XXX94XX -	HFQSXX3XXX94XX H	FQSXX3XXX94XX -

Site: SEDIMENTS

U: not detected F

R: unusable

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SD-101 HFSD101XXX94X 2226507 10/11/94 10/15/94 11/22/94	SD-102 DUI X HFSD102XXX94 2226511 10/11/94 10/15/94 11/23/94	4XD HFSD102XXX9 2226508	2227908 10/12/94 10/18/94	SD-104 4XX HFSD104XXX94 2226512 10/11/94 10/15/94 11/18/94	SD-105 XX HFSD105XXX9 2227909 10/12/94 10/18/94 11/26/94	2227910 10/12/94 10/18/94
ANALYTE SOW-3/90	- II CRQL							
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1254	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	3.9 U U U U U U U U U U U U U U U U U U U	3.4 1 3.4 1 3.4 1 3.4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	3.5 U 3.5 U 3.5 U 3.5 U 3.5 U 3.5 U 3.5 U 6.7 U 7 U 6.7 U 7 U 7 U 7 U 7 U 7 U 7 U 7 U	U 2.2	J 2.1   2.1   2.1   3.1	3.0 3.0 3.0 3.0 3.0 3.0 3.0 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8	U 3.1 U U 6.0 U U 0 6.0 U 0 0 0 U 0 0 0 U 0 U 0 0 U 0 0 U 0 0 U 0 0 U 0 U 0 0 U 0 U 0 0 U 0 U 0 0 U 0 U 0 0 U 0
	:========= :ion Factor: :ent Solids:	1.00 44	1.00 50	1.00 49	1.00 78	1.00 82	1.00 57	1.00 55
Sample Volume\Wei		30.0	30.0	30 <b>.</b> .0	30.0	30.0	30.0	30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ	PSB1015A SXX3XXX94XX H -	PSB1015B FQSXX3XXX94XX	PSB1015B HFQSXX3XXX94XX	PSB1018B HFQSXX3XXX94XX	PSB1015B HFQSXX3XXX94XX	PSB1018B HFQSXX3XXX94XX	PSB1018B HFQSXX3XXX94XX

Site: SEDIMENTS U: not detected J: estimated

P: > 25% difference between columns

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	SD-101 HFSD101XXX94XX 2226507 10/11/94 10/15/94 11/22/94	SD-102 DUP HFSD102XXX94XD 2226511 10/11/94 10/15/94 11/23/94	SD-102 HFSD102XXX94XX 2226508 10/11/94 10/15/94 11/18/94	SD-103 HFSD103XXX94XX 2227908 10/12/94 10/18/94 11/26/94	SD-104 HFSD104XXX94XX 2226512 10/11/94 10/15/94 11/18/94	SD-105 HFSD105XXX94XX 2227909 10/12/94 10/18/94 11/26/94	SD-107 HFSD107XXX94XX 2227910 10/12/94 10/18/94 11/26/94
ANALYTE SOW-3/90	- II CRQL							
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1254 Aroclor-1254 Aroclor-1254	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	3.9 UJ 3.9 UJ 3.9 UJ 3.9 UJ 3.9 UJ 7.5 UJ	3.4 UJ 3.4 UJ 3.4 UJ 3.4 UJ 3.4 UJ 3.4 UJ 6.6 UJ 6.6 UJ 6.6 UJ 6.6 UJ 3.4 UJ 3.4 UJ 3.4 UJ 3.4 UJ 3.4 UJ 3.4 UJ 66 UJ 66 UJ	3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 6.7 UJ	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 2.1 UJ 4.0 UJ	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R
unnessensensensensensensensensensensensen	======================================	1.00 44	1.00 50	1.00 49	1.00 78	1.00 82	1.00 57	1.00 55
Sample Volume\Wei		30.0	30.0	30.0	30.0	30.0	30.0	30.0
Associated Me	thod Blank:	PSB1015A	PSB1015B	PSB1015B	PSB1018B	PSB1015B	PSB1018B	PSB1018B

Associated Equipment Blank: HFQSXX3XXX94XX HFQSXX3XXXX94XX HFQSXX3XXXX

Site: SEDIMENTS

U: not detected
J: estimated

R: unusable

N: spike recovery not met

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	SD-101 HFSD101XXX94XX 226507 10/11/94	SD-102 DUP HFSD102XXX94XD 226511 10/11/94	SD-102 HFSD102XXX94XX 226508 10/11/94	SD-103 HFSD103XXX94XX 227908 10/12/94	SD-104 HFSD104XXX94XX 226512 10/11/94	SD-105 HFSD105XXX94XX 227909 10/12/94	SD-107 HFSD107XXX94XX 227910 10/12/94
ANALYTE	SOW-3/90 - II CRDL						•	
Aluminum	40	8600	7800	11200	19600 *	7260	6230 *	4870 *
Antimony	12	33.5 N*	19.8 BN*	27.9 N*	9.0 U	7.1 UN*	11.6 U	12.8 U
Arsenic	2	14.3 N	14.8 N	15.8 N	9.0	3.0 SN	21.4 S	6.1
Barium	40	76.6 B	60.9 B	97.0	188	81.2	77.3	70.8
Beryllium	1	0.90 B	0.97 B	1.6 B	3.5	0.95	0.61 U	0.67 U
Cadmium	1	4.0 N*	3.9 N*	1.9 BN*	1.8 N	2.2 N*	2.8 N	0.67 UN
Calcium	1000	114000	60500	81800	159000 *	72500	42500 *	154000 *
Chromium	. 2	98.6 *	43.5 *	50.2 *	10.8	48.6 *	37.3	38.8
Cobalt	10	19.7 B	13.7 B	15.0 B	5.0 B	8.6 B	9.3 B	2.0 U
Copper	5	212 *	106 *	120 *	23.4 N*	30.7 *	82.4 N*	14.1 N*
Iron	20	131000	96200	118000	43400	46600	82300	11000
Lead	0.6	754	716	731 *	84.2 N*	132	333 N*	45.4 N*
Magnesium	1000	10600	10500	14900	18200 *	6200	16900 *	7320 *
Manganese	3	4160	3050	4150	2500	1270	3020	420
Mercury	0.1	0.44	0.41	0.37	0.13 UN	0.13	0.18 UN	0.18 UN
Nickel	8	61.2	29.4	27.6	11.2	17.1	28.8	8.7 U
Potassium	1000	4390	3320	4010	1640	1410	335 B	591 B
Selenium	1	1.9 UWN*		2.0 UWN*		1.1 UN*	1.6 U*	1.8 U*
Silver	2	2.1 UN	1.7 UN	2.0 UN	1.2 UN	0.94 UN	1.5 UN	1.7 UN
Sodium	1000	843 B	826 B	912 в	530 B	496 B	141 U	260 B
Thallium	2	1.9 U	1.9 U	2.0 U	1.3 U	1.1 U	1.6 UW	1.8 U
Vanadium	. 10	50.1	40.3	50.9	20.6	20.2	34.8	11.9 B
Zinc	4	1470 E*	1140 E*	1360 E*	392 E	846 E*	799 E	161 E
Cyanide	11	1.4 N	0.78 UN	0.88 UN	0.61 U	0.59 UN	0.73 U	0.99 U
	Percent Solids:	44	50	49	78	82 <u>.</u>	57	<b>55</b>

SDGHANNA2S Associated Method Blank: SDGHANNA2S SDGHANNA2S MBHANNA4 SDGHANNA2S MBHANNA4 MBHANNA4 Associated Equipment Blank:
Associated Field Blank: HFQSXX3XXX94XX HFQSXX3XXX94XX HFQSXX3XXX94XX HFQSXX3XXX94XX HFQSXX3XXX94XX HFQSXX3XXX94XX

Site: SEDIMENTS

N: spike recovery not met \*: W: post digestion spike not met \*: duplicate analysis not met met B: less than CRDL U: not detected

E: interference

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	HFSD101XXX94XX 226507	SD-102 DUP HFSD102XXX94XD 226511 10/11/94	SD-102 HFSD102XXX94XX 226508 10/11/94	SD-103 HFSD103XXX94XX 227908 10/12/94	SD-104 HFSD104XXX94XX 226512 10/11/94	SD-105 HFSD105XXX94XX 227909 10/12/94	SD-107 HFSD107XXX94XX 227910 10/12/94
ANALYTE	SOW-3/90 - II CRDL							
Aluminum	40	8600 J	7800 J	11200 J	19600	7260	6230	4870
Antimony	. 12	33.5 J	19.8 J	27.9 J	9.0 UJ	7.1 UJ	11.6 UJ	12.8 UJ
Arsenic	.2	<u>14.3</u> J	14.8 J	<u>15</u> .8 J	9.0	3.0 J	<u>21.4</u>	_6.1
Barium	40	76.6 J	60.9 J	97.0 J	188	81.2	77.3	70.8
Beryllium Cadmium	1	0.90 J 4.0 J	0.97 J 3.9 J	1.0 J	3.5	0.95 2.2 J	0.61 U	0.67 U
Calcium	1000	114000 J	60500 J	1.9 J 81800 J	1.8 J 159000	72500	2.8 J 42500	0.67 บ 154000
Chromium	2	98.6 J	43.5 J	50.2 J	10.8	48.6	37.3 J	38.8 J
Cobalt	10	19.7 J	13.7 J	15.0 J	5.0 J	8.6 J	9.3 J	2.0 U
Copper	.5	212 J	106 J	120 J	23.4	30.7	82.4	14.1
Iron	20 .	131000 J	96200 J	118000 J	43400	46600	82300	11000
Lead	0.6	754 J	716 J	731 J	84.2	132	333	45.4
Magnesium	1000	10600 J	105 <u>0</u> 0 J	14900 J	18200	6200	16900	7320
Manganese	3	4160 J	.3050 J	4150 J	2500	1270	3020	420
Mercury	0.1	0.44 J	0.41 J	0.37 J	0.13 U	0 <u>.</u> 13	0.18 U	0.18 U
Nickel	8	61.2 J	29.4 J	27.6 J	11.2	17.1	28.8	8.7 U
Potassium	1000	4390 J	3320 J	4010 J	1640	1410	335 J	591 J
Selenium	1	1.9 UJ 2.1 UJ	1.9 UJ 1.7 UJ	2.0 UJ 2.0 UJ	1.3 U 1.2 UJ	1.1 UJ 0.94 ปัง	1.6 U 1.5 UJ	1.8 U 1.7 UJ
Silver Sodium	1000	2.1 UJ 843 J	1.7 UJ 826 J	2.0 UJ 912 J	1.2 UJ 530 J	496 J	1.5 UJ 141 U	260 J
Thallium	2	1.9 UJ	1.9 U	2.0 UJ	1.3 U	1.1 U	1.6 U	1.8 U
Vanadium	10	50.1 J	40.3 J	50.9 J	20.6	20.2	34.8	11.9 J
Zinc	4	1470 J	1140 J	1360 J	392	846	799	161
Cyanide	<u> </u>	1.4 J	0.78 UJ	0.88 UJ	0.61 UJ	0.59 UJ	0.73 UJ	0.99 UJ
	Percent Solids:	44	50	49	78	82	57	55

Associated Method Blank: SDGHANNA2S SDGHANNA2S SDGHANNA2S MBHANNA4 SDGHANNA2S MBHANNA4 MBHANNA4
Associated Equipment Blank: HFQSXX3XXX94XX HFQSXX3XXX

Site: SEDIMENTS
U: not detected
J: estimated

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis (ug/L)

17-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	HFSD101XXX94XX E226507	SD-102 DUP HFSD102XXX94XD E226511 10/11/94	SD-102 HFSD102XXX94XX E226508 10/11/94	SD-103 HFSD103xxx94xx E227908 10/12/94	SD-104 HFSD104XXX94XX E226512 10/11/94	SD-105 HFSD105XXX94XX E227909 10/12/94	SD-107 HFSD107XXX94XX E227910 10/12/94	
ANALYTE	RL								
arsenic	52		52.0 UN	52.0 UN	52.0 UN	52.0 UN	52.0 UN	52.0 UN	
barium	11	549	466	471	1520	588	834	1430	
cadmium	2	2.6 8*	2.0 U*	2.0 0*	5.2	2.0 U*	2.0 U	2.3 B	
chromium	3	5.0 U*	6.7 B*	5.0 U*	9.7 B	9.2 B*	5.0 U	11.6	
lead	26		189 *	144 *	26.0 U	153 *	26.0 U	31.5	
mercury	0.2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
selenium	90	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	90.0 U	
silver	5	5.0 U*	5.0 U*	5.0 U*	5.0 U	6.8 B*	5.0 U	5.0 U	
		=============			=======================================	=======================================	=======================================	=======================================	:======
	ated Method Blank:		SDGHANNA2E	SDGHANNA2E	EPHANNA4	SDGHANNA2E	EPHANNA4	EPHANNA4	
Associate	d Equipment Blank:	-	•	-	-	•	-	-	
Assoc	iated Field Blank:	-	-	-	-	<b>-</b>	-	•	

Site: SEDIMENTS

Note: Inorganic Data - EPTOX Metals

U: not detected N: spike recovery not met B: less then RL \*: duplicate analysis not met

Table 2 Validation / Summary Table

	LOCATION:	SD-101	SD-102 DUP	SD-102	SD-103	SD-104	SD-105	SD-107
	ISIS ID:	HFSD101XXX94XX	HFSD102XXX94XD	HFSD102XXX94XX	HFSD103XXX94XX	HFSD104XXX94XX	HFSD105XXX94XX	HFSD107XXX94XX
	LAB NUMBER:	E226507	E226511	E226508	E227908	E226512	E227909	E227910
	DATE SAMPLED:	10/11/94	10/11/94	10/11/94	10/12/94	10/11/94	10/12/94	10/12/94
ANALYTI	E RL						•	
arsenic	52	52.0 U	52.0 U	52.0 U	52.0 UN	52.0 U	52.0 UN	52.0 UN
barium	11	549	466	471	1520	588	834	1430
cadmium	2	2.6 J	2.0 U	2.0 U	5.2 J	2.0 U	2.0 UJ	2.3 J
chromium	5	5.0 U	6.7 J	5.0 U	9.7	9.2 J	5.0 U	11.6
lead	26	132	189 J	144 J	26.0 U	153	26.0 U	31.5
mercury	0.2	0.20 U						
selenium	90	90.0 U						
silver	5	5.0 U	5.0 U	5.0 U	5.0 U	6.8 J	5.0 U	5.0 U
Asso	ssociated Method Blank:	SDGHANNA2E	SDGHANNA2E	SDGHANNA2E	EPHANNA4	SDGHANNA2E	EPHANNA4	EPHANNA4
	ciated Equipment Blank:	-	-	-	-	-	-	-
	Associated Field Blank:	-	-	-	-	-	-	-

Site: SEDIMENTS
Note: Inorganic Data - EPTOX Metals
U: not detected J: estimated N: spike recovery not met

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

17-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	SD-101 HFSD101XXX94XX 2226507 10/11/94 10/24/94	SD-102 DUP HFSD102XXX94XD 2226511 10/11/94 10/24/94	SD-102 HFSD102XXX94XX 2226508 10/11/94 10/24/94	SD-103 HFSD103XXX94XX 2227908 10/12/94 10/31/94	SD-104 HFSD104XXX94XX 2226512 10/11/94 10/24/94	SD-105 HFSD105XXX94XX 2227909 10/12/94 10/31/94	SD-107 HFSD107XXX94XX 2227910 10/12/94 10/31/94
ANALYTE	RL							
Corrosivity, inch/Yes Ignitability, Degrees Cyanide, Reactive, pp sulfide, Reactive, pp	s F 212 om 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Equ	Method Blank: Jipment Blank:	SDGHANNA2 - -	SDGHANNA2 - -	SDGHANNA2 - -	MBWCHANNA4	SDGHANNA2 - -	MBWCHANNA4 - -	MBWCHANNA4

Site: SEDIMENTS
U: not detected

Table 2 Validation / Summary Table

	LOCATION:	SD-101	SD-102 DUP	SD-102	SD-103	SD-104	SD-105	SD-107
	ISIS ID:	HFSD101XXX94XX	HFSD102XXX94XD	HFSD102XXX94XX	. HFSD103XXX94XX	HFSD104XXX94XX	HFSD105XXX94XX	HFSD107XXX94XX
	LAB NUMBER:	2226507	2226511	2226508	2227908	2226512	2227909	2227910
	DATE SAMPLED:	10/11/94	10/11/94	10/11/94	10/12/94	10/11/94	10/12/94	10/12/94
	ATE ANALYZED:	10/24/94	10/24/94	10/24/94	10/31/94	10/24/94	10/31/94	10/31/94
ANALYTE	RL							
Corrosivity, inch/Yer Ignitability, Degrees Cyanide, Reactive, pp sulfide, Reactive, pp	s F 212 om 1.0	0.01 U >212 1 U 1 U						
Associated Equ	Method Blank:	SDGHANNA2	SDGHANNA2	SDGHANNA2	MBWCHANNA4	SDGHANNA2	MBWCHANNA4	MBWCHANNA4
	uipment Blank:		-	-	-	-	-	
	d Field Blank:	-	-	-	-	-	-	-

Site: SEDIMENTS
U: not detected

Volatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/19/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/19/94	CD-105 HFCD105XXX94X 2228901 10/13/94 10/20/94	CD-106 X HFCD106XXX94XX 2228902 10/13/94 10/20/94	CD-107 C HFCD107XXX94XX 2228903 10/13/94 10/20/94	CD-108 HFCD108XXX94XX 2228904 10/13/94 10/20/94	CD-109 HFCD109XXX94XX 2226506 10/11/94 10/15/94	CD-109 C HFCD109XXY94XX 2226506 R 10/11/94 10/17/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Bromomethane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Vinyl Chloride	10	15 U	15 U	14 U	13 U	18 U	15 U 15 U	13 U	13 U
Chloroethane	10	15 U	15 U	14 U	13 U	18 U		13 U	13 U
Methylene Chloride	10	9 J	9 J	9 J	10 J	12 J	10 J	4 JB	66 B
Acetone	10	15 U	8 J	9 JB		9 JB	4 JB	51	22 B
Carbon Disulfide	10	15 U	15 U	14 U	13 U	18 U	15 U 15 U	2 J	13 U
1,1-Dichloroethene	10	15 U	15 U	14 U	13 U	18 U		13 U	13 U
1,1-Dichloroethane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
1,2-Dichloroethene (total)	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Chloroform	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
1,2-Dichloroethane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
2-Butanone	10	15 U	15 U	14 U	13 U	18 U	15 U	15	13 U
1,1,1-Trichloroethane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Carbon Tetrachloride	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Bromodichloromethane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
1,2-Dichloropropane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
cis-1,3-Dichloropropene	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Trichloroethene	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Dibromochloromethane	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
1,1,2-Trichloroethane	10	15 U	15 U	14 U	13 U	18 U	. 15 U	13 U 13 U	13 U
Benzene	10	15 U	-15 U	14 U	13 U	18 U	15 U		13 U
trans-1,3-Dichloropropene	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Bromoform	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
4-Methyl-2-Pentanone	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
2-Hexanone	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Tetrachloroethene	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
1,1,2,2-Tetrachloroethane	10	15 U	15 U	14 U	13 U	18 U	15 U	1 <u>3</u> Ų	1 <u>3</u> U
Toluene	10	15 U	15 U	14 U	13 U	18 U	15 U	5 J	3 J
Chlorobenzene	10	15 U	15 U	14 U	13 U	18 U	15 U	13 U	13 U
Ethylbenzene	10	15 U	15 U	4 J	13 U	18 U	15 U	13 U	13 U
Styrene	10	15 U	15 U	14 U	13 U 13 U	18 U 18 U	15 U 15 U	13 U 13 U	13 U 13 ປ
Total Xylenes	10 ==========	15 U ==========	15 U ==========	14 U	15 U ============	18 U ====================================	15 U ====================================	15 U :==========	
	n Factor:	1 <u>.</u> 00	1.00	<u>1.</u> 00	<u>1.</u> 00	1.00	1.00	1.00	1.00
	t Solids:	67	- 68	73	. 75 - 00	54	66	76	76 5 00
Sample Volume\Weigh	t (ml\g):	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Associated Meth Associated Equipme Associated Fie Associated Tr	nt Blank: HFQ ld Blank:	P1296.D SXX6XXX94XX HF0 - -	P1296.D QSXX6XXX94XX HF - -	D0828.D QSXX6XXX94XX H - -	D0828.D FQSXX6XXX94XX HF	D0828.D QSXX6XXX94XX HF	D0828.D QSXX6XXX94XX HFG - -	P1217.D PSXX6XXX94XX HI	P1240.D FQSXX6XXX94XX - -

Site: SUMP SEDIMENTS

U: not detected B: blank contamination

Table 2 Validation / Summary Table

	LOCATI ISIS LAB NUMB DATE SAMPL DATE ANALYZ	ID: HFCD102XXX94X) ER: 2227905 ED: 10/12/94	CD-104 C HFCD104XXX94X 2227907 10/12/94 10/19/94	CD-105 XX HFCD105XXX94X 2228901 10/13/94 10/20/94	CD-106 XX HFCD106XXX94XX 2228902 10/13/94 10/20/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/20/94	CD-108 HFCD108XXX94X 2228904 10/13/94 10/20/94	CD-109 C HFCD109XXX94XX 2226506 R 10/11/94 10/17/94
ANALYTE SOW-3/90	II CRQL							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	15 UUUJ 15 15 UU 15 15 UUUUUUUUUUUUUUUUUUUUUUUU	15 15 15 15 15 15 15 15 15 15 15 15 15 1	14 UJ 14 U U U U U U U U U U U U U U U U U U U		18 U U U U U U U U U U U U U U U U U U U	15 15 15 15 15 15 15 15 15 15 15 15 15 1	13 UJ
	ion Factor: ent Solids: ght (ml\g):	1.00 67 5.00	1.00 68 5.00	1.00 73 5.00	1.00 75 5.00	1.00 54 5.00	1.00 66 5.00	1.00 76 5.00
Associated Met Associated Equipm Associated Fi Associated 1	nent Blank: ield Blank:	P1296.D HFQSXX6XXX94XX HI	P1296.D FQSXX6XXX94XX H - -	DO828.D IFQSXX6XXX94XX H - -	D0828.D HFQSXX6XXX94XX HF - -	D0828.D QSXX6XXX94XX HF	DO828.D QSXX6XXX94XX HI	P1240.D FQSXX6XXX94XX - -

Site: SUMP SEDIMENTS
U: not detected
J: estimated

Table 1 Laboratory Report of Analysis

	·	LOCATION: ISIS ID: LAB NUMBER:	CD-101 DI HFCD101XXX 2227904		CD-101 CD101XXX 2227901	94XX HI	CD-103 FCD103XXX 2227906	94XX
		DATE SAMPLED:			10/12/9		10/12/9	
	L	DATE ANALYZED:	10/20/9	4	10/20/9	4	10/20/9	4
ANALYTE	SOW-3/90 - II	CRQL						
Chloromethane		1200	2400	U	2100	U	2500	U
Bromomethane		1200	2400	U	2100	U	2500	U
Vinyl Chloride		1200	2400	U	2100	U	2500	U
Chloroethane		1200	2400	Ü	2100	Ū	2500	Ū
Methylene Chloride		1200 1200	6100 2400	B U	5600 3100	B U	6400 2500	B U
Acetone		1200	2400	Ü	2100 2100	U	2500	Ü
Carbon Disulfide 1.1-Dichloroethene		1200	2400	ŭ	2100	Ü	2500	Ü
1,1-Dichloroethane		1200	2400	Ü	2100	Ŭ	2500	Ŭ
1,2-Dichloroethene	(total)	1200	2400	ŭ	2100	Ŭ	2500	ŭ
Chloroform	(total)	1200	2400	ŭ	2100	ŭ	2500	ŭ
1,2-Dichloroethane		1200	2400	ŭ	2100	Ŭ	2500	Ū
2-Butanone		1200	2400	Ŭ	2100	Ŭ	2500	Ŭ
1,1,1-Trichloroeth	ane	1200	2400	Ü	2100	Ū	2500	Ú
Carbon Tetrachlori		1200	2400	U	2100	U	2500	U
Bromodichlorometha	ne	1200	2400	U	2100	U	2500	U
1,2-Dichloropropan	e	1200	2400	U	2100	U	2500	U
cis-1,3-Dichloropr	opene	1200	2400	U	2100	U	2500	U
Trichloroethene		1200	2400	U	2100	U	2500	U
Dibromochlorometha		1200	2400	U	2100	Ü	2500	U
1,1,2-Trichloroeth	ane	1200	2400	Ü	2100	Ü	2500	U
Benzene		1200	2400	Ü	2100	Ü	2500	U
trans-1,3-Dichloro	propene	1200 1200	2400 2400	U	2100 2100	U U	2500 2500	U
Bromoform 4-Methyl-2-Pentano		1200	2400	Ü	2100	Ü	2500	Ü
2-Hexanone	i i i c	1200	2400	Ü	2100	Ü	2500	ŭ
Tetrachloroethene		1200	2400	ŭ	2100	Ŭ	2500	ŭ
1,1,2,2-Tetrachlor	oethane	1200	2400	ŭ	2100	Ŭ	2500	ŭ
Toluene		1200	2400	Ū	2100	Ū	2500	Ū
Chlorobenzene		1200	2400	U	2100	U	2500	U
Ethylbenzene		1200	2400	U	2100	U	2500	U
Styrene		1200	2400	U	2100	U	2500	U
Total Xylenes		1200	2400	U	2100	U	2500	U
	Dilution		1.00	2222	1.00	=====	1.00	_==
	•	Solids:	50		58		48	
Sample V	olume\Weight		4.00		4.00		4.00	
Asso	ciated Method	d Blank:	N9733.D		N9733.D		N9733.D	)
	ted Equipment		SXX6XXX94XX	HFQSX)	(6XXX94XX	HFQSXX	<b>(6XXX94XX</b>	
	ociated Field		-		-		-	
As	sociated Trip	p Blank:	-		-			
	•	•						

Site: SUMP SEDIMENTS U: not detected

B: blank contamination

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFCD101XXX9 2227904 10/12/94	94XD HFCD101 2227 4 10/1	XXX94XX 901 2/94	CD-103 HFCD103XXX 2227906 10/12/9	4
ANALYTE SOW-3/90 -	II CRQL					
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	1200 1200 1200 1200 1200 1200 1200 1200	2400 2400 2400 2400 2400 2400 2400 2400	UJ 21 UJ 21 UJ 56 UJ 21	000 U U U U U U U U U U U U U U U U U U	2500 2500 2500 2500 2500 2500 2500 2500	
Styrene Total Xylenes	1200 1200	2400 2400	UJ 21 UJ 21	00 U	2500 2500	n1 n1
	on Factor: nt Solids:	1.00 50 4.00	1. 58 4.00	00	1.00 48 4.00	<b>##</b>
Associated Met Associated Equipm Associated Fi Associated T	ent Blank:    HF0 eld Blank:	N9733.D PSXX6XXX94XX - -	N973 HFQSXX6XXX9		N9733.D QSXX6XXX94XX - -	

Site: SUMP SEDIMENTS
U: not detected
J: estimated

## Semivolatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 D 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 D 10/12/94 10/17/94 11/19/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene 1sophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330	3800 J 6700 U	3300 J 5700 U	500 500 500 500 500 500 500 500 500 500	14000 U	140000 U	2400 U 24	4900 U 12000	460 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330 	6700 U 1800 J 6700 U	5700 U 2600 J 5700 U	500 U 500 U 500 U	14000 U 14000 U 14000 U	140000 U 140000 U 140000 U	2400 U 3100 2400 U	4900 U 2900 JD 4900 U	460 U 180 J 460 U

Site: SUMP SEDIMENTS

U: not detected B: blank contamination D: diluted result

J: estimated E: exceeds calibration range

Table 2 Validation / Summary Table

	LOCATI ISIS LAB NUMB DATE SAMPL DATE ANALYZ	ID: HFCD102XXX94X) ER: 2227905 ED: 10/12/94	CD-104 C HFCD104XXX94X 2227907 10/12/94 10/19/94	CD-105 XX HFCD105XXX94X 2228901 10/13/94 10/20/94	CD-106 XX HFCD106XXX94XX 2228902 10/13/94 10/20/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/20/94	CD-108 HFCD108XXX94X 2228904 10/13/94 10/20/94	CD-109 C HFCD109XXX94XX 2226506 R 10/11/94 10/17/94
ANALYTE SOW-3/90	II CRQL							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	15 UUUJ 15 15 UU 15 15 UUUUUUUUUUUUUUUUUUUUUUUU	15 15 15 15 15 15 15 15 15 15 15 15 15 1	14 UJ 14 U U U U U U U U U U U U U U U U U U U		18 U U U U U U U U U U U U U U U U U U U	15 15 15 15 15 15 15 15 15 15 15 15 15 1	13 UJ
	ion Factor: ent Solids: ght (ml\g):	1.00 67 5.00	1.00 68 5.00	1.00 73 5.00	1.00 75 5.00	1.00 54 5.00	1.00 66 5.00	1.00 76 5.00
Associated Met Associated Equipm Associated Fi Associated 1	nent Blank: ield Blank:	P1296.D HFQSXX6XXX94XX HI	P1296.D FQSXX6XXX94XX H - -	DO828.D IFQSXX6XXX94XX H - -	D0828.D HFQSXX6XXX94XX HF - -	D0828.D QSXX6XXX94XX HF	DO828.D QSXX6XXX94XX HI	P1240.D FQSXX6XXX94XX - -

Site: SUMP SEDIMENTS
U: not detected
J: estimated

Table 1 Laboratory Report of Analysis

	·	LOCATION: ISIS ID: LAB NUMBER:	CD-101 DI HFCD101XXX 2227904		CD-101 CD101XXX 2227901	94XX HI	CD-103 FCD103XXX 2227906	94XX
		DATE SAMPLED:			10/12/9		10/12/9	
	L	DATE ANALYZED:	10/20/9	4	10/20/9	4	10/20/9	4
ANALYTE	SOW-3/90 - II	CRQL						
Chloromethane		1200	2400	U	2100	U	2500	U
Bromomethane		1200	2400	U	2100	U	2500	U
Vinyl Chloride		1200	2400	U	2100	U	2500	U
Chloroethane		1200	2400	Ü	2100	Ū	2500	Ū
Methylene Chloride		1200 1200	6100 2400	B U	5600 3100	B U	6400 2500	B U
Acetone		1200	2400	Ü	2100 2100	U	2500	Ü
Carbon Disulfide 1.1-Dichloroethene		1200	2400	ŭ	2100	Ü	2500	Ü
1,1-Dichloroethane		1200	2400	Ü	2100	Ŭ	2500	Ŭ
1,2-Dichloroethene	(total)	1200	2400	ŭ	2100	Ŭ	2500	ŭ
Chloroform	(total)	1200	2400	ŭ	2100	ŭ	2500	ŭ
1,2-Dichloroethane		1200	2400	ŭ	2100	Ŭ	2500	Ū
2-Butanone		1200	2400	Ŭ	2100	Ŭ	2500	Ŭ
1,1,1-Trichloroeth	ane	1200	2400	Ü	2100	Ū	2500	Ú
Carbon Tetrachlori		1200	2400	U	2100	U	2500	U
Bromodichlorometha	ne	1200	2400	U	2100	U	2500	U
1,2-Dichloropropan	e	1200	2400	U	2100	U	2500	U
cis-1,3-Dichloropr	opene	1200	2400	U	2100	U	2500	U
Trichloroethene		1200	2400	U	2100	U	2500	U
Dibromochlorometha		1200	2400	U	2100	Ü	2500	U
1,1,2-Trichloroeth	ane	1200	2400	Ü	2100	Ü	2500	U
Benzene		1200	2400	Ü	2100	Ü	2500	U
trans-1,3-Dichloro	propene	1200 1200	2400 2400	U	2100 2100	U U	2500 2500	U
Bromoform 4-Methyl-2-Pentano		1200	2400	Ü	2100	Ü	2500	Ü
2-Hexanone	i i i c	1200	2400	Ü	2100	Ü	2500	ŭ
Tetrachloroethene		1200	2400	ŭ	2100	Ŭ	2500	ŭ
1,1,2,2-Tetrachlor	oethane	1200	2400	ŭ	2100	Ŭ	2500	ŭ
Toluene		1200	2400	Ū	2100	Ū	2500	Ū
Chlorobenzene		1200	2400	U	2100	U	2500	U
Ethylbenzene		1200	2400	U	2100	U	2500	U
Styrene		1200	2400	U	2100	U	2500	U
Total Xylenes		1200	2400	U	2100	U	2500	U
	Dilution		1.00	2222	1.00	=====	1.00	_==
	•	Solids:	50		58		48	
Sample V	olume\Weight		4.00		4.00		4.00	
Asso	ciated Method	d Blank:	N9733.D		N9733.D		N9733.D	)
	ted Equipment		SXX6XXX94XX	HFQSX)	(6XXX94XX	HFQSXX	<b>(6XXX94XX</b>	
	ociated Field		-		-		-	
As	sociated Trip	p Blank:	-		-			
	•	•						

Site: SUMP SEDIMENTS U: not detected

B: blank contamination

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFCD101XXX9 2227904 10/12/94	94XD HFCD101 2227 4 10/1	XXX94XX 901 2/94	CD-103 HFCD103XXX 2227906 10/12/9	4
ANALYTE SOW-3/90 -	II CRQL					
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	1200 1200 1200 1200 1200 1200 1200 1200	2400 2400 2400 2400 2400 2400 2400 2400	UJ 21 UJ 21 UJ 56 UJ 21	000 U U U U U U U U U U U U U U U U U U	2500 2500 2500 2500 2500 2500 2500 2500	
Styrene Total Xylenes	1200 1200	2400 2400	UJ 21 UJ 21	00 U	2500 2500	n1 n1
	on Factor: nt Solids:	1.00 50 4.00	1. 58 4.00	00	1.00 48 4.00	<b>##</b>
Associated Met Associated Equipm Associated Fi Associated T	ent Blank:    HF0 eld Blank:	N9733.D PSXX6XXX94XX - -	N973 HFQSXX6XXX9		N9733.D QSXX6XXX94XX - -	

Site: SUMP SEDIMENTS
U: not detected
J: estimated

## Semivolatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 D 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 D 10/12/94 10/17/94 11/19/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene 1sophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330	3800 J 6700 U	3300 J 5700 U	500 500 500 500 500 500 500 500 500 500	14000 U	140000 U	2400 U 24	4900 U 12000	460 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330 	6700 U 1800 J 6700 U	5700 U 2600 J 5700 U	500 U 500 U 500 U	14000 U 14000 U 14000 U	140000 U 140000 U 140000 U	2400 U 3100 2400 U	4900 U 2900 JD 4900 U	460 U 180 J 460 U

Site: SUMP SEDIMENTS

U: not detected B: blank contamination D: diluted result

J: estimated E: exceeds calibration range

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94X) 2227905 10/12/94 10/17/94 11/18/94	CD-103 C HFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-103 X HFCD103XXX94X 2227906 D 10/12/94 10/17/94 11/18/94	CD-104 X HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94X 2227907 D 10/12/94 10/17/94 11/19/94	CD-105 K HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 - I	II CRQL				*				
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Putylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene	800 330 800 800 330 330 330 330	16000 U 5600 J 16000 U 16000 U 6700 U 6700 U 6700 U 6700 U 6700 U 6700 U 16000 U 16000 U 16000 U 24000 3900 J 1400 J 6700 U 19000 22000 6700 U 12000 16000	14000 U 9300 14000 U 14000 U 3400 J 5700 U 5700 U 9700 14000 U 14000 U 14000 U 14000 U 14000 U 29000 4600 J 1300 J 5700 U 14000 18000 5700 U 9200	1200 U U 1200 E 500 U U 1200 E 500 U U 1200 E 500 U U 1200 E 700 E	33000 U 14000 U 33000 U 33000 U 14000 U 14000 U 14000 U 2100 J 33000 U 33000 U 14000 U	330000 U 140000 U 330000 U 140000 U 140000 U 140000 U 140000 U 330000 U 330000 U 330000 U 330000 U 140000 U	5900 U 1000 J 5900 U 5900 U 5900 U 2400 U 2400 U 2400 U 25900 U	12000 U 1000 JD 12000 U 12000 U 12000 U 1300 JD 4900 U 4900 U 1800 JD 12000 U 12000 U 4900 U 4900 U 4900 U 22000 D 4400 JD 1700 JD 4900 U 30000 D 27000 D 4900 U 4900 U	1100 U 120 J 1100 U 1100 U 1100 U 140 J 460 U 460 U 1100 U 1100 U 1100 U 460 U 460 U 460 U 460 U 460 U 1100 U 1800 320 J 93 J 460 U 2400 1300 460 U 1400
Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene	330 330 330 330	1700 J 6700 U 11000 10000	2000 J 2000 J 5700 U 8300 6500 7600	500 U 500 U 400 J 330 J 120 J	5100 J 14000 U 14000 U 14000 U 14000 U	140000 U 140000 U 140000 U 140000 U 140000 U	310 J 2400 U 15000 7400 10000	4900 U 4900 U 13000 D 9000 D	400 JB 460 U 1000 680 170 J
Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	330 330 330	10000 6500 J 6700 U	5000 J 5700 U	170 J 500 U	14000 U 14000 U	140000 U 140000 U	5200 2000 J	7800 D 2900 JD	170 J 460 U
Benzo(g,h,i)perylene	330	5900 J	5000 J	140 J	14000 U	140000 U	4400	7700 D	460 U
Dilution	n Factor: t Solids:	10.0 50 30.0	10.0 58 30.0	1.00 67 30.0	20.0 48 30.0	200 48 30.0	5.00 68 30.0	10.0 68 30.0	1.00 73 30.0
Associated Metho Associated Equipmer Associated Fiel	nt Blank: HFQ	R1342.D SXX6XXX94XX HF	R1342.D QSXX6XXX94XX HF	R1342.D QSXX6XXX94XX HI	R1342.D FQSXX6XXX94XX H	R1342.D FQSXX6XXX94XX H	R1342.D FQSXX6XXX94XX HF	R1342.D QSXX6XXX94XX H	Q1728.D FQSXX6XXX94XX -

U: not detected B: blank contamination
J: estimated E: exceeds calibration range D: diluted result

Table 2 Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 10/28/94 11/24/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	II CRQL	: .						•	
Phenol	330	3800 J	3300 J	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
bis(2-Chloroethyl)ether	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Chlorophenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1.3-Dichlorobenzene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1.4-Dichlorobenzene	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1,2-Dichlorobenzene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Methylphenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2,2'-oxybis(1-Chloropropane)	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	· 440 UJ	620 UJ
4-Methylphenol	330	5300 J	5000 J	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
N-Nitroso-di-n-propylamine	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Hexach Loroethane	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Nitrobenzene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Isophorone	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Nitrophenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	. 620 UJ
2,4-Dimethylphenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
bis(2-Chloroethoxy)methane	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2,4-Dichlorophenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1,2,4-Trichlorobenzene	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Naphthalene	330	6700 UJ	11000 U	500 U	14000 UJ	2400 U	100 J	140 J	620 UJ
4-Chloroaniline	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
<b>Hexachlorobutadiene</b>	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
4-Chloro-3-Methylphenol	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Methylnaphthalene	330	17000 J	42000 J	.500 U	3000 J	2400 U	110 J	49 J	320 J
Hexachlorocyclopentadiene	330	R	R	R	R	. R	. R	R	R
2,4,6-Trichlorophenol	330	6700 UJ	5700 U	<b>500</b> U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2,4,5-Trichlorophenol	800	16000 UJ	14000 U	1200 U	33000 UJ	5900 U	1100 UJ	1100 UJ	1500 UJ
2-Chloronaphthalene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Nitroaniline	800	16000 UJ	14000 U	1200 U	33000 UJ	5900 U	1100 UJ	1100 UJ	1500 UJ
Dimethylphthalate	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Acenaphthylene	330	1800	2600 J	500 U	14000 UJ:	3100	180 J	48 J	620 UJ
2,6-Dinitrotoluene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
=======================================								222253225252525	

Site: SUMP SEDIMENTS U: not detected R: unusable

J: estimated

Table 2 Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 CHFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-104 ( HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 10/28/94 11/24/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 - 1	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Diberzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 800 80	16000 UJ 16000 UJ 16000 UJ 16000 UJ 6700 UJ 16000 UJ 17000 UJ	14000 U 9300 J 14000 U 14000 U 14000 U 5700 U 5700 U 5700 U 14000 U 14000 U 5700 U 5700 U 5700 U 14000 J 5700 U	1200 U U 1200 U U U U U U U U U U U U 1200 U U U 1200 U U U U U U U U U U U U U U 1200 500 1000 870 500 1000 870 500 1200 1200 1200 1200 1200 1200 1200	33000 UJ 14000 UJ	5900 U 1000 J 5900 U 1400 U 2400 U 15000 27000 2400 U 15000 7400 15000 7400 10000 52000 J	1100 UJ 120 J 1100 UJ 1100 UJ 1100 UJ 140 J 460 UJ 460 UJ 1100 UJ 1100 UJ 1800 J 1800 J 1800 J 1320 J 93 J 460 UJ 1400 J 1680 UJ 170 J 170 J	1100 UJ 180 J 1100 UJ 1100 UJ 1100 UJ 140 UJ 440 UJ 200 J 1100 UJ 140 UJ 440 UJ 440 UJ 1600 J 150 J 440 UJ 2000 J 1800 J 1800 J 1800 J 440 UJ 240 UJ	1500 UJ 130 J 1500 UJ 1500 UJ 1500 UJ 620 UJ 620 UJ 1500 UJ 1500 UJ 1500 UJ 620 UJ
Benzo(g,h,i)perylene	330	5900 J	5000 J	140 J	14000 UJ	4400	460 UJ	200 J	620 UJ
Dilution	n Factor: t Solids:	10.0 50 30.0	10.0 58 30.0	1.00 67 30.0	20.0 48 30.0	5.00 68 30.0	1.00 73 30.0	1.00 75 30.0	1.00 54 30.0
Associated Metho Associated Equipmer Associated Fiel	nt Blank: HFQ	R1342.D SXX6XXX94XX HF	R1342.D QSXX6XXX94XX HF	R1342.D QSXX6XXX94XX HI	R1342.D FQSXX6XXX94XX HF	R1342.D FQSXX6XXX94XX HF	Q1728.D QSXX6XXX94XX HFG	Q1745.D QSXX6XXX94XX HF0	Q1728.D QSXX6XXX94XX

Site: SUMP SEDIMENTS
U: not detected R: unusable
J: estimated

Table 1 Laboratory Report of Analysis

ANAL WEE	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-106 HFCD106XXX94XX 2228902 10/13/94 10/28/94 11/24/94	CD-107 HFCD107XXX94XX 2228903. 10/13/94 10/19/94 11/24/94	CD-108 HFCD108XXX94XX 2228904 10/13/94 10/19/94 11/24/94	CD-109 HFCD109XXX94XX 2226506 10/11/94 10/14/94 11/09/94	CD-109 HFCD109XXX94XX 2226506 D 10/11/94 10/14/94 11/15/94
ANALYTE SOW-3/90 -	II CRQL					
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene	330 330 330 330 330 330 330 330 330 330	440 U U 440 U 440 U U	620 U	500 500 500 500 500 500 500 500 500 500	2200 U	22000 U
Hexachlorocyclopentadiene	330	440 U	620 U	500 Ú	2200 U	22000 U
2,4,6-Trichlorophenol	330 800	440 U 1100 U	620 U 1500 U	500 U 1200 U	2200 U 5300 U	22000 U 53000 U
2,4,5-Trichlorophenol 2-Chloronaphthalene	330	440 U	620 U	500 U	2200 U	22000 U
2-Nitroaniline	800	1100 Ü	1500 U	1200 U	5300 U	53000 U
Dimethylphthalate	330	440 U	620 U	500 U	1200 J	22000 U
Acenaphthylene	330	48 J	620 U	500 U	2200 U	22000 U
2,6-Dinitrotoluene	330	440 U	620 U	500 U	2200 U	22000 U

U: not detected B: blank contamination
J: estimated E: exceeds calibration range D: diluted result

Table 1 Laboratory Report of Analysis

	LOCAT ISIS LAB NUM DATE SAMP DATE EXTRAC DATE ANALY	ID: HFCD106XXX9 BER: 2228902 LED: 10/13/94 TED: 10/28/94		CD-107 FCD107XXX 2228903 10/13/9 10/19/9 11/24/9	(94XX ) )4 )4	CD-108 HFCD108XXXS 2228904 10/13/94 10/19/94 11/24/94	•	CD-109 HFCD109XXX9 2226506 10/11/94 10/14/94 11/09/94	4xx	CD-109 HFCD109XXX9 2226506 D 10/11/94 10/14/94 11/15/94	
ANALYTE SOW-3/9	O - II CRQL										
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol	800 330 800	180	n 1 n	1500 130 1500	η η	500 1200	U U U	2200 5300	U U	22000 53000	U U U
4-Nitrophenol	800		Ų	15 <u>00</u>	U	1200	Ų		U		U
Dibenzofuran	330	140	i	77	ï		U		U		U
2,4-Dinitrotoluene	330		Ü	620	Ü		U		U		Ü
Diethylphthalate	330		U	620	Ü		U U		U U		Ų
4-Chlorophenyl-phenylethe	r 330 330		Ų	620 300	J	500 500	U		U U		U U
Fluorene 4-Nitroaniline	800		N 1	1500	U		U		U U		u
			Ü	1500	ü		Ü		U U		u
4,6-Dinitro-2-methylpheno N-Nitrosodiphenylamine	330		ŭ	220	j		Ü		U U		ŭ
4-Bromophenyl-phenylether	330 330		Ü	620	ŭ		Ü		Ŭ		Ü
Hexachlorobenzene	330		ŭ	620	ŭ		ŭ		Ŭ		ŭ
Pentachlorophenol	800		ŭ	1500	ŭ	1200	Ŭ		ŭ		ŭ
Phenanthrene	330	1600	•	830	•		ŭ		Ū		Ŭ
Anthracene	330		J	95	J		Ū		Ū		Ū
Carbazole	330		J	620	Ŭ		Ū		Ū		Ū
Di-n-butylphthalate	330		Ū	620	U	500	Ū	2200	U	22000	U
Fluoranthene	330	2000		310	J	65	J	2200	U	22000	U
Pyrene	330	1800		260	J	500	U	2200	U		U
Butylbenzylphthalate	330	440	U	620	U	500	U	2200	u	22000	U
3,3'-Dichlorobenzidine	330	440	U	620	U		U		U		U
Benzo(a)Anthracene	330	940		170	J		U		U		U
Chrysene	330	990		260	J	_51	J		J		U
bis(2-Ethylhexyl)phthalat	e 330		J	87	JB		U		EB		U
Di-n-octylphthalate	330		Ü	620	U		U		Ų		U
Benzo(b)Fluoranthene	330	600		110	j		U		U		U
Benzo(k)Fluoranthene	330	480		110	J		U		U		U
Benzo(a)Pyrene	330	560		620	Ü		U		Ų		U
Indeno(1,2,3-c,d)Pyrene	330	220	j	620	Ü		U		U		U
Dibenz(a,h)Anthracene	330	67	j	620 620	Ü		U		U U		U
Benzo(g,h,i)perylene	330	200	J 	020	U		U	2200	_		U 
	ution Factor:	1.00		1.00		1.00		5.00		50.0	
	rcent Solids:	75		54		66		76		76	
Sample Volume\\		30.0		30.0		30.0		30.0		30.0	
Associated Equ	Method Blank: ipment Blank: Field Blank:	Q1745.D HFQSXX6XXX94XX	HFQSX	Q1728.0 X6XXX94XX		Q1728.D QSXX6XXX94XX -	HFQS	\$1316.D XX6XXX94XX	HFQS	\$1316.D XX6XXX94XX -	

U: not detected B: blank contamination D: diluted result J: estimated E: exceeds calibration range

Table 2 Validation / Summary Table

		LOCATION:	CD-108	CD-109
		ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
		LAB NUMBER:	2228904	2226506 D
	D	ATE SAMPLED:	10/13/94	10/11/94
		E EXTRACTED:	10/19/94	10/14/94
•		TE ANALYZED:	11/24/94	11/15/94
sow-3/90 -	11	CROL	÷	

ANALYTE	SOW-3/90 - II	CRQL	- 1 4		
Phenol		330	500	UJ	22000 U
bis(2-Chloroeth	vl)ether	330	500	ŪĴ	22000 U
2-Chlorophenol	,	330.	500	ŪĴ	22000 U
1,3-Dichloroben	zene	330	500	ŪĴ	22000 U
1,4-Dichloroben	zene	330	500	ŪĴ	22000 U
1,2-Dichloroben		330	500	ŪĴ	22000 U
2-Methylphenol		330	500	ŨĴ	22000 U
2,2'-oxybis(1-C	hloropropane)	330	500	ŪĴ	22000 U
4-Methylphenol		330	500	ŪĴ	22000 U
N-Nitroso-di-n-	propylamine	330	500	ŪĴ	22000 U
<b>Hexachloroethan</b>		330	500	ŪĴ	22000 U
Nitrobenzene		330	500	UJ	22000 U
Isophorone		330	500	UJ	22000 U
2-Nitrophenol		330	500	UJ	22000 U
2,4-Dimethylphe	nol	330	500	UJ	22000 U
bis(2-Chloroeth	oxy)methane	330	500	UJ	22000 U
2,4-Dichlorophe	nol	330	500	UJ	22000 U
1,2,4-Trichloro	benzene	330	500	UJ	9200 J
Naphthal ene		330	500	UJ	22000 U
4-Chloroaniline		330	500	UJ	22000 U
<b>Hexachlorobutad</b>		330	500	UJ	22000 U
4-Chloro-3-Meth	ylphenol	330	500	UJ	22000 U
2-Methylnaphtha		330	500	IJ	22000 U
Hexachlorocyclo	pentadiene	330		R	22000 U
2,4,6-Trichloro	phenol	330	500	UJ	22000 U
2,4,5-Trichloro	phenol	800	1200	UJ	53000 U
2-Chloronaphtha	lene	330	500	UJ	22000 U
2-Nitroaniline		800	1200	UJ	53000 U
Dimethylphthala	te	330	500	UJ	1200 J
Acenaphthylene		330	500	UJ	22000 U
2,6-Dinitrotolu	ene	330	500	UJ	22000 U
=======================================		=======		====	

U: not detected
J: estimated R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-108 HFCD108XXX94XX 2228904 10/13/94 10/19/94 11/24/94	CD-109 HFCD109XXX94XX 2226506 D 10/11/94 10/14/94 11/15/94
ANALYTE SOW-3/90 -	II CRQL		
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	1200 UJ 500 UJ 1200 UJ 500 UJ	53000 U 22000 U 53000 U 22000 U
Benzo(g,h,i)perylene	330 ==========	500 UJ	R =========
	n Factor: t Solids: t (ml\g):	1.00 66 30.0	50.0 76 30.0

Q1728.D \$1316.D HFQSXX6XXX94XX Q1728.D

Associated Method Blank: Associated Equipment Blank: Associated Field Blank:

Site: SUMP SEDIMENTS

U: not detected R: unusable

J: estimated

Table 2 Validation / Summary Table

	LOCATI ISIS LAB NUMB DATE SAMPL DATE ANALYZ	ID: HFCD102XXX94X) ER: 2227905 ED: 10/12/94	CD-104 C HFCD104XXX94X 2227907 10/12/94 10/19/94	CD-105 XX HFCD105XXX94X 2228901 10/13/94 10/20/94	CD-106 XX HFCD106XXX94XX 2228902 10/13/94 10/20/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/20/94	CD-108 HFCD108XXX94X 2228904 10/13/94 10/20/94	CD-109 C HFCD109XXX94XX 2226506 R 10/11/94 10/17/94
ANALYTE SOW-3/90	II CRQL							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	15 UUUJ 15 15 UU 15 15 UUUUUUUUUUUUUUUUUUUUUUUU	15 15 15 15 15 15 15 15 15 15 15 15 15 1	14 UJ 14 U U U U U U U U U U U U U U U U U U U		18 U U U U U U U U U U U U U U U U U U U	15 15 15 15 15 15 15 15 15 15 15 15 15 1	13 UJ
	ion Factor: ent Solids: ght (ml\g):	1.00 67 5.00	1.00 68 5.00	1.00 73 5.00	1.00 75 5.00	1.00 54 5.00	1.00 66 5.00	1.00 76 5.00
Associated Met Associated Equipm Associated Fi Associated 1	nent Blank: ield Blank:	P1296.D HFQSXX6XXX94XX HI	P1296.D FQSXX6XXX94XX H - -	DO828.D IFQSXX6XXX94XX H - -	D0828.D HFQSXX6XXX94XX HF - -	D0828.D QSXX6XXX94XX HF	DO828.D QSXX6XXX94XX HI	P1240.D FQSXX6XXX94XX - -

Site: SUMP SEDIMENTS
U: not detected
J: estimated

Table 1 Laboratory Report of Analysis

	·	LOCATION: ISIS ID: LAB NUMBER:	CD-101 DI HFCD101XXX 2227904		CD-101 CD101XXX 2227901	94XX HI	CD-103 FCD103XXX 2227906	94XX
		DATE SAMPLED:			10/12/9		10/12/9	
	L	DATE ANALYZED:	10/20/9	4	10/20/9	4	10/20/9	4
ANALYTE	SOW-3/90 - II	CRQL						
Chloromethane		1200	2400	U	2100	U	2500	U
Bromomethane		1200	2400	U	2100	U	2500	U
Vinyl Chloride		1200	2400	U	2100	U	2500	U
Chloroethane		1200	2400	Ü	2100	Ū	2500	Ū
Methylene Chloride		1200 1200	6100 2400	B U	5600 3100	B U	6400 2500	B U
Acetone		1200	2400	Ü	2100 2100	U	2500	Ü
Carbon Disulfide 1.1-Dichloroethene		1200	2400	ŭ	2100	Ü	2500	Ü
1,1-Dichloroethane		1200	2400	Ü	2100	Ŭ	2500	Ŭ
1,2-Dichloroethene	(total)	1200	2400	ŭ	2100	Ŭ	2500	ŭ
Chloroform	(total)	1200	2400	ŭ	2100	ŭ	2500	ŭ
1,2-Dichloroethane		1200	2400	ŭ	2100	Ŭ	2500	Ū
2-Butanone		1200	2400	Ŭ	2100	Ŭ	2500	Ŭ
1,1,1-Trichloroeth	ane	1200	2400	Ü	2100	Ū	2500	Ú
Carbon Tetrachlori		1200	2400	U	2100	U	2500	U
Bromodichlorometha	ne	1200	2400	U	2100	U	2500	U
1,2-Dichloropropan	e	1200	2400	U	2100	U	2500	U
cis-1,3-Dichloropr	opene	1200	2400	U	2100	U	2500	U
Trichloroethene		1200	2400	U	2100	U	2500	U
Dibromochlorometha		1200	2400	U	2100	Ü	2500	U
1,1,2-Trichloroeth	ane	1200	2400	Ü	2100	Ü	2500	U
Benzene		1200	2400	Ü	2100	Ñ	2500	U
trans-1,3-Dichloro	propene	1200 1200	2400 2400	U	2100 2100	U U	2500 2500	U
Bromoform 4-Methyl-2-Pentano		1200	2400	Ü	2100	Ü	2500	Ü
2-Hexanone	i i i c	1200	2400	Ü	2100	Ŭ	2500	ŭ
Tetrachloroethene		1200	2400	ŭ	2100	Ŭ	2500	ŭ
1,1,2,2-Tetrachlor	oethane	1200	2400	ŭ	2100	Ŭ	2500	ŭ
Toluene		1200	2400	Ū	2100	Ū	2500	Ū
Chlorobenzene		1200	2400	U	2100	U	2500	U
Ethylbenzene		1200	2400	U	2100	U	2500	U
Styrene		1200	2400	U	2100	U	2500	U
Total Xylenes		1200	2400	U	2100	U	2500	U
	Dilution		1.00	2222	1.00	=====	1.00	_==
	•	Solids:	50		58		48	
Sample V	olume\Weight		4.00		4.00		4.00	
Asso	ciated Method	d Blank:	N9733.D		N9733.D		N9733.D	)
	ted Equipment		SXX6XXX94XX	HFQSX)	(6XXX94XX	HFQSXX	<b>(6XXX94XX</b>	
	ociated Field		-		-		-	
As	sociated Trip	p Blank:	-		-			
	•	•						

Site: SUMP SEDIMENTS
U: not detected

B: blank contamination

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFCD101XXX9 2227904 10/12/94	94XD HFCD101 2227 4 10/1	XXX94XX 901 2/94	CD-103 HFCD103XXX 2227906 10/12/9	4
ANALYTE SOW-3/90 -	II CRQL					
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	1200 1200 1200 1200 1200 1200 1200 1200	2400 2400 2400 2400 2400 2400 2400 2400	UJ 21 UJ 21 UJ 56 UJ 21	000 U U U U U U U U U U U U U U U U U U	2500 2500 2500 2500 2500 2500 2500 2500	
Styrene Total Xylenes	1200 1200	2400 2400	UJ 21 UJ 21	00 U	2500 2500	n1 n1
	on Factor: nt Solids:	1.00 50 4.00	1. 58 4.00	00	1.00 48 4.00	<b>##</b>
Associated Met Associated Equipm Associated Fi Associated T	ent Blank:    HF0 eld Blank:	N9733.D PSXX6XXX94XX - -	N973 HFQSXX6XXX9		N9733.D QSXX6XXX94XX - -	

Site: SUMP SEDIMENTS
U: not detected
J: estimated

## Semivolatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 D 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 D 10/12/94 10/17/94 11/19/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene 1sophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330	3800 J 6700 U	3300 J 5700 U	500 500 500 500 500 500 500 500 500 500	14000 U	140000 U	2400 U 24	4900 U 12000	460 U
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330 	6700 U 1800 J 6700 U	5700 U 2600 J 5700 U	500 U 500 U 500 U	14000 U 14000 U 14000 U	140000 U 140000 U 140000 U	2400 U 3100 2400 U	4900 U 2900 JD 4900 U	460 U 180 J 460 U

Site: SUMP SEDIMENTS

U: not detected B: blank contamination D: diluted result

J: estimated E: exceeds calibration range

Table 1 Laboratory Report of Analysis

	LAB NUMBER DATE SAMPLED DATE EXTRACTED DATE ANALYZED	HFCD101XXX94XD 2227904 10/12/94 10/17/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 ( HFCD103XXX94X) 2227906 10/12/94 10/17/94 11/18/94	CD-103 X HFCD103XXX94X; 2227906 D 10/12/94 10/17/94 11/18/94	CD-104 ( HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94X 2227907 D 10/12/94 10/17/94 11/19/94	CD-105 CD-105XXX94XX 2228901 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene	800 330 800 800 330 330 330 330 800 800	16000 U 5600 J 16000 U 16000 U 6700 U 6700 U 6700 U 6700 U 6700 U 16000 U 16000 U 16000 U 24000 3900 J 1400 J 6700 U 19000 U 19000 U 19000 U 12000 U 12000 U	14000 U 9300 14000 U 14000 U 3400 J 5700 U 5700 U 9700 14000 U	1200 U U 1200 E 700 E 70	33000 U 14000 U 33000 U 14000 U	330000 U 140000 U 330000 U 140000 U	5900 U 1000 J 5900 U 5900 U 1400 J 2400 U 25900 U 19000 4800 U 2400 U 25000 E 2400 U 16000 17000	12000 U 1000 JD 12000 U 12000 U 1300 JD 4900 U 4900 U 4900 U 12000 U 12000 U 12000 U 4900 U 4900 U 4900 U 4900 U 4900 U 22000 D 4400 JD 1700 JD 4900 U 30000 D 27000 D 4900 U 4900 U	1100 U 120 J 1100 U 1100 U 140 J 460 U 460 U 1100 U 1100 U 1100 U 1100 U 1100 U 1100 U 1800 320 J 93 J 460 U 2400 1300 460 U 1400
bis(2-Ethylhexyl)phthalate	330	1700 J	2000 J	500 U 500 U	5100 J 14000 U	140000 U 140000 U	310 J 2400 U	4900 U 4900 U	400 JB 460 U
Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	330 330 330 330 330 330 330	6700 U 11000 10000 10000 6500 J 6700 U 5900 J	5700 U 8300 6500 7600 5000 J 5700 U 5000 J	400 J 330 J 120 J 170 J 500 U 140 J	14000 U 14000 U 14000 U 14000 U 14000 U 14000 U	140000 U 140000 U 140000 U 140000 U 140000 U 140000 U	2400 U 15000 7400 10000 5200 2000 J 4400	13000 D 9000 D 10000 D 7800 D 2900 JD 7700 D	1000 680 170 J 170 J 460 U 460 U
	on Factor:	10.0	10.0	1.00	20.0	200	5.00	10.0	1.00
	nt Solids:	50 30.0	58 30.0	67 30.0	48 30.0	48 30.0	68 30.0	68 30.0	73 30.0
Associated Meth Associated Equipm Associated Fig	ent Blank: HF	R1342.D QSXX6XXX94XX HF	R1342.D GSXX6XXX94XX HF	R1342.D QSXX6XXX94XX HF	R1342.D FQSXX6XXX94XX H	R1342.D FQSXX6XXX94XX H	R1342.D FQSXX6XXX94XX HF	R1342.D QSXX6XXX94XX H	Q1728.D FQSXX6XXX94XX -

U: not detected B: blank contamination
J: estimated E: exceeds calibration range D: diluted result

Table 2 Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 10/28/94 11/24/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	II CRQL	: .						•	
Phenol	330	3800 J	3300 J	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
bis(2-Chloroethyl)ether	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Chlorophenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1.3-Dichlorobenzene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1.4-Dichlorobenzene	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1,2-Dichlorobenzene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Methylphenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2,2'-oxybis(1-Chloropropane)	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	· 440 UJ	620 UJ
4-Methylphenol	330	5300 J	5000 J	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
N-Nitroso-di-n-propylamine	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Hexach Loroethane	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Nitrobenzene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Isophorone	330	6700 UJ	5700 U	500 ປ	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Nitrophenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	. 620 UJ
2,4-Dimethylphenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
bis(2-Chloroethoxy)methane	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2,4-Dichlorophenol	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
1,2,4-Trichlorobenzene	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Naphthalene	330	6700 UJ	11000 U	500 U	14000 UJ	2400 U	100 J	140 J	620 UJ
4-Chloroaniline	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
<b>Hexachlorobutadiene</b>	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
4-Chloro-3-Methylphenol	330	6700 UJ	5700 UJ	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Methylnaphthalene	330	17000 J	42000 J	.500 U	3000 J	2400 U	110 J	49 J	320 J
Hexachlorocyclopentadiene	330	R	R	R	R	. R	. R	R	R
2,4,6-Trichlorophenol	330	6700 UJ	5700 U	<b>500</b> U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2,4,5-Trichlorophenol	800	16000 UJ	14000 U	1200 U	33000 UJ	5900 U	1100 UJ	1100 UJ	1500 UJ
2-Chloronaphthalene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
2-Nitroaniline	800	16000 UJ	14000 U	1200 U	33000 UJ	5900 U	1100 UJ	1100 UJ	1500 UJ
Dimethylphthalate	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
Acenaphthylene	330	1800	2600 J	500 U	14000 UJ:	3100	180 J	48 J	620 UJ
2,6-Dinitrotoluene	330	6700 UJ	5700 U	500 U	14000 UJ	2400 U	460 UJ	440 UJ	620 UJ
=======================================								222253225252525	

Site: SUMP SEDIMENTS U: not detected R: unusable

J: estimated

Table 2 Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/17/94 11/18/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/17/94 11/18/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/17/94 11/18/94	CD-103 CHFCD103XXX94XX 2227906 10/12/94 10/17/94 11/18/94	CD-104 ( HFCD104XXX94XX 2227907 10/12/94 10/17/94 11/18/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/24/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 10/28/94 11/24/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 - 1	II CRQL								
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Diberzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 800 80	16000 UJ 16000 UJ 16000 UJ 16000 UJ 6700 UJ 16000 UJ 17000 UJ	14000 U 9300 J 14000 U 14000 U 14000 U 5700 U 5700 U 5700 U 14000 U 14000 U 5700 U 5700 U 5700 U 14000 J 5700 U	1200 U U 1200 U U U U U U U U U U U U 1200 U U U 1200 U U U U U U U U U U U U U U U U U U	33000 UJ 14000 UJ	5900 U 1000 J 5900 U 1400 U 2400 U 15000 27000 2400 U 15000 7400 15000 7400 10000 52000 J	1100 UJ 120 J 1100 UJ 1100 UJ 1100 UJ 140 J 460 UJ 460 UJ 1100 UJ 1100 UJ 1800 J 1800 J 1800 J 1320 J 93 J 460 UJ 1400 J 1680 UJ 170 J 170 J	1100 UJ 180 J 1100 UJ 1100 UJ 1100 UJ 140 UJ 440 UJ 200 J 1100 UJ 140 UJ 440 UJ 440 UJ 1600 J 150 J 440 UJ 2000 J 1800 J 1800 J 1800 J 440 UJ 240 UJ	1500 UJ 130 J 1500 UJ 1500 UJ 1500 UJ 620 UJ 620 UJ 1500 UJ 1500 UJ 1500 UJ 620 UJ
Benzo(g,h,i)perylene	330	5900 J	5000 J	140 J	14000 UJ	4400	460 UJ	200 J	620 UJ
Dilution	n Factor: t Solids:	10.0 50 30.0	10.0 58 30.0	1.00 67 30.0	20.0 48 30.0	5.00 68 30.0	1.00 73 30.0	1.00 75 30.0	1.00 54 30.0
Associated Metho Associated Equipmer Associated Fiel	nt Blank: HFQ	R1342.D SXX6XXX94XX HF	R1342.D QSXX6XXX94XX HF	R1342.D QSXX6XXX94XX HI	R1342.D FQSXX6XXX94XX HF	R1342.D FQSXX6XXX94XX HF	Q1728.D QSXX6XXX94XX HFG	Q1745.D QSXX6XXX94XX HF0	Q1728.D QSXX6XXX94XX

Site: SUMP SEDIMENTS
U: not detected R: unusable
J: estimated

Table 1 Laboratory Report of Analysis

ANAL WEE	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-106 HFCD106XXX94XX 2228902 10/13/94 10/28/94 11/24/94	CD-107 HFCD107XXX94XX 2228903. 10/13/94 10/19/94 11/24/94	CD-108 HFCD108XXX94XX 2228904 10/13/94 10/19/94 11/24/94	CD-109 HFCD109XXX94XX 2226506 10/11/94 10/14/94 11/09/94	CD-109 HFCD109XXX94XX 2226506 D 10/11/94 10/14/94 11/15/94
ANALYTE SOW-3/90 -	II CRQL					
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene	330 330 330 330 330 330 330 330 330 330	440 U U 440 U 440 U U	620 U	500 500 500 500 500 500 500 500 500 500	2200 U	22000 U
Hexachlorocyclopentadiene	330	440 U	620 U	500 Ú	2200 U	22000 U
2,4,6-Trichlorophenol	330 800	440 U 1100 U	620 U 1500 U	500 U 1200 U	2200 U 5300 U	22000 U 53000 U
2,4,5-Trichlorophenol 2-Chloronaphthalene	330	440 U	620 U	500 U	2200 U	22000 U
2-Nitroaniline	800	1100 Ü	1500 U	1200 U	5300 U	53000 U
Dimethylphthalate	330	440 U	620 U	500 U	1200 J	22000 U
Acenaphthylene	330	48 J	620 U	500 U	2200 U	22000 U
2,6-Dinitrotoluene	330	440 U	620 U	500 U	2200 U	22000 U

U: not detected B: blank contamination
J: estimated E: exceeds calibration range D: diluted result

Table 1 Laboratory Report of Analysis

	LOCAT ISIS LAB NUM DATE SAMP DATE EXTRAC DATE ANALY	ID: HFCD106XXX9 BER: 2228902 LED: 10/13/94 TED: 10/28/94		CD-107 FCD107XXX 2228903 10/13/9 10/19/9 11/24/9	(94XX ) )4 )4	CD-108 HFCD108XXXS 2228904 10/13/94 10/19/94 11/24/94	•	CD-109 HFCD109XXX9 2226506 10/11/94 10/14/94 11/09/94	4xx	CD-109 HFCD109XXX9 2226506 D 10/11/94 10/14/94 11/15/94	
ANALYTE SOW-3/9	O - II CRQL										
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol	800 330 800	180	n 1 n	1500 130 1500	η η	500 1200	U U U	2200 5300	U U	22000 53000	U U U
4-Nitrophenol	800		Ų	15 <u>00</u>	U	1200	Ų		U		U
Dibenzofuran	330	140	i	77	ï		U		U		U
2,4-Dinitrotoluene	330		Ü	620	Ü		U		U		Ü
Diethylphthalate	330		U	620	Ü		U U		U U		Ų
4-Chlorophenyl-phenylethe	r 330 330		Ų	620 300	J	500 500	U		U U		U U
Fluorene 4-Nitroaniline	800		N 1	1500	U		U		U U		u
			Ü	1500	ü		Ü		U U		u
4,6-Dinitro-2-methylpheno N-Nitrosodiphenylamine	330		ŭ	220	j		Ü		U U		ŭ
4-Bromophenyl-phenylether	330 330		Ü	620	ŭ		Ü		Ŭ		Ü
Hexachlorobenzene	330		ŭ	620	ŭ		ŭ		Ŭ		ŭ
Pentachlorophenol	800		ŭ	1500	ŭ	1200	Ŭ		ŭ		ŭ
Phenanthrene	330	1600	•	830	•		ŭ		Ū		Ŭ
Anthracene	330		J	95	J		Ū		Ū		Ū
Carbazole	330		J	620	Ŭ		Ū		Ū		Ū
Di-n-butylphthalate	330		Ū	620	U	500	Ū	2200	U	22000	U
Fluoranthene	330	2000		310	J	65	J	2200	U	22000	U
Pyrene	330	1800		260	J	500	U	2200	U		U
Butylbenzylphthalate	330	440	U	620	U	500	U	2200	u	22000	U
3,3'-Dichlorobenzidine	330	440	U	620	U		U		U		U
Benzo(a)Anthracene	330	940		170	J		U		U		U
Chrysene	330	990		260	J	_51	J		J		U
bis(2-Ethylhexyl)phthalat	e 330		J	87	JB		U		EB		U
Di-n-octylphthalate	330		Ü	620	U		U		Ų		U
Benzo(b)Fluoranthene	330	600		110	j		U		U		U
Benzo(k)Fluoranthene	330	480		110	J		U		U		U
Benzo(a)Pyrene	330	560		620	Ü		U		Ų		U
Indeno(1,2,3-c,d)Pyrene	330	220	j	620	Ü		U		U		U
Dibenz(a,h)Anthracene	330	67	j	620 620	Ü		U		U U		U
Benzo(g,h,i)perylene	330	200	J 	020	U		U	2200	_		U 
	ution Factor:	1.00		1.00		1.00		5.00		50.0	
	rcent Solids:	75		54		66		76		76	
Sample Volume\\		30.0		30.0		30.0		30.0		30.0	
Associated Equ	Method Blank: ipment Blank: Field Blank:	Q1745.D HFQSXX6XXX94XX	HFQSX	Q1728.0 X6XXX94XX		Q1728.D QSXX6XXX94XX -	HFQS	\$1316.D XX6XXX94XX	HFQS	\$1316.D XX6XXX94XX -	

U: not detected B: blank contamination D: diluted result J: estimated E: exceeds calibration range

Table 2 Validation / Summary Table

		LOCATION:	CD-108	CD-109
		ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
		LAB NUMBER:	2228904	2226506 D
	D	ATE SAMPLED:	10/13/94	10/11/94
		E EXTRACTED:	10/19/94	10/14/94
•		TE ANALYZED:	11/24/94	11/15/94
sow-3/90 -	11	CROL	÷	

ANALYTE	SOW-3/90 - II	CRQL	- 1 4		
Phenol		330	500	UJ	22000 U
bis(2-Chloroeth	vl)ether	330	500	ŪĴ	22000 U
2-Chlorophenol	,	330.	500	ŪĴ	22000 U
1,3-Dichloroben	zene	330	500	ŪĴ	22000 U
1,4-Dichloroben	zene	330	500	ŪĴ	22000 U
1,2-Dichloroben		330	500	ŪĴ	22000 U
2-Methylphenol		330	500	ŨĴ	22000 U
2,2'-oxybis(1-C	hloropropane)	330	500	ŪĴ	22000 U
4-Methylphenol		330	500	ŪĴ	22000 U
N-Nitroso-di-n-	propylamine	330	500	ŪĴ	22000 U
<b>Hexachloroethan</b>		330	500	ŪĴ	22000 U
Nitrobenzene		330	500	UJ	22000 U
Isophorone		330	500	UJ	22000 U
2-Nitrophenol		330	500	UJ	22000 U
2,4-Dimethylphe	nol	330	500	UJ	22000 U
bis(2-Chloroeth	oxy)methane	330	500	UJ	22000 U
2,4-Dichlorophe	nol	330	500	UJ	22000 U
1,2,4-Trichloro	benzene	330	500	UJ	9200 J
Naphthal ene		330	500	UJ	22000 U
4-Chloroaniline		330	500	UJ	22000 U
<b>Hexachlorobutad</b>		330	500	UJ	22000 U
4-Chloro-3-Meth	ylphenol	330	500	UJ	22000 U
2-Methylnaphtha		330	500	IJ	22000 U
Hexachlorocyclo	pentadiene	330		R	22000 U
2,4,6-Trichloro	phenol	330	500	UJ	22000 U
2,4,5-Trichloro	phenol	800	1200	UJ	53000 U
2-Chloronaphtha	lene	330	500	UJ	22000 U
2-Nitroaniline		800	1200	UJ	53000 U
Dimethylphthala	te	330	500	UJ	1200 J
Acenaphthylene		330	500	UJ	22000 U
2,6-Dinitrotolu	ene	330	500	UJ	22000 U
=======================================		=======		====	

U: not detected
J: estimated R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-108 HFCD108XXX94XX 2228904 10/13/94 10/19/94 11/24/94	CD-109 HFCD109XXX94XX 2226506 D 10/11/94 10/14/94 11/15/94
ANALYTE SOW-3/90 -	II CRQL		
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	1200 UJ 500 UJ 1200 UJ 500 UJ	53000 U 22000 U 53000 U 22000 U
Benzo(g,h,i)perylene	330 ==========	500 UJ	R =========
	n Factor: t Solids: t (ml\g):	1.00 66 30.0	50.0 76 30.0

Q1728.D \$1316.D HFQSXX6XXX94XX Q1728.D

Associated Method Blank: Associated Equipment Blank: Associated Field Blank:

Site: SUMP SEDIMENTS

U: not detected R: unusable

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/18/94 11/25/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/18/94 11/23/94	CD-102 HFCD102XXX94X 2227905 10/12/94 10/18/94 11/25/94	CD-103 C HFCD103XXX94: 2227906 10/12/94 10/18/94 11/26/94	CD-104 XX HFCD104XXX94X 2227907 10/12/94 10/18/94 11/26/94	CD-105 C HFCD105XXX94XX 2228901 10/13/94 10/19/94 11/28/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 10/19/94 11/28/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 10/19/94 11/28/94
ANALYTE SOW-3/90	- 11 CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1248 Aroclor-1254 Aroclor-1260	1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3	85 U 85 U 85 U 85 U 280 P 200 P 200 P 160 U 160 U 160 U 160 U 160 U 160 U 160 U 1600 U 1600 U 1600 U 1600 U 1600 U	15 U 15 U 15 U 15 U 15 U 15 U 11 JP 15 U 27 JP 28 U 28 U 28 U 28 U 150 U 280 U 280 U 280 U 280 U 280 U 280 U	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	18 U 18 U 18 U 18 U 27 18 U 24 JI 34 U 34 U 34 U 34 U 18 U 18 U 18 U 34 U 3	24 U	7.0 U 14 U 14 U 14 U 14 T 70 P 7.0 U 7.0 U 140 U 140 U 140 U 140 U 140 U	6.8 U 13 U 13 U 13 U 15 P 13 U 6.7 68 U 6.8 U 6.8 U 130 U 130 U 130 U 130 U 130 U 130 U	3.1 U 6.1 U
	ion Factor: ent Solids: ght (ml\g):	25.0 50 30.0	5.00 58 30.0	1.00 67 30.0	5.00 48 30.0	5.00 68 30.0	3.00 73 30.0	3.00 75 30.0	1.00 54 30.0
Associated Me Associated Equip Associated F	thod Blank: ment Blank: HFQS	PSB1018B	PSB1018B	PSB1018B	PSB1018B	PSB1018B	PSB1019A1	PSB1019A1	PSB1019A1 QSXX6XXX94XX

U: not detected D: diluted result C: confirmed by GC/MS

J: estimated P: > 25% difference between columns

Table 1 Laboratory Report of Analysis

	LOCATION:	CD-108	CD-109	CD-109
	ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX	HFCD109XXX94XX
	LAB NUMBER:	2228904	2226506	2226506 D
	DATE SAMPLED:	10/13/94	10/11/94	10/11/94
	DATE EXTRACTED:	10/19/94	10/15/94	10/15/94
	DATE ANALYZED:	11/28/94	11/17/94	11/23/94
ANALYTE SOW-3/9	90 - II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1222 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254	1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	7.7 U 15 U 15 U 15 U 15 U 15 U 150 U 150 U 150 U 150 U 150 U	2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 4.3 11 4.3 4.3 4.3 4.3 7.9 2 4.3 2.2 2.2 4.3 4.3 4.3 4.3 4.3 4.3 4.3 4.3 4.3 4.3	45 U 45 U 45 U 45 U 45 U 45 U 45 U 87 U 87 U 87 U 87 U 87 U 87 U 4500 U 870 U 870 U 870 U 870 U 870 U 870 CD
	lution Factor:	3.00	1.00	20.0
	ercent Solids:	66	76	76
	Weight (ml\g):	30.0	30.0	30.0

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: PSB1019A1 PSB1015B PSB1015A1 HFQSXX6XXX94XX HFQSXX5XXX94XX HFQSXX6XXX94XX

Site: SUMP SEDIMENTS

U: not detected D: diluted result C: confirm J: estimated P: > 25% difference between columns C: confirmed by GC/MS

## PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

## Pesticides/PCBs Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

		PLED: 10/12/94 CTED: 10/18/94		CD-102 KX HFCD102XXX94X 2227905 10/12/94 10/18/94 11/25/94	CD-103 X HFCD103XXX94X 2227906 10/12/94 10/18/94 11/26/94	CD-104 XX HFCD104XXX94X 2227907 10/12/94 10/18/94 11/26/94	CD-105 X HFCD105XXX94X 2228901 10/13/94 10/19/94 11/28/94	CD-106 K HFCD106XXX94X 2228902 10/13/94 10/19/94 11/28/94	CD-107 K HFCD107XXX94XX 2228903 10/13/94 10/19/94 11/28/94
ANALYTE SOW	-3/90 - II CRQL								
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1211 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1250	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	7.0 U 7.0 UJ 7.0 UJ 7.0 U 7.0 U 7.0 U 7.0 U 7.0 U 14 U 14 U 14 U 14 U 14 U 14 U 16 J 7.0 U 7.0 U 7.0 U 7.0 U 7.0 U 140 U 140 U 140 U 140 U 140 U 140 U	6.8 U 13 U 13 U 13 U 13 U 13 U 6.7 J 68 U 680 U 130 U 130 U 130 U 130 U 130 U	3.1 UJ 6.1 UJ
Sample Volu	Dilution Factor: Percent Solids: me\Weight (ml\g):	25.0 50 30.0	5.00 58 30.0	1.00 67 . 30.0	5.00 48 30.0	5.00 68 30.0	3.00 73 30.0	3.00 75 30.0	1.00 54 30.0
Associated	ted Method Blank: Equipment Blank: ated Field Blank:	PSB1018B HFQSXX6XXX94XX	PSB1018B HFQSXX6XXX94XX	PSB1018B HFQSXX6XXX94XX H	PSB1018B FQSXX6XXX94XX H	PSB1018B IFQSXX6XXX94XX H	PSB1019A1  FQSXX6XXX94XX H	PSB1019A1 FQSXX6XXX94XX H	PSB1019A1 FQSXX6XXX94XX -

Site: SUMP SEDIMENTS
U: not detected R: unusable

J: estimated N: spike recovery not met

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFCD108XXX94XX 2228904 10/13/94 10/19/94	CD-109 HFCD109XXX94XX 2226506 10/11/94 10/15/94 11/17/94
ANALYTE SOM	1-3/90 - 11 CRQL		
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1254 Aroclor-1260	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	7.7 U 7.7 U 7.7 U 7.7 U 7.7 U 7.7 U 7.7 U 7.7 U 15 U 15 U 15 U 15 U 15 U 15 U 15 U 15	R R R R R R R R R R R R R R R R R R R
	Dilution Factor:  Percent Solids:	3.00 66	1.00 76

Percent Solids: 66 76
Sample Volume\Weight (ml\g): 30.0 30.0

Associated Method Blank: PSB1019A1 PSB1015B
Associated Equipment Blank: HFQSXX6XXX94XX HFQSXX5XXX94XX
Associated Field Blank:

Site: SUMP SEDIMENTS

U: not detected R: unusable

J: estimated N: spike recovery not met

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Soil Analysis (mg/kg)

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	CD-101 DUP HFCD101XXX94XD 227904 10/12/94	CD-101 HFCD101XXX94XX 227901 10/12/94	CD-102 HFCD102XXX94XX 227905 10/12/94	CD-103 HFCD103XXX94XX 227906 10/12/94	CD-104 HFCD104XXX94XX 227907 10/12/94	CD-105 HFCD105XXX94XX 228901 10/13/94	CD-106 HFCD 106XXX94XX 228902 10/13/94	CD-107 HFCD107XXX94XX 228903 10/13/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	40	16000 *	15100 *	6750 *	5700 *	16200 *	14400	5510	4820
Antimony	12	15.0 U	13.0 U	11.3 U	15.3 B	10.4 U	9.8 U	30.1	12.9 U
Arsenic	2 40	10.2	9.7	21.0 S	8.3	15.3	1.9 UN	5.0 N	6.7 SN
Barium Beryllium	40	249 3.4	222 2.8	34.7 B 0.59 U	219 0.76 U	193 2.6	162 3.6	90.0	101
Cadmium	i	11.3 N	9.4 N	7.1 N	6.7 N	4.8 N	1.3 B*	0.79 B 5.5 *	0.68 ∪ 5.0 *
Calcium	1000	109000 *	89500 *	105000 *	126000 *	79500 *	105000 *	31900 *	198000 *
Chromium	2	43.1	37.0	97.4	39.5	45.4	11.8 *	136 *	47.2 *
Cobalt	10	8.7 B	10.2 B	12.9 B	8.0 B	13.3 в	2.4 B	21.1	16.1 B
Copper	5	188 N*	167 N*	57.9 N*	1380 N*	156 N*	194 N	435 N	132 N
Iron	20	61800	59200	101000	45500	106000	14300	186000	110000
Lead	0.6	676 N*	591 N*	256 N*	631 N* 5730 *	379 N*	138 N*	342 N*	231 N*
Magnesium Manganasa	1000 3	17200 *	15200 <b>*</b> 1960	1900 * <i>7</i> 37	2130	12200 * 3170	21000 *	3320 *	10200 *
Manganese Mercury	0.1	2320 1.9 N	1.1 N	0.15 UN	1450 2.2 N	0.75 N	1300 * 0.81	3600 * 1.1	7770 * 1.1
Nickel	9. i	48.4	42.3	34.8	40.9	24.2	6.7 U*	66.8 *	25.1 *
Potassium	1000	3060	2830	754 B	642 B	1740	578 B	574 B	619 B
Selenium	1	1.9 UW*	1.5 U*	1.3 UW*	3.9 S*	2.3 s*	9.5 UWN	1.1 UN	1.6 UWN
Silver	2	2.0 UN	1.7 UN	1.5 UN	1.9 UN	1.4 UN	1.3 UN	1.3 UN	1.7 UN
Sodium	1000	820 B	711 B	714 B	230 B	51 <u>1</u> B	728 B	256 B	407 B
Thallium	2	2.3 B	1.7 B	1.6 B	1.9 U	_1.3 ປ	0.95 U	_1.1 UW	1.6 U
Vanadium Zina	10	45.4	42.6	52.1	28.7	53.5	9.8 B	75.5	65.5
Zinc Cyanide	4	1350 E 4.0	1170 E 0.85 U	729 E 0.63 U	1550 E 0.87 U	650 E 3.6	207 * 1.2 N	1240 * 0.58 UN	831 * 0.81 UN
======================================	, ====================================	7.V ==========	·=====================================	·	·=====================================	J.U ===========	1.2 N ====================================	0.JO UN	0.81 UN ==========
	Percent Solids:	50	59	67	48	68	73	75	54

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: MBHANNA4 MBHANNA4 MBHANNA4 MBHANNA4 MBHANNA4 MBHANNA6S MBHANNA6S MBHANNA6S HFQSXX6XXX94XX HFQSXX6XXX94XX HFQSXX6XXX94XX HFQSXX6XXX94XX HFQSXX6XXX94XX

Site: SUMP SEDIMENTS

N: spike recovery not met W: S: method of standard additions U: not detected W: post digestion spike not met B: less than CRDL

\*: duplicate analysis not met E: interference

Table 1 Laboratory Report of Analysis

CD-108 CD-109 LOCATION: ISIS ID: HFCD108XXX94XX HFCD109XXX94XX LAB NUMBER: 228904 226506 DATE SAMPLED: 10/13/94 10/11/94

ANALYTE	SOW-3/90 - II CRDL				
Aluminum	40	9290		15400	
Antimony	12	20.7		13.3	BN*
Arsenic	2	8.8	SN	2.4	BSN
Barium	40	96.6		151	
Beryllium	1	0.86	В	2.8	
Cadmium	1	6.5	*	0.87	BN*
Calcium	1000	73600	*	81900	
Chromium	2	30.8	*	17.1	*
Cobalt	10	12.8	В	2.3	В
Copper	5	53.0	N	21.7	*
Iron	20	97600		14000	
Lead	0.6	256	N*	62.6	
Magnesium	1000	13900	*	22300	
Manganese	3	3820	*	2120	
Mercury	0.1	0.39		0.13	U
Nickel	8	38.3	*	6.6	U
Potassium	1000	1480	В	1370	
Selenium	1	1.5	UN	1.3	UWN*
Silver	2	1.5	UN	1.3	UN
Sodium	1000	657	В	879	В
Thallium	2	1.5	U	1.3	UW
Vanadium	10	53.6	*	13.3	
Zinc	4	1790		311	E*
Cyanide	1 :====================================	0.77	UN	1.2 	N ===
	Percent Solids:	66 -		76	

SDGHANNA2S Associated Method Blank: MBHANNA6S Associated Equipment Blank: HFQSXX6XXX94XX HFQSXX6XXX94XX Associated Field Blank:

Site: SUMP SEDIMENTS

U: not detected N: spike recovery not met B: less than CRDL

E: interference S: method of standard additions PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Soil Analysis (mg/kg)

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	CD-101 DUP HFCD101XXX94XD 227904 10/12/94	CD-101 HFCD101XXX94XX 227901 10/12/94	CD-102 HFCD102XXX94XX 227905 10/12/94	CD-103 HFCD103XXX94XX 227906 10/12/94	CD-104 HFCD104XXX94XX 227907 10/12/94	CD-105 HFCD105XXX94XX 228901 10/13/94	CD-106 HFCD106XXX94XX 228902 10/13/94	CD-107 HFCD107XXX94XX 228903 10/13/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	40	16000 J	15100	6750	5700 J	16200	14400	5510	4820
Antimony Arsenic	12	15.0 UJ 10.2 J	13.0 U 9.7	11.3 U 21.0	15.3 J 8.3 J	10.4 U 15.3	9.8 U 1.9 U	30.1 5.0	12.9 U 6.7
Barium	40	249 J	222	34.7 J	219 J	193	1.9 U 162	90.0	101
Beryllium	Ĭ	3.4 J	2.8	0.59 U	0.76 UJ	2.6	3.6	0.79 J	0.68 U
Cadmium	1	11.3 J	9.4 J	7.1 J	6.7 J	4.8 J	1.3 J	5.5 J	5.0 J
Calcium	1000	109000 J	89500	105000	126000 J	79500	105000	31900	198000
Chromium Cobalt	10	43.1 J 8.7 J	37.0 10.2 J	97.4 12.9 J	39.5 J 8.0 J	45.4 13.3 J	11.8 2.4 J	136 21.1	47.2 16.1 J
Copper	15	0.7 B	10.2 B	12.9 J	0.0 J R	13.3 g	2.4 J R	21.1 R	10.1 J
Iron	20	61800 Ĵ	59200	101000 Ü	45500 Ĵ	106000	14300	186000 ¨	110000 ``
Lead	0.6	676 J	591 J	256 J	631 J	379 J	138 J	342 J	231 J
Magnesium	1000	17200 J	15200	1900	5730 J	12200	21000	3320	10200
Manganese Mercury	0.1	2320 J 1.9 J	1960 1.1 J	<i>7</i> 37 0.15 UJ	1450 J 2.2 J	3170 0.75 J	1300	3600 1.1 J	7770
Nickel	8	48.4 J	42.3	34.8	40.9 J	24.2	0.81 J 6.7 U	66.8	1.1 J 25.1
Potassium	1000	3060 J	2830	754 J	642 J	1740	578 J	574 J	619 J
Selenium	1	1.9 U	1.5 U	1.3 UJ	3.9 J	2.3	9.5 UJ	1.1 U	1.6 UJ
Silver	2	2.0 UJ	<u>1.7</u> UJ	1.5 UJ	1.9 UJ	1.4 UJ	1.3 UJ	1.3 UJ	1.7 UJ
Sodium	1000	820 J	711 J	714 J	230 J	511 J	728 J	256 J	407 J
Thallium Vanadium	10	2.3 J 45.4 J	1.7 J 42.6	1.6 J 52.1	1.9 UJ 28.7 J	1.3 U 53.5	0.95 U 9.8 J	1.1 U 75.5	1.6 U 65.5
Zinc	14	1350 J	1170 J	729 J	1550 J	650 J	207 J	1240 J	831 J
Cyanide	<u> </u>	4.0 J	0.85 UJ	0.63 0	0.87 UJ	3.6	1.2	0.58 U	0.81 0
22-6	Percent Solids:	50	59	67	48	68	73	75	54

Associated Method Blank: MBHANNA4 MBHANNA4 MBHANNA4 MBHANNA4 MBHANNA6S MBHANNA6S MBHANNA6S Associated Equipment Blank: HFQSXX6XXX94XX HFQSXX6XXXX94XX HFQSXX6XXXX94XX HFQSXX6XXXX94XX HFQSXX6XXXX94XX HFQSXX6XXXX HFQSXXXX HFQSXXXX HFQSXXXX HFQSXXXX HFQSXXXX HFQSXXXX HFQSXXX HFQSXX HFQSX HFQSXX HFQSX HFQSXX HFQSX HFQSX HFQSX HFQSX HFQSX HFQSX HFQSX H

Site: SUMP SEDIMENTS

U: not detected R: unusable

J: estimated

Table 2 Validation / Summary Table

LOCATION:	CD-108	CD-109
ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
LAB NUMBER:	228904	226506
DATE SAMPLED:	10/13/94	10/11/94

ANALYTE	SOW-3/90 - II CRDL		
Aluminum	40	9290	15400
Antimony	12	20.7	13.3 J
Arsenic	2	8.8	2.4 J
Barium	12 2 40	96.6	151
Beryllium	Ì	0.86 J	2.8 J
Cadmium	1	6.5 J	0.87 J
Calcium	1000	73600	81900
Chromium	2	30.8	17.1
Cobalt	10	12.8 J	2.3 J
Copper	5	R	R
Iron	20	97600	14000
Lead	0.6	256 J	62.6 J
Magnes i um	1000	13900	22300
Manganese	3	3820	2120
Mercury	0.1	0.39 J	0.13 UJ
Nickel	8	38.3	6.6 U
Potassium	1000	1480 J	1370
Selenium	1	1.5 U	1.3 UJ
Silver	2	1.5 UJ	-1.3 UJ
Sodium	1000	657 J	879 J
Thallium	2	1.5 U	1.3 UJ
Vanadium	10	53.6	13.3
Zinc	4	1790 J	311 J
Cyanide	1	0.77 U	1.2
2======================================	=======================================		
	Percent Solids:	66	76

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: MBHANNA6S SDGHANNA2S HFQSXX6XXX94XX HFQSXX6XXX94XX

Site: SUMP SEDIMENTS
U: not detected
J: estimated

R: unusable

Table 1
Laboratory Report of Analysis

·	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	:::::	CD-101 HFCD101XXX94XX E227901 10/12/94	CD-102 HFCD102XXX94XX E227905 10/12/94	CD-103 HFCD103XXX94XX E227906 10/12/94	CD-104 HFCD104XXX94XX E227907 10/12/94	CD-105 HFCD105XXX94XX E228901 10/13/94	CD-106 HFCD106XXX94XX E228902 10/13/94	CD-107 HFCD107XXX94XX E228903 10/13/94
ANALYTE	RL								
arsenic barium cadmium chromium lead mercury selenium silver	52.0 11.0 2.0 5.0 26.0 0.20 90.0 5.0	814 3.1 B 9.9 B 179 0.20 U	52.0 UN 765 10.2 15.5 292 0.20 U 90.0 U 5.0 U	52.0 UN 367 7.6 12.4 714 0.20 U 90.0 U 5.0 U	52.0 UN 797 2.0 U 7.4 B 273 0.20 U 90.0 U 5.0 U	52.0 UN 849 2.0 U 6.2 B 38.9 0.20 U 90.0 U 5.0 U	52.0 UN 1480 6.6 6.3 B 200 0.33 90.0 U 5.0 U	52.0 UN 726 8.9 6.2 B 115 0.20 U 90.0 U 5.0 U	52.0 UN 1120 2.0 U 8.6 B 26.0 U 0.20 U 90.0 U 5.0 U
Associate	iated Method Blank: ed Equipment Blank:	EPHANNA4 - -	EPHANNA4	EPHANNA4	EPHANNA4	EPHANNA4	MBHANNA6EP - -	MBHANNA6EP - -	MBHANNA6EP

Note: Inorganic Data - EPTOX Metals

U: not detected N: spike recovery not met B: less than RL \*: duplicate analysis not met

Table 1 Laboratory Report of Analysis

	LOCATION:	CD-108	CD-109
	ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
	LAB NUMBER:	E228904	E226506
	DATE SAMPLED:	10/13/94	10/11/94
ANALYTE	RL		
arsenic	52.0	52.0 UN	52.0 UN
barium	11.0	779	449
cadmium	2.0	7.4	2.0 U*
chromium	5.0	7.4 B	5.0 U*
lead	26.0	26.0 U	26.0 U*
mercury	0.20	0.20 U	0.20 U
selenium	90.0	90.0 U	90.0 U

Associated Method Blank: MBHANNA6EP
Associated Equipment Blank: Associated Field Blank: -SDGHANNA2E

5.0

Site: SUMP SEDIMENTS

silver

Note: Inorganic Data - EPTOX Metals
U: not detected N: spike recovery not met B: less than RL \*: duplicate analysis not met

15.5 \*

5.0 U

Miscellaneous Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

17-Apr-95

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:		CD-101 HFCD101XXX94XX E227901 10/12/94	CD-102 HFCD102XXX94XX E227905 10/12/94	CD-103 HFCD103XXX94XX E227906 10/12/94	CD-104 HFCD104XXX94XX E227907 10/12/94	CD-105 HFCD105XXX94XX E228901 10/13/94	CD-106 HFCD106XXX94XX E228902 10/13/94	CD-107 HFCD107XXX94XX E228903 10/13/94
ANALYTE	RL								
arsenic barium cadmium chromium lead mercury selenium silver	52.0 11.0 2.0 5.0 26.0 0.20 90.0 5.0	814 3.1 J 9.9 J 179	52.0 UN 765 10.2 J 15.5 J 292 0.20 U 90.0 U 5.0 U	52.0 UN 367 7.6 J 12.4 714 0.20 U 90.0 U 5.0 U	52.0 UN 797 2.0 UJ 7.4 273 0.20 U 90.0 U 5.0 U	52.0 UN 849 2.0 UJ 6.2 38.9 0.20 U 90.0 U 5.0 U	52.0 U 1480 6.6 J 6.3 J 200 0.33 J 90.0 U 5.0 U	52.0 U 726 8.9 J 6.2 J 115 R 90.0 U 5.0 U	52.0 U 1120 2.0 UJ 8.6 J 26.0 U R 90.0 U 5.0 U
Associated	ted Method Blank:   Equipment Blank:   ated Field Blank:	EPHANNA4	EPHANNA4 - -	EPHANNA4 - -	EPHANNA4 - -	EPHANNA4 - -	MBHANNA6EP - -	MBHANNA6EP - -	MBHANNA6EP - -

Site: SUMP SEDIMENTS

Note: Inorganic Data - EPTOX Metals

U: not detected N: spike recovery not met J: estimated R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	CD-108 HFCD108XXX94XX E228904 10/13/94	CD-109 HFCD109XXX94XX E226506 10/11/94
ANALYTE	RL		
ersenic parium cadmium chromium lead nercury selenium silver	52.0 11.0 2.0 5.0 26.0 0.20 90.0	52.0 U 779 7.4 J 7.4 J 26.0 U R 90.0 U 5.0 U	52.0 U 449 2.0 U 5.0 U 26.0 U 0.20 U 90.0 U 15.5

Associated Method Blank: MBHANNA6EP
Associated Equipment Blank: Associated Field Blank: -

Site: SUMP SEDIMENTS
Note: Inorganic Data - EPTOX Metals
U: not detected N: spike recovery not met J: estimated R: unusable

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

D.A	LOCATION:	CD-101 DUP	CD-101	CD-102	CD-103	CD-104	CD-105	CD-106	CD-107
	ISIS ID:	HFCD101XXX94XD	HFCD101XXX94XX	HFCD102XXX94XX	HFCD103XXX94XX	HFCD104XXX94XX	HFCD105XXX94XX	HFCD106XXX94XX	HFCD107XXX94XX
	LAB NUMBER:	2227904	2227901	2227905	2227906	2227907	2228901	2228902	2228903
	ATE SAMPLED:	10/12/94	10/12/94	10/12/94	10/12/94	10/12/94	10/13/94	10/13/94	10/13/94
	E ANALYZED:	10/31/94	10/31/94	10/31/94	10/31/94	10/31/94	11/09/94	11/09/94	11/09/94
ANALYTE	RL								
Corrosivity, inch/Year	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees I	212	>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated M Associated Equip	ment Blank:	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 - -

Table 1 Laboratory Report of Analysis

DAT	LOCATION:	CD-108	CD-109	
	ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX	
	AB NUMBER:	2228904	2226506	
	E SAMPLED:	10/13/94	10/11/94	
	ANALYZED:	11/09/94	10/24/94	
ANALYTE	RL			
Corrosivity, inch/Year	0.01		0.01 U	
Ignitability, Degrees F	212		>212	
Cyanide, Reactive, ppm	1.0		1 U	
sulfide, Reactive, ppm	1.0		1 U	

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - -

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 2 Validation / Summary Table

DAT	LOCATION: ISIS ID: AB NUMBER: E SAMPLED: ANALYZED:		CD-101 HFCD101XXX94XX 2227901 10/12/94 10/31/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/31/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/31/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/31/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 11/09/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 11/09/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 11/09/94
ANALYTE	RL	•							
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm sulfide, Reactive, ppm	0.01 212 1.0 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Me Associated Equipr Associated F	ment Blank:	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 · · · · · · · · · · · · · · · · · · ·

Table 2 Validation / Summary Table

LOCATION:	CD-108	CD-109
ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
LAB NUMBER:	2228904	2226506
DATE SAMPLED:	10/13/94	10/11/94
DATE ANALYZED:	11/09/94	10/24/94

ANALYTE	RL		
Corrosivity, inch/Year	0.01	0.01 U	0.01 U
Ignitability, Degrees F	212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - - -

Table 1 Laboratory Report of Analysis

	LOCATION DEPTH ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: 9 : HFPS101XX994XX : 2232307 : 10/18/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794) 2232309 10/18/94 10/22/94	PS-104 DUP 9 XX HFPS104XX994X 2232304 10/17/94 10/26/94	PS-104 DUP 9 0 HFPS104XX994XI 2232304 R 10/17/94 10/26/94	PS-104 9 0 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL	_							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane Trichloroethane 1,2-Trichloroethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 U U U U U U U U U U U U U U U U U U U	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 U U U U U U U U U U U U U U U U U U U		133 133 133 133 133 133 133 133 133 133	13 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	14 UUUB 14 UUUB 14 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU
Total Xylenes	======================================			1.00		1.00	1.00	======================================	1.00
# · · · · · ·	on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	85 5.00	80 5.00	80 5.00	77 5.00	76 5.00	69 5.00
Associated Met Associated Equipm Associated Fi Associated T	ent Blank: HF eld Blank:	P1381.D QSXX8XXX94XX HF - -	DO852.D GSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX   - -	D0852.D HFQSXX8XXX94XX H - -	DO852.D HFQSXX8XXX94XX HI - -	P1381.D Gasxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D GSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFPS107XX694 2232310 10/18/94	2232311 10/18/94
ANALYTE SOW-3/90 -	II CRQL		
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane Cis-1,3-Dichloropropane Cis-1,3-Dichloropropane Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Tetrachloroethane Chlorobenzene Ethylbenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	14	J 14 U
Styrene Total Xylenes	10 : 10	14 i	J 14 U J 14 U
Dilutio	on Factor: nt Solids:	1.00 70 5.00	1.00 71 5.00
Associated Metl Associated Equipm Associated Fi Associated T	ent Blank: HFQ: eld Blank:	P1381.D SXX8XXX94XX - -	D0852.D HFQSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

## Volatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	PS-101 9 HFPS101XX994XX 2232307 10/18/94 10/22/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794XX 2232309 10/18/94 10/22/94	PS-104 DUP 9 ( HFPS104XX994XD 2232304 10/17/94 10/26/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194 2232306 10/17/94 10/22/94	PS-107 6 XX HFPS107XX694XX 2232310 10/18/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane richloroethane 1,2-Trichloroethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	* 10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 12 12 12 12 12 12 12 12 12 12 12 12 1	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 UJ UJ 12 UJ	13 13 13 13 13 13 13 13 13 13 13 13 13 1	13 13 13 13 13 13 13 13 13 13 13 13 13 1	14 UU 14 UU 14 UU 14 UU 14 UU UU 14 UU	14 UU
	========= on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	1.00 85 5.00	1.00 80 5.00	1.00 77 5.00	1.00 76 5.00	1.00 69 5.00	1.00 70 5.00
Associated Met Associated Equipm Associated Fi Associated T	hod Blank: ent Blank: HFQ eld Blank:	P1381.D SXX8XXX94XX HF	D0852.D QSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX HI	D0852.D FQSXX8XXX94XX HF - -	P1381.D Gesxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX - -	P1381.D HFQSXX8XXX94XX - -

Site: TEST PIT U: not detected J: estimated

Table 2 Validation / Summary Table

LOCATION:	PS-108
DEPTH:	10
ISIS ID:	HFPS108X1094XX
LAB NUMBER:	2232311
DATE SAMPLED:	10/18/94
DATE ANALYZED:	10/26/94

ANALYTE	SOW-3/90 - II	CRQL	_	
Chloromethane		10	14	u
Bromomethane		iŏ	14	ŭ
Vinyl Chloride		10	14	Ŭ
Chloroethane		10	14	ŭ
Methylene Chloride	<u>:</u>	10	14	ŨJ
Acetone		10	14	UJ
Carbon Disulfide		10	14	U
1,1-Dichloroethene	<b>:</b>	10	14	U
1,1-Dichloroethane	•	10	14	U
1,2-Dichloroethene	(total)	10	14	U
Chloroform		10	14	U
1,2-Dichloroethane	•	10 🔍	14	U
2-Butanone		10	14	U
1,1,1-Trichloroeth	ane	10	14	U
Carbon Tetrachlori	de	10	14	U
Bromodichloromethe		10	14	U
1,2-Dichloropropar cis-1,3-Dichloropr	ie	10	14	U
cis-1,3-Dichloropr	opene	10	14	U
Trichloroethene		10	14	U
Dibromochlorometha		10	14	U
1,1,2-Trichloroeth	ane	10	14	U
Benzene		10	14	U
trans-1,3-Dichlord	propene	10	14	U
Bromoform		10	14	U
4-Methyl-2-Pentano	ne	10	14	U
2-Hexanone		10	14	U
Tetrachloroethene	.1	10	14	U
1,1,2,2-Tetrachlor	oetnane	10	14	Ų
Toluene		10	14	ັນ
Chlorobenzene		10	14	Ü
Ethylbenzene		10	14	Ü
Styrene		10	14	U
Total Xylenes		10	14	-
	Dilution E		1 00	=

	Dilution	Factor:	1.00
	Percent	Solids:	71
Sample	<b>Volume\Weight</b>	(ml\g):	5.00

Associated Method Blank: D0852.D
Associated Equipment Blank: HFQSXX8XXX94XX
Associated Field Blank: Associated Trip Blank: -

Site: TEST PIT U: not detected J: estimated Miscellaneous Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

17-Apr-95

Table 2
Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:		CD-101 HFCD101XXX94XX E227901 10/12/94	CD-102 HFCD102XXX94XX E227905 10/12/94	CD-103 HFCD103XXX94XX E227906 10/12/94	CD-104 HFCD104XXX94XX E227907 10/12/94	CD-105 HFCD105XXX94XX E228901 10/13/94	CD-106 HFCD106XXX94XX E228902 10/13/94	CD-107 HFCD107XXX94XX E228903 10/13/94
ANALYTE	RL								
arsenic barium cadmium chromium lead mercury selenium silver	52.0 11.0 2.0 5.0 26.0 0.20 90.0 5.0	814 3.1 J 9.9 J 179	52.0 UN 765 10.2 J 15.5 J 292 0.20 U 90.0 U 5.0 U	52.0 UN 367 7.6 J 12.4 714 0.20 U 90.0 U 5.0 U	52.0 UN 797 2.0 UJ 7.4 273 0.20 U 90.0 U 5.0 U	52.0 UN 849 2.0 UJ 6.2 38.9 0.20 U 90.0 U 5.0 U	52.0 U 1480 6.6 J 6.3 J 200 0.33 J 90.0 U 5.0 U	52.0 U 726 8.9 J 6.2 J 115 R 90.0 U 5.0 U	52.0 U 1120 2.0 UJ 8.6 J 26.0 U R 90.0 U 5.0 U
Associated	ted Method Blank:   Equipment Blank:   ated Field Blank:	EPHANNA4	EPHANNA4 - -	EPHANNA4 - -	EPHANNA4 - -	EPHANNA4 - -	MBHANNA6EP - -	MBHANNA6EP - -	MBHANNA6EP - -

Site: SUMP SEDIMENTS

Note: Inorganic Data - EPTOX Metals

U: not detected N: spike recovery not met J: estimated R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	CD-108 HFCD108XXX94XX E228904 10/13/94	CD-109 HFCD109XXX94XX E226506 10/11/94
ANALYTE	RL		
ersenic parium cadmium chromium lead nercury selenium silver	52.0 11.0 2.0 5.0 26.0 0.20 90.0	52.0 U 779 7.4 J 7.4 J 26.0 U R 90.0 U 5.0 U	52.0 U 449 2.0 U 5.0 U 26.0 U 0.20 U 90.0 U 15.5

Associated Method Blank: MBHANNA6EP
Associated Equipment Blank: Associated Field Blank: -

Site: SUMP SEDIMENTS
Note: Inorganic Data - EPTOX Metals
U: not detected N: spike recovery not met J: estimated R: unusable

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

D.A	LOCATION:	CD-101 DUP	CD-101	CD-102	CD-103	CD-104	CD-105	CD-106	CD-107
	ISIS ID:	HFCD101XXX94XD	HFCD101XXX94XX	HFCD102XXX94XX	HFCD103XXX94XX	HFCD104XXX94XX	HFCD105XXX94XX	HFCD106XXX94XX	HFCD107XXX94XX
	LAB NUMBER:	2227904	2227901	2227905	2227906	2227907	2228901	2228902	2228903
	ATE SAMPLED:	10/12/94	10/12/94	10/12/94	10/12/94	10/12/94	10/13/94	10/13/94	10/13/94
	E ANALYZED:	10/31/94	10/31/94	10/31/94	10/31/94	10/31/94	11/09/94	11/09/94	11/09/94
ANALYTE	RL								
Corrosivity, inch/Year	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees I	212	>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated M Associated Equip	ment Blank:	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 - -

Table 1 Laboratory Report of Analysis

LA Date	LOCATION: ISIS ID: B NUMBER: SAMPLED: ANALYZED:	CD-108 HFCD108XXX94XX 2228904 10/13/94 11/09/94	CD-109 HFCD109XXX94XX 2226506 10/11/94 10/24/94
ANALYTE	RL		
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm sulfide, Reactive, ppm	0.01 212 1.0 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: SDGHANNA2

Site: SUMP SEDIMENTS U: not detected

Miscellaneous Soil Analysis

14-Apr-95

Table 2 Validation / Summary Table

DAT	LOCATION: ISIS ID: AB NUMBER: E SAMPLED: ANALYZED:		CD-101 HFCD101XXX94XX 2227901 10/12/94 10/31/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/31/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/31/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/31/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 11/09/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 11/09/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 11/09/94
ANALYTE	RL	•							
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm sulfide, Reactive, ppm	0.01 212 1.0 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Me Associated Equipr Associated F	ment Blank:	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 · · · · · · · · · · · · · · · · · · ·

Table 2
Validation / Summary Table

LOCATION:	CD-108	CD-109
ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
LAB NUMBER:	2228904	2226506
DATE SAMPLED:	10/13/94	10/11/94
DATE ANALYZED:	11/09/94	10/24/94

ANALYTE	RL		
Corrosivity, inch/Year	0.01	0.01 U	0.01 U
Ignitability, Degrees F	212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - Associated Field Blank: - -

Table 1 Laboratory Report of Analysis

	LOCATION DEPTH ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: 9 : HFPS101XX994XX : 2232307 : 10/18/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794) 2232309 10/18/94 10/22/94	PS-104 DUP 9 XX HFPS104XX994X 2232304 10/17/94 10/26/94	PS-104 DUP 9 0 HFPS104XX994XI 2232304 R 10/17/94 10/26/94	PS-104 9 0 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL	_							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane Trichloroethane 1,2-Trichloroethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 U U U U U U U U U U U U U U U U U U U	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 U U U U U U U U U U U U U U U U U U U		133 133 133 133 133 133 133 133 133 133	13 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	14 UUUB 14 UUUB 14 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU
Total Xylenes	======================================			1.00		1.00	1.00	======================================	1.00
# · · · · · ·	on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	85 5.00	80 5.00	80 5.00	77 5.00	76 5.00	69 5.00
Associated Met Associated Equipm Associated Fi Associated T	ent Blank: HF eld Blank:	P1381.D QSXX8XXX94XX HF - -	DO852.D GSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX   - -	D0852.D HFQSXX8XXX94XX H - -	DO852.D HFQSXX8XXX94XX HI - -	P1381.D Gasxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D GSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFPS107XX694 2232310 10/18/94	2232311 10/18/94
ANALYTE SOW-3/90 -	II CRQL		
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane Cis-1,3-Dichloropropane Cis-1,3-Dichloropropane Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Tetrachloroethane Chlorobenzene Ethylbenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	14	J 14 U
Styrene Total Xylenes	10 : 10	14 i	J 14 U J 14 U
Dilutio	on Factor: nt Solids:	1.00 70 5.00	1.00 71 5.00
Associated Metl Associated Equipm Associated Fi Associated T	ent Blank: HFQ: eld Blank:	P1381.D SXX8XXX94XX - -	D0852.D HFQSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

## Volatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	PS-101 9 HFPS101XX994XX 2232307 10/18/94 10/22/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794XX 2232309 10/18/94 10/22/94	PS-104 DUP 9 ( HFPS104XX994XD 2232304 10/17/94 10/26/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194 2232306 10/17/94 10/22/94	PS-107 6 XX HFPS107XX694XX 2232310 10/18/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane richloroethane 1,2-Trichloroethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	* 10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 12 12 12 12 12 12 12 12 12 12 12 12 1	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 UJ UJ 12 UJ	13 13 13 13 13 13 13 13 13 13 13 13 13 1	13 13 13 13 13 13 13 13 13 13 13 13 13 1	14 UU 14 UU 14 UU 14 UU 14 UU UU 14 UU	14 UU
	========= on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	1.00 85 5.00	1.00 80 5.00	1.00 77 5.00	1.00 76 5.00	1.00 69 5.00	1.00 70 5.00
Associated Met Associated Equipm Associated Fi Associated T	hod Blank: ent Blank: HFQ eld Blank:	P1381.D SXX8XXX94XX HF	D0852.D QSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX HI	D0852.D FQSXX8XXX94XX HF - -	P1381.D Gesxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX - -	P1381.D HFQSXX8XXX94XX - -

Site: TEST PIT U: not detected J: estimated

Table 2 Validation / Summary Table

ANALYTE S	SOW-3/90 - II	CRQL		
Chloromethane		10	14	U
Bromomethane		10	14	ŭ
Vinyl Chloride		10	14	Ŭ
Chloroethane		10	14	ŭ
Methylene Chloride		10	14	ŬJ
Acetone		10	14	ŭĴ
Carbon Disulfide		10	14	Ū
1,1-Dichloroethene		10	14	Ū
1,1-Dichloroethane	•	10	14	Ū
1,2-Dichloroethene	(total)	10	14	Ū
Chloroform	•	10	14	Ü
1,2-Dichloroethane		10 🔍	14	U
2-Butanone		10	14	U
1,1,1-Trichloroetha	ane	10	14	U
Carbon Tetrachloric	de	10	14	U
Bromodichloromethan		10	14	U
1,2-Dichloropropane	<b>)</b>	10	14	U
cis-1,3-Dichloropro	pene	10	14	U
Trichloroethene		10	14	U
Dibromochloromethar		10	14	U
1,1,2-Trichloroetha	ane	10	14	U
Benzene		10	14	U
trans-1,3-Dichloro	propene	10	14	U
Bromoform		10	14	U
4-Methyl-2-Pentanor	ne	10	14	U
2-Hexanone		10	14	U
Tetrachloroethene	. •	10	14	U
1,1,2,2-Tetrachloro	pethane	10	14	Ų
Toluene		10	14	Ù
Chlorobenzene		10	14	Ü
Ethylbenzene		10	14	U
Styrene		10	14	Ü
Total Xylenes		10	14	U
			1 00	===

Dilution Factor: 1.00
Percent Solids: 71
Sample Volume\Weight (ml\g): 5.00

Associated Method Blank: D0852.D
Associated Equipment Blank: HFQSXX8XXX94XX
Associated Field Blank: Associated Trip Blank: -

Site: TEST PIT U: not detected J: estimated

Table 1
Laboratory Report of Analysis

· · ·	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	PS-101 9 HFPS101XX994XX 2232307 10/18/94 10/21/94 12/02/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 HFPS103xx794xx 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 HFPS104XX994XD 2232304 10/17/94 10/21/94 11/28/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 D 10/17/94 10/21/94 11/30/94
ANALYTE SOW-3/90	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorocyclopentadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330 330	400 400 400 400 400 400 400 400 400 400	380 U 380 U 38	400 400 400 400 400 400 400 400 400 400	2100 U 21	4300 U	440 UU	480 U U U U U U U U U U U U U U U U U U U	970 U 970 U
Dimethylphthalate Acenaphthylene	330 330	400 U 400 U	380 U 110 J	400 U 400 U	2100 U 2100 U	4300 U 4300 U	440 U 440 U	480 U 480 U	970 ป 970 ป
2,6-Dinitrotoluene	330	400 U	380 U	400 Ŭ	2100 Ü	4300 U	440 U	480 U	970 U

Site: TEST PIT

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	9 HFPS101XX994XX 2232307 10/18/94 10/21/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 7 4 HFPS103XX794X 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 2323304 10/17/94 10/21/94 11/28/94	PS-104 9 XD HFPS104XX994X: 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 X HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-106 11 ( HFPS106X1194XX 2232306 D 10/17/94 10/21/94 11/30/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	950 U 340 J 950 U 950 U 950 U 400 U 1000 1300 400 U 1000 1100 140 J 990 1100 1200 570 46 J	910 U J 910 U J J U S80 U U J J U J J U J J U J J U J J U J J U J J J U J U J J U	950 U 150 J 950 U 950 U 100 J 400 U 1100 1400 U 1100 1400 U 1000 760 1000 774 J 400 U 830 550 790 350 J	5000 U U 2100 U U U 2100 U U U U U U U U U U U U U U U U U U	10000 U 4300 U 10000 U 4300 U 4300 U 4300 U 4300 U 4300 U 10000 U 10000 U 10000 U 14300 U 4300 U 4300 U 14000 U 14000 U 15000 U 14000 U 15000 U 14000 U 15000 U 17000 U	1000 U J U U U U U U U U U U U U U U U U	1200 U J 1200 U L 480 U U U U U U U U U U U U U U U U U U U	2300 U 970 U 2300 U 2300 U 970 U 970 U 970 U 970 U 970 U 2300 U 2300 U 2300 U 2300 U 2300 U 970 U 2300 U 970 U 970 U 2300 U 590 JD 970 U 4200 D 4500 D 970 U 4200 D 4500 D 970 U
	on Factor: ent Solids: tht (ml\g):	1.00 84 30.0 Q1795.D	1.00 88 30.0 Q1795.D	1.00 84 30.0 Q1795.D	5.00 80 30.0 Q1795.D	10.0 77 30.0 91795.D	1.00 76 30.0 Q1795.D	1.00 69 30.0 91795.D	2.00 69 30.0 91795.D
Associated Met Associated Equipm Associated Fi	ent Blank: HFG								QSXX8XXX94XX

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

D.A	LOCATION:	CD-101 DUP	CD-101	CD-102	CD-103	CD-104	CD-105	CD-106	CD-107
	ISIS ID:	HFCD101XXX94XD	HFCD101XXX94XX	HFCD102XXX94XX	HFCD103XXX94XX	HFCD104XXX94XX	HFCD105XXX94XX	HFCD106XXX94XX	HFCD107XXX94XX
	LAB NUMBER:	2227904	2227901	2227905	2227906	2227907	2228901	2228902	2228903
	ATE SAMPLED:	10/12/94	10/12/94	10/12/94	10/12/94	10/12/94	10/13/94	10/13/94	10/13/94
	E ANALYZED:	10/31/94	10/31/94	10/31/94	10/31/94	10/31/94	11/09/94	11/09/94	11/09/94
ANALYTE	RL								
Corrosivity, inch/Year	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees I	212	>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated M Associated Equip	ment Blank:	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 - -

Table 1 Laboratory Report of Analysis

DAT	LOCATION:	CD-108	CD-109
	ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
	AB NUMBER:	2228904	2226506
	E SAMPLED:	10/13/94	10/11/94
	ANALYZED:	11/09/94	10/24/94
ANALYTE	RL		
Corrosivity, inch/Year	0.01		0.01 U
Ignitability, Degrees F	212		>212
Cyanide, Reactive, ppm	1.0		1 U
sulfide, Reactive, ppm	1.0		1 U

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - -

Miscellaneous Soil Analysis

14-Apr-95

Table 2 Validation / Summary Table

DAT	LOCATION: ISIS ID: AB NUMBER: E SAMPLED: ANALYZED:		CD-101 HFCD101XXX94XX 2227901 10/12/94 10/31/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/31/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/31/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/31/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 11/09/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 11/09/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 11/09/94
ANALYTE	RL	•							
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm sulfide, Reactive, ppm	0.01 212 1.0 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Me Associated Equipr Associated F	ment Blank:	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 · · · · · · · · · · · · · · · · · · ·

Table 2 Validation / Summary Table

LOCATION:	CD-108	CD-109
ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
LAB NUMBER:	2228904	2226506
DATE SAMPLED:	10/13/94	10/11/94
DATE ANALYZED:	11/09/94	10/24/94

ANALYTE	RL		
Corrosivity, inch/Year	0.01	0.01 U	0.01 U
Ignitability, Degrees F	212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - - -

Table 1 Laboratory Report of Analysis

	LOCATION DEPTH ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: 9 : HFPS101XX994XX : 2232307 : 10/18/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794) 2232309 10/18/94 10/22/94	PS-104 DUP 9 XX HFPS104XX994X 2232304 10/17/94 10/26/94	PS-104 DUP 9 0 HFPS104XX994XI 2232304 R 10/17/94 10/26/94	PS-104 9 0 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL	_							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane Trichloroethane 1,2-Trichloroethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 U U U U U U U U U U U U U U U U U U U	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 U U U U U U U U U U U U U U U U U U U		133 133 133 133 133 133 133 133 133 133	13 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	14 UUUB 14 UUUB 14 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU
Total Xylenes	======================================			1.00		1.00	1.00	======================================	1.00
# · · · · · ·	on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	85 5.00	80 5.00	80 5.00	77 5.00	76 5.00	69 5.00
Associated Met Associated Equipm Associated Fi Associated T	ent Blank: HF eld Blank:	P1381.D QSXX8XXX94XX HF - -	DO852.D GSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX   - -	D0852.D HFQSXX8XXX94XX H - -	DO852.D HFQSXX8XXX94XX HI - -	P1381.D Gasxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D GSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	6 HFPS107XX69 2232310 10/18/94	2232311 10/18/94
ANALYTE SOW-3/90 -	II CRQL		
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Tetrachloroethane Chlorobenzene Chlorobenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	14 14 14 14 14 14 14 14 14 14 14 14 14 1	U 14 U 14 U 14 U U 14 U U 14 U U U 14 U U U 14 U U U U
Ethylbenzene Styrene Total Xylenes	10 10 10	14	U 14 U U 14 U U 14 U
Diluti	on Factor: nt Solids: ht (ml\g): hod Blank: ent Blank: HFG eld Blank:		

U: not detected

B: blank contamination

J: estimated

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	9 HFPS101XX994XX 2232307 10/18/94 10/21/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 7 4 HFPS103XX794X 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 2323304 10/17/94 10/21/94 11/28/94	PS-104 9 XD HFPS104XX994X: 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 X HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-106 11 ( HFPS106X1194XX 2232306 D 10/17/94 10/21/94 11/30/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	950 U 340 J 950 U 950 U 950 U 400 U 1000 1300 400 U 1000 1100 140 J 990 1100 1200 570 46 J	910 U J 910 U J J U S80 U U J J U J J U J J U J J U J J U J J U J J J U J U J J U	950 U 150 J 950 U 950 U 100 J 400 U 1100 1400 U 1100 1400 U 1000 760 1000 774 J 400 U 830 550 790 350 J	5000 U U 2100 U U U 2100 U U U U U U U U U U U U U U U U U U	10000 U 4300 U 10000 U 4300 U 4300 U 4300 U 4300 U 4300 U 10000 U 10000 U 10000 U 14300 U 4300 U 4300 U 14000 U 14000 U 15000 U 14000 U 15000 U 14000 U 15000 U 17000 U	1000 U J U U U U U U U U U U U U U U U U	1200 U J 1200 U L 480 U U U U U U U U U U U U U U U U U U U	2300 U 970 U 2300 U 2300 U 970 U 970 U 970 U 970 U 970 U 2300 U 2300 U 2300 U 2300 U 2300 U 970 U 2300 U 970 U 970 U 2300 U 590 JD 970 U 4200 D 4500 D 970 U 4200 D 4500 D 970 U
	on Factor: ent Solids: tht (ml\g):	1.00 84 30.0 Q1795.D	1.00 88 30.0 Q1795.D	1.00 84 30.0 Q1795.D	5.00 80 30.0 Q1795.D	10.0 77 30.0 91795.D	1.00 76 30.0 Q1795.D	1.00 69 30.0 91795.D	2.00 69 30.0 91795.D
Associated Met Associated Equipm Associated Fi	ent Blank: HFG								QSXX8XXX94XX

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

D.A	LOCATION:	CD-101 DUP	CD-101	CD-102	CD-103	CD-104	CD-105	CD-106	CD-107
	ISIS ID:	HFCD101XXX94XD	HFCD101XXX94XX	HFCD102XXX94XX	HFCD103XXX94XX	HFCD104XXX94XX	HFCD105XXX94XX	HFCD106XXX94XX	HFCD107XXX94XX
	LAB NUMBER:	2227904	2227901	2227905	2227906	2227907	2228901	2228902	2228903
	ATE SAMPLED:	10/12/94	10/12/94	10/12/94	10/12/94	10/12/94	10/13/94	10/13/94	10/13/94
	E ANALYZED:	10/31/94	10/31/94	10/31/94	10/31/94	10/31/94	11/09/94	11/09/94	11/09/94
ANALYTE	RL								
Corrosivity, inch/Year	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees I	212	>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated M Associated Equip	ment Blank:	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 - -

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	9 HFPS101XX994XX 2232307 10/18/94 10/21/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 7 4 HFPS103XX794X 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 2323304 10/17/94 10/21/94 11/28/94	PS-104 9 XD HFPS104XX994X: 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 X HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-106 11 ( HFPS106X1194XX 2232306 D 10/17/94 10/21/94 11/30/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	950 U 340 J 950 U 950 U 950 U 400 U 1000 1300 400 U 1000 1100 140 J 990 1100 1200 570 46 J	910 U J 910 U J J U S80 U U J J U J J U J J U J J U J J U J J U J J J U J U J J U	950 U 150 J 950 U 950 U 100 J 400 U 1100 1400 U 1100 1400 U 1000 760 1000 774 J 400 U 830 550 790 350 J	5000 U U 2100 U U U 2100 U U U U U U U U U U U U U U U U U U	10000 U 4300 U 10000 U 4300 U 4300 U 4300 U 4300 U 4300 U 10000 U 10000 U 10000 U 14300 U 4300 U 4300 U 14000 U 14000 U 15000 U 14000 U 15000 U 14000 U 15000 U 17000 U	1000 U J U U U U U U U U U U U U U U U U	1200 U J 1200 U L 480 U U U U U U U U U U U U U U U U U U U	2300 U 970 U 2300 U 2300 U 970 U 970 U 970 U 970 U 970 U 2300 U 2300 U 2300 U 2300 U 2300 U 970 U 2300 U 970 U 970 U 2300 U 590 JD 970 U 4200 D 4500 D 970 U 4200 D 4500 D 970 U
	on Factor: ent Solids: tht (ml\g):	1.00 84 30.0 Q1795.D	1.00 88 30.0 Q1795.D	1.00 84 30.0 Q1795.D	5.00 80 30.0 Q1795.D	10.0 77 30.0 91795.D	1.00 76 30.0 Q1795.D	1.00 69 30.0 91795.D	2.00 69 30.0 91795.D
Associated Met Associated Equipm Associated Fi	ent Blank: HFG								QSXX8XXX94XX

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

D.A	LOCATION:	CD-101 DUP	CD-101	CD-102	CD-103	CD-104	CD-105	CD-106	CD-107
	ISIS ID:	HFCD101XXX94XD	HFCD101XXX94XX	HFCD102XXX94XX	HFCD103XXX94XX	HFCD104XXX94XX	HFCD105XXX94XX	HFCD106XXX94XX	HFCD107XXX94XX
	LAB NUMBER:	2227904	2227901	2227905	2227906	2227907	2228901	2228902	2228903
	ATE SAMPLED:	10/12/94	10/12/94	10/12/94	10/12/94	10/12/94	10/13/94	10/13/94	10/13/94
	E ANALYZED:	10/31/94	10/31/94	10/31/94	10/31/94	10/31/94	11/09/94	11/09/94	11/09/94
ANALYTE	RL								
Corrosivity, inch/Year	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ignitability, Degrees I	212	>212	>212	>212	>212	>212	>212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Associated M Associated Equip	ment Blank:	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 - -

Table 1 Laboratory Report of Analysis

DAT	LOCATION:	CD-108	CD-109
	ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
	AB NUMBER:	2228904	2226506
	E SAMPLED:	10/13/94	10/11/94
	ANALYZED:	11/09/94	10/24/94
ANALYTE	RL		
Corrosivity, inch/Year	0.01		0.01 U
Ignitability, Degrees F	212		>212
Cyanide, Reactive, ppm	1.0		1 U
sulfide, Reactive, ppm	1.0		1 U

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - -

Miscellaneous Soil Analysis

14-Apr-95

Table 2 Validation / Summary Table

DAT	LOCATION: ISIS ID: AB NUMBER: E SAMPLED: ANALYZED:		CD-101 HFCD101XXX94XX 2227901 10/12/94 10/31/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/31/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/31/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/31/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 11/09/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 11/09/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 11/09/94
ANALYTE	RL	•							
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm sulfide, Reactive, ppm	0.01 212 1.0 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Me Associated Equipr Associated F	ment Blank:	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 · · · · · · · · · · · · · · · · · · ·

Table 2 Validation / Summary Table

LOCATION:	CD-108	CD-109
ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX
LAB NUMBER:	2228904	2226506
DATE SAMPLED:	10/13/94	10/11/94
DATE ANALYZED:	11/09/94	10/24/94

ANALYTE	RL		
Corrosivity, inch/Year	0.01	0.01 U	0.01 U
Ignitability, Degrees F	212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - - -

Table 1 Laboratory Report of Analysis

	LOCATION DEPTH ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: 9 : HFPS101XX994XX : 2232307 : 10/18/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794) 2232309 10/18/94 10/22/94	PS-104 DUP 9 XX HFPS104XX994X 2232304 10/17/94 10/26/94	PS-104 DUP 9 0 HFPS104XX994XI 2232304 R 10/17/94 10/26/94	PS-104 9 0 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL	_							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane Trichloroethane 1,2-Trichloroethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 U U U U U U U U U U U U U U U U U U U	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 U U U U U U U U U U U U U U U U U U U		133 133 133 133 133 133 133 133 133 133	13 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	14 UUUB 14 UUUB 14 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU
Total Xylenes	======================================			1.00		1.00	1.00	======================================	1.00
# · · · · · ·	on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	85 5.00	80 5.00	80 5.00	77 5.00	76 5.00	69 5.00
Associated Met Associated Equipm Associated Fi Associated T	ent Blank: HF eld Blank:	P1381.D QSXX8XXX94XX HF - -	DO852.D GSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX   - -	D0852.D HFQSXX8XXX94XX H - -	DO852.D HFQSXX8XXX94XX HI - -	P1381.D Gasxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D GSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

Table 1 Laboratory Report of Analysis

	LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	6 HFPS107XX69 2232310 10/18/94	2232311 10/18/94
ANALYTE SOW-3/90 -	II CRQL		
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Tetrachloroethane Chlorobenzene Chlorobenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	14 14 14 14 14 14 14 14 14 14 14 14 14 1	U 14 U 14 U 14 U U 14 U U 14 U U U 14 U U U 14 U U U U
Ethylbenzene Styrene Total Xylenes	10 10 10	14	U 14 U U 14 U U 14 U
Diluti	on Factor: nt Solids: ht (ml\g): hod Blank: ent Blank: HFG eld Blank:		

U: not detected

B: blank contamination

J: estimated

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	9 HFPS101XX994XX 2232307 10/18/94 10/21/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 7 4 HFPS103XX794X 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 2323304 10/17/94 10/21/94 11/28/94	PS-104 9 XD HFPS104XX994X: 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 X HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-106 11 ( HFPS106X1194XX 2232306 D 10/17/94 10/21/94 11/30/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	950 U 340 J 950 U 950 U 950 U 400 U 1000 1300 400 U 1000 1100 140 J 990 1100 1200 570 46 J	910 U J 910 U J J U S80 U U J J U J J U J J U J J U J J U J J U J J J U J U J J U	950 U 150 J 950 U 950 U 100 J 400 U 1100 1400 U 1100 1400 U 1000 760 1000 774 J 400 U 830 550 790 350 J	5000 U U 2100 U U U 2100 U U U U U U U U U U U U U U U U U U	10000 U 4300 U 10000 U 4300 U 4300 U 4300 U 4300 U 4300 U 10000 U 10000 U 10000 U 14300 U 4300 U 4300 U 14000 U 14000 U 15000 U 14000 U 15000 U 14000 U 15000 U 17000 U	1000 U J U U U U U U U U U U U U U U U U	1200 U J 1200 U L 480 U U U U U U U U U U U U U U U U U U U	2300 U 970 U 2300 U 2300 U 970 U 970 U 970 U 970 U 970 U 2300 U 2300 U 2300 U 2300 U 2300 U 970 U 2300 U 970 U 970 U 2300 U 590 JD 970 U 4200 D 4500 D 970 U 4200 D 4500 D 970 U
	on Factor: ent Solids: tht (ml\g):	1.00 84 30.0 Q1795.D	1.00 88 30.0 Q1795.D	1.00 84 30.0 Q1795.D	5.00 80 30.0 Q1795.D	10.0 77 30.0 91795.D	1.00 76 30.0 Q1795.D	1.00 69 30.0 91795.D	2.00 69 30.0 91795.D
Associated Met Associated Equipm Associated Fi	ent Blank: HFG								QSXX8XXX94XX

Miscellaneous Soil Analysis

14-Apr-95

Table 1 Laboratory Report of Analysis

D/	LOCATION: ISIS ID: LAB NUMBER: ATE SAMPLED: IE ANALYZED:	CD-101 DUP HFCD101XXX94XD 2227904 10/12/94 10/31/94	CD-101 HFCD101XXX94XX 2227901 10/12/94 10/31/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/31/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/31/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/31/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 11/09/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 11/09/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 11/09/94
ANALYTE	RL								
Corrosivity, inch/Year Ignitability, Degrees   Cyanide, Reactive, ppm sulfide, Reactive, ppm	F 212 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated M Associated Equi		MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 - -

Table 1 Laboratory Report of Analysis

DAT	LOCATION:	CD-108	CD-109	
	ISIS ID:	HFCD108XXX94XX	HFCD109XXX94X	
	AB NUMBER:	2228904	2226506	
	E SAMPLED:	10/13/94	10/11/94	
	ANALYZED:	11/09/94	10/24/94	
ANALYTE	RL			
Corrosivity, inch/Year	0.01		0.01 U	
Ignitability, Degrees F	212		>212	
Cyanide, Reactive, ppm	1.0		1 U	
sulfide, Reactive, ppm	1.0		1 U	

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - -

Table 1 Laboratory Report of Analysis

DAT	LOCATION:	CD-108	CD-109	
	ISIS ID:	HFCD108XXX94XX	HFCD109XXX94X	
	AB NUMBER:	2228904	2226506	
	E SAMPLED:	10/13/94	10/11/94	
	ANALYZED:	11/09/94	10/24/94	
ANALYTE	RL			
Corrosivity, inch/Year	0.01		0.01 U	
Ignitability, Degrees F	212		>212	
Cyanide, Reactive, ppm	1.0		1 U	
sulfide, Reactive, ppm	1.0		1 U	

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - - Associated Field Blank: - - -

Miscellaneous Soil Analysis

14-Apr-95

Table 2 Validation / Summary Table

DAT	LOCATION: ISIS ID: AB NUMBER: E SAMPLED: ANALYZED:		CD-101 HFCD101XXX94XX 2227901 10/12/94 10/31/94	CD-102 HFCD102XXX94XX 2227905 10/12/94 10/31/94	CD-103 HFCD103XXX94XX 2227906 10/12/94 10/31/94	CD-104 HFCD104XXX94XX 2227907 10/12/94 10/31/94	CD-105 HFCD105XXX94XX 2228901 10/13/94 11/09/94	CD-106 HFCD106XXX94XX 2228902 10/13/94 11/09/94	CD-107 HFCD107XXX94XX 2228903 10/13/94 11/09/94
ANALYTE	RL	•							
Corrosivity, inch/Year Ignitability, Degrees F Cyanide, Reactive, ppm sulfide, Reactive, ppm	0.01 212 1.0 1.0	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U	0.01 U >212 1 U 1 U
Associated Me Associated Equipr Associated F	ment Blank:	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBWCHANNA4 - -	MBHANNA6 - -	MBHANNA6 - -	MBHANNA6 · · · · · · · · · · · · · · · · · · ·

Table 2
Validation / Summary Table

LOCATION:	CD-108	CD-109			
ISIS ID:	HFCD108XXX94XX	HFCD109XXX94XX			
LAB NUMBER:	2228904	2226506			
DATE SAMPLED:	10/13/94	10/11/94			
DATE ANALYZED:	11/09/94	10/24/94			

ANALYTE	RL		
Corrosivity, inch/Year	0.01	0.01 U	0.01 U
Ignitability, Degrees F	212	>212	>212
Cyanide, Reactive, ppm	1.0	1 U	1 U
sulfide, Reactive, ppm	1.0	1 U	1 U

Associated Method Blank: MBHANNA6 SDGHANNA2
Associated Equipment Blank: - - Associated Field Blank: - -

Site: SUMP SEDIMENTS
U: not detected

Table 1 Laboratory Report of Analysis

	LOCATION DEPTH ISIS ID LAB NUMBER DATE SAMPLED DATE ANALYZED	: 9 : HFPS101XX994XX : 2232307 : 10/18/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794) 2232309 10/18/94 10/22/94	PS-104 DUP 9 XX HFPS104XX994X 2232304 10/17/94 10/26/94	PS-104 DUP 9 0 HFPS104XX994XI 2232304 R 10/17/94 10/26/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL	_							
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane Trichloroethane 1,2-Trichloroethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 U U U U U U U U U U U U U U U U U U U	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 U U U U U U U U U U U U U U U U U U U		133 133 133 133 133 133 133 133 133 133	13 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	14 UUUB 14 UUUB 14 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU
Total Xylenes	======================================			1.00		1.00	1.00	======================================	1.00
# · · · · · ·	on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	85 5.00	80 5.00	80 5.00	77 5.00	76 5.00	69 5.00
Associated Met Associated Equipm Associated Fi Associated T	ent Blank: HF eld Blank:	P1381.D QSXX8XXX94XX HF - -	DO852.D GSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX   - -	D0852.D HFQSXX8XXX94XX H - -	DO852.D HFQSXX8XXX94XX HI - -	P1381.D Gasxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D GSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	HFPS107XX694 2232310 10/18/94	2232311 10/18/94
ANALYTE SOW-3/90 -	II CRQL		
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane Cis-1,3-Dichloropropane Cis-1,3-Dichloropropane Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane Tetrachloroethane Tetrachloroethane Chlorobenzene Ethylbenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	14 14 14 14 14 14 14 14 14 14 14 14 14 1	J 14 U
Styrene Total Xylenes	10 : 10	14 i	J 14 U J 14 U
Dilutio	on Factor: nt Solids:	1.00 70 5.00	1.00 71 5.00
Associated Metl Associated Equipm Associated Fi Associated T	ent Blank: HFQ: eld Blank:	P1381.D SXX8XXX94XX - -	D0852.D HFQSXX8XXX94XX - -

U: not detected

B: blank contamination

J: estimated

# Volatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	PS-101 9 HFPS101XX994XX 2232307 10/18/94 10/22/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/26/94	PS-103 7 HFPS103XX794XX 2232309 10/18/94 10/22/94	PS-104 DUP 9 ( HFPS104XX994XD 2232304 10/17/94 10/26/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/22/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/22/94	PS-106 11 HFPS106X1194 2232306 10/17/94 10/22/94	PS-107 6 XX HFPS107XX694XX 2232310 10/18/94 10/22/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane richloroethane 1,2-Trichloroethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	* 10 10 10 10 10 10 10 10 10 10 10 10 10 1	12 12 12 12 12 12 12 12 12 12 12 12 12 1	11	12 12 12 12 12 12 12 12 12 12 12 12 12 1	12 UJ UJ 12 UJ	13 13 13 13 13 13 13 13 13 13 13 13 13 1	13 13 13 13 13 13 13 13 13 13 13 13 13 1	14 UU 14 UU 14 UU 14 UU 14 UU UU 14 UU	14 UU
	========= on Factor: nt Solids: ht (ml\g):	1.00 84 5.00	1.00 88 5.00	1.00 85 5.00	1.00 80 5.00	1.00 77 5.00	1.00 76 5.00	1.00 69 5.00	1.00 70 5.00
Associated Met Associated Equipm Associated Fi Associated T	hod Blank: ent Blank: HFQ eld Blank:	P1381.D SXX8XXX94XX HF	D0852.D QSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX HI	D0852.D FQSXX8XXX94XX HF - -	P1381.D Gesxx8xxx94xx HF - -	P1381.D QSXX8XXX94XX HF - -	P1381.D QSXX8XXX94XX - -	P1381.D HFQSXX8XXX94XX - -

Site: TEST PIT U: not detected J: estimated

Table 2 Validation / Summary Table

LOCATION:	PS-108
DEPTH:	10
ISIS ID:	HFPS108X1094XX
LAB NUMBER:	2232311
DATE SAMPLED:	10/18/94
DATE ANALYZED:	10/26/94

ANALYTE	SOW-3/90 - II	CRQL	_	
Chloromethane		10	14	u
Bromomethane		iŏ	14	ŭ
Vinyl Chloride		10	14	Ŭ
Chloroethane		10	14	ŭ
Methylene Chloride	<u>:</u>	10	14	ŨJ
Acetone		10	14	UJ
Carbon Disulfide		10	14	U
1,1-Dichloroethene	<b>:</b>	10	14	U
1,1-Dichloroethane	•	10	14	U
1,2-Dichloroethene	(total)	10	14	U
Chloroform		10	14	U
1,2-Dichloroethane	•	10 🔍	14	U
2-Butanone		10	14	U
1,1,1-Trichloroeth	ane	10	14	U
Carbon Tetrachlori	de	10	14	U
Bromodichloromethe		10	14	U
1,2-Dichloropropar cis-1,3-Dichloropr	ie	10	14	U
cis-1,3-Dichloropr	opene	10	14	U
Trichloroethene		10	14	U
Dibromochlorometha		10	14	U
1,1,2-Trichloroeth	ane	10	14	U
Benzene		10	14	U
trans-1,3-Dichlord	propene	10	14	U
Bromoform		10	14	U
4-Methyl-2-Pentano	ne	10	14	U
2-Hexanone		10	14	U
Tetrachloroethene	.1	10	14	U
1,1,2,2-Tetrachlor	oetnane	10	14	Ų
Toluene		10	14	ັນ
Chlorobenzene		10	14	Ü
Ethylbenzene		10	14	Ü
Styrene		10	14	U
Total Xylenes		10	14	-
	Dilution E		1 00	=

	Dilution	Factor:	1.00
	Percent	Solids:	71
Sample	<b>Volume\Weight</b>	(ml\g):	5.00

Associated Method Blank: D0852.D
Associated Equipment Blank: HFQSXX8XXX94XX
Associated Field Blank: Associated Trip Blank: -

Site: TEST PIT U: not detected J: estimated PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 1
Laboratory Report of Analysis

· · ·	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	PS-101 9 HFPS101XX994XX 2232307 10/18/94 10/21/94 12/02/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 HFPS103xx794xx 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 HFPS104XX994XD 2232304 10/17/94 10/21/94 11/28/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 D 10/17/94 10/21/94 11/30/94
ANALYTE SOW-3/90	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorocyclopentadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline	330 330 330 330 330 330 330 330	400 400 400 400 400 400 400 400 400 400	380 U 380 U 38	400 400 400 400 400 400 400 400 400 400	2100 U 21	4300 U	440 UU	480 U U U U U U U U U U U U U U U U U U U	970 U 970 U
Dimethylphthalate Acenaphthylene	330 330	400 U 400 U	380 U 110 J	400 U 400 U	2100 U 2100 U	4300 U 4300 U	440 U 440 U	480 U 480 U	970 ป 970 ป
2,6-Dinitrotoluene	330	400 Ü	380 U	400 Ŭ	2100 Ü	4300 U	440 U	480 U	970 U

Site: TEST PIT

Table 1
Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	9 HFPS101XX994XX 2232307 10/18/94 10/21/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 7 4 HFPS103XX794X 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 2323304 10/17/94 10/21/94 11/28/94	PS-104 9 XD HFPS104XX994X: 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 X HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-106 11 ( HFPS106X1194XX 2232306 D 10/17/94 10/21/94 11/30/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 330 330 330 330	950 U 340 J 950 U 950 U 950 U 400 U 1000 1300 400 U 1000 1100 140 J 990 1100 1200 570 46 J	910 U J 910 U J J U S80 U U J J U J J U J J U J J U J J U J J U J J J U J U J J U	950 U 150 J 950 U 950 U 950 U 400 U 1100 1400 U 1100 1400 U 1000 760 1000 774 J 400 U 830 550 790 350 J	5000 U U 2100 U U U 2100 U U U U U U U U U U U U U U U U U U	10000 U 4300 U 10000 U 4300 U 4300 U 4300 U 4300 U 4300 U 10000 U 10000 U 10000 U 14300 U 4300 U 4300 U 14000 U 14000 U 15000 U 14000 U 15000 U 14000 U 15000 U 17000 U	1000 U J U U U U U U U U U U U U U U U U	1200 U J 1200 U L 480 U U U U U U U U U U U U U U U U U U U	2300 U 970 U 2300 U 2300 U 970 U 970 U 970 U 970 U 970 U 2300 U 2300 U 2300 U 2300 U 2300 U 970 U 2300 U 970 U 970 U 2300 U 590 JD 970 U 4200 D 4500 D 970 U 4200 D 4500 D 970 U
	on Factor: ent Solids: tht (ml\g):	1.00 84 30.0 Q1795.D	1.00 88 30.0 Q1795.D	1.00 84 30.0 Q1795.D	5.00 80 30.0 Q1795.D	10.0 77 30.0 91795.D	1.00 76 30.0 Q1795.D	1.00 69 30.0 91795.D	2.00 69 30.0 91795.D
Associated Met Associated Equipm Associated Fi	ent Blank: HFG								QSXX8XXX94XX

Table 1 Laboratory Report of Analysis

• •	•			
	LOCATION:	PS-107	PS-108	PS-108
	DEPTH:	6	10	10
	ISIS ID:	HFPS107XX694XX	HFPS108X1094XX	HFPS108X1094XX
	LAB NUMBER:	2232310	2232311	2232311 D
	DATE SAMPLED:	10/18/94	10/18/94	10/18/94
	DATE EXTRACTED:	10/21/94	10/21/94	10/21/94
	DATE ANALYZED:	12/02/94	12/02/94	12/03/94
ANALYTE SOW-3/90 -	II CRQL			
Phenol	330	480 U	470 U	940 U
bis(2-Chloroethyl)ether	330	480 U	470 U	940 U
2-Chlorophenol	330	480 U	470 U	940 U
1,3-Dichlorobenzene	330	480 U	470 U	940 U
1,4-Dichlorobenzene	330	480 Ŭ	470 U	940 U
1,2-Dichlorobenzene	330	480 Ü	470 U	940 U
2-Methylphenol	330	480 U	470 U	940 U
2,2'-oxybis(1-Chloropropane)		480 U	470 U	940 U
4-Methylphenol	330	480 U	470 U	940 U
N-Nitroso-di-n-propylamine	330	480 U	470 U	940 U
Hexachloroethane	330	480 U	470 Ū	940 U
Nitrobenzene	. 330	480 U	470 U	940 U
Isophorone	330	480 U	470 Ū	940 U
2-Nitrophenol	330	480 U	470 U	940 Ú
2.4-Dimethylphenol	330	480 U	470 U	940 U
bis(2-Chloroethoxy)methane	330	480 U	470 U	940 U
2,4-Dichlorophenol	330	480 U	470 U	940 U
1,2,4-Trichlorobenzene	330	480 U	470 U	940 U
Naphthalene	330	67 J	470 U	940 U
4-Chloroaniline	330	480 U	470 U	940 U
Hexach Lorobutadiene	330	480 U	470 U	940 U
4-Chloro-3-Methylphenol	330	480 U	470 U	940 U
2-Methylnaphthalene	330	480 U	470 U	940 U
Hexachlorocyclopentadiene	330	480 U	470 U	940 U
2,4,6-Trichlorophenol	330	480 U	470 U	940 U
2,4,5-Trichlorophenol	800	1100 U	1100 U	2200 U
2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene	330	480 U	470 U	940 U
2-Nitroaniline	800	1100 U	1 <u>100</u> U	2200 U
Dimethylphthalate	330	480 U	470 U	940 U
Acenaphthylene	330	480 U	470 U	940 U
2,6-Dinitrotoluene	330	480 U	470 U	940 U

Table 1 Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFPS107XX69 2232310 10/18/94 10/21/94	2232311 10/18/94 10/21/94	2232311 D 10/18/94 10/21/94
ANALYTE SOW-3/90 -	II CRQL			
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 5,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	800 330 800 800 330 330 330 330	480 1100 1100 480 480 480 480 1100 1100	U 1100 U 150 U 150 U 1100 U 1700 U 470 U 470 U 470 U 470 U 1100 U 1100 U 470	U 2200 U J 130 JD U 2200 U U 2200 U U 940 U U U 940 U U U 940 U U 940 U U 940
Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	330 330		U 98 U 1100	J 140 JD 2000 D
Diluti	======== on Factor: nt Solids:	,		
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	Q1795.D SXX8XXX94XX	Q1795.D HFQSXX8XXX94XX	Q1795.D HFQSXX8XXX94XX

# Semivolatile Organic Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	PS-101 9 HFPS101XX994XX 2232307 10/18/94 10/21/94 12/02/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 HFPS103XX794XX 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 HFPS104XX994XD 2232304 10/17/94 10/21/94 11/28/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194XX 2232306 10/17/94 10/21/94 11/28/94	PS-107 6 HFPS107XX694XX 2232310 10/18/94 10/21/94 12/02/94
ANALYTE SOH-3/90 -	- II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane	330 330 330 330 330 330 330 330	400 UJ 400 UJ 400 UJ 400 UJ 400 UJ 8 400 UJ 400 UJ 400 UJ 400 UJ 8 8	380 UJ 380 UJ 380 UJ 380 UJ 380 UJ 380 UJ 380 UJ 380 UJ 380 UJ 380 UJ	400 UJ 400 UJ	2100 U 2100 U	4300 U	440 U 440 U	480 U 480 U 480 U 480 U 480 U 480 U 480 U 480 U 480 U 480 U 880 U 880 U	480 UJ 480 UJ
2,4-Dichlorophenol 1,2,4-Trichlorobenzene	330 330	400 UJ	380 UJ	400 UJ 400 UJ	2100 U 2100 U	4300 U 4300 U	440 U 440 U	4 <u>80</u> U	480 UJ 480 UJ
Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol	330 330 330 330	110 J 400 UJ 400 UJ R	380 UJ 380 UJ 380 UJ R	140 J 400 UJ 400 UJ 400 UJ	2100 U 2100 U 2100 U 2100 U	4300 U 4300 U 4300 U 4300 U	110 J 440 U 440 U 440 U	53 J 480 U 480 U R	67 J 480 UJ 480 UJ 480 UJ
2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol	330 330 330 800	87 J 400 UJ R	380 UJ R R	220 J 400 UJ 400 UJ 950 UJ	2100 U 2100 UJ 2100 U 5000 U	4300 U 4300 UJ 4300 U 10000 U	60 J 440 UJ 440 U 1000 U	480 U 480 UJ R	480 UJ 480 UJ 480 UJ 1100 UJ
2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate	330 800 330	400 UJ 950 UJ 400 UJ	380 UJ 380 UJ	400 UJ 950 UJ 400 UJ	2100 U 5000 U 2100 U	4300 U 10000 U 4300 U	440 U 1000 U 440 U	480 Ü 1200 U 480 U	480 UJ 1100 UJ 480 UJ
Acenaphthylene 2,6-Dinitrotoluene	330 330	400 UJ 400 UJ	110 J 380 UJ	400 UJ 400 UJ	2100 U 2100 U	4300 U 4300 U	440 U 440 U	480 U 480 U	480 UJ 480 UJ

Site: TEST PIT U: not detected J: estimated

R: unusable

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	HFPS101XX994XX 2232307 10/18/94 10/21/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 12/02/94	PS-103 7 7 8 HFPS103XX794X) 2232309 10/18/94 10/21/94 12/02/94	PS-104 DUP 9 ( HFPS104XX994XD 2232304 10/17/94 10/21/94 11/28/94	PS-104 9 HFPS104XX994XX 2232301 10/17/94 10/21/94 11/28/94	PS-105 7 3 HFPS105XX794XX 2232305 10/17/94 10/21/94 11/28/94	PS-106 11 HFPS106X1194X 2232306 10/17/94 10/21/94 11/28/94	PS-107 6 X HFPS107XX694XX 2232310 10/18/94 10/21/94 12/02/94
ANALYTE SOW-3/90 -		12/02/74	12/02/94	12/02/94	(1/20/94	11/20/94	11/20/74	11/20/94	12/02/74
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	800 330 800 800 330 330 330 330	950 UJ 340 J R 70 J 400 UJ 400 UJ 400 UJ 400 UJ 400 UJ 1300 J 1300 J 1200 J 1100 J 1100 J 1100 J 1100 J 1200 J	910 UJ 250 J R R 180 J 380 UJ 380 UJ 210 J 910 UJ 8 380 UJ 380 UJ 1200 J 2100 J	950 UJ 950 UJ 950 UJ 100 J 400 UJ 400 UJ 950 UJ 950 UJ 700 J 1400 UJ 1400 UJ	5000 U J 5000 U J 5000 U J 5000 U J 2100 U J	10000 U 4300 U 10000 U 4300 U 4300 U 4300 U 4300 U 4300 U 10000 U 10000 U 10000 U 13000 U 14300 U 14300 U 14300 U 14300 U 14300 U 14000 J 15000 U 14300 U 14000 J 15000 U 14300 U 14000 J 15000 U 17000 J 17000 J 16000 J 7800 J 5400 J 5400 J	1000 U J J J J U U U J J U U J J U U J J U U J J U U J J U U J J U J U J J U J J U J J U J J U J U J J U J U J J U J U J U J U J J U	1200 U J R R 480 U U U U 1600 U U 1600 J 2000 U J 200 U J	1100 UJ 480 UJ 1100 UJ 480 UJ 480 UJ 480 UJ 480 UJ 1100 UJ 1100 UJ 1100 UJ 1100 UJ 1100 UJ 480 UJ
Diluti	ion Factor: ent Solids:	1.00 84	1.00 88	1.00 84	5.00 80	10.0 77	1.00 76	1.00 69	1.00 70
Sample Volume\Weig Associated Met Associated Equipm Associated Fi	thod Blank: ment Blank: HFG	30.0 Q1795.D SXX8XXX94XX HFG	30.0 Q1795.D QSXX8XXX94XX HF	30.0 Q1795.D Gesxx8xxx94xx HI	30.0 Q1795.D FQSXX8XXX94XX HF	30.0 Q1795.D FQSXX8XXX94XX HF	30.0 Q1795.D :QSXX8XXX94XX HF	30.0 Q1795.D QSXX8XXX94XX HI	30.0 Q1795.D FQSXX8XXX94XX

U: not detected R: unusable

J: estimated

Table 2 Validation / Summary Table

-	LAB NUMB DATE SAMPL DATE ANALYZ	TH: 6 ID: HFBS101XX694XX ER: 2235104 ED: 10/20/94	BS-102 8 4 HFBS102xx894x 2235103 10/20/94 10/26/94	BS-103 10 X HFBS103X1094 2235105 10/20/94 10/27/94	BS-104 8 XX HFBS104XX894 2235106 10/21/94 10/26/94	BS-105 10 0.XX HFBS105X1094 2235107 10/21/94 10/26/94	BS-106 12 XX HFBS106X1294X 2236602 10/24/94 10/27/94	BS-107 14 X HFBS107X1494) 2236601 10/24/94 10/27/94	BS-108 8 XX HFBS108XX894XX 2235102 10/19/94 10/26/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	21 UJ 21 UJ	13	18 UU	23 U U U 23 U U U 23 U U U 23 U U U 23 U U U 23 U U U 23 U U U 23 U U U 23 U U U 23 U			12 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	
	on Factor: nt Solids:	1.00 48 5.00	1.00 77 5.00	1.00 56 5.00	1.00 44 5.00	1.00 41 5.00	1.00 49 5.00	1.00 84 5.00	1.00 72 5.00
Associated Met Associated Equipm Associated Fi Associated T	hod Blank: ent Blank: eld Blank:	D0871.D	D0852.D	D0871.D	D0852.D	D0852.D	D0871.D	D0871.D	D0852.D IFQSXX9XXX94XX - -

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	BS-109 7 HFBS109XX794XX 2235101 10/19/94 10/26/94	BS-110 DUP 12 HFBS110X1294XD 2232313 10/18/94 10/26/94	BS-110 12 HFBS110X1294XX 2232312 10/18/94 10/26/94
ANALYTE SOW-3/90 -	II CRQL			
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane richloroethene Dibromochloromethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	11	12 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	12 12 12 12 12 12 12 12 12 12 12 12 12 1
Styrene Total Xylenes	10 10	11 Ŭ 11 Ŭ	12 U 12 U	12 Ü 12 U
	========= n Factor:	======================================		
	t Solids:	90 5.00	82 5.00	82 5.00
Associated Meth Associated Equipme Associated Fie Associated Tr	nt Blank: HFQ ld Blank:	D0852.D SXX9XXX94XX HFG - -	D0852.D DSXX9XXX94XX HF - -	D0852.D QSXX9XXX94XX - -

04/14/95

#### PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

## Pesticides/PCBs Soil Analysis (ug/kg)

Table 1
Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	PS-101 9 HFPS101XX994XX 2232307 10/18/94 10/21/94 11/30/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 11/30/94	PS-103 7 HFPS103XX794X 2232309 10/18/94 10/21/94 11/29/94	PS-104 DUP 9 X HFPS104XX994XI 2232304 10/17/94 10/21/94 11/30/94	PS-104 9 0 HFPS104XX994XX 2232301 10/17/94 10/21/94 11/29/94	PS-105 7 HFPS105xx794xx 2232305 10/17/94 10/21/94 11/29/94	PS-106 11 HFPS106X1194X) 2232306 10/17/94 10/21/94 11/30/94	PS-107 6 ( HFPS107XX694XX 2232310 10/18/94 10/21/94 11/29/94
ANALYTE SOW-3/90	- II CRQL			•					
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-12121 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1260	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 1.7 1.7 1.7 1.7 1.7 1.7	6.1 U 12 U 1	5.8 U 11 U 11 U 11 U 11 U 11 U 11 U 58 U 5.8 U 5.8 U 5.8 U 110 U 110 U 88 J 110 U 120	4.0 U 4.0 U 4.0 U 4.0 U 4.0 U 4.0 U 7.9 U	6.6 U 6.6 U 6.6 U 6.6 U 6.6 U 6.6 U 13	6.6 U 6.6 U 6.6 U 6.6 U 6.6 U 6.6 U 13	2.2 U 4.3 U	7.4 U 14 U 1	2.4 U U 2.4 U U U U U U U U U U U U U U U U U U U
	ion Factor: ent Solids: ght (ml\g):	3.00 84 30.0	3.00 88 30.0	2.00 84 30.0	3.00 77 30.0	3.00 77 30.0	1.00 76 30.0	3.00 69 30.0	1.00 70 30.0
Associated Me Associated Equip Associated F	ment Blank: HFQS	PSB1021A SXX8XXX94XX HFG	PSB1021B QSXX8XXX94XX HF	PSB1021B QSXX8XXX94XX H	PSB1021A FQSXX8XXX94XX HF	PSB1021B QSXX8XXX94XX HF	PSB1021B QSXX8XXX94XX HF0	PSB1021A PSXX8XXX94XX HF	PSB1021B QSXX8XXX94XX

Site: TEST PIT

U: not detected

P: > 25% difference between columns

J: estimated

Table 1
Laboratory Report of Analysis

LOCATION: PS-108
 DEPTH: 10
 ISIS ID: HFPS108X1094XX
 LAB NUMBER: 2232311
DATE SAMPLED: 10/18/94

DATE EXTRACTED: 10/21/94 DATE ANALYZED: 11/30/94

ANALYTE	SOW-3/90 - II	CRQL		
alpha-BHC		1.7	7.2	U
beta-BHC		1.7	7.2	U
delta-BHC		1.7	7.2	U
gamma-BHC (Lindan	e)	1.7	7.2	U
Heptachlor		1.7	7.2	U
Aldrin		1.7	7.2	
Heptachlor Epoxid	e	1.7	7.2	U
Endosulfan I		1.7	7.2	
Dieldrin		3.3	14	U
4,4'-DDE		3.3	14	U
Endrin		3.3	14	U
Endosulfan II		3.3	14	U
4,4'-DDD		3.3	14	U
Endrin Aldehyde		3.3 3.3	14	U
Endosulfan Sulfat	e	3.3	14	U
4,4'-DDT		3.3	14	U
Methoxychlor		_17	72	U
Endrin Ketone		<b>3.3</b>	_14	U
alpha-Chlordane		1.7	7.2	
gamma-Chlordane		1.7	7.2	U
Toxaphene		1 <u>70</u>	720	U
Aroclor-1016		33	140	U
Aroclor-1221		67	280	U
Aroclor-1232		33	140	U
Aroclor-1242		33	140	U
Aroclor-1248		33	140	U
Aroclor-1254		33	140	U
Aroclor-1260		33	140	U
	==========	======	==========	===

Dilution Factor: 3.00
Percent Solids: 71
Sample Volume\Weight (ml\g): 30.0

Associated Method Blank: PSB1021A
Associated Equipment Blank: HFQSXX8XXX94XX
Associated Field Blank:

Site: TEST PIT

U: not detected

P: > 25% difference between columns

J: estimated

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-13 SOIL (ug\kg)

## SEMIVOLATILE

· · · · · · · · · · · · · · · · · · ·	<del></del>			
	HFBS101XX694XX	HFBS102XX894XX	HFB\$103X1094XX	HFBS104XX894XX
nknown nknown hydrocarbon nknown aromatic	1600 J(6) 590 J(3) 160 J	13000 J(3) 130000 J(17)	3600 J(6) 5700 J(10) 1100 J(2)	15000 J(7) 350 J
	HFBS105X1094XX	HFBS108XX894XX	HFBS109XX794XX	HFBS110X1294XD
inknown inknown hydrocarbon inknown aromatic	3100 J(4)	240 J 3800 J(11) 2100 J(6)	480 J(3) 890 J(4) 2800 J(8)	390 J 7300 J(19)
	HFBS110X1294XX	HFCD105XXX94XX	HFCD106XXX94XX	HFCD107XXX94XX
mknown mknown hydrocarbon mknown aromatic	290 J(2) 2300 J(16) 120 J	780 J(2) 7800 J(14) 1800 J(4)	2300 J(10) 240 J 3100 J(9)	6200 J(7) 12000 J(13)
	HFCD108XXX94XX	HFPS101XX994XX	HFPS102XX594XX	HFPS103XX794XX
inknown hydrocarbon inknown inknown aromatic	1100 J(7)	1900 J(6) 620 J(2) 5600 J(11)	8700 J(11) 370 J 7200 J(8)	20000 J(14) 500 J 3700 J(5)
	HFPS104XX994XD	HFPS104XX994XX	HFPS105XX794XX	HFPS106X1194XX
inknown inknown aromatic inknown hydrocarbon	8200 J(8) 22000 J(12)	20000 J(6) 66000 J(14)	750 J(3) 3000 J 3600 J(12)	4100 J(9) 8600 J(10) 300 J
The state of the s	HFPS106X1194XXDL	HFPS107XX694XX	JFPS108X1094XX	HFPS108X1094XXDL
Inknown Inknown aromatic Inknown hydrocarbon	7700 J(7) 18000 J(12)	1500 J(3) 8200 J(17)	2500 J(8) 8900 J(10) 400 J(2)	3200 J(6) 15000 J(13)
	HFWT101XXX94XD	HFWT101XXX94XX	HFWT102XXX94XXRE	
inknown Inknown hydrocarbon Inknown aromatic	110000 J(9) 44000 J(9) 14000 J(2)	220000 J(9) 69000 J(10) 13000 J	650000 J(13) 190000 J(9)	

Data Qualifiers: J: estimated

## TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-14 AQUEOUS (ug\L)

# SEMIVOLATILE

	HFQSXX3XXX94XX	HFQSXX4XXX94XX	HFQSXX5XXX94XX
unknown	26 J(7)	19 J(4)	20 J(4)
unknown aromatic	7 J(2)	3 J `	5 J

Data Qualifiers: J = estimated

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-14 SOIL (ug\kg)

## SEMIVOLATILE

•	HFSS121XXX94XX	HFSS121XXX94XXDL	HFSS123XXX94XX	
unknown unknown aromatic unknown hydrocarbon	700 J(2) 8900 J(16) 1900 J(2)	3900 J(7) 7900 J(8) 810 J	1700 J(8) 2800 J(7) 270 J	
	HFSS110XXX94XX	HFSS111XXX94XX	HFSS111XXX94XDRE	HFSS112XXX94XX
unknown unknown aromatic unknown hydrocarbon	910 J(4) 3200 J(9) 450 J(2)	4000 J(6) 3300 J(4) 6500 J(10)	5900 J(11) 580 J 4700 J(9)	8700 J(12) 3100 J(6) 940 J(2)
	HFSS113XXX94XX	HFSS114XXX94XX	HFSS118XXX94XX	HFSS118XXX94XXDL
unknown unknown aromatic unknown hydrocarbon	120000 J(14) 73000 J(6) 13000 J	7810 J(11) 6200 J(7) 3900 J(4)	48000 J(4) 11000 J(6)	130000 J(15) 29000 J(2)
	HFCD109XXX94XX	HFCD109XXX94XXDL	HFSD101XXX94XX	HFSD102XXX94XX
unknown unknown aromatic unknown hydrocarbon	65000 J(9) 88000 J(10) 5800 J	290000 J(9) 300000 J(4) 44000 J	18000 J(7) 12000 J(7)	13000 J(7) 1400 J 16000 J(7)
	HFSD102XXX94XDRE	HFSD104XXX94XXRE	HFSS109XXX94XXRE	
unknown unknown aromatic unknown hydrocarbon	5300 J(4) 680 J 8400 J(9)	1900 J(2) 3700 J(4) 19000 J(16)	1900 J 26000 J(7) 52000 J(8)	

Data Qualifiers: J: estimated

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-15 AQUEOUS (ug\L)

# SEMIVOLATILE

	HFQSXX1XXX94XX		
unknown	14 J(4)		

Data Qualifiers: J = estimated

### Table 2 Validation / Summary Table

LOCATION: PS-108
DEPTH: 10
ISIS ID: HFPS108X1094XX
LAB NUMBER: 2232311
DATE SAMPLED: 10/18/94
DATE EXTRACTED: 10/21/94
DATE ANALYZED: 12/02/94

ANALYTE	SOW-3/90 - II	CRQL.		
Dhama1		770		
Phenol	h	330 730		IJ
bis(2-Chloroet	nyt Jetner	330 770		IJ
2-Chlorophenol		330		IJ
1,3-Dichlorobe		330		IJ
1,4-Dichlorobe	nzene	330		IJ
1,2-Dichlorobe	nzene	330		IJ
2-Methylphenol		330		IJ
2,2'-oxybis(1-	Chloropropane)	330		IJ
4-Methylphenol		330		IJ
N-Nitroso-di-n		330		IJ
Hexachloroetha	ne	330		IJ
Nitrobenzene		330		IJ
Isophorone		330		IJ
2-Nitrophenol		330		IJ
2,4-Dimethylph		<b>33</b> 0		IJ
bis(2-Chloroet	hoxy)methane	330	470 <sub>.</sub> (	IJ
2,4-Dichloroph	enol	330		IJ
1,2,4-Trichlor	obenzene	<b>33</b> 0		IJ
Naphthalene		330		IJ
4-Chloroanilin		330		IJ
<b>Hexachlorobuta</b>		<b>33</b> 0		IJ
4-Chloro-3-Met	hylphenol	330		IJ
2-Methylnaphth		330		IJ
Hexachlorocycle	opentadi ene	330		IJ
2,4,6-Trichlor	ophenol	330	470 (	IJ
2,4,5-Trichlor	ophenol	800		IJ
2-Chloronaphth	alene	330		IJ.
2-Nitroaniline		800	1100 (	IJ
Dimethylphthal	ate	330		IJ
Acenaphthylene		330		IJ
2,6-Dinitrotol	uene	330	470 I	IJ
222222222222		=======	=========	==

Site: TEST PIT

U: not detected

R: unusable

J: estimated

page 2a

# Table 2 Validation / Summary Table

LOCATION: PS-108 DEPTH: 10 ISIS ID: HFPS108X1094XX LAB NUMBER:
DATE SAMPLED:
DATE EXTRACTED:
DATE ANALYZED: 2232311 10/18/94 10/21/94 12/02/94

ANALYTE	SOW-3/90 - II	CRQL		
3-Nitroaniline		800	1100	IJ
Acenaphthene		330	150	J
2,4-Dinitrophenol		800	1100	บั้ม
4-Nitrophenol		800	1100	UJ
Dibenzofuran		330	470	
2,4-Dinitrotoluen	۵	330	470	ÜĴ
Diethylphthalate	•	330	470	UJ
4-Chlorophenyl-ph	envi ether	330	470	ÜĴ
Fluorene	city to the	330	470	บัง
4-Nitroaniline	,	800	1100	UJ
4,6-Dinitro-2-met	hylphenol	800	1100	UJ
N-Nitrosodiphenyl	amine	330	470	UJ
4-Bromophenyl-phe	nvlether	330	470	ŨĴ
Hexachlorobenzene	,	330	470	ŨĴ
Pentachlorophenol		800	1100	ŨĴ
Phenanthrene		330	470	Ĵ
Anthracene		330	49	Ĵ
Carbazole		330	470	UJ
Di-n-butylphthala	te	330	470	IJ
Fluoranthene		330	3700	J
Pyrene		330	3200	J
Butylbenzylphthal	ate	330	470	UJ
3,3'-Dichlorobenz	idine	330	470	UJ
Benzo(a)Anthracen	e	330	3800	J
Chrysene		330	6300	J
bis(2-Ethylhexyl)	phthalate	330	470	IJ
Di-n-octylphthala	te	330	470	ŲJ
Benzo(b)Fluoranth		330	4900	J
Benzo(k)Fluoranth	ene	330	1500	J.
Benzo(a)Pyrene		330	3000	j
Indeno(1,2,3-c,d)	ryrene	330	1400	j
Dibenz(a,h)Anthra		330	98	j
Benzo(g,h,i)peryl		330	1100	J
			1 00	-==

Dilution Factor: Percent Solids: Sample Volume\Weight (ml\g): 1.00 71 30.0

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: Q1795.D HFQSXX8XXX94XX

Site: TEST PIT U: not detected J: estimated

R: unusable

page 2b

#### PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

# Pesticides/PCBs Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	9 HFPS101XX994XX 2232307 10/18/94 10/21/94	PS-102 5 HFPS102XX594XX 2232308 10/18/94 10/21/94 11/30/94	PS-103 7 4 HFPS103XX794 2232309 10/18/94 10/21/94 11/29/94	PS-104 DUF 9 XX HFPS104XX994 2232304 10/17/94 10/21/94 11/30/94	9	PS-105 7 XX HFPS105XX794X 2232305 10/17/94 10/21/94 11/29/94	PS-106 11 X HFPS106X1194X) 2232306 10/17/94 10/21/94 11/30/94	PS-107 6 K HFPS107XX694XX 2232310 10/18/94 10/21/94 11/29/94
ANALYTE SOW-3/	90 - II CRQL								
P	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	6.1 U 12 U 1	5.8 U U 5.8 U U U U U U U U U U U U U U U U U U U	4.0 U 4.0 U 4.0 U 4.0 U 4.0 U 4.0 U 7.9 U 7.9 U 7.9 U 7.9 U 7.9 U 7.9 U 400 U 79 U 400 U 79 U 100 T 79 U 2.00 84	6.6 L 6.6 L 6.6 L 6.6 L 6.6 L 13 L 14 L 15 L 16 L 17 L 18 L 1		2.2 U U U U U U U U U U U U U U U U U U	3.00 69	2.4 U 2.4 UJ 2.4 U 2.4 U 2.4 U 2.4 U 2.4 U 2.4 U 4.7 U
Associated Ed	Method Blank:	30.0 PSB1021A PSXX8XXX94XX HF	30.0 PSB1021B QSXX8XXX94XX HF	30.0 PSB1021B FQSXX8XXX94XX	30.0 PSB1021A HFQSXX8XXX94XX	30.0 PSB1021B HFQSXX8XXX94XX	30.0 PSB1021B HFQSXX8XXX94XX H	30.0 PSB1021A FQSXX8XXX94XX H	30.0 PSB1021B FQSXX8XXX94XX

Site: TEST PIT U: not detected J: estimated R: unusable

#### Table 2 Validation / Summary Table

LOCATION: PS-...
DEPTH: 10
ISIS ID: HFPS108X1094XX
AB NUMBER: 2232311
IO/18/94
10/21/94 DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED: 11/30/94

ANALYTE	11 - 09\E-wos	CRQL			
alpha-BHC	• • • • • • • • • • • • • • • • • • • •	1.7	··· 7.:	,	U
beta-BHC		1.7	7.		Ü
delta-BHC		1.7	7.		Ŭ
gamma-BHC (Lindar	ne)	1.7	7.		Ŭ
Heptachlor	10)	1.7	7.		Ŭ
Aldrin		1.7	7.		ŭ
Heptachlor Epoxic	to.	1.7	7.		ŭ
Endosulfan I	40	1.7	7.		ŭ
Dieldrin		3.3	10		ŭ
4,4'-DDE		3.3	10		Ŭ
Endrin		3.3	10		ŭ
Endosulfan II		3.3	14		Ŭ
4,4'-DDD		3.3	14		Ŭ
Endrin Aldehyde		3.3	14		Ū
Endosulfan Sulfat	te	3.3	10	4	U
4,4'-DDT		3.3	14	4	UJ
Methoxychlor		17	73	2	U
Endrin Ketone		3.3	14	4	U
alpha-Chlordane		1.7	7.3	2	U
gamma-Chlordane		1.7	7.3		U
Toxaphene		170	72		U
Aroclor-1016		33	140		U
Aroclor-1221		67	280		U
Aroclor-1232		33	140		U
Aroclor-1242		33	140		U
Aroclor-1248		33	140		U
Aroclor-1254		<u>33</u>	14		U
Aroclor-1260		33	14	_	U
		========		===	===

Dilution Factor: Percent Solids: 3.00 71 Sample Volume\Weight (ml\g): 30.0

PSB1021A

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: HFQSXX8XXX94XX

Site: TEST PIT

U: not detected R: unusable

J: estimated

04/14/95

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Soil Analysis (mg/kg)

Table 1 Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED:	PS-101 9 HFPS101XX994XX 232307 10/18/94	PS-102 5 HFPS102XX594XX 232308 10/18/94	PS-103 7 HFPS103XX794XX 232309 10/18/94	PS-104 DUP 9 HFPS104XX994XD 232304 10/17/94	PS-104 9 HFPS104XX994XX 232301 10/17/94	PS-105 7 HFPS105xx794xx 232305 10/17/94	PS-106 11 HFPS106X1194XX 232306 10/17/94	PS-107 6 HFPS107XX694XX 232310 10/18/94
ANALYTE	SOW-3/9011 CRDL								
Aluminum	40	8310	11300	4100	6110	7560	19600	6500	5010
Antimony	12	10.3 B	21.8	11.8 B	9.5 U	7.9 U	9.4 B	10.4 U	16.5
Arsenic	2	11.5 N	7.7 SN	6.7 N	2.0 BN	2.2 BN	10.6 SN	3.9 N	12.8 N
Barium	40	87.8	155	65.4	12.4 B	17.1 B	109	17.5 B	74.1
Beryllium	1	1.3	2.3	0.47 B	0.50 U	0.42 U	1.3	0.55 U	0.87 B
Cadmium	<b>1</b>	4.8 *	3.8 *	3.6 *	0.50 U*	0.42 U*	4.4 *	0.55 U*	5.1 *
Calcium	1000	40700 *	68000 *	32500 *	473 B*	772 B*	42100 *	1080 B*	24800 *
Chromium	2	33.6 *	84.1 *	112 *	6.1 *	7.7 *	98.8 *	6.4 *	82.7 *
Cobalt	10	14.3	11.9	12.4	1.5 U	1.2 U	12.3	1.6 U	21.3
Copper	_5	210 N	_163 N	120 N	1.2 UN	2.0 BN	136 N	2.3 BN	214 N
Iron	20	163000	93300	124000	8350	9890	121000	8630	227000
Lead	0.6	217 N*	330 N*	669 N*	5.9 N*	7.6 N*	318 N*	18.6 SN*	414 N*
Magnesium	100 <u>0</u>	9350 *	15300 *	9910 *	496 B*	725 B*	11300 *	424 U*	5800 *
Manganese	3	5110 *	4290 *	3720 *	106 *	146 *	3150 <b>*</b>	102 *	5220 *
Mercury	0.1 8	0.40	0.37 55.3 *	0.13 39.2 *	0.12 U 6.5 U*	0.13 U 5.4 U*	0.23 39.4 *	0.15 U 7.1 U*	0.14 U 136 *
Nickel Potassium	1000	23.0 * 2920	1390	1470	814 B	868 B	13300	7.1 U* 955 B	1270 B
Selenium	1000	1.2 UN	1.1 UN	1.0 UN	1.1 UN	1.2 UN	1.1 UN	1.4 UN	1.4 UN
Silver	2	1.0 UN	1.1 UN	1.1 UN	1.2 UN	1.0 UN	1.1 UN	1.4 UN	1.3 UN
Sodium	1000	550 B	835 B	463 B	279 B	324 B	749 B	431 B	406 B
Thallium	2	1.2 UW	1.1 U	1.0 UW	ī.í Ū	1.2 U	1.1 UW	1.4 U	1.4 UW
Vanadium	10	55.2	39.7	50.2	8.8 B	10.8	45.6	10.3 B	64.9
Zinc	4	1440 *	459 *	417 *	6.4 *	6.2 *	1230 *	13.8 *	941 *
Cyanide	1	0.62 UN	0.54 UN	0.55 UN	0.59 UN	0.54 UN	0.62 UN	0.63 UN	0.67 UN
	Percent Solids:	84	88	85	80	77	76	69	70

Site: TEST PIT

U: not detected S: method of standard additions \*: duplicate analysis not met
N: spike recovery not met W: post digestion spike not met B: blank contamination

Table 1
Laboratory Report of Analysis

LOCATION: PS-108
 DEPTH: 10
 ISIS ID: HFPS108X1094XX
 LAB NUMBER: 232311
DATE SAMPLED: 10/18/94

ANALYTE SO	W-3/90 - II CRDL		
Aluminum	40	5290	
Antimony	12	10.7	U
Arsenic	2	4.8	SN
Barium	40	33.2	В
Beryllium	1	0.56	U
Cadmium	1	1.5	*
Calcium	1000	4680	*
Chromium	2	8.0	*
Cobalt	10	2.6	В
Copper	5	6.4	BN
Iron	20	6810	
Lead	0.6	11.2	N*
Magnesium	1000	995	B*
Manganese	3	130	*
Mercury	0.1	0.14	U
Nickel	. 8	7.3	U*
Potassium	1000	725	В
Selenium	1	1.3	UN
Silver	2	1.4	UN
Sodium	1000	451	В
Thallium	2	1.3	U
Vanadium	10	9.8	В
Zinc	4	23.9	*
Cyanide	1	0.75	UN
=======================================		======	===
	Percent Solids:	71	

Associated Method Blank: MBHANNA6S
Associated Equipment Blank: HFQSXX8XXX94XX
Associated Field Blank:

Site: TEST PIT

U: not detected S: method of standard additions \*: duplicate analysis not met
N: spike recovery not met W: post digestion spike not met B: blank contamination

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Soil Analysis (mg/kg)

Table 2
Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED:	PS-101 9 HFPS101XX994XX 232307 10/18/94	PS-102 5 HFPS102XX594XX 232308 10/18/94	PS-103 7 HFPS103XX794XX 232309 10/18/94	PS-104 DUP 9 HFPS104XX994XD 232304 10/17/94	PS-104 9 HFPS104XX994XX 232301 10/17/94	PS-105 7 HFPS105XX794XX 232305 10/17/94	PS-106 11 HFPS106X1194XX 232306 10/17/94	PS-107 6 HFPS107XX694XX 232310 10/18/94
ANALYTE	· SOW-3/90 - II CRDL								
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver	40 12 2 40 1 1 1 1000 2 10 5 20 0.6 1000 3 0.1 8 1000	8310 10.3 J 11.5 87.8 1.3 4.8 J 40700 33.6 14.3 210 163000 217 9350 5110 0.40 23.0 2920 1.2 UJ	11300 21.8 7.7 155 2.3 3.8 J 68000 84.1 11.9 163 93300 330 15300 4290 0.37 55.3 1390 1.1 UJ	4100 11.8 J 6.7 65.4 0.47 J 3.6 J 32500 112 12.4 120 124000 669 9910 3720 0.13 39.2 1470 1.0 UJ	6110 9.5 2.0 12.4 0.50 0.50 473 6.1 1.5 1.2 8350 5.9 106 0.12 0.12 0.50 U	7560 7.9 U 2.2 J 17.1 J 0.42 U 0.42 U 772 J 7.7 1.2 U 2.0 J 9890 7.6 J 725 J 146 U 0.13 U 5.4 U 868 J 1.2 UJ	19600 9.4 J 10.6 109 1.3 4.4 42100 98.8 12.3 136 121000 318 11300 3150 0.23 39.4 13300 1.1 UJ	6500 10.4 3.9 17.5 0.55 U 0.55 U 1080 6.4 1.6 U 2.3 8630 18.6 J 424 U 102 0.15 U 7.1 U 955 J	5010 16.5 12.8 74.1 0.87 J 5.1 J 24800 82.7 21.3 214 227000 414 5800 5220 0.14 U 136 1270 J 1.4 UJ
Sodium Thallium Vanadium Zinc Cyanide	1000 2 10 4 1	550 J 1.2 U 55.2 1440 0.62 UJ	835 J 1.1 U 39.7 459 0.54 UJ	463 J 1.0 U 50.2 417 0.55 UJ	279 J 1.1 U 8.8 J 6.4 0.59 UJ	324 J 1.2 U 10.8 6.2 0.54 UJ	749 J 1.1 U 45.6 1230 0.62 UJ	431 J 1.4 U 10.3 J 13.8 0.63 UJ	406 J 1.4 U 64.9 941 0.67 UJ
	Percent Solids:	84	88	<b>8</b> 5	80	77	76	69	70

Site: TEST PIT
U: not detected
J: estimated

# Table 2 Validation / Summary Table

LOCATION: PS-108
 DEPTH: 10
 ISIS ID: HFPS108X1094XX
 LAB NUMBER: 232311
DATE SAMPLED: 10/18/94

ANALYTE	SOW-3/90 - II CRDL		
Aluminum	40	5290	
Antimony	12	10.7	U
Arsenic	2	4.8	
Barium	40	33.2	J
Beryllium	1	0.56	U
Cadmium	1	1.5	J
Calcium	1000	4680	
Chromium	2	8.0	
Cobalt	10	2.6	J
Copper	5	6.4	j
Iron	20	6810	
Lead	0.6	11.2	J
Magnesium	1000	995	J
Manganese	3	130	
Mercury	0.1	0.14	U
Nickel	8	7.3	U
Potassium	1000	725	J
Selenium	1	1.3	UJ
Silver	2	1.4	UJ
Sodium	1000	451	J
Thallium	2	1.3	U
Vanadium	10	9.8	J
Zinc	4	23.9	
Cyanide	1	0.75	UJ
		#2222 74	===
	Percent Solids:	71	

Associated Method Blank: MBHANNA6S
Associated Equipment Blank: HFQSXX8XXX94XX
Associated Field Blank:

Site: TEST PIT U: not detected J: estimated

Table 1 Laboratory Report of Analysis

-	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	6 HFBS101XX694XX 2235104 10/20/94	BS-102 8 HFBS102XX894XX 2235103 10/20/94 10/26/94	BS-103 10 HFBS103X1094X 2235105 10/20/94 10/27/94	BS-104 8 (X HFBS104XX894X: 2235106 10/21/94 10/26/94	BS-105 10 X HFBS105X1094X 2235107 10/21/94 10/26/94	BS-106 12 ( HFBS106X1294XX 2236602 10/24/94 10/27/94	BS-107 14 HFBS107X1494X 2236601 10/24/94 10/27/94	BS-108 8 X HFBS108XX894XX 2235102 10/19/94 10/26/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropane Trichloroethane 1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethane 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	21 U U U U U U U U U U U U U U U U U U U	13 UUUJB 13 13 13 13 13 13 13 13 13 13 13 13 13 1	18 UUUU 18 18 18 18 18 18 18 18 18 18 18 18 18	23 U 23 U 23 U 23 U 23 U 23 U 23 U 23 U	24 U U U B 24 U U U B 24 U U U U U U U U U U U U U U U U U U U	20 U U 20 U U U U U U U U U U U U U U U	12 U U U U U U U U U U U U U U U U U U U	14 U U 14 U U U U U U U U U U U U U U U
Perce	======== on Factor: nt Solids:	1.00 48	1.00 77	1.00 56	1.00 44	1.00 41	1.00 49	1.00 84	1.00 72
Sample Volume\Weig Associated Met Associated Equipm Associated Fi Associated T	hod Blank: ent Blank: HFG eld Blank:	5.00 D0871.D SXX9XXX94XX HF	5.00 D0852.D G9SXX9XXX94XX HF	5.00 D0871.D QSXX9XXX94XX F	5.00 D0852.D HFQSXX9XXX94XX H - -	5.00 D0852.D FQSXX9XXX94XX HI - -	5.00 D0871.D FQSXX9XXX94XX HF	5.00 D0871.D QSXX9XXX94XX H - -	5.00 D0852.D FQSXX9XXX94XX - -

Site: SOIL BORINGS U: not detected J: estimated

B: blank contamination

Table 1 Laboratory Report of Analysis

	LOCATION DEPTH	_	BS-110 DU 12	IP BS-110 12
	ISIS ID	: HFBS109XX794	XX HFBS110X129	4XD HFBS110X1294XX
	LAB NUMBER		2232313	2232312
•	DATE SAMPLED		10/18/94	
	DATE ANALYZED	: 10/26/94	10/26/94	10/26/94
ANALYTE SOW-3/90 -	II CRQL	-		
Chloromethane	10.	11 U	12	U 12 U
Bromomethane	10	11 U		U 12 U
Vinyl Chloride	10	11 U		U 12 U
Chloroethane	10	11 U		U 12 U
Methylene Chloride	• 10	4 JI		JB 2 JB
Acetone	10	5 JI		JB 12 U
Carbon Disulfide	10	11 U		U 12 U
1,1-Dichloroethene	10	11 U		U 12 U
1,1-Dichloroethane	10	11 U	• •	U 12 U
1,2-Dichloroethene (total)	10	11 U		U 12 U
Chloroform	10	11 U		U 12 U
1,2-Dichloroethane	10	11 U		U 12 U
2-Butanone	10	11 U		Ų 12 U
1,1,1-Trichloroethane	10	11 U		U 12 U
Carbon Tetrachloride	10	11 U		U 12 U
Bromodichloromethane	10	11 U		U 12 U
1,2-Dichloropropane	10	11 U		U 12 U
cis-1,3-Dichloropropene	10	11 U		U 12 U
Trichloroethene	10	11 U		U 12 U
Dibromochloromethane	10	11 U		U 12 U
1,1,2-Trichloroethane	. 10	11 U	•	U 12 U
Benzene	10	11 U		U 12 U
trans-1,3-Dichloropropene	10	11 U		U 12 U
Bromoform_	10	11 U		U 12 U
4-Methyl-2-Pentanone	10	11 U		U 12 U
2-Hexanone	10	11 U	•	U 12 U
Tetrachloroethene	10	11 U		U 12 U
1,1,2,2-Tetrachloroethane	10	11 U		U 12 U
Toluene	10	11 U		U 12 U
Chlorobenzene	10	11 U		U 12 U
Ethylbenzene	10	11 U		U 12 U
Styrene	10 10	11 U		U 12 U U 12 U
Total Xylenes		11 U	12 	U 12 U
	on Factor:	1.00	1.00	1.00
	nt Solids:	90	82	82
Sample Volume\Weig	ht (ml\g):	5.00	5.00	5.00
Associated Met	hod Blank:	D0852.D	D0852.D	D0852.D
Associated Equipm			HFQSXX9XXX94XX	HFQSXX9XXX94XX
Associated Fi		-		
Associated T		-	-	, <del>-</del>
	•			

Site: SOIL BORINGS U: not detected B: blank contamination

J: estimated

Table 1 Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-101 6 HFBS101xx694XX 2235104 10/20/94 10/25/94 12/01/94	BS-102 8 HFBS102XX894XX 2235103 10/20/94 10/25/94 12/02/94	BS-103 10 HFBS103X1094XX 2235105 10/20/94 10/25/94 12/02/94	BS-104 8 HFBS104XX894XX 2235106 10/21/94 10/25/94 12/02/94	BS-105 10 HFBS105X1094XX 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 HFBS106X1294XX 2236602 10/24/94 10/28/94 11/30/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 11/30/94	BS-108 8 HFBS108XX894XX 2235102 10/19/94 10/25/94 12/02/94
ANALYTE SOW-3/90	II CRQL				•				
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene 4-Chlorocyclopentadiene 4-Chlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate	330 330 330 330 330 330 330 330 330 330	690 U	430 U	600 U U 600 U 60	760 U	810 U 810 U	680 U G80 U G80 U G80 U U U G80 U U U U U U U U U U U U U U U U U U U	400 U U U U U U U U U U U U U U U U U U	460 U U 460 U
Acenaphthylene 2,6-Dinitrotoluene	330 330	690 U 690 U	430 U 430 U	600 U 600 U	760 U 760 U	810 U 810 U	680 U	400 U	460 U

Table 1 Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	6 : HFBS101XX694X : 2235104 : 10/20/94 : 10/25/94	BS-102 8 X HFBS102XX894X 2235103 10/20/94 10/25/94 12/02/94	BS-103 10 X HFBS103X1094X 2235105 10/20/94 10/25/94 12/02/94	BS-104 8 X HFBS104XX894; 2235106 10/21/94 10/25/94 12/02/94	BS-105 10 XX HFBS105X1094X 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 ( HFBS106X1294XX 2236602 10/24/94 10/28/94 11/30/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 11/30/94	BS-108 8 HFBS108XX894XX 2235102 10/19/94 10/25/94 12/02/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	800 330 800 800 330 330 330 800 80	1700 U 690 U 1700 U 1700 U 1700 U 690 U 690 U 1700 U 1700 U 1700 U 1700 U 1700 U 1700 U 690 U	1000 U 390 J 1000 U 1000 U 430 U 430 U 430 U 430 U 430 U 430 U 1000 U 1000 U 1000 U 1200 160 J 430 U	1400 U 600 U 1400 U 600 U 600 U 600 U 600 U 1400 U 1400 U 1400 U 600 U 1400 U 230 J 260 U 600 U 230 J 260 U 600 U 600 U 87 J 80 J 600 U 87 J 80 J 600 U 600 U	1800 U 760 U	810 U 2000 U 810 U 810 U 810 U 810 U 2000 U 810 U	1600 U U 1600 U U 1600 U U 1600 U U 1600 U U 1600 U 1600 U U 1600 U 1600 U U 1600 U 1600 U 1600 U U 1600 U	950 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	1100 U U U U U U U U U U U U U U U U U U
Diluti	ion Factor: ent Solids: ght (ml\g): thod Blank:	1.00 48 30.0 R1658.D	1.00 77 30.0 R1658.D	1.00 56 30.0 R1658.D	1.00 44 30.0 R1658.D	1.00 41 30.0 R1658.D	1.00 49 30.0 R1597.D	1.00 84 30.0 R1597.D	1.00 72 30.0 R1658.D
Associated Equipm Associated Fi		ASXX9XXX94XX H -	FQSXX9XXX94XX H	FQSXX9XXX94XX H	FQSXX9XXX94XX	HFQSXX9XXX94XX H	FQSXX9XXX94XX HF -	QSXX9XXX94XX HF	QSXX9XXX94XX

Table 1 Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-109 7 HFBS109XX794XX 2235101 10/19/94 10/25/94 12/01/94	BS-110 DUP 12 HFBS110X1294XD 2232313 10/18/94 10/21/94 12/02/94	BS-110 12 HFBS110X1294XX 2232312 10/18/94 10/21/94 12/02/94
ANALYTE SOW-3/90 -	II CRQL			
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol	330 330 330 330 330 330 330 330	370 U	410 U U U U U U U U U U U U U U U U U U U	410 U U 980 U U 410 U U U 980 U U U U U U U U U U U U U U U U U U U
2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330	370 U 370 U 370 U 370 U	410 U 410 U 410 U	410 U 410 U 410 U

Table 1 Laboratory Report of Analysis

ANALYTE - 0011 7 (00	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-109 7 HFBS109XX794 2235101 10/19/94 10/25/94 12/01/94	BS-110 DU 12 XX HFBS110X129 2232313 10/18/94 10/21/94 12/02/94	12 PAXD HFBS110X1294XX 2232312 10/18/94 10/21/94
ANALYTE SOW-3/90 -	II CRQL			
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene	800 330 800 800 330 330 330 330	890 U 890 U 890 U 370 U 370 U 370 U 370 U 890 U 370 U	410 980 980 980 410 410 410 980 980 410 410 410 410 410 410 410 41	U 980 U 410 U 980 U 980 U 410
Benzo(k)Fluoranthene Benzo(a)Pyrene	330	370 U		Ŭ 410 Ŭ
Indeno(1,2,3-c,d)Pyrene	330	370 U		U 410 U
Dibenz(a,h)Anthracene	330 330	370 U 370 U		U 410 U U 410 U
Benzo(g,h,i)perylene				
Diluti	on Factor: nt Solids:	1.00 90 30.0	1.00 82 30.0	1.00 82 30.0
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	R1658.D SXX9XXX94XX -	Q1795.D HFQSXX9XXX94XX	Q1795.D HFQSXX9XXX94XX

## PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

## Semivolatile Organic Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-101 6 HFBS101XX694XX 2235104 10/20/94 10/25/94 12/01/94	BS-102 8 HFBS102XX894XX 2235103 10/20/94 10/25/94 12/02/94	BS-103 10 HFBS103X1094XX 2235105 10/20/94 10/25/94 12/02/94	BS-104 8 HFBS104XX894XX 2235106 10/21/94 10/25/94 12/02/94	BS-105 10 HFBS105X1094XX 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 HFBS106X1294XX 2236602 10/24/94 10/28/94 11/30/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 11/30/94	BS-108 8 HFBS108XX894XX 2235102 10/19/94 10/25/94 12/02/94
ANALYTE SOW-3/90	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dimethylphenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene	330 330 330 330 330 330 330 330 330 330	690 UJ	430 UJ 430 UJ	600 UJ 600 UJ	760 UJ	810 UJ 810 UJ	680 UJ 680 UJ	400 400 400 400 400 400 400 400 400 400	460 UJ 460 UJ
2-Nitroaniline	800	1700 UJ	1000 UJ	1400 UJ	1800 UJ	2000 UJ	1600 UJ	950 U	1100 UJ
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330	680 N1 680 N1 680 N1	430 UJ 430 UJ 430 UJ	900 N7 900 N7 900 N7	760 UJ 760 UJ 760 UJ	810 UJ 810 UJ 810 UJ	980 N1 980 N1 980 N1	400 U 400 U 400 U	460 ÜJ 460 ÜJ 460 ÜJ

Site: SOIL BORINGS
U: not detected
J: estimated

R: unusable

Table 1 Laboratory Report of Analysis

-	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE ANALYZED:	6 HFBS101XX694XX 2235104 10/20/94	BS-102 8 HFBS102XX894XX 2235103 10/20/94 10/26/94	BS-103 10 HFBS103X1094X 2235105 10/20/94 10/27/94	BS-104 8 (X HFBS104XX894X: 2235106 10/21/94 10/26/94	BS-105 10 X HFBS105X1094X 2235107 10/21/94 10/26/94	BS-106 12 ( HFBS106X1294XX 2236602 10/24/94 10/27/94	BS-107 14 HFBS107X1494X 2236601 10/24/94 10/27/94	BS-108 8 X HFBS108XX894XX 2235102 10/19/94 10/26/94
ANALYTE SOW-3/90 -	II CRQL								
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropane cis-1,3-Dichloropropene Trichloroethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Total Xylenes	10 10 10 10 10 10 10 10 10 10 10 10 10 1	21 U U U U U U U U U U U U U U U U U U U	13 UUUUBB 13 13 13 13 13 13 13 13 13 13 13 13 13	18 U U U U U U U U U U U U U U U U U U U	23 U 23 U 23 U 23 U 23 U 23 U 23 U 23 U	24 U U U B 24 U U U U U U U U U U U U U U U U U U	20 U U 20 U U U U U U U U U U U U U U U	12 U U U U U U U U U U U U U U U U U U U	14 U U 14 U U U U U U U U U U U U U U U
	========= on Factor: nt Solids: ht (ml\a):	1.00 48 5.00	1.00 77 5.00	1.00 56 5.00	1.00 44 5.00	1.00 41 5.00	1.00 49 5.00	1.00 84 5.00	1.00 72 5.00
Associated Met Associated Equipm Associated Fi Associated T	hod Blank: ent Blank: HFG eld Blank:	D0871.D SXX9XXX94XX HF - -	D0852.D FQSXX9XXX94XX HF	D0871.D QSXX9XXX94XX F	DO852.D HFQSXX9XXX94XX H - -	D0852.D FQSXX9XXX94XX HI - -	D0871.D FQSXX9XXX94XX HF - -	D0871.D QSXX9XXX94XX H - -	D0852.D FQSXX9XXX94XX - -

Site: SOIL BORINGS U: not detected J: estimated

B: blank contamination

Table 1 Laboratory Report of Analysis

	LOCATION:		BS-110 DUP	BS-110
	DEPTH: ISIS ID: LAB NUMBER:	HFBS109XX794XX	12 K HFBS110X1294XI 2232313	12 D HFBS110X1294XX 2232312
	DATE SAMPLED: DATE ANALYZED:	10/19/94	10/18/94 10/26/94	10/18/94 10/26/94
ANALYTE SOW-3/90	II CRQL			
Chloromethane	10.	11 U	12 U	12 U
Bromomethane	10	11 U	12 U	12 U
Vinyl Chloride	10	11 U	12 U	12 U
Chloroethane	10	11 U	12 U	12 U
Methylene Chloride	• 10	4 JB	6 JB	2 JB
Acetone	10	5 JB	7 JB	12 U
Carbon Disulfide	10	11 U	12 U	12 U
1,1-Dichloroethene	10	11 U	12 U	12 U
1,1-Dichloroethane	10	11 U	12 U	12 U
1,2-Dichloroethene (total)	10	11 U	12 U	12 U
Chloroform	10	11 U	12 U	12 U
1,2-Dichloroethane	10	11 U	12 U	12 U
2-Butanone	10	11 U	12 U	12 U
1,1,1-Trichloroethane	10	11 U	12 U	12 U
Carbon Tetrachloride	10	11 U	12 U	12 U
Bromodichloromethane	10	11 U	12 U	12 U
1,2-Dichloropropane	10	11 U	12 U 12 U	12 U
cis-1,3-Dichloropropene	10	11 U		12 U
Trichloroethene	10	11 U	12 U	12 U
Dibromochloromethane	10 10	11 U 11 U	12 U 12 U	12 U 12 U
1,1,2-Trichloroethane	10	11 0	12 U	12 U
Benzene	10	11 0	12 U	12 U
trans-1,3-Dichloropropene Bromoform	10	11 0	12 U	12 U
4-Methyl-2-Pentanone	10	11 0	12 0	12 U
2-Hexanone	10	11 Ŭ	12 U	12 U
Tetrachloroethene	10	11 Ŭ	12 0	12 0
1,1,2,2-Tetrachloroethane	10	11 Ŭ	12 Ŭ	12 Ū
Toluene	10	11 Ŭ	12 Ŭ	12 Ū
Chlorobenzene	10	11 Ŭ	12 Ŭ	12 Ŭ
Ethylbenzene	10	11 Ū	12 Ū	12 Ū
Styrene	10	11 U	12 U	12 U
Total Xylenes	10	11 U	12 U	12 U
	ion Factor:	1.00	1.00	1.00
	ent Solids:	90	82	82
Sample Volume\Weig	ght (ml\g):	5.00	5.00	5.00
Associated Met	thod Blank:	D0852.D	D0852.D	D0852.D
Associated Equip		SXX9XXX94XX HF	QSXX9XXX94XX H	FQSXX9XXX94XX
Associated F		-	-	•
Associated 1	rip Blank:	-	-	. •

Site: SOIL BORINGS U: not detected B: blank contamination

J: estimated

page 2

Table 1 Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-101 6 HFBS101xx694XX 2235104 10/20/94 10/25/94 12/01/94	BS-102 8 HFBS102XX894XX 2235103 10/20/94 10/25/94 12/02/94	BS-103 10 HFBS103X1094XX 2235105 10/20/94 10/25/94 12/02/94	BS-104 8 HFBS104XX894XX 2235106 10/21/94 10/25/94 12/02/94	BS-105 10 HFBS105X1094XX 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 HFBS106X1294XX 2236602 10/24/94 10/28/94 11/30/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 11/30/94	BS-108 8 HFBS108XX894XX 2235102 10/19/94 10/25/94 12/02/94
ANALYTE SOW-3/90	II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloro-3-Methylphenol 2-Methylnaphthalene 4-Chlorocyclopentadiene 4-Chlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate	330 330 330 330 330 330 330 330 330 330	690 U	430 U	600 U U 600 U U 600	760 U	810 U 810 U	680 U G80 U G80 U G80 U U U G80 U U U U U U U U U U U U U U U U U U U	400 U U U U U U U U U U U U U U U U U U	460 U U 460 U
Acenaphthylene 2,6-Dinitrotoluene	330 330	690 U 690 U	430 U 430 U	600 U 600 U	760 U 760 U	810 U 810 U	680 U	400 U	460 U

Table 1 Laboratory Report of Analysis

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	6 : HFBS101XX694X : 2235104 : 10/20/94 : 10/25/94	BS-102 8 X HFBS102XX894X 2235103 10/20/94 10/25/94 12/02/94	BS-103 10 X HFBS103X1094X 2235105 10/20/94 10/25/94 12/02/94	BS-104 8 X HFBS104XX894; 2235106 10/21/94 10/25/94 12/02/94	BS-105 10 XX HFBS105X1094X 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 ( HFBS106X1294XX 2236602 10/24/94 10/28/94 11/30/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 11/30/94	BS-108 8 HFBS108XX894XX 2235102 10/19/94 10/25/94 12/02/94
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	800 330 800 800 330 330 330 800 80	1700 U 690 U 1700 U 1700 U 1700 U 690 U 690 U 1700 U 1700 U 1700 U 1700 U 1700 U 1700 U 690 U	1000 U 390 J 1000 U 1000 U 430 U 430 U 430 U 430 U 430 U 430 U 1000 U 1000 U 1000 U 1200 160 J 430 U	1400 U 600 U 1400 U 600 U 600 U 600 U 600 U 1400 U 1400 U 1400 U 600 U 1400 U 230 J 260 U 600 U 230 J 260 U 600 U 600 U 87 J 80 J 600 U 87 J 80 J 600 U 600 U	1800 U 760 U	810 U 2000 U 810 U 810 U 810 U 810 U 2000 U 810 U	1600 U U 1600 U U 1600 U U U 1600 U U 1600 U 1	950 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	1100 U U U U U U U U U U U U U U U U U U
Diluti	ion Factor: ent Solids: ght (ml\g): thod Blank:	1.00 48 30.0 R1658.D	1.00 77 30.0 R1658.D	1.00 56 30.0 R1658.D	1.00 44 30.0 R1658.D	1.00 41 30.0 R1658.D	1.00 49 30.0 R1597.D	1.00 84 30.0 R1597.D	1.00 72 30.0 R1658.D
Associated Equipm Associated Fi		ASXX9XXX94XX H -	FQSXX9XXX94XX H	FQSXX9XXX94XX H	FQSXX9XXX94XX	HFQSXX9XXX94XX H	FQSXX9XXX94XX HF -	QSXX9XXX94XX HF	QSXX9XXX94XX

Table 1 Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-109 7 HFBS109XX794XX 2235101 10/19/94 10/25/94 12/01/94	BS-110 DUP 12 HFBS110X1294XD 2232313 10/18/94 10/21/94 12/02/94	BS-110 12 HFBS110X1294XX 2232312 10/18/94 10/21/94 12/02/94
ANALYTE SOW-3/90 -	II CRQL			
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol	330 330 330 330 330 330 330 330	370 U	410 U U U U U U U U U U U U U U U U U U U	410 U U 980 U U 410 U U U 980 U U U U U U U U U U U U U U U U U U U
2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330	370 U 370 U 370 U	410 U 410 U 410 U	410 U 410 U 410 U

Table 1 Laboratory Report of Analysis

ANALYTE - 0011 7 (00	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-109 7 HFBS109XX794 2235101 10/19/94 10/25/94 12/01/94	BS-110 DU 12 XX HFBS110X129 2232313 10/18/94 10/21/94	12 PAXD HFBS110X1294XX 2232312 10/18/94 10/21/94
ANALYTE SOW-3/90 -	II CRQL			
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene	800 330 800 800 330 330 330 330	890 U 890 U 890 U 370 U 370 U 370 U 370 U 890 U 370 U	410 980 980 980 410 410 410 980 980 410 410 410 410 410 410 410 41	U 980 U 410 U 980 U 980 U 410
Benzo(k)Fluoranthene Benzo(a)Pyrene	330	370 U		Ŭ 410 Ŭ
Indeno(1,2,3-c,d)Pyrene	330	370 U		U 410 U
Dibenz(a,h)Anthracene	330 330	370 U 370 U		U 410 U U 410 U
Benzo(g,h,i)perylene				
Diluti	on Factor: nt Solids:	1.00 90 30.0	1.00 82 30.0	1.00 82 30.0
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	R1658.D SXX9XXX94XX -	Q1795.D HFQSXX9XXX94XX	Q1795.D HFQSXX9XXX94XX

#### PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

#### Semivolatile Organic Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

ANALYTE SOW-3/90 -	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-101 6 HFBS101XX694XX 2235104 10/20/94 10/25/94 12/01/94	BS-102 8 HFBS102XX894XX 2235103 10/20/94 10/25/94 12/02/94	BS-103 10 HFBS103X1094XX 2235105 10/20/94 10/25/94 12/02/94	BS-104 8 HFBS104XX894XX 2235106 10/21/94 10/25/94 12/02/94	BS-105 10 HFBS105X1094XX 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 HFBS106X1294XX 2236602 10/24/94 10/28/94 11/30/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 11/30/94	BS-108 8 HFBS108XX894XX 2235102 10/19/94 10/25/94 12/02/94
ANALYTE SOW-3/90	· II CRQL								
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dimethylphenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene	330 330 330 330 330 330 330 330 330 330	690 UJ 690 UJ	430 UJ 430 UJ	600 UJ 600 UJ	760 UJ	810 UJ 810 UJ	680 UJ 680 UJ	400 400 400 400 400 400 400 400 400 400	460 UJ 460 UJ
2-Nitroaniline	800	1700 UJ	1000 UJ	1400 UJ	1800 UJ	2000 UJ	1600 UJ	950 U	1100 UJ
Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	330 330 330	980 N1 980 N1 980 N1	430 UJ 430 UJ 430 UJ	900 N7 900 N7 900 N7	760 UJ 760 UJ 760 UJ	810 UJ 810 UJ 810 UJ	980 N1 980 N1 980 N1	400 U 400 U 400 U	460 ÜJ 460 ÜJ 460 ÜJ

Site: SOIL BORINGS
U: not detected
J: estimated

R: unusable

Table 2 Validation / Summary Table

	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	6: HFB\$101XX694XX : 2235104 : 10/20/94 : 10/25/94	BS-102 8 HFBS102XX894XX 2235103 10/20/94 10/25/94 12/02/94	BS-103 10 K HFBS103X1094X 2235105 10/20/94 10/25/94 12/02/94	BS-104 8 K HFBS104XX894XX 2235106 10/21/94 10/25/94 12/02/94	BS-105 10 10 10 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 HFBS106X1294XX 2236602 10/24/94 10/28/94 11/30/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 11/30/94	BS-108 8 HFBS108XX894XX 2235102 10/19/94 10/25/94 12/02/94
ANALYTE SOW-3/90 -	II CRQL	•							
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene Dibenz(a,h)Anthracene	800 330 800 800 800 330 330 330	1700 UJ 690 UJ 1700 UJ 1700 UJ 690 UJ 690 UJ 690 UJ 1700 UJ 1700 UJ 1700 UJ 690 UJ	1000 UJ 1000 UJ 1000 UJ 1000 UJ 430 UJ 430 UJ 1000 UJ 430 UJ 1000 UJ 430 UJ 1200 J 160 J 430 UJ 1200 J 160 J 430 UJ	1400 UJ 600 UJ 1400 UJ 600 UJ 600 UJ 600 UJ 1400 UJ 600 UJ 1400 UJ 1400 UJ 1400 UJ 1400 UJ 1400 UJ 600 UJ 1400 UJ 87 J 80 J 600 UJ 600 UJ 1600 UJ 1600 UJ 1600 UJ	1800 UJ 760 UJ	2000 UJ 810 UJ 2000 UJ 810 UJ 810 UJ 810 UJ 810 UJ 2000 UJ 810 UJ 2000 UJ 810 UJ	980 NY 98	950 U 400 U 950 U 400 U	1100 UJ 460 UJ 1100 UJ 1100 UJ 290 UJ 460 UJ 460 UJ 1100 UJ 1100 UJ 1100 UJ 460 UJ 1100 UJ 460 UJ 1100 UJ 460 UJ 1100 UJ
Benzo(g,h,i)perylene	330	690 UJ	93 J	600 UJ	760 UJ	810 UJ	680 UJ	400 U	460 UJ
Diluti	on Factor: nt Solids:	1.00 48 30.0	1.00 77 30.0	1.00 56 30.0	1.00 44 30.0	1.00 41 30.0	1.00 49 30.0	1.00 84 30.0	1.00 72 30.0
Associated Met Associated Equipm Associated Fi	ent Blank: HF	R1658.D QSXX9XXX94XX HF	R1658.D QSXX9XXX94XX HI	R1658.D FQSXX9XXX94XX H	R1658.D FQSXX9XXX94XX HF	R1658.D GSXX9XXX94XX HI	R1597.D GSXX9XXX94XX HFG -	R1597.D PSXX9XXX94XX HF	R1658.D QSXX9XXX94XX -

Site: SOIL BORINGS
U: not detected R: unusable
J: estimated

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Semivolatile Organic Soil Analysis (ug/kg)

Table 2 Validation / Summary Table

·	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-109 7 HFBS109XX794XX 2235101 10/19/94 10/25/94 12/01/94	BS-110 DUP 12 HFBS110X1294XD 2232313 10/18/94 10/21/94 12/02/94	BS-110 12 HFBS110X1294XX 2232312 10/18/94 10/21/94 12/02/94
ANALYTE SON-3/90 -	II CRQL			
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-oxybis(1-Chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2,4,5-Trichlorophenol	330 330 330 330 330 330 330 330 330 330	370 U	410 UJ 410 UJ	410 UJ 410 UJ
2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene	800 330 330 330	890 U 370 U 370 U 370 U	980 UJ 410 UJ 410 UJ 410 UJ	980 UJ 410 UJ 410 UJ 410 UJ

Site: SOIL BORINGS

U: not detected R: unusable

J: estimated

Table 2 Validation / Summary Table

	LOCATION:			BS-110 D	UP	BS-110	
	DEPTH:			12	0/1/0	12	•
		HFBS109XX79	4XX HF			HFBS110X129	94XX
	LAB NUMBER:			2232313		2232312	
	DATE SAMPLED:			10/18/9		10/18/9	
	DATE EXTRACTED:			10/21/9		10/21/9	
	DATE ANALYZED:	12/01/94	•	12/02/9	4	12/02/9	4
ANALYTE SOW-3/90 -	II CRQL	s.					
3-Nitroaniline	800	890	U	980	UJ	980	UJ
Acenaphthene	330		บ		กา	410	กา
2,4-Dinitrophenol	800		Ŭ.	980	N1	980	n1
4-Nitrophenol	800		Ŭ	980	N1	980 980	UJ
Dibenzofuran	330		Ü	410		410	
	330 330		Ü	410	n1 n1	410	N1 N1
2,4-Dinitrotoluene	330 330		-				
Diethylphthalate			Ü	410	UJ	410	UJ
4-Chlorophenyl-phenylether	330	370	Ü	410	ΠÌ	410	IJ
Fluorene	330	370	Ä	410	ΝJ	410	IJ
4-Nitroaniline	800	890	Ü	980	ΩĴ	980	ΩJ
4,6-Dinitro-2-methylphenol	800		Ü	980	ΩĴ	980	ΩĴ
N-Nitrosodiphenylamine	330		Ü	410	เก	410	IJ
4-Bromophenyl-phenylether	330		U	410	UJ	410	UJ
Hexachlorobenzene	330		U	410	UJ	410	UJ
Pentachlorophenol	800	890	U	980	ÑΊ	980	UJ
Phenanthrene	330		U	410	UJ	410	UJ
Anthracene	330		U	410	UJ	410	UJ
Carbazole	330		U	410	UJ	410	UJ
Di-n-butylphthalate	330		U	410	บง	410	IJ
Fluoranthene	330		U	410	UJ	410	IJ
Pyrene	330		U	410	UJ	410	IJ
Butylbenzylphthalate	330	• • •	U	410	UJ	410	UJ
3,3'-Dichlorobenzidine	330		U	410	ΠÌ	410	UJ
Benzo(a)Anthracene	330		UJ	410	UJ	410	IJ
Chrysene	330		U	410	IJ	410	IJ
bis(2-Ethylhexyl)phthalate	330		UJ	410	UJ	960	J
Di-n-octylphthalate	330		U	410	IJ	410	UJ
Benzo(b)fluoranthene	330		U	410	UJ	410	UJ
Benzo(k)Fluoranthene	330		U		UJ	410	UJ
Benzo(a)Pyrene	330		U	410	UJ	410	UJ
Indeno(1,2,3-c,d)Pyrene	330		U	410	UJ	410	UJ
Dibenz(a,h)Anthracene	330	370	U	410	UJ	410	UJ
Benzo(g,h,i)perylene	330	370	U	410	UJ	410	UJ
	on factor:	1.00	======	1.00	# <b>##</b>	1.00	===
	ent Solids:	90		82		82	
Sample Volume\Weig		30.0		30.0		30.0	
Sample volume/werg	hie /mc/A\	30.0		30.0		30.0	
Associated Met	hod Blank:	R1658.D		Q1795.D		Q1795.D	
Associated Equipm		SXX9XXX94XX	HFQSXX		HFQ	SXX9XXX94XX	
Associated Fi		-		-		-	

Site: SOIL BORINGS
U: not detected
J: estimated R: unusable

Table 2 Validation / Summary Table

	LOCATIC ISIS I LAB NUMBE DATE SAMPLE DATE EXTRACTE DATE ANALYZE	D: HFWT101XXX94XD R: 2228908 D: 10/13/94 D: 10/19/94	WT-101 HFWT101XXX94X 2228905 10/13/94 10/19/94 11/27/94	WT-102 K HFWT102XXX94XX 2228909 10/13/94 10/19/94 11/28/94
ANALYTE SOW-	3/90 - 11 CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254 Aroclor-1256	1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	R R R R R R R R R R R R R R R R R R R	R R R R R R R R R R R R R R R R R R R	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
	Dilution Factor: Percent Solids:	1.00 95	1.00 94	1.00 91
Associate Associated I	e\Weight (ml\g): ed Method Blank: Equipment Blank: I ted Field Blank:	1.00 PMB1019B HFQSXX5XXX94XX HF	1.00 PMB1019B QSXX5XXX94XX H	1.00 PMB1019B FQSXX5XXX94XX -

Site: WASTE J: estimated R: unusable

Table 2 Validation / Summary Table

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	WT-101 DUP HFWT101XXX94XD 228908 10/13/94	WT-101 HFWT101XXX94XX 228905 10/13/94	WT-102 HFWT102XXX94XX 228909 10/13/94
ANALYTE	SOW-3/90 - II CRDL			
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	40 12 2 40 1 1 1000 2 10 5 20 0.6 1000 3 0.1 8 1000 1 2 1000 2	14500 12.9 3.4 142 3.2 2.9 75000 39.2 4.6 93.7 40000 229 15000 1420 0.12 18.6 734 J 0.98 UJ 511 J 1.6 J 15.6 J	11300 6.7 U 3.6 J 119 2.2 3.6 60900 51.6 4.3 J 80.1 J 45000 1870 0.11 U 26.1 555 J R 0.89 UJ 481 J 1.1 U 19.3 1330 0.51 UJ	360 826 4.9 J 4.8 J 0.34 U 2320 0.85 U 1.0 U 8.9 J 668 J 48.6 0.11 U 4.4 U 142 U 8.5 U 135 J 1.1 U 2.9 U 29.5 U 0.67 UJ
	Percent Solids:	95	94	91

Associated Method Blank: Associated Equipment Blank: Associated Field Blank: MBHANNA6S MBHANNA6S MBHANNA6S HFQSXX5XXX94XX HFQSXX5XXX94XX

Site: WASTE U: not detected J: estimated R: unusable

Table 1 Laboratory Report of Analysis

		LAB NUMBER DATE SAMPLED DATE EXTRACTED DATE ANALYZED	: 6 : HFBS101XX694X : 2235104 : 10/20/94 : 10/25/94	BS-102 8X HFBS102XX894 2235103 10/20/94 10/25/94 12/01/94	BS-103 10 XX HFBS103X1094 2235105 10/20/94 10/25/94 12/01/94	BS-104 4XX HFBS104XX89 2235106 10/21/94 10/25/94 12/01/94	2235107 10/21/94 10/25/94	BS-106 12 4XX HFBS106X1294X 2236602 10/24/94 10/28/94 12/04/94	BS-107 14 X HFBS107X1494> 2236601 10/24/94 10/28/94 12/04/94	BS-108 8 X HFBS108XX894XX 2235102 10/19/94 10/25/94 12/01/94
ANALYTE	sow-3/90 -	II CRQL	_		•					
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindar Heptachlor Aldrin Heptachlor Epoxic Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfan 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-121 Aroclor-1221 Aroclor-1222 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254	de	1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	3.5 U 3.5 U 3.5 U 3.5 U 3.5 U 3.5 U 6.9 U	2.2 U 2.2 U 2.2 U 2.2 U 2.2 U 2.2 U 2.2 U 4.3 U	3.0 3.0 3.0 3.0 3.0 5.9 5.9 5.9 5.9 5.9 5.9 5.9 3.0 5.9 120 5.9 5.9	J 3.9 J 3.9 J 3.9 J 3.9 J 3.9 J 7.5 J	U 4.1   U 8.0   U 8.0	3.5 U 3.6 U 3.7 U 3.7 U 3.8 U	2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 2.0 U 2.0 U 2.0 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U	2.4 U U U U U U U U U U U U U U U U U U U
Sample		ion Factor: ent Solids: ght (ml\g):	1.00 48 30.0	1.00 77 30.0	1.00 56 30.0	1.00 44 30.0	1.00 41 30.0	1.00 49 30.0	1.00 84 30.0	1.00 72 30.0
Assoc	sociated Met iated Equip ssociated F	ment Blank: HF	PSB1025A1 GSXX9XXX94XX F	PSB1025A1 IFQSXX9XXX94XX -	PSB1025A1 HFQSXX9XXX94XX -	PSB1025A1 HFQSXX9XXX94XX	PSB1025A1 HFQSXX9XXX94XX	PSB1028A HFQSXX9XXX94XX H	PSB1028A FQSXX9XXX94XX H	PSB1025A1 IFQSXX9XXX94XX -

Site: SOIL BORINGS U: not detected

Table 1
Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	BS-109 7 HFBS109XX794 2235101 10/19/94 10/25/94 12/01/94	BS-110 DU 12 6XX HFBS110X129 2232313 10/18/94 10/21/94 11/29/94	12 4XD HFBS110X1294XX 2232312 10/18/94 10/21/94
ANALYTE SOW-3/90	- II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1232 Aroclor-1248 Aroclor-1254 Aroclor-1254	1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	1.9 L 1.9 L 1.9 L 1.9 L 1.9 L 1.9 L 3.7 L	2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1	U 2.1 U 4.0
	ion Factor: ent Solids: ght (ml\g):	1.00 90 30.0	1.00 82 30.0	1.00 82 30.0
Associated Me Associated Equip Associated F	ment Blank: HFQ	PSB1025A1 SXX9XXX94XX -	PSB1021B HFQSXX9XXX94XX -	PSB1021B HFQSXX9XXX94XX -

Site: SOIL BORINGS U: not detected

#### Pesticides/PCBs Soil Analysis (ug/kg)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Table 2 Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	6 HFBS101XX694XX 2235104 10/20/94 10/25/94	BS-102 8 HFBS102XX894X 2235103 10/20/94 10/25/94 12/01/94	BS-103 10 X HFBS103X1094X 2235105 10/20/94 10/25/94 12/01/94	BS-104 8 X HFBS104XX894X 2235106 10/21/94 10/25/94 12/01/94	BS-105 10 x HFBS105X1094XX 2235107 10/21/94 10/25/94 12/02/94	BS-106 12 HFBS106X1294XX 2236602 10/24/94 10/28/94 12/04/94	BS-107 14 HFBS107X1494XX 2236601 10/24/94 10/28/94 12/04/94	BS-108 8 HFBS108xx894xx 2235102 10/19/94 10/25/94 12/01/94
ANALYTE SOW-3/90	- 11 CRQL				•				
	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 6.9 UJ 6.9 UJ 6.9 UJ 6.9 UJ 6.9 UJ 6.9 UJ 6.9 UJ 6.9 UJ 69 UJ 69 UJ 69 UJ	2.2 UJ 2.2 UJ 2.2 UJ 2.2 UJ 2.2 UJ 2.2 UJ 4.3 UJ 4.	3.0 UJ 3.0 UJ 3.0 UJ 3.0 UJ 3.0 UJ 3.0 UJ 5.9 UJ 5.9 UJ 5.9 UJ 5.9 UJ 5.9 UJ 3.0 UJ 3.0 UJ 3.0 UJ 3.0 UJ 5.9 UJ 5.9 UJ 5.9 UJ 5.9 UJ 5.9 UJ	3.9 UJ 3.9 UJ 3.9 UJ 3.9 UJ 3.9 UJ 3.9 UJ 7.5 UJ	4.1 UJ 8.0 UJ 80 UJ 80 UJ 80 UJ 80 UJ	3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 3.5 UJ 6.7 UJ	1.00	2.4 UJ 4.6 UJ
Pero Sample Volume\We	cent Solids: ight (ml\g):	48 30.0	77 30.0	56 30.0	44 30.0	41 30.0	49 30.0	84 30.0	72 30.0
Associated M Associated Equi Associated	pment Blank: HFG	PSB1025A1 SXX9XXX94XX HF	PSB1025A1 QSXX9XXX94XX H	PSB1025A1 FQSXX9XXX94XX H	PSB1025A1 FQSXX9XXX94XX H	PSB1025A1 FQSXX9XXX94XX HF	PSB1028A GSXX9XXX94XX HF	PSB1028A . QSXX9XXX94XX HF	PSB1025A1 QSXX9XXX94XX -

Table 2 Validation / Summary Table

	LOCATIO DEPT ISIS I LAB NUMBE DATE SAMPLE DATE EXTRACTE DATE ANALYZE	H: 7 D: HFBS109XX794 R: 2235101 D: 10/19/94 D: 10/25/94	BS-110 DU 12 XX HFBS110X129 2232313 10/18/94 10/21/94 11/29/94	12 4XD HFBS110X1294XX 2232312 10/18/94 10/21/94
ANALYTE	SOW-3/90 - II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDT Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1224 Aroclor-1248 Aroclor-1254 Aroclor-1250	1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3	1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 1.9 U 3.7 U	2.1  3.1  3.1  3.1  3.1  3.1  3.1  3.1	U 2.1 U 2.1 U U U 4.0
Sample V	Dilution Factor: Percent Solids: Volume\Weight (ml\g):	1.00 90 30.0	1.00 82 30.0	1.00 82 30.0
Asso Associa	ociated Method Blank:	PSB1025A1	PSB1021B HFQSXX9XXX94XX	PSB1021B HFQSXX9XXX94XX

Table 1
Laboratory Report of Analysis

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED:	BS-101 6 HFBS101XX694XX 235104 10/20/94	BS-102 8 HFBS102XX894XX 235103 10/20/94	BS-103 10 HFBS103X1094XX 235105 10/20/94	BS-104 8 HFBS104XX894XX 235106 10/21/94	BS-105 10 HFBS105X1094XX 235107 10/21/94	BS-106 12 HFBS106X1294XX 236602 10/24/94	BS-107 14 HFBS107X1494XX 236601 10/24/94	BS-108 8 HFBS108XX894XX 235102 10/19/94
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	40	29900	15700	11800	35300	43600	69000	16600	6100
Antimony	12	15.8 U	21.1	31.7	16.3 U	18.2 U	13.0 U	8.6 U	13.9 в
Arsenic	2	35.1 SN	7.7 SN	36.9 N	4.0 UN	4.5 UN	6.7 U	20.8	15.8 SN
Barium	40	224	106	146	188	464	263	91.2	138
Beryllium		2.4	2.0	2.0	3.8	6.3	10.2	0.54 B	0.55 U
Cadmi um	1	2.4 *	1.3 *	17.4 *	0.86 U*	0.96 U*	0.68 U	0.45 U	1.9 *
Calcium	1000	249000 *	77500 *	60600 *	132000 *	233000 *	221000	36700	19100 *
Chromium	2	53.4 *	15.5 *	38.6 *	2.1 U*	9.6 *	15.1	24.4	26.5 *
Cobalt	10	13.7 B	9.7 B	28.7	2.6 U	2.9 U	5.3 B	15.1	7.5 B
Соррег		31.7 N	11.5 N	86.4 N	2.1 UN	7.3 BN	13.9	26.8	238 N
Iron	20	19300	87600	53300	1780	9450	30600	31600	38300
Lead	0.6	144 N*	47.8 N*	1830 N*	1.9 N*	113 SN*	3.0	11.4	.564 N*
Magnesium	1000	5360 *	16900 *	12500 *	9220 *	16700 *	19900	13500	4550 *
Manganese	3	216 *	2260 *	7560 *	2710 *	2690 *	2040	524	800 *
Mercury	0.1	0.21 U 25.6 *	0.13 U	0.18 U	0.22 U 11.1 U*	0.24 U	0.20 U	0.12 U	0.43
Nickel	8 1000		9.2 * 902 B	49.7 * 4990		12.4 U*	8.9 U	37.3 7040	22.6 *
Potassium Selenium	1000	53600 8.0 +N	1.2 UN	1.7 UWN	655 B \ 2.0 UWN	1230 B 2.3 UWN	1330 B 4.5 +	3010 1.2 U	610 B 1.2 UN
Silver	1	2.1 UN	1.2 UN 1.1 UN	1.7 UN	2.0 UWN 2.1 UN	2.3 UWN 2.4 UN	1.7 U	1.2 U 1.1 U	1.2 UN 1.4 UN
Sodium	1000	2090	906 B	992 B	522 B	1400 B	445 B	151 B	380 B
Thallium	1000	4.2	1.2 U	5.0	2.0 U	2.3 U	1.7 U	1.2 U	1.2 U
Vanadium	10	62.2	36.6	95.1	7.3 U	13.8 B	30.0	39.0	20.1
Zinc	4	491 *	69.3 *	8750 *	5.4 B*	74.8 *	22.5	78.7	1260 *
Cyanide	i	1.1 UN	0.58 UN	17.5 N	32.1 N	3.9 N	42.4	0.62 U	0.63 UN
**********	Percent Solids:	48	77	56	45	41	49	======================================	

Site: SOIL BORINGS

U: not detected S: method of standard additions \*: duplicate analysis not met B: less than CRDL

N: spike recovery not met W: post digestion spike not met +: coefficient < 0.995

BS-109

BS-110 DUP

BS-110

Table 1 Laboratory Report of Analysis

	DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED:	7 HFBS109XX794X 235101 10/19/94	12 X HFBS110X1294 232313 10/18/94	12 EXD HFB\$110X1294XX 232312 10/18/94
ANALYTE	SOW-3/90 - II CRDL			
Aluminum	40	7790	12400	10100
Antimony	12	7.8 U	8.0 U	1 8.9 U
Arsenic <sup>*</sup>	2	2.0 N	4.7 s	N 7.8 SN
Barium	40	17.0 B	94.1	81.9
Beryllium	1	0.41 U	0.63 B	0.62 B
Cadmium	1	0.41 U*		* 0.81 B*
Calcium	1000	805 B*	49400 *	69700 *
Chromium	2	8.1 *	20.9 *	17.8 *
Cobalt	10 5	1.7 B	12.8	11.7 B
Copper	5	2.9 BN	19.3 N	22.4 N
Iron	20	9710	23600	23100
Lead	0.6	7.1 N*	24.0 N	* 10.7 N*
Magnes i um	1000	319 U*	16500 *	13000 *
Manganese	3	90.5 *	492 *	493 *
Mercury	0.1	0.11 U	0.12 U	0.12 U
Nickel	8	5.4 U*	28.9 *	27.1 *
Potassium	1000	416 B	2450	1870
Selenium	1	0.93 UN	1.2 U	N 1.1 UN

LOCATION:

Percent Solids:

90

MBHANNA6S

82

288

1.2

0.51 UN

MBHANNA6S

82

Associated Method Blank: Associated Equipment Blank: Associated Field Blank:

MBHANNA6S

1.0 249

0.93

13.2

6.2

12.7

HFQSXX9XXX94XX HFQSXX9XXX94XX HFQSXX9XXX94XX

Site: SOIL BORINGS

Silver

Sodium

Zinc Cyanide

Thallium

Vanadium

U: not detected S: method of standard additions

1000

2

10

\*: duplicate analysis not met

308 В

1.1 U

59.6 \*

0.59 UN

26.1

B: less than CRDL

N: spike recovery not met W: post digestion spike not met +: coefficient < 0.995

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Inorganic Soil Analysis (mg/kg)

Table 2
Validation / Summary Table

	LOCATION: DEPTH: ISIS ID: LAB NUMBER: DATE SAMPLED:	BS-101 6 HFBS101xx694xx 235104 10/20/94	BS-102 8 HFBS102XX894XX 235103 10/20/94	BS-103 10 HFBS103X1094XX 235105 10/20/94	BS-104 8 HFBS104XX894XX 235106 10/21/94	BS-105 10 HFBS105X1094XX 235107 10/21/94	BS-106 12 HFBS106X1294XX 236602 10/24/94	BS-107 14 HFBS107X1494XX 236601 10/24/94	BS-108 8 HFBS108XX894XX 235102 10/19/94
ANALYTE	SOW-3/90 - II CRDL							•	
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium	40 12 2 40 1 1 1000 2 10 5 20 0.6 1000 3 0.1 8 1000 1 2	29900 J 15.8 UJ 35.1 J 224 J 2.4 J 249000 J 53.4 J 13.7 J 19300 J 144 J 5360 J 216 J 0.21 UJ 25.6 J 53600 J R 2.1 UJ 2990 J 4.2 J 62.2 J	15700 21.1 7.7 106 2.0 1.3 77500 15.5 9.7 11.5 87600 47.8 16900 2260 0.13 U 9.2 9.2 9.2 J 1.2 UJ 1.1 U 906 J	11800 31.7 36.9 146 2.0 17.4 60600 38.6 28.7 86.4 53300 12500 7560 0.18 49.7 4990 1.7 1.7 992 5.0 95.1	35300 J 16.3 UJ 4.0 UJ 188 J 0.86 UJ 132000 J 2.1 UJ 2.6 UJ 2.1 UJ 1780 J 1.9 J 9220 J 2710 J 0.22 UJ 11.1 UJ 655 J 2.0 UJ 522 J 2.1 UJ 522 J 2.1 UJ	43600 J 18.2 UJ 4.5 UJ 4.6.3 J 0.96 UJ 233000 J 9.6 J 2.9 UJ 7.3 J 9450 J 113 J 16700 J 2690 J 0.24 UJ 12.4 UJ 1230 J 2.3 UJ 1400 J 2.3 UJ 1400 J 2.3 UJ 13.8 J	69000 J 13.0 UJ 6.7 UJ 263 J 10.2 J 0.68 UJ 221000 J 15.1 J 5.3 J 13.9 J 30600 J 3.0 J 19900 J 2040 J 0.20 UJ 8.9 UJ 1330 J 4.5 J 1.7 UJ 445 J 1.7 UJ 30.0 J	16600 8.6 20.8 91.2 0.45 0.45 36700 24.4 15.1 26.8 31600 11.4 13500 524 0.12 37.3 3010 1.2 UJ 151 UJ	6100 13.9 J 15.8 138 0.55 U 1.9 19100 26.5 7.5 J 238 38300 564 4550 800 0.43 22.6 610 J 1.2 UJ 1.4 U 380 J 1.2 U
Zinc Cyanide	4	491 J 1.1 UJ	69.3 0.58 UJ	8750 17.5 J	5.4 J 32.1 J	74.8 J 3.9 J	22.5 J 42.4 J	78.7 0.62 UJ	1260 0.63 UJ
2222222222222	Percent Solids:	48	77	56	45	41	49	84	72

Site: SOIL BORINGS

U: not detected R: unusable

J: estimated

Table 2 Validation / Summary Table

LOCATION:	BS-109	BS-110 DUP	BS-110
DEPTH:	7	12	12
ISIS ID:	HFBS109XX794XX	HFBS110X1294XD	HFBS110X1294XX
LAB NUMBER:	235101	232313	232312
DATE SAMPLED:	10/19/94	10/18/94	10/18/94

ANALYTE	SOW-3/90 - II CRDL			
Aluminum	40	7790	12400	10100
Antimony	12	7.8 U	8.0 U	8.9 U
Arsenic	12 2	2.0	4.7	7.8
Barium	40	17.0 J	94.1	81.9
Beryllium	1	0.41 U	0.63 J	0.62 J
Cadmium	1	0.41 U	0.81 J	0.81 J
Calcium	1000	805 J	49400	69700
Chromium	2	8.1 U	20.9	17.8
Cobalt	10 5	1.7 J	12.8	11.7 J
Copper	5	2.9 J	19.3	22.4
Iron	20	9710	23600	23100
Lead	0.6	7.1 J	24.0 J	10.7 J
Magnesium	1000	319 U	16500	13000
Manganese	• 3	90.5	492	493
Mercury	0.1	0.11 U	0.12 U	0.12 U
Nickel	8	5.4 U	28.9	27.1
Potassium	1000	416 J	2450	1870
Selenium	1	0.93 UJ	1.2 UJ	1.1 UJ
Silver	2	1.0 U	1.1 UJ	1.2 UJ
Sodium .	1000	249 J	288 J	308 J
Thallium	2	0.93 U	1.2 U	1.1 U
Vanadium	10	13.2	31.5	26.1
Zinc	4	6.2	64.7	59.6
Cyanide	1	12.7 J	0.51 UJ	0.59 UJ
	Percent Solids:	90	82	82

Associated Method Blank: MBHANNA6S MBHANNA6S Associated Equipment Blank: HFQSXX9XXX94XX HFQSXX9XXX94XX HFQSXX9XXX94XX - -

Site: SOIL BORINGS

U: not detected R: unusable

J: estimated

### TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-01 AQUEOUS (ug\L)

VOLATILE

HFQTXX1XXX94XX

unknown aromatic

27 J(2)

NO VOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFCL109XXX94XX HFQSXX2XXX94XX HFSW101XXX94XX HFSW102XXX94XX HFSW102XXX94XD

HFSW106XXX94XX HFSW104XXX94XX

## TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-02 AQUEOUS (Ug\L)

### VOLATILE

#### NO VOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFCL101XXX94XX	HFCL105XXX94XX	HFQTXX2XXX94XX
HFCL101XXX94XD	HFCL106XXX94XX	HFQTXX3XXX94XX
HFCL102XXX94XX	HFCL107XXX94XX	HFSW103XXX94XX
HFCL103XXX94XX	HFCL108XXX94XX	HFSW105XXX94XX
HFCL104XXX94XX	HFQSXX7XXX94XX	HFSW107XXX94XX

Page 1

## TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-03 AQUEOUS (Ug\L)

VOLATILE

NO VOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFQSXX6XXX94XX

SEMIVOLATILE

HFQSXX6XXX94XX

unknown

13 J(3)

Data Qualifiers: J = estimated

Page 1

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-03 SOIL (ug\kg)

#### VOLATILE

	HFCD101XXX94XD	HFCD103XXX94XX	HFSD107XXX94XX	
unknown hydrocarbon	3700 J(2)	14000 J(3)		
trimethyl benzene isomer	2800 J	15000 J(3)		
methyl propyl benzene isomer	1300 J	2600 J		
unknown aromatic	1800 J	9200 J(2)	•	
unknown		3100 J		
trichlorobenzene isomer		•	23 J	

#### NO VOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFCD101XXX94XX HFCD102XXX94XX HFCD104XXX94XX HFSD103XXX94XX HFSD105XXX94XX

#### SEMIVOLATILE

	HFCD101XXX94XD	HFCD101XXX94XX	HFCD102XXX94XX	HFCD103XXX94XX
unknown unknown aromatic unknown hydrocarbon	27000 J 180000 J(9) 230000 J(8)	54000 J(3) 310000 J(9) 270000 J(8)	2000 J(12) 620 J(3) 480 J(3)	53000 J(12) 25000 190000 J(7)
	HFCD103XXX94XXDL	HFCD104XXX94XX	HFCD104XXX94XXDL	HFSD103XXX94XX
unknown unknown aromatic unknown hydrocarbon		3400 J(6) 260 J 4000 J(12)		
	HFSD105XXX94XX	HFSD107XXX94XX		
unknown unknown aromatic unknown hydrocarbon	110000 J(18) 7100 J	4200 J(4) 8100 J(7) 11000 J(8)		

## TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-04 AQUEOUS (ug\L)

#### SEMIVOLATILE

	HFCL109XXX94XX	HFQSXX2XXX94XX	HFSW101XXX94XX	HFSW102XXX94XD
nknown hydrocarbon 140 J(6) nknown 1000 J(18) 9 J	9 J(4)	21 J(3) 5 J(2)	4 J 4 J	
	HFSW102XXX94XX	HFSW102XXX94XXDL	HFSW104XXX94XX	
unknown hydrocarbon unknown unknown aromatic	8 J(3) 5 J(2) 3 J	25 J(2)	2 J	

NO SEMIVOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:  ${\tt HFSW106XXX94XX}$ 

### TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-07 AQUEOUS (ug\L)

#### SEMIVOLATILE

	HFCL103XXX94XX	HFCL105XXX94XX	HFCL106XXX94XX	HFCL107XXX94XX
unknown unknown hydrocarbon	2 J	41 J(10)	61 J(12) 7 J(2)	3 J
	HFCL108XXX94XX	HFSW105XXX94XX	HFCL101XXX94XX	HFCL101XXX94XD
nknown	3 J	4 J	178 J(13)	49 J(8)
unknown hydrocarbon unknown aromatic unknown naphthalene	6 J(2)	3 J	5 J	2 J 3 J

NO SEMIVOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFCL102XXX94XX HFCL104XXX94XX HFQSXX7XXX94XX HFSW103XXX94XX HFSW107XXX94XX

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-09 AQUEOUS (ug\L)

VOLATILE

NO VOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFQSXX1XXX94XX

Page 1

### TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-09 SOIL (ug\kg)

#### VOLATILE

	HFSS116XXX94XX	HFSS125XXX94XX		
unknown hydrocarbon	73 J(4)			
unknown trichlorobenzene isomer	11 J	9 J		
NO VOLATILE TIC'S WERE IDENTIFE	ED IN THE FOLLOWING	SAMPLES:		,
	HFSS101XXX94XX	HFSS105XXX94XX	HFSS115XXX94XD	HFSS124XXX94XX
	HFSS101XXX94XD HFSS102XXX94XX	HFSS106XXX94XX HFSS107XXX94XX	HFSS117XXX94XX HFSS119XXX94XX	
	HFSS103XXX94XX	HFSS108XXX94XX	HFSS120XXX94XX	

## TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-10 AQUEOUS (Ug\L)

VOLATILE

HFQSXX5XXX94XX

naphthalene isomer

5 J

NO VOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFQSXX3XXX94XX HFQSXX4XXX94XX

### TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-10 SOIL (ug\kg)

#### VOLATILE

	HFCD109XXX94XXRE	HFSS114XXX94XX	HFSS118XXX94XX
unknown hydrocarbon	300 J(6)	170 J(6)	
trichlorobenzene isomer unknown	26 J		37 J(2)

NO VOLATILE TIC'S WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

 HFSD101XXX94XX
 HFSS110XXX94XX
 HFSS121XXX94XX

 HFSD102XXX94XD
 HFSS111XXX94XD
 HFSS123XXX94XX

 HFSD102XXX94XX
 HFSS111XXX94XX
 HFSS123XXX94XX

 HFSD104XXX94XX
 HFSS112XXX94XX
 HFSS113XXX94XX

### TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-11 SOIL (ug\kg)

VOLATILE

NO VOLATILE TICS WERE IDENTIFIED IN THE FOLLOWING SAMPLES:

HFBS106X1294XX HFBS107X1494XX

SEMIVOLATILE

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-12 AQUEOUS (ug\L)

VOLATILE

	HFQSXX8XXX94XX	HFQSXX9XXX94XX
naphthalene isomer	176 J(2)	16 J(2)

Table 2 Validation / Summary Table

,	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/19/94	WT-101 HFWT101XXX94XX 2228905 10/13/94 10/19/94 11/23/94	WT-102 HFWT102XXX94XX 2228909 R 10/13/94 10/19/94 11/24/94	
ANALYTE SOW-3,	/90 - II CRQL	•			
Phenol	10000	10000 UJ	11000 UJ	11000 UJ	
bis(2-Chloroethyl)ether	10000	10000 UJ	11000 U	11000 UJ	
2-Chlorophenol	10000	10000 UJ	11000 UJ	11000 UJ	
1,3-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ	
1,4-Dichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ	
1,2-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ	
2-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
2,2'-oxybis(1-Chloropro	pane) 10000	10000 UJ	11000 U	11000 UJ	
4-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
N-Nitroso-di-n-propylam	ine 10000 ·	10000 UJ	11000 UJ	11000 UJ	
Hexachloroethane	10000	10000 UJ	11000 U	11000 UJ	
Ni trobenzene	10000	10000 UJ	11000 U	11000 UJ	
Isophorone	10000	10000 UJ	11000 U	11000 UJ	
2-Nitrophenol	10000	10000 UJ	11000 UJ	11000 UJ	
2,4-Dimethylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
bis(2-Chloroethoxy)meth	ane 10000	10000 UJ	11000 U	11000 UJ	
2,4-Dichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ	
1,2,4-Trichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ	
Naphthalene	10000	10000 UJ	11000 U	11000 UJ	
4-Chloroaniline	10000	10000 UJ	11000 U	11000 UJ	
Hexach Lorobutadiene	10000	10000 UJ	11000 U	11000 UJ	
4-Chloro-3-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
2-Methylnaphthalene	10000	10000 UJ	11000 U	11000 UJ	
Hexachlorocyclopentadie	ne 10000	R	R	11000 UJ	
2,4,6-Trichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ	
2.4.5-Trichlorophenol	25000	26000 UJ	26000 UJ	27000 UJ	
2-Chloronaphthalene	10000	10000 UJ	11000 U	11000 UJ	
2-Nitroaniline	25000	26000 UJ	26000 U	27000 UJ	
Dimethylphthalate	10000	10000 UJ	11000 U	11000 UJ	
Acenaphthylene	10000	10000 UJ	11000 U	11000 UJ	
2.6-Dinitrotoluene	10000	10000 UJ	11000 U	11000 มม	

Site: WASTE U: not detected J: estimated

R: unusable

Table 2 Validation / Summary Table

DATE EXTRACTED: 10/19/94 10/19/94 10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   11/24/94		LAB NUMBER Date sampled	: HFWT101XXX9 : 2228908 : 10/13/94	94XD 4	WT-101 HFWT101XXX 2228905 10/13/94	4	WT-102 HFWT102XXX 2228909 10/13/9	R 4
3-Nitroaniline								
Acenaphthene	ANALYTE SOW-3/90	II CRQL	-					
2,4-Dinitrophenol 25000 26000 UJ 26000 UJ 27000 UJ Dibenzofuran 10000 10000 UJ 11000 UJ 11000 UJ 2,4-Dinitrotoluene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 2,4-Dinitrotoluene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 4-Chlorophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 4-Chlorophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 4-Witrophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 4-Witrophenyl-phenylether 25000 26000 UJ 26000 UJ 27000 UJ 4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ WHITROPHYLETHER 10000 10000 UJ 11000 UJ 11000 UJ WHITROPHYLETHER 10000 10000 UJ 11000 UJ 11000 UJ WHITROPHYLETHER 10000 10000 UJ 11000 UJ 11000 UJ WHITROPHENS 10000 UJ 11000 UJ WHITROPHENS 10000 UJ 110						_	7111	
4-Nitrophenol 25000 26000 UJ 26000 UJ 27000 UJ 11000 UJ 27000 UJ 26000 UJ 27000 UJ 11000 UJ 1400 J 1400 J 1400 J 1400 UJ 1400								
Dibenzofuran   10000								
2,4-Dinitrotoluene 10000 10000 UJ 11000								
Diethylphthalate								
4-Chlorophenyl-phenylether 10000 10000 UJ 11000 U 1400 J 4-Nitroaniline 25000 26000 UJ 26000 UJ 27000 UJ 4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 U 11000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 10000 UJ 10000 UJ 11000 UJ 10000 UJ 11000 UJ 10000 UJ 10000 UJ 11000 UJ 10000 UJ 100								
Fluorene					11111	_		
4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 8-Nitrosodiphenylamine 10000 10000 UJ 11000 U 11000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 U 11000 UJ Pentachlorobenzene 10000 10000 UJ 11000 UJ 11000 UJ Pentachlorobenzene 10000 10000 UJ 11000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ Carbazole 10000 10000 UJ 11000		10000	10000	UJ	11000	Ū	1400	j
N-Nitrosodiphenylamine 10000 10000 UJ 11000 U 11000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 U 11000 UJ Pentachlorobenzene 10000 10000 UJ 11000 U 11000 UJ Pentachlorophenol 25000 26000 UJ 26000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 U 8700 J Anthracene 10000 10000 UJ 11000 U 11000 UJ Pi-n-butylphthalate 10000 10000 UJ 11000 U 11000 UJ Pi-n-butylphthalate 10000 10000 UJ 11000 U 11000 UJ Pyrene 10000 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Anthracene 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Anthracene 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Anthracene 10000 10000 UJ 11000 UJ 11000 UJ Nis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 UJ 11000 UJ Nis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 UJ 11000 UJ Nis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Pyrene 10000 10000 UJ 11000 UJ Nerzo(a)Pyrene 10000 Nerzo(a)Pyrene 10000 Nerzo(a)Pyrene 10000		25000		UJ	26000	U	27000	UJ
### 4-Bromophenyl-phenylether   10000   10000   UJ   11000   UJ   11000   UJ   UJ   11000   UJ   11000   UJ   11000   UJ   Pentachlorophenol   25000   26000   UJ   26000   UJ   27000   UJ   Phenanthrene   10000   10000   UJ   11000   UJ   UJ   UJ   UJ   UJ   UJ   UJ	4,6-Dinitro-2-methylphenol			UJ	26000	UJ	27000	UJ
Hexachlorobenzene						_	11111	
Pentachlorophenol 25000 26000 UJ 26000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 U 8700 J Anthracene 10000 10000 UJ 11000 U 11000 UJ Carbazole 10000 10000 UJ 11000 U 11000 UJ Phenanthrene 10000 10000 UJ 11000 UJ 11000 UJ Phenanthene 10000 10000 UJ 11000 UJ 11000 UJ Phenanthene 10000 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 10000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000								
Phenanthrene								
Anthracene 10000 10000 UJ 11000 U 11000 UJ 11000 UJ 11000 UJ Di-n-butylphthalate 10000 10000 UJ 11000			7777		7777			
Carbazole 10000 10000 UJ 11000 U 11000 UJ 11000 UJ Pi-n-butylphthalate 10000 10000 UJ 11000 U 11000 UJ Pluoranthene 10000 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ Physene 10000 10000 UJ 11000 UJ 11000 UJ Physene 10000 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 10000 UJ 11000 UJ Pi-n-octylphthalate 10000 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000					11111			
Di-n-butylphthalate								
Fluoranthene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 3,7-prene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 UJ UJ 11000 UJ UJ 11000 UJ					11111			
Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ UJ 11000 UJ 110	Fluorenthene				11111	-		
Butylbenzylphthalate         10000         10000         UJ         11000         U         11000         UJ           3,3'-Dichlorobenzidine         10000         10000         UJ         11000         U         11000         UJ           Benzo(a)Anthracene         10000         10000         UJ         11000         U         11000         UJ           Chrysene         10000         10000         UJ         11000         U         11000         UJ           Di-n-octylphthalate         10000         10000         UJ         11000         U         11000         UJ           Benzo(b)Fluoranthene         10000         10000         UJ         11000         U         11000         UJ           Benzo(a)Pyrene         10000         10000         UJ         11000         U         11000         UJ           Indeno(1,2,3-c,d)Pyrene         10000         10000         UJ         11000         U         11000         UJ           Dibenz(a,h)Anthracene         10000         10000         UJ         11000         U         11000         UJ           Benzo(g,h,i)perylene         10000         10000         UJ         11000         U         11000         <								
3,3'-Dichlorobenzidine 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Anthracene 10000 10000 UJ 11000 U 11000 UJ Chrysene 10000 10000 UJ 11000 U 11000 UJ Dis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 U 11000 UJ Di-n-octylphthalate 10000 10000 UJ 11000 U 11000 UJ Eenzo(b)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(k)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Pyrene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Pyrene 10000 10000 UJ 11000 UJ 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)errylene 10000 10000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000								
Benzo(a)Anthracene								
Chrysene 10000 10000 UJ 11000 U 11000 UJ bis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 U 11000 UJ Di-n-octylphthalate 10000 10000 UJ 11000 U 11000 UJ Eenzo(b)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(k)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Pyrene 10000 10000 UJ 11000 U 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Dibenz(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ 1				ŨĴ	11111	Ū		
Di-n-octylphthalate		10000	10000	UJ	11000	Ū	11000	UJ
Benzo(b)Fluoranthene	bis(2-Ethylhexyl)phthalate	10000	10000	UJ	11000	U	11000	UJ
Benzo(k)Fluoranthene								
Benzo(a)Pyrene 10000 10000 UJ 11000 U 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Dibenz(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ Benzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ						-		
Indeno(1,2,3-c,d)Pyrene					1::::	_		
Dibenz(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ 110								
Dilution Factor: 1.00 1.00 1.00 1.00 Percent Solids: 95 94 91   Sample Volume\Weight (ml\g): 1.00 1.00 1.00								
Dilution Factor: 1.00 1.00 1.00  Percent Solids: 95 94 91  Sample Volume\Weight (ml\g): 1.00 1.00 1.00						-		
Percent Solids: 95 94 91 Sample Volume\Weight (ml\g): 1.00 1.00 1.00						_		
Sample Volume\Weight (ml\g): 1.00 1.00 1.00	Diluti	on Factor:	1.00		1.00		1.00	
	•				1.00		1.00	
			Q1706.D		Q1706.D		Q1706.D	
Associated Equipment Blank: HFQSXX6XXX94XX HFQSXX6XXX94XX HFQSXX6XXX94XX			QSXX6XXX94XX -	HFQ	SXX6XXX94XX -	HFQ	SXX6XXX94XX -	

Site: WASTE

U: not detected

R: unusable

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	WT-101 DUI HFWT101XXX9 2228908 10/13/94 10/19/94 11/27/94	4XD HFWT101XXX9 2228905 10/13/94 10/19/94	2228909 10/13/94 10/19/94
ANALYTE SOW-3/90 -	II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-12560	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3	54   54   54   54   54   54   54   54	U 54 U 110 U 1100 U 1100 U 1100	U 56 U U 110  U
	on Factor: ent Solids: ht (ml\g):	1.00 95 1.00	1.00 94 1.00	1.00 91 1.00
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	PMB1019B SXX5XXX94XX -	PMB1019B HFQSXX5XXX94XX	PMB1019B HFQSXX5XXX94XX -

Site: WASTE U: not detected

P: > 25% difference between columns

Table 1 Laboratory Report of Analysis

	LOCATION:	WT-101 DI		WT-101		WT-102	
	ISIS ID: LAB NUMBER:	HFWT101XXX9 228908		HFWT101XXX 228905		HFWT102XXX 228909	
	DATE SAMPLED:	10/13/9		10/13/9		10/13/9	
	5	10, 10, 5	•	10, 10, ,	•	10, 15, ,	•
ANALYTE	SOW-3/90 - II CRDL						
Aluminum	40	14500		11300		360	
Antimony	12 2	12.9		6.7	U	826	
Arsenic	2	3.4	N	3.6	N	4.9	- N
Barium	40	. 142		119		4.8	В
Beryllium	1	3.2		2.2		0.34	U
Cadmium	1	2.9	*	3.6	*	0.34	U*
Calcium	1000	75000	*	60900	*	2320	*
Chromium	2	39.2	*	51.6	*	0.85	U*
Cobalt	10 5	4.6	В	4.3	В	1.0	U
Copper	5	93.7	N	80.1	N	8.9	N
Iron	20	40000		45000		668	
Lead	0.6	229	N*	182	N*	6050	N*
Magnesium	1000	15000	*	12400	*	439	В*
Manganese	3	1420	*	1870	*	48.6	*
Mercury	0.1	0.12		0.11	U	0.11	U
Nickel	8	18.6	*	26.1	*	4.4	U*
Potassium	1000	734	В	555	В	142	U
Selenium	1	0.81	UWN	1.1	UN	1.1	UN
Silver	2	0.98	UN	0.89	UN	0.85	UN
Sodium	1000	511	В	481	В	135	В
Thallium	2	1.6	В	1.1	UW	1.1	U
Vanadium	10	15.8		19.3		2.9	U
Zinc	4	1060	*	1330	*	29.5	*
Cyanide	1	0.80	N	0.51	UN	0.67	UN
	:======================================		====	========	=====	========	===

Associated Method Blank: MBHANNA6S MBHANNA6S MBHANNA6S Associated Equipment Blank: Associated Field Blank: HFQSXX5XXX94XX HFQSXX5XXX94XX HFQSXX5XXX94XX

Site: WASTE

Percent Solids:

U: not detected W: post digestion spike not met B:
N: spike recovery not met \*: duplicate analysis not met B: less than CRDL

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Table 2 Validation / Summary Table

,	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	10/19/94	WT-101 HFWT101XXX94XX 2228905 10/13/94 10/19/94 11/23/94	WT-102 HFWT102XXX94XX 2228909 R 10/13/94 10/19/94 11/24/94	
ANALYTE SOW-3,	/90 - II CRQL	•			
Phenol	10000	10000 UJ	11000 UJ	11000 UJ	
bis(2-Chloroethyl)ether	10000	10000 UJ	11000 U	11000 UJ	
2-Chlorophenol	10000	10000 UJ	11000 UJ	11000 UJ	
1,3-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ	
1,4-Dichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ	
1,2-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ	
2-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
2,2'-oxybis(1-Chloropro	pane) 10000	10000 UJ	11000 U	11000 UJ	
4-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
N-Nitroso-di-n-propylam	ine 10000 ·	10000 UJ	11000 UJ	11000 UJ	
Hexachloroethane	10000	10000 UJ	11000 U	11000 UJ	
Ni trobenzene	10000	10000 UJ	11000 U	11000 UJ	
Isophorone	10000	10000 UJ	11000 U	11000 UJ	
2-Nitrophenol	10000	10000 UJ	11000 UJ	11000 UJ	
2,4-Dimethylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
bis(2-Chloroethoxy)meth	ane 10000	10000 UJ	11000 U	11000 UJ	
2,4-Dichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ	
1,2,4-Trichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ	
Naphthalene	10000	10000 UJ	11000 U	11000 UJ	
4-Chloroaniline	10000	10000 UJ	11000 U	11000 UJ	
Hexach Lorobutadiene	10000	10000 UJ	11000 U	11000 UJ	
4-Chloro-3-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ	
2-Methylnaphthalene	10000	10000 UJ	11000 U	11000 UJ	
Hexachlorocyclopentadie	ne 10000	R	R	11000 UJ	
2,4,6-Trichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ	
2.4.5-Trichlorophenol	25000	26000 UJ	26000 UJ	27000 UJ	
2-Chloronaphthalene	10000	10000 UJ	11000 U	11000 UJ	
2-Nitroaniline	25000	26000 UJ	26000 U	27000 UJ	
Dimethylphthalate	10000	10000 UJ	11000 U	11000 UJ	
Acenaphthylene	10000	10000 UJ	11000 U	11000 UJ	
2.6-Dinitrotoluene	10000	10000 UJ	11000 U	11000 มม	

Site: WASTE U: not detected J: estimated

R: unusable

Table 2 Validation / Summary Table

DATE EXTRACTED: 10/19/94 10/19/94 10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   10/19/94 11/24/94   11/24/94		LAB NUMBER Date sampled	: HFWT101XXX9 : 2228908 : 10/13/94	94XD 4	WT-101 HFWT101XXX 2228905 10/13/94	4	WT-102 HFWT102XXX 2228909 10/13/9	R 4
3-Nitroaniline								
Acenaphthene	ANALYTE SOW-3/90	II CRQL	-					
2,4-Dinitrophenol 25000 26000 UJ 26000 UJ 27000 UJ Dibenzofuran 10000 10000 UJ 11000 UJ 11000 UJ 2,4-Dinitrotoluene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 2,4-Dinitrotoluene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 4-Chlorophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 4-Chlorophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 4-Witrophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 4-Witrophenyl-phenylether 25000 26000 UJ 26000 UJ 27000 UJ 4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ WHITROPHYLETHER 10000 10000 UJ 11000 UJ 11000 UJ WHITROPHYLETHER 10000 10000 UJ 11000 UJ 11000 UJ WHITROPHYLETHER 10000 10000 UJ 11000 UJ 11000 UJ WHITROPHENS 10000 UJ 11000 UJ WHITROPHENS 10000 UJ 110						_	7111	
4-Nitrophenol 25000 26000 UJ 26000 UJ 27000 UJ 11000 UJ 27000 UJ 26000 UJ 27000 UJ 11000 UJ 1400 J 1400 J 1400 J 1400 UJ 1400								
Dibenzofuran   10000								
2,4-Dinitrotoluene 10000 10000 UJ 11000								
Diethylphthalate								
4-Chlorophenyl-phenylether 10000 10000 UJ 11000 U 1400 J 4-Nitroaniline 25000 26000 UJ 26000 UJ 27000 UJ 4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 U 11000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 UJ 11000 UJ 10000 UJ 10000 UJ 11000 UJ 10000 UJ 11000 UJ 10000 UJ 10000 UJ 11000 UJ 10000 UJ 100								
Fluorene					11111	_		
4,6-Dinitro-2-methylphenol 25000 26000 UJ 26000 UJ 27000 UJ 8-Nitrosodiphenylamine 10000 10000 UJ 11000 U 11000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 U 11000 UJ Pentachlorobenzene 10000 10000 UJ 11000 UJ 11000 UJ Pentachlorobenzene 10000 10000 UJ 11000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ Carbazole 10000 10000 UJ 11000		10000	10000	UJ	11000	Ū	1400	j
N-Nitrosodiphenylamine 10000 10000 UJ 11000 U 11000 UJ 4-Bromophenyl-phenylether 10000 10000 UJ 11000 U 11000 UJ Pentachlorobenzene 10000 10000 UJ 11000 U 11000 UJ Pentachlorophenol 25000 26000 UJ 26000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 U 8700 J Anthracene 10000 10000 UJ 11000 U 11000 UJ Pi-n-butylphthalate 10000 10000 UJ 11000 U 11000 UJ Pi-n-butylphthalate 10000 10000 UJ 11000 U 11000 UJ Pyrene 10000 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Anthracene 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Anthracene 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Anthracene 10000 10000 UJ 11000 UJ 11000 UJ Nis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 UJ 11000 UJ Nis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 UJ 11000 UJ Nis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 UJ 11000 UJ Nerzo(a)Pyrene 10000 10000 UJ 11000 UJ Nerzo(a)Pyrene 10000 Nerzo(a)Pyrene 10000 Nerzo(a)Pyrene 10000		25000		UJ	26000	U	27000	UJ
### 4-Bromophenyl-phenylether   10000   10000   UJ   11000   UJ   11000   UJ   UJ   11000   UJ   11000   UJ   11000   UJ   Pentachlorophenol   25000   26000   UJ   26000   UJ   27000   UJ   Phenanthrene   10000   10000   UJ   11000   UJ   UJ   UJ   UJ   UJ   UJ   UJ	4,6-Dinitro-2-methylphenol			UJ	26000	UJ	27000	UJ
Hexachlorobenzene						_	11111	
Pentachlorophenol 25000 26000 UJ 26000 UJ 27000 UJ Phenanthrene 10000 10000 UJ 11000 U 8700 J Anthracene 10000 10000 UJ 11000 U 11000 UJ Carbazole 10000 10000 UJ 11000 U 11000 UJ Phenanthrene 10000 10000 UJ 11000 UJ 11000 UJ Phenanthene 10000 10000 UJ 11000 UJ 11000 UJ Phenanthene 10000 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 10000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pyrene 10000 Pyrene 10000 UJ 11000								
Phenanthrene								
Anthracene 10000 10000 UJ 11000 U 11000 UJ 11000 UJ 11000 UJ Di-n-butylphthalate 10000 10000 UJ 11000			7777		7777			
Carbazole 10000 10000 UJ 11000 U 11000 UJ 11000 UJ Pi-n-butylphthalate 10000 10000 UJ 11000 U 11000 UJ Pluoranthene 10000 10000 UJ 11000 UJ 11000 UJ Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ 11000 UJ Physene 10000 10000 UJ 11000 UJ 11000 UJ Physene 10000 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 10000 UJ 11000 UJ Pi-n-octylphthalate 10000 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000 UJ Pi-n-octylphthalate 10000 UJ 11000 UJ 11000					11111			
Di-n-butylphthalate								
Fluoranthene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 3,7-prene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 UJ UJ 11000 UJ UJ 11000 UJ					11111			
Pyrene 10000 10000 UJ 11000 UJ 11000 UJ 3,3'-Dichlorobenzidine 10000 10000 UJ 11000 UJ UJ 11000 UJ 110	Fluorenthene				11111	-		
Butylbenzylphthalate         10000         10000         UJ         11000         U         11000         UJ           3,3'-Dichlorobenzidine         10000         10000         UJ         11000         U         11000         UJ           Benzo(a)Anthracene         10000         10000         UJ         11000         U         11000         UJ           Chrysene         10000         10000         UJ         11000         U         11000         UJ           Di-n-octylphthalate         10000         10000         UJ         11000         U         11000         UJ           Benzo(b)Fluoranthene         10000         10000         UJ         11000         U         11000         UJ           Benzo(a)Pyrene         10000         10000         UJ         11000         U         11000         UJ           Indeno(1,2,3-c,d)Pyrene         10000         10000         UJ         11000         U         11000         UJ           Dibenz(a,h)Anthracene         10000         10000         UJ         11000         U         11000         UJ           Benzo(g,h,i)perylene         10000         10000         UJ         11000         U         11000         <								
3,3'-Dichlorobenzidine 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Anthracene 10000 10000 UJ 11000 U 11000 UJ Chrysene 10000 10000 UJ 11000 U 11000 UJ Dis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 U 11000 UJ Di-n-octylphthalate 10000 10000 UJ 11000 U 11000 UJ Eenzo(b)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(k)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Pyrene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Pyrene 10000 10000 UJ 11000 UJ 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)errylene 10000 10000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000 UJ 11000 UJ 11000 UJ 11000 UJ Eenzo(g,h,i)errylene 10000								
Benzo(a)Anthracene								
Chrysene 10000 10000 UJ 11000 U 11000 UJ bis(2-Ethylhexyl)phthalate 10000 10000 UJ 11000 U 11000 UJ Di-n-octylphthalate 10000 10000 UJ 11000 U 11000 UJ Eenzo(b)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(k)Fluoranthene 10000 10000 UJ 11000 U 11000 UJ Eenzo(a)Pyrene 10000 10000 UJ 11000 U 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Dibenz(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ Eenzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ 1				ŨĴ	11111	Ū		
Di-n-octylphthalate		10000	10000	UJ	11000	Ū	11000	UJ
Benzo(b)Fluoranthene	bis(2-Ethylhexyl)phthalate	10000	10000	UJ	11000	U	11000	UJ
Benzo(k)Fluoranthene								
Benzo(a)Pyrene 10000 10000 UJ 11000 U 11000 UJ Indeno(1,2,3-c,d)Pyrene 10000 10000 UJ 11000 U 11000 UJ Dibenz(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ Benzo(g,h,i)perylene 10000 10000 UJ 11000 U 11000 UJ						-		
Indeno(1,2,3-c,d)Pyrene					1::::	_		
Dibenz(a,h)Anthracene 10000 10000 UJ 11000 U 11000 UJ 110								
Dilution Factor: 1.00 1.00 1.00 1.00 Percent Solids: 95 94 91   Sample Volume\Weight (ml\g): 1.00 1.00 1.00								
Dilution Factor: 1.00 1.00 1.00  Percent Solids: 95 94 91  Sample Volume\Weight (ml\g): 1.00 1.00 1.00						-		
Percent Solids: 95 94 91 Sample Volume\Weight (ml\g): 1.00 1.00 1.00						_		
Sample Volume\Weight (ml\g): 1.00 1.00 1.00	Diluti	on Factor:	1.00		1.00		1.00	
	•				1.00		1.00	
			Q1706.D		Q1706.D		Q1706.D	
Associated Equipment Blank: HFQSXX6XXX94XX HFQSXX6XXX94XX HFQSXX6XXX94XX			QSXX6XXX94XX -	HFQ	SXX6XXX94XX -	HFQ	SXX6XXX94XX -	

Site: WASTE

U: not detected

R: unusable

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	WT-101 DUI HFWT101XXX94 2228908 10/13/94 10/19/94 11/27/94	4XD HFWT101XXX9 2228905 10/13/94 10/19/94	2228909 10/13/94 10/19/94
ANALYTE SOW-3/90 -	II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Joxaphene Aroclor-1221 Aroclor-1222 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-12560	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 17 3.3 1.7 1.7 1.7 1.7 1.7	54   54   54   54   54   54   54   54	54 U 54 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 540 U 540 U 540 U 1100 U 5400 U 1100	U 56 U U 110  U
	on Factor: ent Solids: ht (ml\g):	1.00 95 1.00	1.00 94 1.00	1.00 91 1.00
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	PMB1019B SXX5XXX94XX	PMB1019B HFQSXX5XXX94XX	PMB1019B HFQSXX5XXX94XX -

Site: WASTE U: not detected

P: > 25% difference between columns

Table 2 Validation / Summary Table

•	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	WT-101 DUP HFWT101XXX94XD 2228908 10/13/94 10/19/94 11/23/94	WT-101 HFWT101XXX94XX 2228905 10/13/94 10/19/94 11/23/94	WT-102 HFWT102XXX94XX 2228909 R 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	II CRQL			
Phenol	10000	10000 UJ	11000 UJ	11000 UJ
bis(2-Chloroethyl)ether	10000	10000 UJ	11000 U	11000 UJ
2-Chlorophenol	10000	10000 UJ	11000 UJ	11000 UJ
1,3-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ
1,4-Dichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ
1,2-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ
2-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ
2,2'-oxybis(1-Chloropropane)	10000	10000 UJ	11000 U	11000 UJ
4-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ
N-Nitroso-di-n-propylamine	10000	10000 UJ	11000 UJ	11000 UJ
Hexachloroethane	10000	10000 UJ	11000 U	11000 UJ
Nitrobenzene	10000	10000 UJ	11000 U	11000 UJ
Isophorone	10000	10000 UJ	11000 U	11000 UJ
2-Nitrophenol	10000	10000 UJ	11000 UJ	11000 UJ
2,4-Dimethylphenol	10000	10000 UJ	11000 UJ	11000 UJ
bis(2-Chloroethoxy)methane	10000	10000 UJ	11000 U	11000 UJ
2,4-Dichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ
1,2,4-Trichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ
Naphthalene	10000	10000 UJ	11000 U	11000 UJ
4-Chloroaniline	10000	10000 UJ	11000 U	11000 UJ
Hexachlorobutadiene	10000	10000 UJ	11000 U	11000 UJ
4-Chloro-3-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ
2-Methylnaphthalene	10000	10000 UJ	11000 U	11000 UJ
<b>Hexachlorocyclopentadiene</b>	10000	R	R	11000 UJ
2,4,6-Trichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ
2.4.5-Trichlorophenol	25000	26000 UJ	26000 UJ	27000 UJ
2-Chloronaphthalene	10000	10000 UJ	11000 U	11000 UJ
2-Nitroaniline	25000	26000 UJ	26000 U	27000 UJ
Dimethylphthalate	10000	10000 UJ	11000 Ú	11000 UJ
Acenaphthylene	10000	10000 UJ	11000 U	11000 UJ
2,6-Dinitrotoluene	10000	10000 UJ	11000 U	11000 UJ

R: unusable

Table 2
Validation / Summary Table

	LOCATIO ISIS I LAB NUMBE DATE SAMPLE DATE EXTRACTE DATE ANALYZE	D: HFWT101XXX9 R: 2228908 D: 10/13/94 D: 10/19/94	PAXD HFWT101XXX9 2228905 10/13/94 10/19/94	2228909 R 4 10/13/94 4 10/19/94
ANALYTE SOW-3/90 -	II CRQL	••		
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	25000 10000 25000 10000 10000 10000 10000 25000 25000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	10000 26000 26000 10000 10000 10000 10000 26000 26000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	UJ 26000 UJ 11000 UJ 26000 UJ 11000	U 27000 UJ UJ 11000 UJ UJ 27000 UJ UJ 27000 UJ UJ 11000 UJ U 11000 UJ U 11000 UJ U 1400 J U 27000 UJ U 17000 UJ U 11000 UJ
Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	10000 10000	10000	UJ 11000 UJ 11000	U 11000 UJ U 11000 UJ
Diluti	on Factor: ent Solids:	1.00 95 1.00	1.00 94 1.00	1.00 91 1.00
Associated Met Associated Equipm Associated Fi	ment Blank: H	Q1706.D FQSXX6XXX94XX	Q1706.D HFQSXX6XXX94XX	Q1706.D HFQSXX6XXX94XX -

Site: WASTE

U: not detected

R: unusable

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	WT-101 DUI HFWT101XXX94 2228908 10/13/94 10/19/94 11/27/94	4XD HFWT101XXX9 2228905 10/13/94 10/19/94	2228909 10/13/94 10/19/94
ANALYTE SOW-3/90 -	II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Joxaphene Aroclor-1221 Aroclor-1222 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-12560	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 17 3.3 1.7 1.7 1.7 1.7 1.7	54   54   54   54   54   54   54   54	54 U 54 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 540 U 540 U 540 U 1100 U 5400 U 1100	U 56 U U 110  U
	on Factor: ent Solids: ht (ml\g):	1.00 95 1.00	1.00 94 1.00	1.00 91 1.00
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	PMB1019B SXX5XXX94XX	PMB1019B HFQSXX5XXX94XX	PMB1019B HFQSXX5XXX94XX -

Site: WASTE U: not detected

P: > 25% difference between columns

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	WT-101 DU HFWT101XXX9 228908 10/13/94	94XD	WT-101 HFWT101XXX 228905 10/13/9	94XX	WT-102 HFWT102XXX 228909 10/13/9	94XX
ANALYTE	SOW-3/90 - 11 CRDL						
Aluminum	40	14500		11300		360	
Antimony	12 2	12.9		6.7	U	826	
Arsenic	2	3.4	N	3.6	N	4.9	·N
Barium	40	142		119		4.8	В
Beryllium	1	3.2		2.2		0.34	U
Cadmium	1	2.9	*	3.6	*	0.34	U*
Calcium	1000	75000	*	60900	*	2320	*
Chromium	2	39.2	*	51.6	*	0.85	U*
Cobalt	10	4.6	В	4.3	В	1.0	U
Copper	5	93.7	N	80.1	N	8.9	N
Iron	20	40000		45000		668	
Lead	0.6	229	N*	182	N*	6050	N*
Magnesium	1000	15000	*	12400	*	439	B*
Manganese	3	1420	*	1870	*	48.6	*
Mercury	0.1	0.12		0.11	U	0.11	U
Nickel	8	18.6	*	26.1	*	4.4	U*
Potassium	1000	734	В	555	В	142	U
Selenium	1	0.81	UWN	1.1	UN	1.1	UN
Silver	2	0.98	UN	0.89	UN	0.85	UN
Sodium	1000	511	В	481	В	135	В
Thallium	2	1.6	В	1.1	UW	1.1	U
Vanadium	10	15.8		19.3		2.9	U
Zinc	4	1060	*	1330	*	29.5	*
Cyanide	1	0.80	N	0.51	UN	0.67	UN
			====		=====	=======	===

Associated Method Blank:	MBHANNA6S	MBHANNA6S	MBHANNA6S
Associated Equipment Blank:	HFQSXX5XXX94XX	HFQSXX5XXX94XX	HFQSXX5XXX94XX
Associated Field Blank:	-	-	-

Site: WASTE

Percent Solids:

U: not detected W: post digestion spike not met B:
N: spike recovery not met \*: duplicate analysis not met B: less than CRDL

91

Table 2 Validation / Summary Table

•	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	WT-101 DUP HFWT101XXX94XD 2228908 10/13/94 10/19/94 11/23/94	WT-101 HFWT101XXX94XX 2228905 10/13/94 10/19/94 11/23/94	WT-102 HFWT102XXX94XX 2228909 R 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	II CRQL			
Phenol	10000	10000 UJ	11000 UJ	11000 UJ
bis(2-Chloroethyl)ether	10000	10000 UJ	11000 U	11000 UJ
2-Chlorophenol	10000	10000 UJ	11000 UJ	11000 UJ
1,3-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ
1,4-Dichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ
1,2-Dichlorobenzene	10000	10000 UJ	11000 U	11000 UJ
2-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ
2,2'-oxybis(1-Chloropropane)	10000	10000 UJ	11000 U	11000 UJ
4-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ
N-Nitroso-di-n-propylamine	10000	10000 UJ	11000 UJ	11000 UJ
Hexachloroethane	10000	10000 UJ	11000 U	11000 UJ
Nitrobenzene	10000	10000 UJ	11000 U	11000 UJ
Isophorone	10000	10000 UJ	11000 U	11000 UJ
2-Nitrophenol	10000	10000 UJ	11000 UJ	11000 UJ
2,4-Dimethylphenol	10000	10000 UJ	11000 UJ	11000 UJ
bis(2-Chloroethoxy)methane	10000	10000 UJ	11000 U	11000 UJ
2,4-Dichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ
1,2,4-Trichlorobenzene	10000	10000 UJ	11000 UJ	11000 UJ
Naphthalene	10000	10000 UJ	11000 U	11000 UJ
4-Chloroaniline	10000	10000 UJ	11000 U	11000 UJ
Hexachlorobutadiene	10000	10000 UJ	11000 U	11000 UJ
4-Chloro-3-Methylphenol	10000	10000 UJ	11000 UJ	11000 UJ
2-Methylnaphthalene	10000	10000 UJ	11000 U	11000 UJ
<b>Hexachlorocyclopentadiene</b>	10000	R	R	11000 UJ
2,4,6-Trichlorophenol	10000	10000 UJ	11000 UJ	11000 UJ
2.4.5-Trichlorophenol	25000	26000 UJ	26000 UJ	27000 UJ
2-Chloronaphthalene	10000	10000 UJ	11000 U	11000 UJ
2-Nitroaniline	25000	26000 UJ	26000 U	27000 UJ
Dimethylphthalate	10000	10000 UJ	11000 Ú	11000 UJ
Acenaphthylene	10000	10000 UJ	11000 U	11000 UJ
2,6-Dinitrotoluene	10000	10000 UJ	11000 U	11000 UJ

R: unusable

Table 2
Validation / Summary Table

	LOCATIO ISIS I LAB NUMBE DATE SAMPLE DATE EXTRACTE DATE ANALYZE	D: HFWT101XXX9 R: 2228908 D: 10/13/94 D: 10/19/94	PAXD HFWT101XXX9 2228905 10/13/94 10/19/94	2228909 R 4 10/13/94 4 10/19/94
ANALYTE SOW-3/90 -	II CRQL	••		
3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)Anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)Fluoranthene Benzo(a)Pyrene Indeno(1,2,3-c,d)Pyrene	25000 10000 25000 10000 10000 10000 10000 25000 25000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	10000 26000 26000 10000 10000 10000 10000 26000 26000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	UJ 26000 UJ 11000 UJ 26000 UJ 11000	U 27000 UJ UJ 11000 UJ UJ 27000 UJ UJ 27000 UJ UJ 11000 UJ U 11000 UJ U 11000 UJ U 1400 J U 27000 UJ U 17000 UJ U 11000 UJ
Dibenz(a,h)Anthracene Benzo(g,h,i)perylene	10000 10000	10000	UJ 11000 UJ 11000	U 11000 UJ U 11000 UJ
Diluti	on Factor: ent Solids:	1.00 95 1.00	1.00 94 1.00	1.00 91 1.00
Associated Met Associated Equipm Associated Fi	ment Blank: H	Q1706.D FQSXX6XXX94XX	Q1706.D HFQSXX6XXX94XX	Q1706.D HFQSXX6XXX94XX -

Site: WASTE

U: not detected

R: unusable

J: estimated

Table 1
Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	WT-101 DUI HFWT101XXX94 2228908 10/13/94 10/19/94 11/27/94	4XD HFWT101XXX9 2228905 10/13/94 10/19/94	2228909 10/13/94 10/19/94
ANALYTE SOW-3/90 -	II CRQL			
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor Aldrin Heptachlor Epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endrin Aldehyde Endosulfan Sulfate 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Joxaphene Aroclor-1221 Aroclor-1222 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-12560	1.7 1.7 1.7 1.7 1.7 1.7 1.7 3.3 3.3 3.3 3.3 3.3 3.3 17 3.3 1.7 1.7 1.7 1.7 1.7	54   54   54   54   54   54   54   54	54 U 54 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 110 U 540 U 540 U 540 U 1100 U 5400 U 1100	U 56 U U 110  U
	on Factor: ent Solids: ht (ml\g):	1.00 95 1.00	1.00 94 1.00	1.00 91 1.00
Associated Met Associated Equipm Associated Fi	ent Blank: HFQ	PMB1019B SXX5XXX94XX	PMB1019B HFQSXX5XXX94XX	PMB1019B HFQSXX5XXX94XX -

Site: WASTE U: not detected

P: > 25% difference between columns

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	WT-101 DU HFWT101XXX9 228908 10/13/94	94XD	WT-101 HFWT101XXX 228905 10/13/9	94XX	WT-102 HFWT102XXX 228909 10/13/9	94XX
ANALYTE	SOW-3/90 - 11 CRDL						
Aluminum	40	14500		11300		360	
Antimony	12 2	12.9		6.7	U	826	
Arsenic	2	3.4	N	3.6	N	4.9	·N
Barium	40	142		119		4.8	В
Beryllium	1	3.2		2.2		0.34	U
Cadmium	1	2.9	*	3.6	*	0.34	U*
Calcium	1000	75000	*	60900	*	2320	*
Chromium	2	39.2	*	51.6	*	0.85	U*
Cobalt	10	4.6	В	4.3	В	1.0	U
Copper	5	93.7	N	80.1	N	8.9	N
Iron	20	40000		45000		668	
Lead	0.6	229	N*	182	N*	6050	N*
Magnesium	1000	15000	*	12400	*	439	B*
Manganese	3	1420	*	1870	*	48.6	*
Mercury	0.1	0.12		0.11	U	0.11	U
Nickel	8	18.6	*	26.1	*	4.4	U*
Potassium	1000	734	В	555	В	142	U
Selenium	1	0.81	UWN	1.1	UN	1.1	UN
Silver	2	0.98	UN	0.89	UN	0.85	UN
Sodium	1000	511	В	481	В	135	В
Thallium	2	1.6	В	1.1	UW	1.1	U
Vanadium	10	15.8		19.3		2.9	U
Zinc	4	1060	*	1330	*	29.5	*
Cyanide	1	0.80	N	0.51	UN	0.67	UN
			====		=====	=======	===

Associated Method Blank:	MBHANNA6S	MBHANNA6S	MBHANNA6S
Associated Equipment Blank:	HFQSXX5XXX94XX	HFQSXX5XXX94XX	HFQSXX5XXX94XX
Associated Field Blank:	-	-	-

Site: WASTE

Percent Solids:

U: not detected W: post digestion spike not met B:
N: spike recovery not met \*: duplicate analysis not met B: less than CRDL

91

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis (ug/L)

14-Apr-95

Table 1 Laboratory Report of Analysis

	LOCATION: ISIS ID: LAB NUMBER: DATE SAMPLED:	WT-101 DUP HFWT101XXX94XD E228908 10/13/94	WT-101 HFWT101XXX94XX E228905 10/13/94	WT-102 HFWT102XXX94XX E228909 10/13/94
ANALYTE	RL			
arsenic barium cadmium chromium lead mercury selenium silver	52.0 11.0 2.0 5.0 26.0 0.2 90.0	431 2.0 U 5.0 U 34.1 0.20 U 90.0 U	52.0 UN 386 2.0 U 5.0 U 26.0 U 0.20 U 90.0 U 5.0 U	75.0 N 330 2.0 U 5.0 U 1380 0.20 U 90.0 U 5.0 U

Associated Method Blank: MBHANNA6EP
Associated Equipment Blank: Associated Field Blank: -

Site: WASTE

Note: Inorganic Data - EPTOX Metals
U: not detected N: spike recovery not met

Table 2 Validation / Summary Table

	LOCATION:	WT-101 DUP	WT-101	WT-102
	ISIS ID:	HFWT101XXX94XD	HFWT101XXX94XX	HFWT102XXX94XX
	LAB NUMBER:	E228908	E228905	E228909
	DATE SAMPLED:	_10/13/94	10/13/94	10/13/94
ANALYTE	RL			
arsenic	52.0		52.0 U	75.0 J
barium	11.0		. 386 J	330 J
cadmium	2.0	2.0 UJ	2.0 UJ	2.0 UJ
chromium	5.0		5.0 U	5.0 U
lead	26.0	R	. 26.0 UJ	1380 J
mercury	0.2		R	R
selenium	90.0		90.0 U	90.0 U

Associated Method Blank:	MBHANNA6EP	MBHANNA6EP	MBHANNA6EP
Associated Equipment Blank:	-	-	-
Accordated Field Rlank.	-		-

Site: WASTE
Note: Inorganic Data - EPTOX Metals
U: not detected J: estimated R: unusable

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Air Analysis (filter)

17-Apr-95

Table 1 Laboratory Report of Analysis

> LOCATION: QB-101 QB-102 ISIS ID: HFQB101XXX94XX HFQB102XXX94XX LAB NUMBER: 235110 235111 DATE SAMPLED: 10/19/94 10/19/94 DATE ANALYZED:

11/17/94

11/17/94

ANALYTE

RL

lead

0.3 U

0.3 UW

0.3

Site: AIR BLANKS

U: not detected W: post digestion spike not met

Miscellaneous Air Analysis (filter)

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

17-Apr-95

Table 1 Laboratory Report of Analysis

> LOCATION: AF-101 ISIS ID: HFAF101XXX94XX 235109 10/19/94 LAB NUMBER: DATE SAMPLED: DATE ANALYZED: 11/17/94

ANALYTE

RL

0.3

lead

0.3 U

Associated Method Blank: HANNA6
Associated Air Blank: HFQB101XXX94XX / HFQB102XXX94XX

Site: AIR SAMPLES U: not detected

Table 1 Laboratory Report of Analysis

	LOCATI ISIS LAB NUME DATE SAMPI DATE ANALYZ	ID: HFWT101XXX9 BER: 2228908 .ED: 10/13/94	94XD HFWT101XXX 2228905 4 10/13/9	94XX HFWT102XXX94XX 2228909 4 10/13/94
ANALYTE SOW-3	/90 - II CRQL			•
Chloromethane	1200	1300	U 1300	U 1300 U
Bromomethane	1200	1300	U 1300	U 1300 U
Vinyl Chloride	1200	1300	U 1300	U 1300 U
Chloroethane	1200	1300	U 1300	U 1300 U
Methylene Chloride	1200	2400	1700	2400
Acetone	1200	1300	U 1300	U 1300 U
Carbon Disulfide	1200	1300	U 1300	U 1300 U
1,1-Dichloroethene	1200	1300	U 1300	U 1300 U
1,1-Dichloroethane	1200	1300	U 1300	U 1300 U
1,2-Dichloroethene (tot		1300	U 1300	U 1300 U
Chloroform	1200	1300	U 1300 U 1300	U 1300 U U 1300 U
1,2-Dichloroethane	1200	1300		
2-Butanone	1200	1300 1300	U 1300 U 1300	U 1300 U U 1300 U
1,1,1-Trichloroethane	1200 1200	1300	U 1300	U 1300 U
Carbon Tetrachloride	1200	1300	U 1300	U 1300 U
Bromodichloromethane	1200	1300	U 1300	U 1300 U
1,2-Dichloropropane		1300	U 1300	U 1300 U
cis-1,3-Dichloropropene Trichloroethene	1200	1300	U 1300	U 1300 U
Dibromochloromethane	1200	1300	U 1300	U 1300 U
	1200	1300	U 1300	U 1300 U
1,1,2-Trichloroethane Benzene	1200	1300	U 1300	U 1300 U
trans-1,3-Dichloroprope		1300	U 1300	U 1300 U
Bromoform	1200	1300	U 1300	U 1300 U
4-Methyl-2-Pentanone	1200	1300	U 1300	U 1300 U
2-Hexanone	1200	1300	U 1300	U 1300 U
Tetrachloroethene	1200	1300	u 1300	U 1300 U
1,1,2,2-Tetrachloroetha		1300	U 1300	U 1300 U
Toluene	1200	510	J 310	J 1300 U
Chlorobenzene	1200	1300	Ü 1300	Ŭ 1300 U
Ethylbenzene	1200	1300	U 170	J 1300 U
Styrene	1200	1300	U 1300	U 1300 U
Total Xylenes	1200	840	J 3000	1300 U
	ilution Factor:	1.00	1.00	1.00
	Percent Solids:	95	94	91
Sample Volume	\Weight (ml\g):	4.00	4.00	4.00
Acconinta	d Method Blank:	M0571.D	M0571.D	M0571.D
	quipment Blank:	HFQSXX5XXX94XX		
	ed Field Blank:	**************************************	***************************************	40//////////
	ted Trip Blank:		-	
A550C14	ced II ib praik:			

Table 2 Validation / Summary Table

	LOCATION			WT - 102
		: HFWT101XXX94		
	LAB NUMBER		2228905	2228909
	DATE SAMPLED		10/13/94	
	DATE ANALYZED	: 10/17/94	10/17/94	10/17/94
ANALYTE SOW-3/90 -	II CRQL	_		
Chloromethane	1200	1300 l		U 1300 U
Bromomethane	1200	1300 l		U 1300 U
Vinyl Chloride	1200	1300 l		U 1300 U
Chloroethane	1200	1300 l		U 1300 U
Methylene Chloride	1200	2400 l		U 2400 U
Acetone	1200	1300 l		U 1300 U
Carbon Disulfide	1200	1300 l		U 1300 U
1,1-Dichloroethene	1200	1300 เ		U 1300 U
1,1-Dichloroethane	1200	1300 l		U 1300 U
1,2-Dichloroethene (total)	1200	1300 l	J · 1300	U 1300 U
Chloroform	1200	1300 l		U 1300 U
1,2-Dichloroethane	1200	1300 U	J 1300	U 1300 U
2-Butanone	1200	1 <b>3</b> 00 l		U 1300 U
1,1,1-Trichloroethane	1200	1300 l		U 1300 U
Carbon Tetrachloride	1200	1300 l	J 1300	U 1300 U
Bromodichloromethane	1200	1300 l	J 1300	U 1300 U
1,2-Dichloropropane	1200	1300 l	J 1300	U 1300 U
cis-1,3-Dichloropropene	1200	1300 l	J 1300	U 1300 U
Trichloroethene	1200	1 <b>3</b> 00 l		U 1300 U
Dibromochloromethane	1200	1300 l	J 1300	U 1300 U
1,1,2-Trichloroethane	1200	1300 l		U 1300 U
Benzene	1200	<b>130</b> 0 l		U 1300 U
trans-1,3-Dichloropropene	1200	1300 l	J 1300	U 1300 U
Bromoform	1200	1300 l	J 1300	U 1300 U
4-Methyl-2-Pentanone	1200	1300 l	J 1300	U 1300 U
2-Hexanone	1200	1300 l		บ 1300 บ
Tetrachloroethene	1200	1300 l	J 1300	U 1300 U
1,1,2,2-Tetrachloroethane	1200	1300 t		น 1300 บ
Toluene	1200	510 .	J · 310	J 1300 U
Chlorobenzene	1200	<b>1300</b> t		บ 1300 บ
Ethylbenzene	1200	1300 l		J 1300 U
Styrene	1200			ีน 1300 บ
Total Xylenes	1200		J 3000	J 1300 U
		1.00		1.00
	on Factor:			
	nt Solids:	95 4.00	94	91 4 00
Sample Volume\Weigh	it (ML\g):	4.00	4.00	4.00
Associated Meth	od Blank:	M0571.D	M0571.D	M0571.D
Associated Figure		QSXX5XXX94XX	HFQSXX5XXX94XX	
Associated Fig				5000000000
Associated Tr		-		-
Associated II	ib acquire			

Table 1 Laboratory Report of Analysis

ANALYTE COLL 7 (00	LAB NUMBER: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	WT-101 DUP HFWT101XXX94XD 2228908 10/13/94 10/19/94 11/23/94	WT-101 HFWT101XXX94XX 2228905 10/13/94 10/19/94 11/23/94	WT-102 HFWT102XXX94XX 2228909 10/13/94 10/19/94 11/23/94	WT-102 HFWT102XXX94XX 2228909 R 10/13/94 10/19/94 11/24/94
ANALYTE SOW-3/90 -	II CRQL				
Phenol	10000	10000 U	11000 U	11000 ປ	11000 U
bis(2-Chloroethyl)ether	10000	10000 U	11000 U	11000 U	11000 U
2-Chlorophenol	10000	10000 U	11000 U	11000 U	11000 U
1,3-Dichlorobenzene	10000	10000 U	11000 U	11000 U	11000 U
1.4-Dichlorobenzene	10000	10000 U	11000 U	11000 U	11000 U
1,2-Dichlorobenzene	10000	10000 U	11000 U	11000 U	11000 U
2-Methylphenol	10000	10000 U	11000 U	11000 U	11000 U
2,2'-oxybis(1-Chloropropane)		10000 U	11000 U	11000 U	11000 U
4-Methylphenol	10000	10000 U	11000 U	11000 U	11000 U
N-Nitroso-di-n-propylamine	10000	10000 U	11000 U	11000 U	11000 U
Hexachloroethane	10000	10000 U	11000 U	11000 U	11000 U
Nitrobenzene	10000	10000 U	11000 U	11000 U	11000 U
Isophorone	10000	10000 U	11000 U	11000 · U	11000 U
2-Nitrophenol	10000	10000 U	11000 U	11000 U	11000 U
2,4-Dimethylphenol	10000	10000 U	11000 U	11000 U	11000 U
bis(2-Chloroethoxy)methane	10000	10000 U	11000 U	11000 U	11000 U
2,4-Dichlorophenol	10000	10000 U	11000 U	11000 U	11000 U
1,2,4-Trichlorobenzene	10000	10000 U	11000 U	11000 U	11000 U
Naphthalene	10000	10000 U	11000 U	11000 U	11000 U
4-Chloroaniline	10000	10000 U	11000 U	11000 U	11000 U
Hexachlorobutadiene	10000	10000 U	11000 U	11000 U	11000 U
4-Chloro-3-Methylphenol	10000	10000 U	11000 U	11000 U	11000 U
2-Methylnaphthalene	10000	10000 U	11000 U	11000 U	11000 U
Hexachlorocyclopentadiene	10000	10000 U	11000 U	11000 U	11000 U
2,4,6-Trichlorophenol	10000	10000 U	11000 U	11000 U	11000 U
2,4,5-Trichlorophenol	25000	26000 U	26000 U	27000 U	27000 U
2-Chloronaphthalene	10000	10000 U	11000 U	11000 U	11000 ປ
2-Nitroaniline	25000	26000 U	26000 U	27000 U	27000 U
Dimethylphthalate	10000	10000 U	11000 U	11000 U	11000 U
Acenaphthylene	10000	10000 U	11000 U	11000 U	11000 U
2,6-Dinitrotoluene	10000	10000 U	11000 U	11000 U	11000 U

Table 1
Laboratory Report of Analysis

. ANALYTE SOW-3/90 -	LAB NUMB DATE SAMPL DATE EXTRACT DATE ANALYZ	ID: HFWT101XXX9 ER: 2228908 ED: 10/13/94 ED: 10/19/94	4XD	WT-101 HFWT101xxx 2228905 10/13/94 10/19/94 11/23/94		WT-102 HFWT102XXX9 2228909 10/13/94 10/19/94 11/23/94		WT-102 HFWT102XXX94XX 2228909 R 10/13/94 10/19/94 11/24/94
ARALITE SUW-3/70	11 CVGC							
3-Nitroaniline	25000	26000	U	26000	U	27000	U	27000 U
Acenaphthene	10000	10000	U	11000	U	11000	U	11000 U
2,4-Dinitrophenol	25000	26000	U	26000	U		U	27000 U
4-Nitrophenol	25000	26000	U	26000	U	27000	U	<sup>.</sup> 27000 U
Dibenzofuran	10000	10000	U	11000	U	11000	U	11000 U
2,4-Dinitrotoluene	10000	10000	U	11000	U	11000	U	11000 U
Diethylphthalate	10000	10000	U	11000	U		U	11000 U
4-Chlorophenyl-phenylether	10000	10000	U	11000	U	11000	U	11000 U
Fluorene	10000	10000	U	11000	U		U	1400 J
4-Nitroaniline	25000	26000	U.	26000	U		U	27000 U
4,6-Dinitro-2-methylphenol	25000	26000	U.	26000	U		U	27000 U
N-Nitrosodiphenylamine	10000	10000	U	11000	U	11000	U	11000 U
4-Bromophenyl-phenylether	10000	10000	U	11000	U	11000	U	11000 U
Hexachlorobenzene	10000	10000	U	11000	U	11000	U	11000 U
Pentachlorophenol	25000	26000	U	26000	U	27000 I	U	27000 U
Phenanthrene	10000	10000	U	11000	U	7300	j	8700 J
Anthracene	10000	10000	U	11000	U	7900	J	11000 U
Carbazole	10000	10000	U	11000	U	11000	U	11000 U
Di-n-butylphthalate	10000	10000	U	11000	U	11000	U	11000 U
Fluoranthene	10000	10000	U	11000	U	11000	U	11000 U
Pyrene	10000	10000	U	11000	U	11000	U	11000 U
Butylbenzylphthalate	10000	10000	U	11000	U	11000	U	- 11000 U
3,3'-Dichlorobenzidine	10000	10000	U	11000	U	11000 t	J	11000 U
Benzo(a)Anthracene	10000	10000	U	11000	U	11000	IJ	11000 U
Chrysene	10000	10000	U	11000	U	11000	IJ	11000 U
bis(2-Ethylhexyl)phthalate	10000	10000	U	11000	U	11000	U	11000 U
Di-n-octylphthalate	10000	10000	U	11000	U	11000 I	U	11000 U
Benzo(b)fluoranthene	10000	10000	U	11000	U	11000 I	U	11000 U
Benzo(k)Fluoranthene	10000	10000	U	11000	U	. 11000	U	11000 U
Benzo(a)Pyrene	10000	10000	U	11000	U	11000	U	11000 U
Indeno(1,2,3-c,d)Pyrene	10000	10000	U	11000	U	11000	U	11000 U
Dibenz(a,h)Anthracene	10000	10000	U	11000	U		U	11000 U
Benzo(g,h,i)perylene	10000	10000	U	11000	U		IJ	11000 U
				1.00	====	1.00	====	1,00
	on Factor:	1.00 95		7.00 94		91		91
	ent Solids:					1.00		
Sample Volume\Weig	ant (mr/8):	1.00		1.00		1.00		1.00
Associated Met	hod Blank:	Q1706.D		Q1706.D		Q1706.D		Q1706.D
Associated Equipm		HFQSXX6XXX94XX	HFG	SXX6XXX94XX	HFQ	SXX6XXX94XX	HFO	SXX6XXX94XX
Associated Fi				•		•		-
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								

PROJECT: NYSDEC-PSA-14 Hanna Furnace Site

Miscellaneous Soil Analysis

14-Apr-95

Table 1
Laboratory Report of Analysis

LOCATION:	WT-101 DUP	WT-101	WT-102
ISIS ID:	HFWT101XXX94XD	HFWT101XXX94XX	HFWT102XXX94XX
LAB NUMBER:	2228908	2228905	2228909
DATE SAMPLED:	10/13/94	10/13/94	10/13/94
DATE ANALYZED:	11/09/94	11/09/94	11/09/94

ANALYTE	RL			
Corrosivity, inch/Year	0.01	0.01 U	0.01 U	0.01 U
Ignitability, Degrees F	212	>212	>212	>212
Cyanide, Reactive, ppm	1	1 U	1 U	1 U
Sulfide, Reactive, ppm	1	1 U	1 U	1 U

Site: WASTE

U: not detected

Table 2 Validation / Summary Table

LOCATION:	WT-101 DUP	WT-101	WT-102
ISIS ID:	HFWT101XXX94XD	HFWT101XXX94XX	HFWT102XXX94XX
LAB NUMBER:	2228908	2228905	2228909
DATE SAMPLED:	10/13/94	10/13/94	10/13/94
DATE ANALYZED:	11/09/94	11/09/94	11/09/94
	• •	• • • • •	
RL			

0.01	0.01 U	0.01 U	0.01 U
212	>212	>212	>212
1	1 U	1 U	- 1 U
1	1 Ū	1 Ŭ	1 Ū
		212 >212 1 1 U	212 >212 >212 >212 1 1 U 1 U

MBHANNA6 MBHANNA6 MBHANNA6

Associated Method Blank: Associated Equipment Blank: Associated Field Blank:

Site: WASTE

**ANALYTE** 

U: not detected

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-12 SOIL (ug\kg)

#### VOLATILE

	HFBS102XX894XX	HFBS110X1294XX	HFBS110X1294XD	HFPS102XX594XX
unknown hydrocarbon	7700 J(10)	40.1/2>		
inknown aromatic Inknown	•	19 J(2)	9 J	
thyl methyl benzene isomer			6 J	13 J
	HFPS108X1094XX	HFWT101XXX94XX	HFWT101XXX94XD	HFWT102XXX94XX
thyl methyl benzene isomer	29 J	3000 J	2500 J(2)	· · · ·
rimethyl benzene isomer nknown aromatic		6100 J(3) 4700 J(3)	2000 J 7900 J(6)	
nknown hydrocarbon		1300 J	7700 0(0)	
nknown		1500 J		3300 J(2)
etramethyl benzene isomer aphthalene isomer		1000 J		970 J
O VOLATILE TIC'S WERE IDENTIF	IED IN THE FOLLOWING	SAMPLES:		
-	HFBS101XX694XX	HFBS109XX794XX	HFPS101XX994XX	HFPS106X1194XX
•	HFBS103X1094XX	HFCD105XXX94XX	HFPS103XX794XX	HFPS107XX694XX
	HFBS104XX894XX	HFCD106XXX94XX	HFPS104XX994XX	
	HFBS105X1094XX	HFCD107XXX94XX	HFPS104XX994XD	

Data Qualifiers: J = estimated

# TENTATIVELY IDENTIFIED COMPOUND (TIC) SUMMARY NYSDEC-PSA-14 HANNA FURNACE SITE; FILE: 7169-13 AQUEOUS (ug\L)

#### SEMIVOLATILE

	HFQSXX8XXX94XX	HFQSXX9XXX94XX
Unknown	30 J(6)	27 J(6)

Data Qualifiers: J = estimated

# SECTION 6.0 SURVEY CONTROL REPORT

# New York State Department of Environmental Conservation SUPERFUND STANDBY CONTRACT

# HANNA FURNACE CORP.

Buffalo, New York

# CONTROL REPORT

January 1995



OM P. POPLI, P.E., L.S., P.C. Consulting Engineers & Surveyors 44 Saginaw Drive Rochester, NY 14623 (716) 442-6940

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# ATTACHMENT A INTRODUCTION

### INTRODUCTION

This report summarizes the results of a site investigation survey encompassing approximately 130 acres surrounding the Hanna Furnace Corp. located in Buffalo, New York.

The survey work needed to satisfy the requirements of the Task Order Memorandum was performed in December, 1994 by Om P. Popli, P.E., L.S., P.C., by Brad Lins, Party Chief, under the supervision of Michael F. Ives, P.L.S.

## ATTACHMENT B

# STATEMENT OF WORK

## TASK ORDER MEMORANDUM

# SURVEYING AND MAPPING PRELIMINARY SITE ASSESSMENTS

The services to be provided under Task Order Memorandum \_\_\_ shall be performed in accordance with the terms and conditions of the Task Order Agreement between Om Popli Associates Incorporated (POPLI) and ABB Environmental Services (ABB-ES) dated May 5, 1991.

#### PROJECT SUMMARY

ABB-ES, under contract to the New York State Department of Environmental Conservation (NYSDEC), is performing Preliminary Site Assessments (PSAs) of suspected inactive hazardous waste sites in the State of New York. The purpose of the investigation is to confirm or deny the presence of hazardous waste disposal on-site and determine if a significant threat exists to public health and the environment. Task 1 activities include a data and records search and a site walkover. Task 2 involves the preparation of Work Plans for additional site investigations. Tasks 3 and 4 include initial environmental sampling and subsurface investigations, respectively.

Tasks 1 and 2 been completed and ABB-ES is developing site-specific budgets for the field investigation activities to be conducted under Tasks 3 and 4. As part of Tasks 3 and 4 the services of a licensed land surveyor are required to locate exploration locations, site features, and prepare a map for each site.

#### SCOPE OF SERVICES

POPLI shall provide all necessary personnel, equipment, and materials to perform the following Scope of Services in accordance with the Standard Specification described in Attachment A.

The follwoing seven sites are included under this Task Order Memorandum are:

#### SITE LIST

SITE:NAME	NYSDEC SITE NO.	Crty/Town	COUNTY
Wantagh Cleaners	130054	Hempstead	Nassau
Ranco Wiping Cloth	130076	Freeport	Nassau
Green Thumb Spray Company	130518	Hempstead	Nassau
Target Products, Inc.	819015	LeRoy	Genessee

#### SITE LIST

SITE NAME	NYSDEC SITE NO.	Crty/Town	C	OUNTY		
(continued)						
Davidson's Collision	828091	Rochester	Monroe			
Hanna Furnace, Division of National Steel Corp	915029	Buffalo	Erie			
ENRX, Inc.	915150	Buffalo	Erie			

A site location map and site sketch for each site are provided in Attachment B.

GENERAL SERVICES. The following general services are to be provided at each of the seven sites.

- 1. Mobilize and demobilize all necessary survey equipment and personnel to complete the horizontal location and vertical elevation survey within the project schedule.
- 2. Supply POPLI's personnel with all necessary equipment and clothing including, but not limited to, hardhats and safety glasses and other items in addition to those normally utilized by POPLI at a nonhazardous site.
- 3. Maintain good relations with NYSDEC, the local community, and associated agencies and land owners. POPLI field personnel employed on the project should be made thoroughly cognizant of the importance of this aspect of the work and its sensitivity to the entire program.
- 4. Attend a health and safety meeting with ABB-ES and the NYSDEC prior to the start of the survey activities.
- 5. Establish appropriate horizontal and vertical control at the site (i.e., locating existing benchmarks) Refer to the Attachment A, Technical Specifications for appropriate control.
- 6. Establish horizontal control at all monitoring wells, borings, sample locations, corners of buildings, and other points as determined by ABB-ES and indicate on map. Horizontal positions will be tied into the New York State Plane Coordinate System. Horizontal accuracy is to be 0.1 foot.
- 7. Establish vertical control at all monitoring wells, borings, sample locations, and corners of buildings as determined by ABB-ES and indicate on map. Vertical

elevations will be tied to mean sea level, 1929 General Adjustment. Vertical elevation accuracy will be 0.01 foot.

- 8. Locate and indicate specific features of the site on the map, such as the location and extent of filled areas, buried tanks, waste piles, buildings, etc. as determined by ABB-ES.
- 9. Provide all necessary measures for securing POPLP's equipment during the conduct of the work.
- 10. Conduct all field activities in an efficient and professional manner with minimum impact to the site environment. Tree and brush removal and other activities which impact the existing site environment shall not be undertaken without prior approval by ABB-ES.
- 11. Prepare a map showing property and site boundaries, developed through the use of current tax maps. The name of current property owners are to be shown on the map. In addition the map shall contain north arrow, scale, a legend that shows designations (wells, borings, sample locations, etc.) and a title block containing the official site name and site number.
- 12. Provide an electronic copy of the map on a 3.5-inch diskette in a format compatible with AutoCADD Release 12.
- 13. Provide a final bound report for each site summarizing coordinates of all surveyed locations, and ground elevations, together with any comments pertinent to each location. Sampling locations shall be referenced by identification numbers, to be provided by ABB-ES. This report shall also contain photocopies of all field notes and calculations as an appendix. The report shall describe procedures, traverses, and closures, and will note any significant observations relative to the survey. The final report shall be complete and accurate and shall not contain any errors. Any errors or omissions by POPLI shall be corrected by POPLI at no cost to ABB-ES within two weeks of notice of errors/omissions, so as not to jeopardize the overall project schedule. The final report shall be signed by a surveyor licensed in the State of New York.
- 14. Provide current health and safety certificates of all POPLI field personnel assigned to field surveying activities at any of the seven sites.

The methods, procedures and techniques to be used by POPLI are the responsibility of POPLI, and shall be designed to meet the intent of the specifications in Attachment A, appended hereto and incorporated by this Task Order Memorandum. Should the technical specifications conflict in any manner with the scope of services, the provisions of the scope of services shall govern.

SITE-SPECIFIC SERVICES. Specific requirements for each site are as follows:

## Wantagh Cleaners

Map the site, located at the corners of Wantagh Avenue and Sandhill Road in Hepstead, New York. Include the following items in the survey:

horizontal locations of 3 monitoring wells;

• vertical elevations of monitoring wells including top of the riser, tope of the protective casing, and the ground surface;

major site characteristics including the building, paved areas, and leaching pools (as indicated by manhole covers);

property boundaries based on tax map data; and

• 10 miscellaneous spot locations to be established by ABB-ES.

#### Ranco Wiping Cloth

Map the approximately 0.24-acre site located at 409 North Main Street, Freeport, New York. Include the following items in the survey:

horizontal locations of 5 shallow subsurface soil samples;

horizontal locations of 3 monitoring wells;

• vertical elevations of monitoring wells including top of the riser, tope of the protective casing, and the ground surface;

• major site characteristics including the edge of paved areas, building corners, and the drywell;

• property boundaries based on tax map data; and

• 10 miscellaneous spot locations to be established by ABB-ES.

## Green Thumb Spray Company

Map the approximately 0.2-acre site located at 627 Peninsula Boulevard, Hempstead, New York. Include the following items in the survey:

horizontal locations of up to 3 shallow subsurface soil samples;

• horizontal locations of 3 monitoring wells;

• vertical elevations of monitoring wells including top of the riser, tope of the protective casing, and the ground surface;

• major site characteristics including edge of the paved area, building corners, and drawell:

property boundaries based on tax map data; and

• \_\_\_\_10 miscellaneous spot locations to be established by ABB-ES.

## Target Products, Inc.

Man the 0.5-acre site on Lent Avenue, LeRoy, New York. Include the following items in the survey:

- horizontal locations of 3 collocated surface water/sediment samples;
- horizontal locations of 3 surface soil samples;
- horizontal locations of 4 existing and 4 new monitoring wells;
- vertical elevations of monitoring wells including top of the riser, top of the protective casing, and the ground surface;
- major site characteristics including the edge of paved area, building corners, catch basin #1, catch basin #2, fenced areas, the approximate edge of the drainage swale;
- property boundaries based on tax map data; and
- 10 miscellaneous spot locations to be established by ABB-ES.

#### Davidson's Collision

Map the approximately 0.5-acre site on Gregory Street, Rochester, New York. Include the following items in the survey:

- horizontal locations of 5 surface soil samples;
- horizontal locations of 4 monitoring wells;
- vertical elevations of monitoring wells including top of the riser, tope of the protective casing, and the ground surface;
- major site characteristics including the parking lot, auto body shop, auto parts store, and fence:
- property boundaries based on tax map data; and
- 10 miscellaneous spot locations to be established by ABB-ES.

#### Hanna Eurnace

Map the 130-acre site located at 1818 Fuhrman Boulevard, Buffalo, New York. Include the following items in the survey:

- horizontal locations of 7 collocated surface water/sediment samples; 54/50 7 /s
- horizontal locations of 9 sump samples; colet 9 Vs
- horizontal locations of 2 drum samples; wit 2 is
- horizontal locations of 21 surface soil samples; 35
- horizontal locations of 8 test pits  $\tau \sim 8/6$
- horizontal locations of 10 monitoring wells; MM: 10

- vertical elevations of monitoring wells including top of the riser, tope of the protective casing, and the ground surface;
- major site characteristics including the outline of the Union Ship Canal, existing roads, and existing buildings;

property boundaries based on tax map data; and

50 miscellaneous spot locations to be established by ABB-ES.

#### ENRX, Inc.

Map the approximately 0.5-acre site located at 766 Babcock Street, Buffale, New York. Include the following items in the survey:

horizontal locations of 3 monitoring wells;

• vertical elevations of monitoring wells including top of the riser, tope of the protective casing, and the ground surface;

• major site characteristics including edge of paved area, building corners, fenced areas, and locations of utility manholes:

• property boundaries based on tax map data; and

• 10 miscellaneous spot locations to be established by ABB-ES.

## ABB-ES or its designated representative will provide the following services:

- 1. Provide POPLI with right-of-access to all locations through NYSDEC and appropriate land owners.
- 2. Conduct health and safety meeting with POPLI field representatives prior to initiation of survey activities.

## HEALTH AND SAFETY REQUIREMENTS

Before field work begins, POPLI must submit certification to ABB-ES that each of its employees working on-site at the PSA sites is in a Medical Monitoring program and has completed the appropriate training and field experience in compliance with the new OSHA 29 CFR regulations.

POPLI is responsible for meeting the requirements of the laws and regulations that apply to its work and to its employees. POPLI is advised to investigate the new requirements of 29 CFR before beginning work on this project. All work will be done at Level D, as described in the Health and Safety Plan (HASP) which will be forwarded to POPLI by ABB-ES prior to authorization to proceed for individual sites.

#### PROJECT SCHEDULE

Each site survey will be schedule separately depending on field work schedules. POPLI shall mobilize within five (5) calendar days of notice to proceed. ABB-ES anticipates that the survey for Tasks 3 and 4 field investigation activities shall commence on or about September 1, 1994. The final bound report shall be completed and provided to ABB-ES no later than 21 calender days after completion of the field work.

NYSDEC or ABB-ES reserve the right to reduce or increase the number of sampling locations, spot elevations, or temporary bench marks in this program. POPLI will provide sufficient equipment and manpower to avoid unnecessary delays.

POPLI shall assume 8-hour days and a repeating schedule of normal 5-day work week with 2 days off on weekends. If survey work falls behind schedule, POPLI shall be prepared to work reasonable overtime and mobilize additional survey equipment and personnel-to complete the program within the project schedule, as specified by ABB-ES.

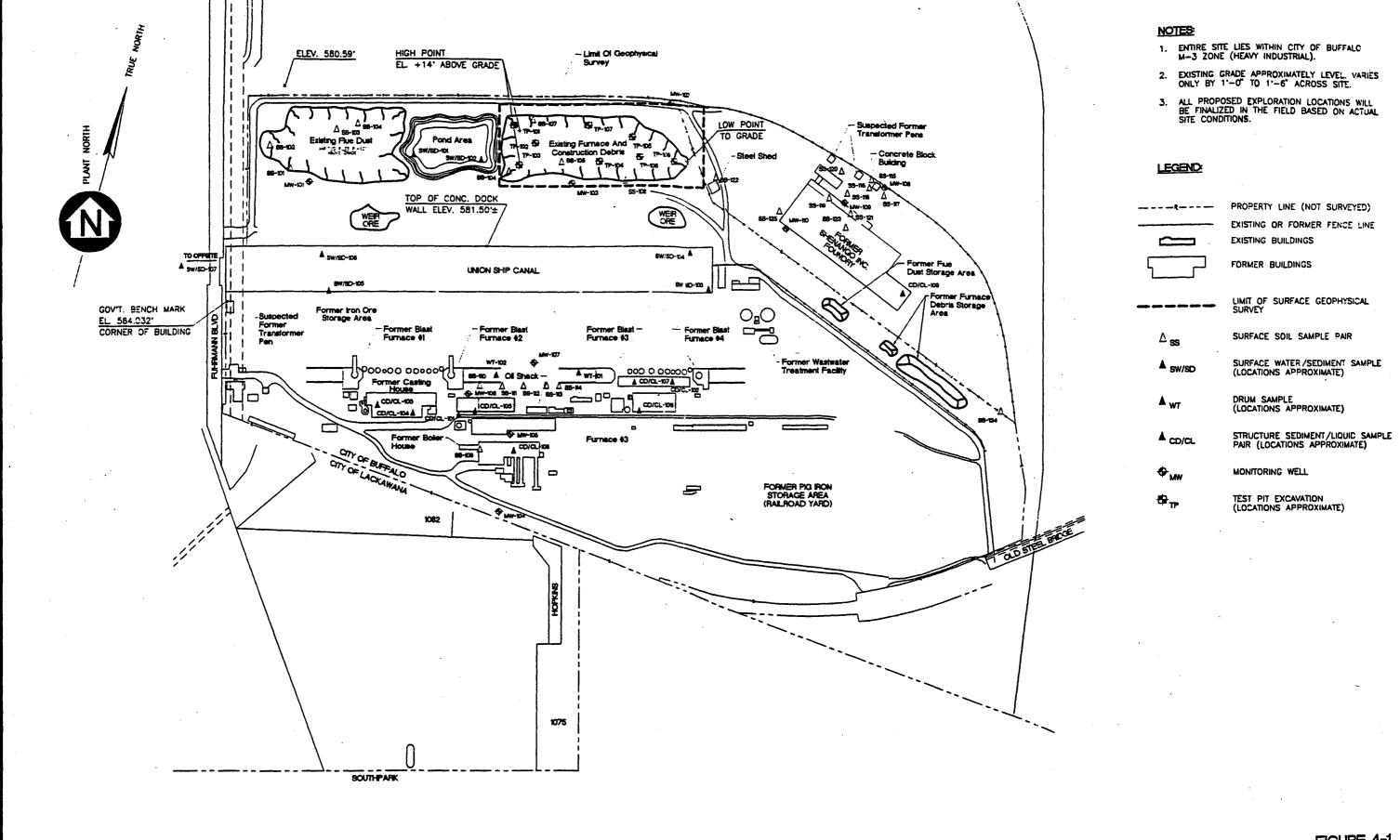
#### MEASUREMENT AND PAYMENT

The payment items shall be those presented in accordance with contract required rates included in the Contract Schedules included as Attachment C. All measurements for payment purposes shall be rounded to the nearest 0.5 hour and half day. All unit cost shall be based on "Level D Protection". Prevailing Rates do not apply to investigative activities in the PSA. A separate rate schedule is to be provided for each of the fourteen sites.

#### **COMPENSATION**

POPLI shall be compensated on a cost plus fixed fee basis for the services described in the Scope of Services as authorized and accepted by ABB-ES in accordance with the contract required rates Attachment C and the site-specific estimates included in Attachment D. Invoices shall include the project job number task order number and indicate by date, the hours, expenses, and services provided on a site by site basis. Time reports, expense reports, and itemization of miscellaneous charges shall be required as backup for-each-submitted invoice in accordance with the Task Order Agreement-Attachment A: Schedule B, Payment Requirements.

# ATTACHMENT C FIGURES

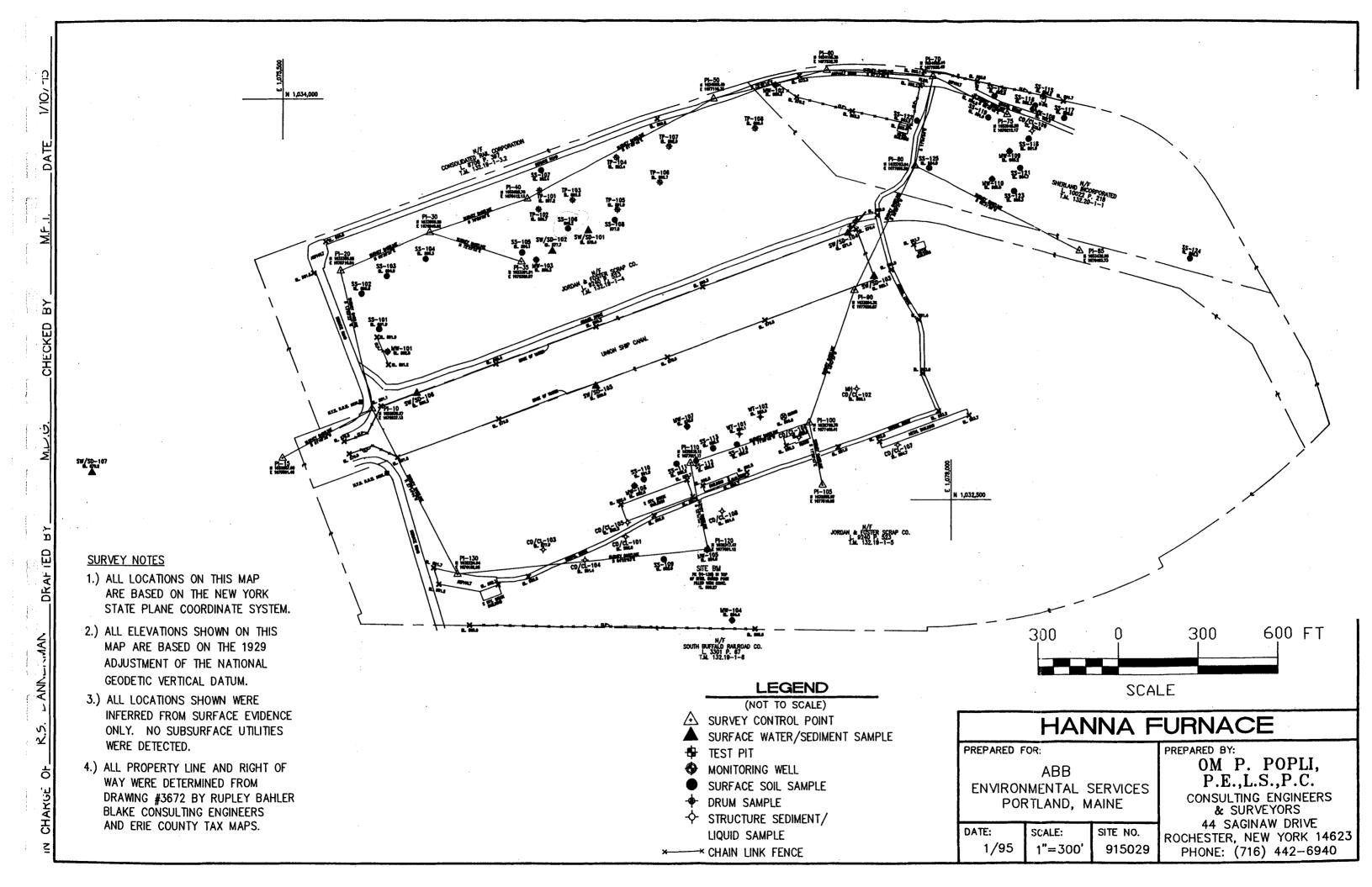


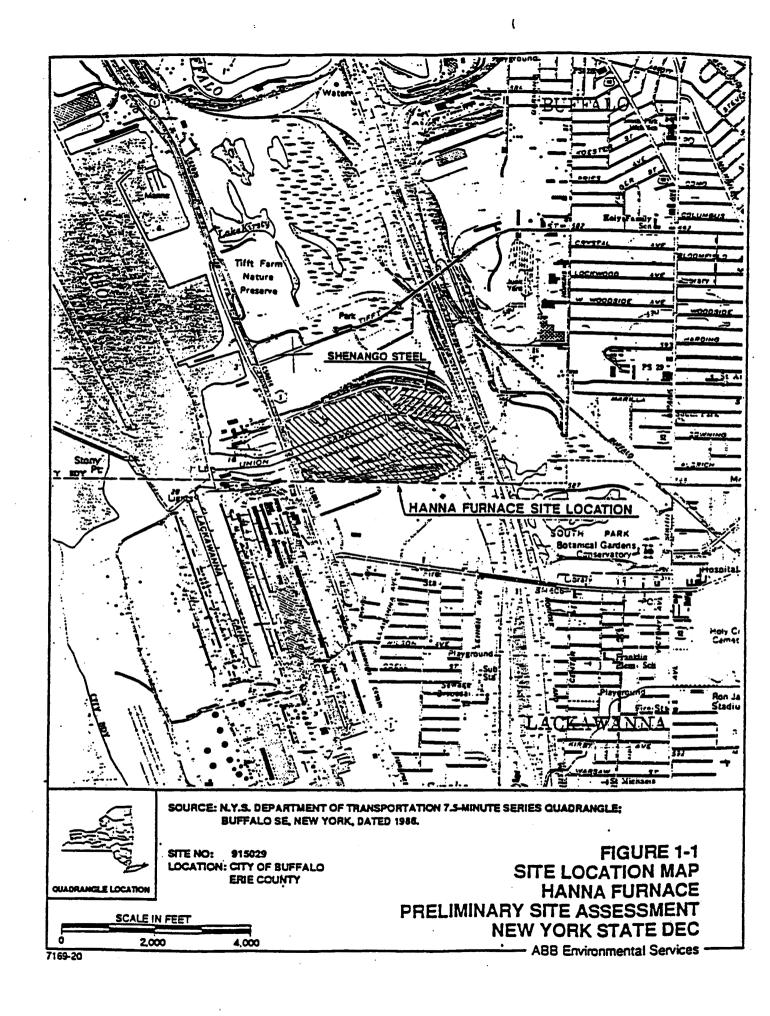
400

SCALE: "=400"

800 FEET

FIGURE 4-1
PROPOSED SAMPLING LOCATIONS
HANNA FURNACE
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC
ABB Environmental Services





# ATTACHMENT D TABULATION OF DATA

#### SUMMARY

	HANNA FURNACE							
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION				
SS-101	1033139.65	1075860.92	581.6	GROUND				
SS-102	1033271.00	1075794.96	590.8	GROUND				
SS-103	1033337.20	1075889.19	584.0	GROUND				
SS-104	1033401.43	1076033.06	585.3	GROUND				
SS-105	1033425.37	1076392.18	584.1	GROUND				
SS-106	1033514.76	1076565.10	593.1	GROUND				
SS-107	1033732.50	1076464.16	583.4	GROUND				
SS-108	1033547.04	1076739.58	577.5	GROUND				
SS-109	1032280.29	1076923.36	582.0	GROUND				
SS-110	1032577.80	1076848.14	581.9	GROUND				
SS-111	1032635.23	1076969.68	582.2	GROUND				
SS-112	1032646.64	1077044.03	582.6	GROUND				
SS-113	1032693.32	1077110.44	582.3	GROUND				
SS-114	1032707.39	1077198.76	582.8	GROUND				
SS-115	1034009.97	1078345.94	582.2	GROUND				
SS-116	1033976.47	1078316.12	582.3	GROUND				
SS-117	1033930.66	1078426.66	580.9	GROUND				
SS-118	1033853.16	1078291.17	581.9	GROUND				
SS-119	1033934.88	1078141.71	581.8	GROUND				
SS-120	1034015.76	1078165.32	582.0	GROUND				
SS-121	1033743.41	1078260.40	584.7	GROUND				
SS-122	1033923.05	1077872.87	583.2	GROUND				
SS-123	1033657.02	1078236.86	588.3	GROUND				
L		<del></del>	<u> </u>	<u></u>				

#### SUMMARY

HANNA FURNACE									
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION					
SS-124	1033403.08	1078898.30	582.3	GROUND					
SS-125	1033745.45	1077918.09	584.9	GROUND					
TP-101	1033656.70	1076457.79	597.2	GROUND					
TP-102	1033586.38	1076454.28	598.7	GROUND					
TP-103	1033620.67	1076581.81	592.5	GROUND					
TP-104	1033780.68	1076744.74	583.4	GROUND					
TP-105	1033585.30	1076749.22	581.9	GROUND					
TP-106	1033687.44	1076906.50	582.7	GROUND					
TP-107	1033823.16	1076940.54	582.6	GROUND					
TP-108	1033891.66	1077264.87	580.4	GROUND					
SW/SD-101	1033506.24	1076640.67	578.4	GROUND					
SW/SD-102	1033429.64	1076506.88	577.7	GROUND					
SW/SD-103	1033335.99	1077711.46	580.1	GROUND					
SW/SD-104	1033496.61	1077614.12	571.6	GROUND					
SW/SD-105	1032926.25	1076669.66	580.0	GROUND					
SW/SD-106	1032899.09	1076002.18	580.3	GROUND					
SW/SD-107	1032603.39	1074792.02	572.2	GROUND					
CD/CL-101	1032363.47	1076781.00	582.0	GROUND					
CD/CL-103	1032316.01	1076473.89	577.9	GROUND					
CD/CL-104	1032277.15	1076629.66	581.4	GROUND					
CD/CL-105	1032415.21	1076786.92	582.2	GROUND					
CD/CL-107	1032705.31	1077801.63	584.7	GROUND					
CD/CL-108	1032458.19	1077143.16	581.4	GROUND					
CD/CL-109	1033881.73	1078303.82	583.8	GROUND					

#### **SUMMARY**

HANNA FURNACE								
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION				
WT-101	1032746.99	1077207.72	584.1	GROUND				
100	4000040.44	4077005.00	500.0	CDOLIND				
WT-102	1032810.11	1077285.90	583.8	GROUND				
MW-101	1033054.97	1075892.75	582.8	GROUND				
M44-101	1033054.97	10/5892./5	585.40	CASE				
		<del></del>	585.17	RISER				
			305.17	- INOLIT				
MW-102	1034053.80	1077340,25	580.3	GROUND				
			583.20	CASE				
			582,98	RISER				
			;	7				
MW-103	1033398.21	1076446.06	580.3	GROUND				
	:		582.81	CASE				
	<del></del>	<del></del>	582.56	RISER				
			<del></del>					
MW-104	1032052.97	1077181.31	584.4	GROUND				
			587.19	CASE				
			586.90	RISER				
	•		i					
MW-105	1032315.41	1077087.84	584.0	GROUND				
			586.22	CASE				
			586.03	RISER				
•			1					
MW-106	1032553.59	1076813.75	582.8	GROUND				
			586.05	CASE				
			585.67	RISER				
			1					
MW-107	1032774.66	1077009.50	579.6	GROUND				
			582.27	CASE				
			582.09	RISER				
			· · · · · · · · · · · · · · · · · · ·					
MW-108	1033963.96	1078307.08	582.9	GROUND				
			585.39	CASE				
	:		584.88	RISER				
NAV 100	1022007.00	1070000 00	505 O	CDO! IND				
MW-109	1033807.88	1078220.90	585.2 587.74	GROUND CASE				
			587.60	RISER				
			301.00	חואבא				
MW-110	1033703.07	1078155.28	585.0	GROUND				
17177 110	100100.01	101013020	587.53	CASE				
	······································	<del></del>	587.38	RISER				
				- HOLI				

### FINAL Ground Coords (ON SITE Trav.) 12-28-94

### Easy Survey Coordinate Editor, File ->TRAV.CR5

Point	Northing	Easting	Elevation	- Description -
. 1	0.0000	0.0000	0.0000	NULL
10	1032838.2713	1075837.1286	582.5300	PI-10 ·
15	1032657.9773	1075501.4602	579.1400	PI-15
20	1033356.8459	1075716.8420	588.1700	PI-20
30	1033500.2044	1076048.0227	586.0300	PI-30
35	1033391.9125	1076389.8737	581.7000	PI-35
40	1033625.6957	1076412.1261	598.8100	PI-40
50	1034000.3972	1077110.3072	580.0800	PI-50
60	1034108.3037	1077532.7516	580.8500	PI-60
70	1034089.4375	1077932.4807	583.2000	PI-70
75	1033945.5578	1078212.1734	583.6400	PI-75
80	1033753.0355	1077866.5930	585.1400	PI-80
85	1033432.0802	1078483.7266	582.5700	PI-85
90	1033284.3208	1077638.0672	579.9700	PI-90
100	1032788.7047	1077469.4074	582.8500	PI-100
105	1032555.0740	1077519.0470	581.3100	PI~105
110	1032638.1171	1077021,1689	582.9000	PI-110
120	1032317.4665	1077091.1195	586.2700	PI-120
130	1032224.9422	1076152.9537	581.8700	PI-130

Easy Survey Coordinate Editor, File ->TRAV1A.CR5

Point	Northing	Easting	Elevation	- Description -
1	0.0000	0.0000	0.0000	NULL
10	1032838.2713	1075837.1286	0.0000	PI-10
130	1032224.9422	1076152.9537	0.0000	PI-130
140	1029757.2010	1081013.8136	0.0000	PI-140
150	1029976.2301	1079630.3977	0.0000	PI-150
160	1030098.2317	1078845.8375	0.0000	PI-160
170	1030242.9559	1077827.2533	0.0000	PI-170
180	1030454.3914	1077205.8397	0.0000	PI-180
190	1031391.4077	1077004.2385	0.0000	PI-190
200	1031481.3372	1076280.7258	0.0000	PI-200
210	1032237.5414	1076005.6311	0.0000	PI-210
220	1031463.2554	1076329.3787	0.0000	PI-220
230	1031475.0838	1077014.4465	0.0000	PI-230
240	1030415.8352	1077331.6039	0.0000	PI-240
250	1030293.3041	1077873.8706	0.0000	PI-250
260	1030170.3528	1078741.9644	0.0000	PI-260
270	1030082.2155	1079352.2745	0.0000	PI-270
280	1030096.1292	1079562.3560	0.0000	PI-280
290	1029859.5214	1080979.4758	0.0000	PI-290
300	1029988.1139	1081198.5397	0.0000	MON. BALA

Easy Survey Coordinate Editor, File ->HFHSBL12.CR5

Point	Northing	Easting	Elevation	- Description -
1	0.0000	0.0000	0.0000	NULL
707	1032730.8991	1077371.4890	583.8445	RUINS COR A GRD
708	1032702.3335	1077382.9171	585.2561	RUINS COR B TOP
709	1032715.1197	1077417.1245	585.2629	RUINS COR C TOP
710	1032710.3250	1077418.8106	583.3758	RUINS COR D GRD
711	1032730.8742	1077473.2721	583.7297	RUINS COR E GND
712	1032750.8367	1077466.1888	583.2718	RUINS COR F GND
713	1032729.8646	1077409.1227	586.2928	RUINS COR G TOP
714	1032743.2560	1077403.9271	584.0924	RUINS COR H GRD
715	1032733.9700	1077429.7957	585.7828	CD/CL 106
716	1032811.3814	1077372.8051	590.5534	24'DIA S.STKRUIN
717	1032915.6493	1077646.3807	586.1173	CD/CL 102 MH
718	1032966.8508	1077895.0184	583.8212	CL 12' GRAVEL DR
719	1032803.1914	1077863.6973	582.8951	CL 12'*CL15'GRAV
720	1032832.2533	1077952.2306	583.2105	CL15' GOING EAST
721	1032765.6527	1077768.8243	582.5917	CL15 DRV GRAVEL
722	1032728.7393	1077672.7047	582.0776	CL15 DRV GRAVEL
723	1032696.4012	1077578.4460	581.8533	CL15 DRV GRAVEL
724	1032663.8030	1077489.1116	581.6032	CL15 DRV GRAVEL
725	1032633.2356	1077399.5032	581.8635	CL15 DRV GRAVEL
726	1032602.8979	1077309.1913	581.9206	CL15 DRV GRAVEL

Point	Northing	Easting	Elevation	- Description -
1	0.0000	0.0000	0.0000	NULL '
350	1032838.2828	1075837.1500	582.5176	CK TO 10
351	1032603.3886	1074792.0173	572.2269	SW/SD-107
352	1033356.8750	1075716.8353		CK TO 20
353	1032755.6206	1075719.5274	582.5213	ELB;CL 30'PAV RD
354	1032767.5480	1075751.9402	582.3659	
355	1032794.5277	1075792.7157	582.1087	
356	1032835.4589	1075815.8076	581.8454	CPL; POC
357	1032882.1424	1075817.2844	581.6716	CPL; POC
358	1032904.0632	1075810.7219	581.6714	
359	1032997.2555	1075775.5372		ELB;CL 30'PAV RD
360	1033090.3923	1075739.8432	582.1636	
361	1033186.0136	1075703.0370		ELB;CL 30'PAV RD
362	1033263.5640	1075673.2894	582.6079	
363	1033109.0620	1075853.0637	581.9409	•
364	1033006.0253	1075896.0899	581.1739	_
365	1033139.6516	1075860.9242	581.5864	
366	1033054.9665	1075892.7508	582.7341	MW-101
367	1032899.0925	1076002.1838	580.3051	SW/SD-106*CANAL
368	1032938.8032	1076108.8369	580.2562	
369	1032974.2183	1076203.7886	580.0307	
370	1033008.1782	1076295.2721	580.3487	
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        1033477.2921
                                        580.8649 DRV; CL 21'GRAVEL
                      1077524.0602
   608
        1033508.4723
                                        581.0087 DRV; CL 21'GRAVEL
                      1077618.3002
   609
        1033543.3659
                                        580.9771 DRV:CL CL GRVL
   610
       1033559.5946 1077724.8137
                                        581.1483 DRV; CL 15'GRAVEL
   611
        1033456.5688 1077751.3062
                                        580.9214 DRV; CL 15'GRAVEL
   612
       1033361.4903
                     1077776.5096
                                        580.4107 DRV; CL 15'GRAVEL
       1033273.5230
                     1077819.6660
   613
                                        581.3474 DRV; CL 15'GRAVEL
       1033174.4206
                     1077879.6121
   614
                                        580.9145 DRV; CL 15'GRAVEL
   615
       1033122.9086
                      1077891.3984
                                        583.8668 DRV;CL 12'GRAVEL
   616
       1032973.1401
                      1077892.9597
                                        581.5364 BLD; CNR METAL
        1033445.3083
   617
                      1077906.7205
                                        581.3951 BLD; CNR METAL
   618
        1033431.8428
                      1077869.0072
                                        581.6826 BLD; CNR METAL
   619
       1033455.3056
                      1077860.2959
                                        571.6408 SW/SD-104;36"CMP
   620
       1033496.6097
                      1077614.1155
                                        580.0531 SW/SD-103
   621
       1033335.9920
                     1077711.4630
   622
       1033753.0654
                     1077866.6639
                                        585.1250 CK TO 80
                                        583.2049 CK TO 100
   623
       1032788.7001
                      1077469.4083
                                        583.2015 CK TO 100
   624
       1032788.7002
                     1077469.4083
                                        582.8316 CK TO 100
   625
       1032788.6024
                     1077469.4291
                                        581.9612 BLD; CNR METAL
                     1077733.2330
   626
       1032718.0284
                                        582.5244 BLD:CNR METAL
   627
       1032694.2477
                      1077742.1082
                                        583.6691 BLD; CNR METAL
   628
       1032816.3161
                      1078069.2010
                                        584.7433 CD/CL-107
   629
        1032705.3105
                      1077801.6305
                                        582.7148 BLD:CNR BRICK
   630
        1032565.7189
                      1077174.3063
       1032590.8911 1077241.1401
                                        582.1977 BLD; CNR BRICK
   631
                                        582.5067 BLD; CNR BRICK
   632
       1032603.1848
                     1077236.4571
       1032788.7182 1077469.4475
                                        582.8576 CK TO 100
   635
   636 1032317.2371 1077091.1598
                                        586.2914 CK TO 120
                                        582.7619 BLD:BB
   637
       1032601.7639 1077198.3374
       1032589.2330
                                        582.4509 BLD:CC
   638
                      1077165.5146
       1032588.1556 1077162.0497
   639
                                        582.2534 O.
                                        582.2534 BLD:DD
   640
       1032588.1556
                     1077162.0497
       1032553.9658 1077071.5862
   641
                                        582.5987 BLD; EE
  `642
       1032531.3939
                     1077079.2825
                                        582.8054 BLD:FF
   643
        1032575.0385
                      1077009.2358
                                        583.6827 0
                      1077009.2284
   644
        1032574.9992
                                        583.6843 BLD; HH
. 645
        1032483.7119
                      1076763.0119
                                        582.4370 BLD; II
   646
       1032553.5900
                     1076813.7513
                                        582.7506 MW-106
   647
       1032577.8015 1076848.1444
                                        581.9045 SS-110
   648
       1032635.2268 1076969.6788
                                       582.1538 SS-111
   649
       1032646.6420 . 1077044.0265
                                        582.6428 SS-112
   650
       1032693.3213 1077110.4350
                                        582.3030 SS-113
       1032707.3918 1077198.7552
                                        582.8013 SS-114
  · 651
       1032810.1106 1077285.9033
                                       _583.7635 WT-102
   652
   653
       1032746.9891
                     1077207.7218
                                        584.0640 WT-101
       1032774.6558
                     1077009.5021
                                        579.6486 MW-107
   654
   655
        1032926.2503
                      1076669.6607
                                        579.9986 SW/SD-105
                                       582.8771 BLD:GG
        1032512.7908
   656
                      1077031.9591
                                      586.2958 CK TO 120
        1032317.4339
                     1077091.1234
   657
                                     582.9328 CK TO 110
   658
       1032638.1342
                     1077021.2144
   659
       1032623.4536 1077363.4069 581.8956 DRV;CL 15'GRVL
```

1

1

```
582.2391 DRV;CL 15'GRVL
        1032587.2689
                       1077267.3824
   660
                                          582.5079 DRV; CL 15'GRVL
        1032553.1101
                       1077174.6684
   661
                                          582.6781 DRV;CL 15'GRVL
   662
        1032520.0476
                       1077081.3428
                                          582.2054 DRV; CL 15'GRVL
   663
        1032478.3277
                       1076982.1891
                                          581.9805 DRV; CL 15'GRVL
                       1076886.9454
        1032441.4941
   664
                                          582.3199 DRV;CL 15'GRVL
   665
        1032391.6839
                       1076797.7865
        1032341.2570
                       1076704.0333
                                          582.1680 DRV;CL 15'GRVL
   666
                                          582.4352 DRV; CL 15'GRVL
   667
        1032299.5093
                       1076610.2366
                                          582.5772 DRV; CL 15'GRVL
   668
        1032256.0334
                       1076505.0317
   669
        1032277.1534
                       1076629.6634
                                          581.3746 CD/CL-104
                                          581.9532 CD/CL-101
   670
        1032363.4719
                       1076780.9988
                                          582.2153 CD/CL-105
   671
        1032415.2077
                       1076786.9203
        1032280.2944
                                          582.0105 SS-109
   672
                       1076923.3577
                                          581.3986 CD/CL-108
   673
        1032458.1946
                       1077143.1564
        1032315.4097
   674
                                          584.0498 MW-105
                       1077087.8390
   675
        1032052.9738
                       1077181.3073
                                          584.3952 MW-104
        1032019.9678
                                          585.4697 CLF; BEGIN
   676
                       1077267.5054
   677
        1032021.4351
                       1077106.2968
                                          584.9078 CLF;4'
        1032025.4630
                       1076938.7949
                                          586.0144 CLF;4'
   678
                                          583.6090 CLF;4'
   679
        1032030.5516
                       1076806.6914
                                          583.2998 CLF;4'
   680
        1032029.2047
                       1076655.3914
                       1076552.6914
                                          584.8817 CLF;4'
   681
        1032029.3659
   682
        1032031.5065
                       1076421.3147
                                          583.0972 CLF;4'
   683
        1032034.5787
                       1076284.5572
                                          583.5474 CLF;4'
   684
        1032034.2343
                       1076197.7292
                                          583.8804 CLF;4'END
   685
        1032224.9343
                       1076152.8732
                                          581.9497 CK TO 130
        1032317.4744
   686
                       1077091.2004
                                          586.2655 CK TO 120
   687
        1032316.0060
                       1076473.8944
                                          577.9476 CD/CL-103
   688
        1032254.8946
                       1076503.2151
                                          582.4380 DRV;CL 15'GRVL
   689
        1032214.9432
                       1076417.9845
                                          582.5915 DRV;CL 15'GRVL
   690
        1032204.8706
                       1076363.8998
                                          582.6852 DRV;CL 15'GRVL
   691
        1032203.0464
                       1076301.3055
                                          582.5714 DRV;CL 15'END @E
   692
        1032213.9513
                       1076297.6159
                                          582.5001 EP
   693
        1032216.7145
                       1076223.7770
                                          582.2236 EP
   694
        1032232.7089
                       1076130.4358
                                          581.8771 EP
   695
        1032248.3277
                       1076065.7762
                                          581.7348 EP; CNR
   696
        1032187.2530
                       1076084.3483
                                          581.2334 EP; CNR
. . 697
                       1076166.4018
        1032172.3364
                                          581.4769 EP
   .698
        1032159.6220
                      1076237.0695
                                          582.2509 BLD; CNR BRICK*EP
   699
        1032125.7665
                                          582.6561 BLD; CNR BRICK LL
                       1076249.6571
   700
                       1076304.9058
        1032184.9773
                                          582.2590 BLD; CNR BRICK*EP
   701
        1032488.6546 1075953.7932
                                          579.1914 ELB; CL 30'PAV RD
        1032396.1582
   702
                                          579.5791 ELB;CL 30'PAV RD
                       1075981.0427
  . 703
        1032303.0367
                       1076008.8237
                                          579.9741 ELB; CL 30'PAV RD
                       1076036.6755 580.5622 ELB;CL 30'PAV RD
   704
        1032209.1089
   705
        1032113.8581
                       1076064.9541
                                         581.0271 ELB; CL 30'PAV RD
   706
        1032019.6908
                       1076092.7468
                                         581.5572 ELB;CL 30'PAV RD
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JOB: Name TRAV, Date 12-09-1994, Time 09:08:25 -
Mode Setup: North Azimuth, Dist feet, Scale 0.9999, Earth crv OFF, Angle Deg
 Store:Pt 1,N 0.0000,E 0.0000,Elv 0.0000,NULL
 Store:Pt 10,N 1032838.2713,E 1075837.1286,Elv 0.0000,PI-10
 Store:Pt 130,N 1032224.9422,E 1076152.9537,Elv 0.0000,PI-130
 Occupy: Occ 10,N 1032838.2713,E 1075837.1286,Elv 0.0000,PI-10
 Backsight:Occ 10,BS Pt 0,BS azm 152.4516,Back circle 0.0000
 Side Shot: 10-15, Ang-Rt 89.0016, Zenith 90.3131, Slp Dst 381.0780, PI-15
 Traverse:10-20,Ang-Rt 194.1111,Zenith 89.2433,Slp Dst 532.4240,PI-20
 Traverse: 20-30, Ang-Rt 259.3910, Zenith 90.2238, Slp Dst 360.9210, PI-30
 Side Shot:30-35,Ang-Rt 220.5901,Zenith 90.4459,Slp Dst 358.6600,PI-35
 Traverse:30-40,Ang-Rt 184.2322,Zenith 88.0859,Slp Dst 385.3620,PI-40
 Traverse: 40-50, Ang-Rt 170.4743, Zenith 91.2204, Slp Dst 792.6800, PI-50
Traverse: 50-60, Ang-Rt 193.5334, Zenith 89.5618, Slp Dst 436.0520, PI-60
Traverse: 60-70, Ang-Rt 197.0152, Zenith 89.4118, Slp Dst 400.2200, PI-70
 Side Shot:70-75, Ang-Rt 204.3112, Zenith 89.5647, Slp Dst 314.5620, PI-75
Traverse: 70-80, Ang-Rt 278.2246, Zenith 89.4314, Slp Dst 342.8320, PI-80
 Side Shot:80-85, Ang-Rt 106.2346, Zenith 90.1456, Slp Dst 695.6810, PI-85
 Traverse:80-90,Ang-Rt 194.5437,Zenith 90.3607,Slp Dst 521.5380,PI-90
 Traverse:90-100,Ang-Rt 172.4806,Zenith 89.1334,Slp Dst 523.6280,PI-100
 Side Shot:100-105, Ang-Rt 149.1240, Zenith 89.2653, Slp Dst 238.8810, PI-105
Traverse: 100-110, Ang-Rt 232.3811, Zenith 90.0154, Slp Dst 472.9050, PI-110
Traverse: 110-120, Ang-Rt 96.1549, Zenith 89.5514, Slp Dst 328.2250, PI-120
Traverse: 120-131, Ang-Rt 276.4000, Zenith 90.0646, Slp Dst 942.7820, CK TO PI-130
 Store:Pt 10,N 1032838.2713,E 1075837.1286,Elv 582.5300,PI-10
 Store:Pt 15,N 1032657.9773,E 1075501.4602,Elv 579.1400,PI-15
 Store:Pt 20,N 1033356.8459,E 1075716.8420,Elv 588.1700,PI-20
Store:Pt 30,N 1033500.2044,E 1076048.0227,Elv 586.0300,PI-30
Store:Pt 35,N 1033391.9124,E 1076389.8737,Elv 581.7000,PI-35
Store:Pt 40,N 1033625.6957,E 1076412.1261,Elv 598.8100,PI-40
 Store:Pt 50,N 1034000.3972,E 1077110.3072,Elv 580.0800,PI-50
 Store:Pt 60,N 1034108.3038,E 1077532.7516,Elv 580.8500,PI-60
 Store: Pt 70,N 1034089.4375,E 1077932.4807,Elv 583.2000,PI-70
 Store: Pt 75,N 1033945.5578,E 1078212.1734,Elv 583.6400,PI-75
 Store:Pt 75,N 1033945.5578,E 1078212.1734,Elv 583.6400,PI-75
Store:Pt 80,N 1033753.0355,E 1077866.5930,Elv 585.1400,PI-80
 Store:Pt 85,N 1033432.0802,E 1078483.7266,Elv 582.5700,PI-85
 Store:Pt 90,N 1033284.3208,E 1077638.0672,Elv 579.9700,PI-90
 Store:Pt 100,N 1032788.7048,E 1077469.4074,Elv 582.8500,PI-100
 Store:Pt 105,N 1032555.0740,E 1077519.0470,Elv 581.3100,PI-105
Store:Pt 110,N 1032638.1171,E 1077021.1689,Elv 582.9000,PI-110
Store:Pt 120,N 1032317.4665,E 1077091.1195,Elv 586.2700,PI-120
 Store:Pt 130,N 1032224.9422,E 1076152.9537,Elv 581.8700,PI-130
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JOB: Name TRAV1A, Date 12-28-1994, Time 10:29:59
Mode Setup: North Azimuth, Dist feet, Scale 0.9999, Earth crv OFF, Angle Deg
Store:Pt 1,N 0.0000,E 0.0000,Elv 0.0000,NULL
Store:Pt 300,N 1029988.1139,E 1081198.5397,Elv 0.0000,MON. BALA
Occupy:Occ 300,N 1029988.1139,E 1081198.5397,Elv 0.0000,MON. BALA
Backsight: Occ 300, BS Pt 0, BS azm 186.4500, Back circle 0.0000
HI / HR :Inst H 0.0000, Rod H 0.0000
Traverse: 300-140, Ang-Rt 31.5433, Zenith 92.0454, Slp Dst 295.9350, PI-140
Traverse: 140-150, Ang-Rt 240.2015, Zenith 90.5356, Slp Dst 1400.9600, PI-150
Traverse: 150-160, Ang-Rt 179.5032, Zenith 90.2038, Slp Dst 794.0830, PI-160
Traverse: 160-170, Ang-Rt 179.1452, Zenith 90.2012, Slp Dst 1028.9350, PI-170
Traverse: 170-180, Ang-Rt 190.4215, Zenith 90.0247, Slp Dst 656.4650, PI-180
Traverse: 180-190, Ang-Rt 239.0401, Zenith 90.1940, Slp Dst 958.5700, PI-190
Traverse: 190-200, Ang-Rt 109.1339, Zenith 89.5018, Slp Dst 729.1560, PI-200
Traverse: 200-210, Ang-Rt 242.5527, Zenith 90.1320, Slp Dst 804.7740, PI-210
Traverse: 210-10, Ang-Rt 184.1919, Zenith 89.4747, Slp Dst 623.9810, PI-10
Traverse: 10-130, Ang-Rt 348.2523, Zenith 90.0519, Slp Dst 689.9380, PI-130
Traverse: 130-220, Ang-Rt 194.1216, Zenith 89.5456, Slp Dst 781.9310, PI-220
Traverse: 220-230, Ang-Rt 102.0307, Zenith 90.1458, Slp Dst 685.2450, PI-230
Traverse: 230-240, Ang-Rt 254.1914, Zenith 89.3733, Slp Dst 1105.8450, PI-240
Traverse: 240-250, Ang-Rt 119.2405, Zenith 90.1015, Slp Dst 555.9960, PI-250
Traverse: 250-260, Ang-Rt 175.1943, Zenith 89.3622, Slp Dst 876.8660, PI-260
Traverse: 260-270, Ang-Rt 180.0922, Zenith 89.5128, Slp Dst 616.7050, PI-270
Traverse: 270-280, Ang-Rt 167.5936, Zenith 89.1444, Slp Dst 210.5810, PI-280
Traverse: 280-290, Ang-Rt 193.1605, Zenith 88.5254, Slp Dst 1437.1540, PI-290
Traverse: 290-291, Ang-Rt 140.0648, Zenith 89.0130, Slp Dst 254.0850, BALA PI-300
Traverse: 291-292, Ang-Rt 339.0418, Zenith 92.0454, Slp Dst 295.9350, CK TO PI-140
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JOB: Name HFHSBL12, Date 11-13-1994, Time 16:13:46
Mode Setup: North Azimuth, Dist feet, Scale 1.0000, Earth crv OFF
Store:Pt 1,N 0.0000,E 0.0000,Elv 0.0000,NULL
Occupy: Occ 100, N 1032788.7047, E 1077469.4074, Elv 582.8500, PI-100
Backsight: Occ 100, BS Pt 110, BS azm 251.2548, Back circle 0.0000
HI / HR : Inst H 5.3400, Rod H 6.0000
Side Shot: 100-707, Ang-Rt 348.0053, Zenith 89.0959, Slp Dst 113.7200, RUINS COR A
Side Shot:100-708, Ang-Rt 333.3634, Zenith 88.3347, Slp Dst 122.2700, RUINS COR B Side Shot:100-709, Ang-Rt 323.5751, Zenith 88.0301, Slp Dst 90.3200, RUINS COR C T
HI / HR :Inst H 5.3400, Rod H 12.4000
Side Shot: 100-710, Ang-Rt 321, 2449, Zenith 85, 2105, Slp Dst 93, 6000, RUINS COR D G
HI / HR : Inst H 5.3400, Rod H 6.0000
Side Shot: 100-711, Ang-Rt 284.4448, Zenith 88.2842, Slp Dst 57.9800, RUINS COR E G
Side Shot:100-712,Ang-Rt 293.2541,Zenith 88.2210,Slp Dst 38.0200,RUINS COR F G Side Shot:100-713,Ang-Rt 334.1553,Zenith 87.1242,Slp Dst 84.3400,RUINS COR G T Side Shot:100-714,Ang-Rt 343.4822,Zenith 88.3758,Slp Dst 79.7300,RUINS COR H G
Side Shot: 100-715, Ang-Rt 324.2748, Zenith 86.5722, Slp Dst 67.6600, CD/CL 106
Side Shot:100-716,Ang-Rt 31.4650,Zenith 85.1056,Slp Dst 99.5800,24'DIA S.STKRU
Side Shot:100-717, Ang-Rt 162.5504, Zenith 88.5801, Sip Dst 217.8300, CD/CL 102 MH
HI / HR : Inst H 5.3400, Rod H 12.4000
Side Shot:100-718, Ang-Rt 175.5127, Zenith 89.0010, Slp Dst 461.4600, CL 12' GRAVE
Side Shot:100-719, Ang-Rt 196.2757, Zenith 88.5806, Slp Dst 394.6200, CL 12'*CL15'
Side Shot:100-720, Ang-Rt 193.2458, Zenith 89.0723, Slp Dst 484.8400, CL15' GOING
Side Shot:100-721, Ang-Rt 202.5821, Zenith 88.4209, Slp Dst 300.3800, CL15 DRV GRA
Side Shot: 100-722, Ang-Rt 215.0015, Zenith 88.1803, Slp Dst 212.0500, CL15 DRV GRA
Side Shot:100-723, Ang-Rt 238.4907, Zenith 87.3411, Slp Dst 142.9900, CL15 DRV GRA Side Shot:100-724, Ang-Rt 279.3618, Zenith 87.2204, Slp Dst 126.5800, CL15 DRV GRA
Side Shot: 100-725, Ang-Rt 312.4649, Zenith 87.5734, Slp Dst 170.5700, CL15 DRV GRA
Side Shot: 100-726, Ang-Rt 329.2025, Zenith 88.3407, Slp Dst 245.4200, CL15 DRV GRA
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JOB: Name HFHSBL11, Date 12-20-1994, Time 07:52:18
Mode Setup: North Azimuth, Dist feet, Scale 1.0000, Earth crv OFF, Angle Deg
Store:Pt 1,N 0.0000,E 0.0000,Elv 0.0000,NULL
Occupy: Occ 15,N 1032657.9773,E 1075501.4602,Elv 579.1400,PI-15
Backsight: Occ 15, BS Pt 10, BS azm 65.0016, Back circle 0.0000
HI / HR : Inst H 5.5800, Rod H 5.2100
Side Shot: 15-350, Ang-Rt 0.0000, Zenith 89.3252, Slp Dst 381.0600, CK TO 10
HI / HR :Inst H 5.5800, Rod H 12.4000
Side Shot: 15-351, Ang-Rt 203.5028, Zenith 90.0027, Slp Dst 711.5400, SW/SD-107
Occupy: Occ 10,N 1032838.2713,E 1075837.1286,Elv 582.5300,PI-10
Backsight: Occ 10, BS Pt 20, BS azm 350.1111, Back circle 0.0000
HI / HR :Inst H 5.3500, Rod H 5.1500
Side Shot:10-352, Ang-Rt 0.0000, Zenith 89.2458, Slp Dst 532.4000, CK TO 20
HI / HR : Inst H 5.3500, Rod H 5.2500
Side Shot:10-353, Ang-Rt 247.5734, Zenith 90.0236, Slp Dst 143.7400, ELB; CL 30'PAV
Side Shot:10-354, Ang-Rt 243.2135, Zenith 90.0812, Slp Dst 110.7200, CPL; PC
Side Shot:10-355, Ang-Rt 238.2939, Zenith 90.2845, Slp Dst 62.3400, CPL; POC
Side Shot:10-356, Ang-Rt 275.3241, Zenith 92.0522, Slp Dst 21.5200, CPL; POC
Side Shot:10-357, Ang-Rt 348.4314, Zenith 91.0825, Slp Dst 48.1600, CPL; POC
Side Shot:10-358, Ang-Rt 351.1125, Zenith 90.4629, Slp Dst 70.9000, CPL; PT
Side Shot:10-359, Ang-Rt 351.5257, Zenith 90.1752, SIp Dst 170.5000, ELB; CL 30'PAV
Side Shot:10-360, Ang-Rt 351.5733, Zenith 90.0556, Slp Dst 270.2400, ELB; CL 30'PAV
Side Shot:10-361, Ang-Rt 351.5820, Zenith 89.5955, Slp Dst 372.7000, ELB; CL 30'PAV
Side Shot:10-362,Ang-Rt 351.5926,Zenith 90.0010,Slp Dst 455.7600,ELB;CL 30'PAV
Side Shot:10-363, Ang-Rt 16.2537, Zenith 90.0844, Slp Dst 271.2600, CLF; 5'
Side Shot:10-364, Ang-Rt 32.2528, Zenith 90.2809, Slp Dst 177.8200, CLF; 5'
Side Shot: 10-365, Ang-Rt 17.3425, Zenith 90.1152, Slp Dst 302.3200, SS-101
Side Shot: 10-366, Ang-Rt 27.2719, Zenith 89.5824, S1p Dst 223.7200, MW-101
Side Shot:10-367, Ang-Rt 82.4951, Zenith 90.4526, Slp Dst 175.9200, SW/SD-106*CANA
Side Shot:10-368, Ang-Rt 82.4517, Zenith 90.2810, Slp Dst 289.7200, MCS; CANAL EDGE
Side Shot:10-369, Ang-Rt 82.4257, Zenith 90.2251, Slp Dst 391.0600, MCS; CANAL EDGE
Side Shot:10-370,Ang-Rt 82.4241,Zenith 90.1603,Slp Dst 488.6400,MCS;CANAL EDGE
Side Shot:10-371, Ang-Rt 82.3955, Zenith 90.1406, Slp Dst 585.8200, MCS; CANAL EDGE
Side Shot:10-372,Ang-Rt 82.3941,Zenith 90.1404,Slp Dst 686.4600,MCS;CANAL EDGE
Side Shot: 10-373, Ang-Rt 82.3821, Zenith 90.1031, Slp Dst 789.4600, MCS; CANAL EDGE
Side Shot:10-374, Ang-Rt 82.4033, Zenith 90.0913, Slp Dst 889.0600, MCS; CANAL EDGE
Side Shot:10-375,Ang-Rt 82.4057,Zenith 90.0828,Slp Dst 989.1800,MCS;CANAL EDGE
Side Shot:10-376, Ang-Rt 82.4140, Zenith 90.0607, Slp Dst 1219.1000, MCS; CANAL EDG
Side Shot: 10-377, Ang-Rt 82.3819, Zenith 90.0559, Slp Dst 1315.6200, MCS; CANAL EDG
HI / HR :Inst H 5.3500, Rod H 12.4000
Side Shot:10-378,Ang-Rt 80.2700,Zenith 89.4407,Slp Dst 1026.6600,DRV;CL 21'GRA
Side Shot: 10-379, Ang-Rt 80.2526, Zenith 89.4150, Slp Dst 927.3800, DRV; CL 21'GRAV
Side Shot:10-380, Ang-Rt 79.5828, Zenith 89.4043, Slp Dst 818.1600, DRV; CL 21'GRAV
Side Shot: 10-381, Ang-Rt 79.4125, Zenith 89.3642, Slp Dst 718.0400, DRV; CL 21'GRAV
Side Shot: 10-382, Ang-Rt 79.2309, Zenith 89.3207, Slp Dst 619.2800, DRV; CL 21'GRAV
Side Shot:10-383, Ang-Rt 78.4808, Zenith 89.2635, Slp Dst 518.1600, DRV; CL 21'GRAV
HI / HR : Inst H 5.3500, Rod H 5.2500
Side Shot:10-384, Ang-Rt 78.0455, Zenith 90.2026, Slp Dst 416.0000, DRV; CL 21'GRAV
Side Shot:10-385, Ang-Rt 75.1948, Zenith 90.2523, Slp Dst 318.1400, DRV; CL 21'GRAV
Side Shot:10-386,Ang-Rt 72.2446,Zenith 90.3314,Slp Dst 218.2400,DRV;CL 21'GRAV
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Side Shot:10-387, Ang-Rt 60.5953, Zenith 90.2314, Slp Dst 125.8200, DRV; CL 21'GRAV Side Shot:10-388, Ang-Rt 40.4717, Zenith 90.4228, Slp Dst 95.9200, DRV; CL 21'GRAVE Side Shot: 10-389, Ang-Rt 17.1438, Zenith 90.5118, Slp Dst 121.3800, DRV; CL 21'GRAV Side Shot:10-390, Ang-Rt 5.3624, Zenith 90.3620, Slp Dst 141.8600, DRV; CL 21'GRAVE Side Shot:10-391, Ang-Rt 357.4425, Zenith 90.2749, Slp Dst 142.1000, DRV; @PAV Side Shot:10-392, Ang-Rt 82.4837, Zenith 90.4439, Slp Dst 175.4200, MCS; CANAL EDGE Side Shot:10-393, Ang-Rt 83.0912, Zenith 91.3358, Slp Dst 81.4600, MCS; CANAL EDGE Side Shot: 10-394, Ang-Rt 84.1903, Zenith 92.3959, Slp Dst 32.4400, MCS; CANAL EDGE Side Shot: 10-395, Ang-Rt 204.4222, Zenith 92.1708, Slp Dst 90.6200, MCS; CANAL EDGE HI / HR :Inst H 5.3500, Rod H 9.0000 Side Shot: 10-396, Ang-Rt 233.5202, Zenith 89.5739, Slp Dst 158.5000, MCS; CANAL EDG Side Shot: 10-397, Ang-Rt 234.2759, Zenith 89.5744, Slp Dst 159.6400, CLF; 4' Side Shot:10-398,Ang-Rt 205.3128,Zenith 89.5339,Slp Dst 90.2600,CLF;4' Side Shot:10-399,Ang-Rt 80.0728,Zenith 86.0140,Slp Dst 33.7200,CLF;4' HI / HR :Inst H 5.3500, Rod H 0.0000 Side Shot: 10-400, Ang-Rt 316.0257, Zenith 94.0926, Slp Dst 52.5000, ROW; NYS HI / HR :Inst H 5.3500, Rod H 5.2500 Side Shot:10-401, Ang-Rt 211.4026, Zenith 90.4129, Slp Dst 213.7800, ELB; CL 21'PAV Side Shot: 10-402, Ang-Rt 205.0706, Zenith 90.4853, Slp Dst 197.0200, CPL; PC Side Shot: 10-403, Ang-Rt 190.4728, Zenith 90.5611, Slp Dst 187.1600, CPL; POC Side Shot: 10-404, Ang-Rt 178.2721, Zenith 90.5441, Slp Dst 213.3200, CPL; POC Side Shot: 10-405, Ang-Rt 173.5119, Zenith 90.4548, Slp Dst 269.6200, CPL; PT Side Shot: 10-406, Ang-Rt 174.3502, Zenith 90.3218, Sip Dst 368.5600, ELB: CL 21'PAV Side Shot: 10-407, Ang-Rt 165.0927, Zenith 90.2607, Slp Dst 201.9000, CLF; 4' Side Shot:10-408, Ang-Rt 192.5954, Zenith 91.3103, Slp Dst 135.2600, CLF; 4' Side Shot:10-409, Ang-Rt 220.1046, Zenith 91.0711, Slp Dst 187.2000, CLF; 4' Side Shot: 10-410, Ang-Rt 220.3626, Zenith 91.0642, Slp Dst 187.2600, MCS; CANAL EDG Side Shot:10-411,Ang-Rt 192.4339,Zenith 91.3327,Slp Dst 134.0600,MCS;CANAL EDG Side Shot:10-412, Ang-Rt 164.4617, Zenith 90.2706, Slp Dst 200.6800, MCS; CANAL EDG Side Shot:10-413, Ang-Rt 140.1626, Zenith 90.3859, Slp Dst 235.4200, MCS; CANAL EDG Side Shot:10-414, Ang-Rt 124.0128, Zenith 90.3242, Slp Dst 300.2600, MCS; CANAL EDG Side Shot: 10-415, Ang-Rt 113.5643, Zenith 90.2425, Slp Dst 381.1000, MCS; CANAL EDG Side Shot: 10-416, Ang-Rt 107.2545, Zenith 90.2044, Slp Dst 470.6000, MCS; CANAL EDG Side Shot: 10-417, Ang-Rt 103.0416, Zenith 90.1710, Slp Dst 563.7000, MCS; CANAL EDG Side Shot: 10-418, Ang-Rt 100.0103, Zenith 90.1441, Slp Dst 657.1400, MCS; CANAL EDG Side Shot: 10-419, Ang-Rt 97.3720, Zenith 90.1245, Slp Dst 757.8200, MCS; CANAL EDGE Side Shot:10-420, Ang-Rt 96.0355, Zenith 90.1124, Slp Dst 842.8400, MCS; CANAL EDGE HI / HR :Inst H 5.3500, Rod H 0.0000 Side Shot:10-421,Ang-Rt 180.2616,Zenith 91.2250,Slp Dst 243.4600,ROW;NYS HI / HR :Inst H 5.3500, Rod H 5.2500 Side Shot: 10-422, Ang-Rt 254.2550, Zenith 90.3121, Slp Dst 381.0600, CK TO 15 HI / HR : Inst H 5.3500 Rod H 0.0000 Side Shot: 10-423, Ang-Rt 180.4140, Zenith 91.2233, Slp Dst 243.4600, ROW; NYS Side Shot: 10-424, Ang-Rt 316.0330, Zenith 94.0934, Slp Dst 52.5200, ROW; NYS HI / HR : Inst H 5.3500, Rod H 5.2500 Side Shot:10-425,Ang-Rt 254.4843,Zenith 90.3109,Slp Dst 381.0600,CK TO 15 Occupy: Occ 20,N 1033356.8459,E 1075716.8420,Elv 588.1700,PI-20 Backsight: Occ 20, BS Pt 10, BS azm 170.1111, Back circle 359.5959 HI / HR :Inst H 5.2800, Rod H 5.2100 Side Shot:20-426,Ang-Rt 0.0000,Zenith 90.3650,S1p Dst 532.4400,CK TO 10 HI / HR : Inst H 5.2800, Rod H 5.2500 Side Shot:20-427,Ang-Rt 275.0159,Zenith 90.3143,Slp Dst 319.3600,SS-104

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Side Shot:20-428, Ang-Rt 289.3344, Zenith 91.2357, Slp Dst 173.5200, SS-103
Side Shot:20-429, Ang-Rt 330.4525, Zenith 88.4243, Slp Dst 116.1000, SS-102
Side Shot:20-430, Ang-Rt 38.0948, Zenith 93.0558, Slp Dst 103.1200, ELB; CL 30'PAV
Side Shot:20-431, Ang-Rt 103.5026, Zenith 94.3314, Slp Dst 80.0200, ELB; CL 30'PAV
Side Shot: 20-432, Ang-Rt 98.0407, Zenith 93.4737, Slp Dst 101.3400, EP
Side Shot: 20-433, Ang-Rt 124.1944, Zenith 93.2713, Slp Dst 132.5800, EP; PC
Side Shot:20-434, Ang-Rt 141.1238, Zenith 92.5616, Slp Dst 155.1800, EP; POC
Side Shot: 20-435, Ang-Rt 157.4459, Zenith 93.1517, Slp Dst 140.5400, EP; PT
Side Shot: 20-436, Ang-Rt 166.1028, Zenith 93.2315, Slp Dst 132.2400, EP
Side Shot: 20-437, Ang-Rt 165.5927, Zenith 93.3521, Slp Dst 122.1800, ELB; CL 21'PAV
Side Shot: 20-438, Ang-Rt 165.4004, Zenith 93.5134, Slp Dst 112.9200, EP; PC
Side Shot: 20-439, Ang-Rt 159.1542, Zenith 95.2543, Slp Dst 82.1200, EP; POC
Side Shot:20-440, Ang-Rt 141.0519, Zenith 96.0705, Slp Dst 70.1200, EP; PRC
Side Shot: 20-441, Ang-Rt 128.5107, Zenith 96.2815, Slp Dst 66.0000, EP
Side Shot: 20-442, Ang-Rt 113.4845, Zenith 96.3200, Slp Dst 62.4400, EP; CNR
Side Shot:20-443, Ang-Rt 110.4607, Zenith 95.4112, Slp Dst 68.4000, EP; @RD
Side Shot: 20-444, Ang-Rt 166.4650, Zenith 93.3544, SIp Dst 121.5600, ELB; CL 21'PAV
Side Shot:20-445, Ang-Rt 207.3616, Zenith 92.5552, Slp Dst 147.2000, ELB; CL 21'PAV
Side Shot: 20-446, Ang-Rt 228.5930, Zenith 92.0000, Slp Dst 217.5400, ELB; CL 21'PAV
HI / HR :Inst H 5.2800, Rod H 9.0000
Side Shot: 20-447, Ang-Rt 239.2248, Zenith 90.4021, Slp Dst 304.6200, ELB; CL 21'PAV
Side Shot:20-448, Ang-Rt 244.5653, Zenith 90.3622, Slp Dst 395.1600, ELB; CL 21'PAV
HI / HR :Inst H 5.2800, Rod H 5.2500
Side Shot:20-449, Ang-Rt 259.3904, Zenith 90.2029, Slp Dst 360.8800, CK TO 30
Occupy: Occ 35,N 1033391.9125,E 1076389.8737,Elv 581.7000,PI-35
Backsight: Occ 35,BS Pt 30,BS azm 290.4922,Back circle 0.0000
HI / HR :Inst H 5.1800, Rod H 4.8700
Side Shot:35-450, Ang-Rt 0.0000, Zenith 89.2127, Slp Dst 358.6600, CK TO 30
HI / HR : Inst H 5.1800, Rod H 9.0000
Side Shot:35-451, Ang-Rt 127.2319, Zenith 85.5509, Slp Dst 214.5400, SS-106
HI / HR :Inst H 5.1800, Rod H 12.4000
Side Shot:35-452, Ang-Rt 138.3004, Zenith 89.3309, S]p Dst 382.5800, SS-108
Off Center Shot:Ang-Rt 139.0946, Zenith 89.5325, Slp Dst 275.5600
Off Center Shot:Offset len -6.0000
HI / HR : Inst H 5.1800, Rod H 9.0000
Side Shot:35-453, Ang-Rt 137.5456, Zenith 89.5325, Slp Dst 275.6253, SW/SD-101
Side Shot:35-454,Ang-Rt 144.3313,Zenith 90.0406,Slp Dst 122.9400,SW/SD-102
HI / HR :Inst H 5.1800, Rod H 5.2500
Side Shot:35-455, Ang-Rt 156.0150, Zenith 91.2523, Slp Dst 56.5600, MW-103
Side Shot:35-456, Ang-Rt 76.2134, Zenith 85.5132, Slp Dst 33.6200, SS-106
HI / HR :Inst H 5.1800, Rod H 4.8700
Side Shot:35-457, Ang-Rt 0.0000, Zenith 89.2126, Slp Dst 358.6600, CK TO 30
Occupy: Occ 75,N 10333945.5578,E 1078212.1734,Elv 583.6400,PI-75
Backsight:Occ 75,BS Pt 70,BS azm 300.2804,Back circle 0.0000
HI / HR :Inst H 5.4800, Rod H 5.2500
Side Shot:75-458,Ang-Rt 0.0000,Zenith 90.0711,Slp Dst 314.5600.CK TO 70
HI / HR :Inst H 5.4800, Rod H 12.4000
Side Shot:75-459, Ang-Rt 237.5314, Zenith 87.4232, Slp Dst 289.8200, SS-123
HI / HR :: Inst H 5.4800, Rod H 5.2500
Side Shot:75-460, Ang-Rt 255.5855, Zenith 89.4448, Slp Dst 249.0800, MW-110
Side Shot: 75-461, Ang-Rt 239.0910, Zenith 89.2953, Slp Dst 137.9600, MW-109
Side Shot:75-462, Ang-Rt 187.3806, Zenith 90.0201, Slp Dst 111.6800, CD/CL-109
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Side Shot: 75-463, Ang-Rt 202.1449, Zenith 90.5609, S1p Dst 121.5800, SS-118
Side Shot:75-464, Ang-Rt 156.4505, Zenith 90.4804, Slp Dst 215.0200, SS-117
Side Shot: 75-465, Ang-Rt 127.0355, Zenith 90.3737, S1p Dst 148.4800, SS-115
Side Shot: 75-466, Ang-Rt 136.1252, Zenith 90.4926, Slp Dst 108.4600, SS-116
Side Shot: 75-467, Ang-Rt 141.4806, Zenith 90.3820, Slp Dst 96.6800, MW-108
Side Shot:75-468, Ang-Rt 29.0331, Zenith 91.1544, Slp Dst 84.4200, SS-120
Side Shot: 75-469, Ang-Rt 324.0943, Zenith 91.3728, Slp Dst 71.3000, SS-119
Side Shot: 75-470, Ang-Rt 8.5544, Zenith 90.0825, Slp Dst 144.3600, DRV; CL 18'GRAVE
Side Shot:75-471, Ang-Rt 29.0836, Zenith 91.2844, Slp Dst 48.0600, DRV; CL 18'GRAVE
Side Shot:75-472,Ang-Rt 147.5136,Zenith 90.4035,Slp Dst 65.1600,DRV;CL 18'GRAV
Side Shot:75-473,Ang-Rt 163.0915,Zenith 90.3104,Slp Dst 161.4200,DRV;CL 18'GRA
Side Shot:75-474,Ang-Rt 167.5656,Zenith 90.1531,Slp Dst 258.3200,DRV;CL 18'GRA
HI / HR :Inst H 5.4800, Rod H 9.0000
Side Shot: 75-475, Ang-Rt 139.5540, Zenith 89.3451, Slp Dst 217.2200, CLF; BEGIN
HI / HR :Inst H 5.4800, Rod H 5.2500
Side Shot: 75-476, Ang-Rt 76.1354, Zenith 90.2351, Slp Dst 96.9800, CLF
HI / HR :Inst H 5.4800, Rod H 8.3000
Side Shot: 75-477, Ang-Rt 21.1117, Zenith 89.1438, Slp Dst 167.7800, CLF'EP
HI / HR : Inst H 5.4800, Rod H 5.2500
Side Shot: 75-478, Ang-Rt 16.1304, Zenith 90.1231, Slp Dst 158.9600, CLF
Side Shot:75-479, Ang-Rt 17.0100, Zenith 90.1644, Slp Dst 154.3200, CLF; EP
Side Shot:75-480, Ang-Rt 13.2811, Zenith 90.0900, Slp Dst 149.3800, CLF; END EP
Side Shot:75-481, Ang-Rt 8.5503, Zenith 90.0513, Slp Dst 145.6400, EP
Side Shot:75-482,Ang-Rt 4.4855,Zenith 89.4845,Slp Dst 140.7400,CLF;END*EP
Side Shot: 75-483, Ang-Rt 1.1130, Zenith 89.3623, Slp Dst 138.2200, CLF; END*EP CNR
Side Shot: 75-484, Ang-Rt 127.3034, Zenith 90.3920, Slp Dst 146.9800, BLD; CNR
Side Shot: 75-485, Ang-Rt 133.3414, Zenith 90.3254, Slp Dst 135.7000, BLD; CNR
Side Shot: 75-486, Ang-Rt 136.4759, Zenith 90.2347, Slp Dst 148.1600, BLD; CNR
Side Shot:75-487, Ang-Rt 0.0000, Zenith 90.0705, Slp Dst 314.5600, CK TO 70
Occupy: Occ 40,N 1033625.6957,E 1076412.1261,Elv 598.8100,PI-40
Backsight: Occ 40,BS Pt 30,BS azm 254.1343,Back circle 0.0000
HI / HR : Inst H 5.3900, Rod H 5.2500
Side Shot:40-488,Ang-Rt 0.0000,Zenith 91.5438,Slp Dst 385.4000,CK TO 30
Side Shot:40-489,Ang-Rt 170.4752,Zenith 91.2141,Slp Dst 792.6600,CK TO 50
Side Shot:40-490, Ang-Rt 0.0000, Zenith 91.5443, Slp Dst 385.4000, CK TO 30
Side Shot:40-491,Ang-Rt 170.4751,Zenith 91.2144,Slp Dst 792.6600,CK TO 50
HI / HR :Inst H 5.3900, Rod H 12.4000
Side Shot: 40-492, Ang-Rt 14.3805, Zenith 91.3902, Slp Dst 400.9800, ELB; CL 21'PAV
Side Shot: 40-493, Ang-Rt 19.2701, Zenith 92.0629, Slp Dst 310.6000, ELB; CL 21'PAV Side Shot: 40-494, Ang-Rt 28.1632, Zenith 92.5416, Slp Dst 222.6000, ELB; CL 21'PAV
Side Shot: 40-495, Ang-Rt 47.0254, Zenith 94.2410, Slp Dst 147.1200, ELB; CL 21'PAV
Side Shot: 40-496, Ang-Rt 87.1756, Zenith 96.0345, Slp Dst 110.1600, ELB; CL 21'PAV
Side Shot: 40-497, Ang-Rt 130.0531, Zenith 94.3039, Slp Dst 146.7200, ELB; CL 21'PAV
Side Shot: 40-498, Ang-Rt 149.0608, Zenith 93.0008, Slp Dst 224.1400, ELB; CL 21'PAV
Side Shot: 40-499, Ang-Rt 157.4756, Zenith 92.0801, Slp Dst 314.2600, ELB; CL 21'PAV
Side Shot: 40-500, Ang-Rt 134.5928, Zenith 94.0326, Slp Dst 119.1000, SS-107
HI / HR :Inst H 5.3900, Rod H 5.2500
Side Shot: 40-501, Ang-Rt 164.5031, Zenith 91.4739, Slp Dst 55.2200, TP-101
Side Shot: 40-502, Ang-Rt 242.0113, Zenith 90.1345, Slp Dst 57.6400, TP-102
Side Shot: 40-503, Ang-Rt 200.4250, Zenith 92.0938, Slp Dst 169.8800, TP-103
Side Shot:40-504, Ang-Rt 174.0200, Zenith 92.2555, Slp Dst 367.2800, TP-104
HI / HR :Inst H 5.3900, Rod H 9.0000
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Side Shot: 40-505, Ang-Rt 205.5101, Zenith 92.1408, Slp Dst 339.7600, TP-105
HI / HR :Inst H 5.3900, Rod H 5.2500
Side Shot: 40-506, Ang-Rt 170.4744, Zenith 91.2151, Slp Dst 792.6600, CK TO 50
Occupy: Occ 50,N 1034000.3972,E 1077110.3072,Elv 580.0800,PI-50
Backsight:Occ 50,BS Pt 40,BS azm 245.0126,Back circle 0.0000
HI / HR : Inst H 5.3800, Rod H 5.2100
Side Shot:50-507, Ang-Rt 193.5339, Zenith 89.5519, Slp Dst 436.0400, CK TO 60
HI / HR :Inst H 5.3800, Rod H 9.0000
Side Shot:50-508, Ang-Rt 331.1745, Zenith 89.0253, Slp Dst 373.5200, TP-106
HI / HR :Inst H 5.3800, Rod H 5.2500
Side Shot:50-509, Ang-Rt 341.5918, Zenith 89.2640, Slp Dst 245.4400, TP-107
Side Shot:50-510, Ang-Rt 243.2053, Zenith 89.5621, Slp Dst 188.9800, TP-108
Side Shot:50-511, Ang-Rt 15.3636, Zenith 90.0034, Slp Dst 196.4600, PLM
Side Shot:50-512, Ang-Rt 8.1255, Zenith 90.0046, Slp Dst 491.1400, ELB; CL 21'PAV R
Side Shot:50-513, Ang-Rt 8.2309, Zenith 89.5702, Slp Dst 395.7600, ELB; CL 21'PAV R
Side Shot:50-514, Ang-Rt 8.4014, Zenith 89.5618, Slp Dst 299.6400, ELB; CL 21'PAV R
Side Shot: 50-515, Ang-Rt 8.4425, Zenith 89.5444, Slp Dst 226.7600, ELB; CL 21'PAV R
Side Shot:50-516, Ang-Rt 6.4617, Zenith 89.5807, Slp Dst 129.5000, ELB; CL 21'PAV R
Side Shot:50-517,Ang-Rt 352.5443,Zenith 90.0015,Slp Dst 34.2800,ELB;CL 21'PAV
Side Shot:50-518,Ang-Rt 199.4206,Zenith 90.0659,Slp Dst 64.0800,ELB;CL 21'PAV
Side Shot: 50-519, Ang-Rt 191.5608, Zenith 89.5921, Slp Dst 161.5800, ELB; CL 21'PAV
Side Shot:50-520, Ang-Rt 191.1803, Zenith 89.5853, Slp Dst 237.4200, ELB; CL 21'PAV Side Shot:50-521, Ang-Rt 195.0844, Zenith 89.5815, Slp Dst 236.0600, MW-102
Side Shot:50-522, Ang-Rt 196.0325, Zenith 90.0531, Slp Dst 251.3000, CLF
Side Shot:50-522, Ang-Rt 0.0001, Zenith 88.3930, Slp Dst 792.6600, CK TO 40
Occupy: Occ 60, N 1034108.3037, E 1077532.7516, Elv 580.8500, PI-60
Backsight: Occ 60, BS Pt 50, BS azm 258.5500, Back circle 0.0000
HI / HR : Inst H 5.3600, Rod H 5.2500
Side Shot:60-523, Ang-Rt 0.0000, Zenith 90.0714, Slp Dst 436.0400, CK TO 50
Side Shot: 60-524, Ang-Rt 357.0409, Zenith 90.2427, Slp Dst 185.2000, CLF
Side Shot:60-525,Ang-Rt 332.1530,Zenith 90.4018,Slp Dst 151.1800,CLF
HI / HR :Inst H 5.3600, Rod H 9.0000
Side Shot: 60-526, Ang-Rt 292.0925, Zenith 88.5319, Slp Dst 126.7400, CLF
Side Shot:60-527, Ang-Rt 252.0940, Zenith 88.0428, Slp Dst 181.7200, CLF Side Shot:60-528, Ang-Rt 235.1237, Zenith 88.2840, Slp Dst 268.7600, CLF
HI / HR :Inst H 5.3600, Rod H 12.4000
Side Shot:60-529, Ang-Rt 226.3241, Zenith 88.2921, Slp Dst 378.1400, CLF; CNR
Side Shot:60-530, Ang-Rt 215.4051, Zenith 88.3254, Slp Dst 360.2200, CLF
Side Shot:60-531, Ang-Rt 202.5443, Zenith 88.3825, Slp Dst 356.4000, CLF; END
Side Shot:60-532, Ang-Rt 3.0759, Zenith 90.1153, Sip Dst 199.4000, ELB; CL 21'PAV R Side Shot:60-533, Ang-Rt 3.1600, Zenith 90.1433, Sip Dst 103.6400, ELB; CL 21'PAV R
Side Shot: 60-534, Ang-Rt 218.3643, Zenith 90.0509, Slp Dst 24.1400, ELB; CL 21'PAV
Side Shot:60-535, Ang-Rt 198.0555, Zenith 89.3358, Slp Dst 121.1000, ELB; CL 21'PAV
Side Shot: 60-536, Ang-Rt 198.0409, Zenith 89.3918, Slp Dst 218.9600, ELB; CL 21'PAV
Side Shot: 60-537, Ang-Rt 198.0515, Zenith 89.3956, Slp Dst 314.8600, ELB: CL 21'PAV
HI / HR :Inst H 5.3600, Rod H 5.4300
Side Shot:60-538, Ang-Rt 197.0151, Zenith 89.3920, Slp Dst 400.2200, CK TO 70
Occupy: Occ 70,N 1034089.4375,E 1077932.4807,Elv 583,2000,PI-70
Backsight: Occ 70, BS Pt 60, BS azm 275.5652, Back circle 0.0000
HI / HR :Inst H 5.3400, Rod H 5.2400
Side Shot:70-539, Ang-Rt 0.0000, Zenith 90.2118, Slp Dst 400.2200, CK TO 60
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Side Shot:70-540, Ang-Rt 349.5546, Zenith 90.2617, Slp Dst 93.3800, EP; CNR

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Side Shot:70-541, Ang-Rt 346.4233, Zenith 90.3843, Slp Dst 93.4000, EP; CNR
Side Shot:70-542, Ang-Rt 328.1216, Zenith 90.3422, Slp Dst 58.8200, EP; CNR
Side Shot:70-543, Ang-Rt 330.1445, Zenith 90.3521, Slp Dst 56.4000, EP; CNR
Side Shot:70-544, Ang-Rt 334.4016, Zenith 89.4817, Slp Dst 46.9800, BLD; EP
Side Shot:70-545, Ang-Rt 325.4958, Zenith 90.3555, Slp Dst 38.9200, BLD; EP
Side Shot: 70-546, Ang-Rt 314.3910, Zenith 90.4021, Slp Dst 43.5000, BLD; EP
Side Shot: 70-547, Ang-Rt 310.2351, Zenith 90.4807, Slp Dst 49.6400, BLD; EP
Side Shot:70-548, Ang-Rt 239.4754, Zenith 89.4104, Slp Dst 45.7400, EP
Side Shot: 70-549, Ang-Rt 203.2702, Zenith 89.2709, Slp Dst 176.0800, EP
HI / HR :Inst H 5.3400, Rod H 9.0000
Side Shot:70-550, Ang-Rt 183.1612, Zenith 88.5009, Slp Dst 164.7200, 0
Side Shot:70-551, Ang-Rt 183.1611, Zenith 88.5011, Slp Dst 164.7200, CLF; EP
Side Shot:70-552, Ang-Rt 172.5140, Zenith 85.5211, Slp Dst 60.5600, CLF; EP
Side Shot:70-553, Ang-Rt 28.0530, Zenith 84.4733, Slp Dst 39.1400, CLF; CNR*EP
HI / HR :Inst H 5.3400, Rod H 5.2500
Side Shot:70-554, Ang-Rt 5.1710, Zenith 90.1553, SIp Dst 36.5200, CLF; END*EP
HI / HR :Inst H 5.3400, Rod H 9.0000
Side Shot:70-555, Ang-Rt 3.2022, Zenith 87.4811, Slp Dst 83.9800, EP
HI / HR :Inst H 5.3400, Rod H 5.3700
Side Shot:70-556, Ang-Rt 278.2249, Zenith 89.4021, Slp Dst 342.8400, CK TO 80
Occupy: Occ 80,N 1033753.0355,E 1077866.5930,Elv 585.1400,PI-80
Backsight: Occ 80, BS Pt 70, BS azm 14.1938, Back circle 359.5959
HI / HR :Inst H 5.4100, Rod H 5.0400
Side Shot:80-557, Ang-Rt 194.5441, Zenith 90.3633, Slp Dst 521.5400, CK TO 90
HI / HR :Inst H 5.4100, Rod H 9.0000
Side Shot:80-558, Ang-Rt 205.5857, Zenith 90.0946, Slp Dst 237.3600, DRV; CL 15'GRA
HI / HR :Inst H 5.4100, Rod H 5.2500
Side Shot:80-559, Ang-Rt 214.2508, Zenith 91.1459, Slp Dst 201.5800, DRV; CL 15'GRA
Side Shot:80-560, Ang-Rt 216.4314, Zenith 91.3230, Slp Dst 171.4200, DRV; CL 15'GRA
Side Shot:80-561,Ang-Rt 209.5939,Zenith 91.3027,Slp Dst 118.7400,DRV;CL 15'GRA Side Shot:80-562,Ang-Rt 205.4549,Zenith 91.4447,Slp Dst 82.0200,DRV;CL 15'GRAV
Side Shot:80-563, Ang-Rt 212.0607, Zenith 92.5229, Slp Dst 30.7400, DRV; CL 15'GRAV
Side Shot:80-564, Ang-Rt 295.5346, Zenith 90.0218, Slp Dst 12.8000, DRV; CL 15'GRAV
Side Shot:80-565, Ang-Rt 350.1518, Zenith 90.4649, Slp Dst 113.5200, DRV; CL 15'GRA
Side Shot:80-566, Ang-Rt 0.3513, Zenith 90.3119, Slp Dst 210.7600, DRV; CL 15'GRAVE
Side Shot:80-567, Ang-Rt 1.2126, Zenith 90.2713, Slp Dst 307.6000, DRV; CL 15'GRAVE
HI / HR :Inst H 5.4100, Rod H 9.0000
Side Shot:80-568, Ang-Rt 339.5239, Zenith 89.1127, Slp Dst 147.4800, BLD; CNR METAL
HI / HR :Inst H 5.4100, Rod H 5.2500
Side Shot:80-569,Ang-Rt 334.3309,Zenith 90.5056,Slp Dst 123.2600,BLD;CNR METAL
Side Shot:80-570, Ang-Rt 320.5001, Zenith 90.5446, Slp Dst 147.4000, BLD; CNR METAL
Side Shot:80-571, Ang-Rt 351.0151, Zenith 90.4310, Slp Dst 170.1400, SS-122
Side Shot:80-572, Ang-Rt 87.1803, Zenith 90.2913, Slp Dst 52.0600, SS-125
HI / HR :Inst H 5.4100, Rod H 12.4000
Side Shot:80-573, Ang-Rt 80.1908, Zenith 89.0243, Slp_Dst 393.9800, SS-121
HI / HR :Inst H 5.4100, Rod H 5.2000
Side Shot:80-574, Ang-Rt 359.5955, Zenith 90.2141, Slp Dst 342.8000, CK TO 70
Occupy: Occ 85,N 1033432.0802,E 1078483.7266,Elv 582.5700,PI-85
Backsight: Occ 85, BS Pt 80, BS azm 300.4324, Back circle 0.0000
HI / HR :Inst H 5.4300, Rod H 5.2700
Side Shot:85-575, Ang-Rt 0.0000, Zenith 89.4818, Slp Dst 695.6800, CK TO 80
HI / HR :Inst H 5.4300, Rod H 9.0000
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Side Shot:85-576, Ang-Rt 156.3123, Zenith 89.3218, Slp Dst 415.6000, SS-124
Occupy: Occ 90,N 1033284.3208,E 1077638.0672,Elv 579.9700,PI-90
Backsight: Occ 90, BS Pt 100, BS azm 202.0221, Back circle 0.0000
HI / HR :Inst H 5.3000, Rod H 8.8900
Side Shot:90-577, Ang-Rt 0.0000, Zenith 89.1529, Slp Dst 523.4800, CK TO 100
HI / HR :Inst H 5.3000, Rod H 5.2500
Side Shot:90-578, Ang-Rt 51.2325, Zenith 90.0047, Slp Dst 1024.3000, MCS; CANAL EDG
Side Shot:90-579, Ang-Rt 51.2722, Zenith 90.0118, Slp Dst 930.1600, MCS; CANAL EDGE
Side Shot:90-580, Ang-Rt 51.3130, Zenith 90.0505, Slp Dst 841.2200, MCS; CANAL EDGE
Side Shot:90-581, Ang-Rt 51.3722, Zenith 90.0057, Slp Dst 746.0400, MCS; CANAL EDGE
Side Shot:90-582, Ang-Rt 51.4646, Zenith 90.0135, Slp Dst 652.2600, MCS; CANAL EDGE
Side Shot:90-583,Ang-Rt 51.5656,Zenith 90.0236,Slp Dst 557.8400,MCS;CANAL EDGE
Side Shot:90-584, Ang-Rt 52.1149, Zenith 90.0113, Slp Dst 456.7800, MCS; CANAL EDGE
Side Shot:90-585, Ang-Rt 52.3657, Zenith 90.0153, Slp Dst 353.4000, MCS; CANAL EDGE
Side Shot:90-586, Ang-Rt 53.1055, Zenith 90.0624, Slp Dst 266.3600, MCS; CANAL EDGE
Side Shot:90-587, Ang-Rt 54.3210, Zenith 90.1030, Slp Dst 173.2000, MCS; CANAL EDGE
Side Shot:90-588, Ang-Rt 58.5451, Zenith 90.0841, Slp Dst 80.9000, MCS; CANAL EDGE
Side Shot:90-589, Ang-Rt 198.4335, Zenith 90.5408, Slp Dst 21.5200, MCS; CANAL EDGE
Side Shot:90-590, Ang-Rt 223.5146, Zenith 91.0748, Slp Dst 87.4400, MCS; CANAL END
Side Shot:90-591, Ang-Rt 178.0749, Zenith 90.0533, Slp Dst 141.3400, MCS; CANAL END
Side Shot:90-592, Ang-Rt 162.4925, Zenith 90.5506, Slp Dst 226.6000, MIS; CNR CANAL
Side Shot:90-593,Ang-Rt 152.3721,Zenith 91.5427,Slp Dst 214.5400,MIS;CANAL EDG
Side Shot:90-594,Ang-Rt 127.4601,Zenith 92.0239,Slp Dst 215.9000,MIS;CANAL EDG
Side Shot:90-595, Ang-Rt 105.0404, Zenith 91.4350, Slp Dst 258.2000, MIS; CANAL EDG
Side Shot:90-596, Ang-Rt 89.5206, Zenith 91.2227, Slp Dst 333.6800, MIS; CANAL EDGE
Side Shot:90-597,Ang-Rt 81.0233,Zenith 91.0331,Slp Dst 416.9800,MIS;CANAL EDGE
Side Shot:90-598, Ang-Rt 74.5959, Zenith 90.5313, Slp Dst 510.2200, MIS; CANAL EDGE
Side Shot:90-599,Ang-Rt 72.2904,Zenith 89.5623,Slp Dst 569.9400,MCS;CANAL EDGE
Side Shot:90-600, Ang-Rt 67.4545, Zenith 89.5859, Slp Dst 854.6000, DRV; CL 21'GRAV
Side Shot:90-601, Ang-Rt 70.0751, Zenith 89.5923, Slp Dst 763.6400, DRV; CL 21'GRAV
Side Shot:90-602, Ang-Rt 72.3928, Zenith 89.5755, S1p Dst 672.8600, DRV; CL 21'GRAV
Side Shot:90-603, Ang-Rt 76.3217, Zenith 89.5554, Slp Dst 581.6800, DRV; CL 21'GRAV
Side Shot:90-604, Ang-Rt 81.4246, Zenith 89.5510, Slp Dst 496.8800, DRV; CL 21'GRAV
Side Shot:90-605, Ang-Rt 88.5954, Zenith 89.5550, Slp Dst 412.4000, DRV; CL 21'GRAV
Side Shot:90-606, Ang-Rt 99.5920, Zenith 89.5153, Slp Dst 337.3600, DRV; CL 21'GRAV
Side Shot:90-607, Ang-Rt 114.4702, Zenith 89.4753, S1p Dst 279.9400, DRV; CL 21'GRA
Side Shot:90-608, Ang-Rt 134.1452, Zenith 89.4827, Slp Dst 251.4800, DRV; CL 21'GRA
Side Shot:90-609,Ang-Rt 156.5034,Zenith 89.4655,Slp Dst 259.8000,DRV;CL 21'GRA
Side Shot:90-610, Ang-Rt 178.4151, Zenith 89.4836, Slp Dst 288.6200, DRV; CL CL GRV
Side Shot:90-611,Ang-Rt 194.3141,Zenith 89.4111,Slp Dst 206.1400,DRV;CL 15'GRA
Side Shot:90-612, Ang-Rt 222.0414, Zenith 89.4027, Slp Dst 158.5000, DRV; CL 15'GRA
Side Shot:90-613,Ang-Rt 254.3633,Zenith 89.5237,Slp Dst 181.9200,DRV;CL 15'GRA
HI / HR :Inst H 5.3000, Rod H 9.0000
Side Shot:90-614,Ang-Rt 275.4017,Zenith 88.5414,Slp Dst 265.4200,DRV;CL 15'GRA
Side Shot:90-615,Ang-Rt 283.4236,Zenith 89.0651,S1p Dst 300.4200,DRV;CL 15'GRA
Side Shot:90-616, Ang-Rt 301.5306, Zenith 88.5505, S1p Dst 402.3200, DRV; CL 12'GRA
Side Shot:90-617, Ang-Rt 220.1629, Zenith 89.0212, Slp Dst 313.2400, BLD; CNR METAL
HI / HR :Inst H 5.3000, Rod H 5.2500
Side Shot:90-618,Ang-Rt 218.3811,Zenith 89.4245,Slp Dst 274.0400,BLD;CNR METAL
Side Shot:90-619,Ang-Rt 213.3753,Zenith 89.3937,Slp Dst 280.4000,BLD;CNR METAL
Side Shot:90-620,Ang-Rt 154.4609,Zenith 92.1446,Slp Dst 213.8000,SW/SD-104;36"
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Side Shot:90-621,Ang-Rt 216.0338,Zenith 89.5844,Slp Dst 89.7600,SW/SD-103

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Side Shot:90-622, Ang-Rt 187.1214, Zenith 89.2621, Slp Dst 521.5400, CK TO 80
Occupy: Occ 105,N 1032555.0740,E 1077519.0470,Elv 581.3100,PI-105
Backsight: Occ 105, BS Pt 100, BS azm 351.1501, Back circle 0.0000
HI / HR :Inst H 5.4900, Rod H 8.8900
Side Shot:105-623, Ang-Rt 0.0000, Zenith 88.4348, Slp Dst 238.9000, CK TO 100
Side Shot:105-624, Ang-Rt 0.0000, Zenith 88.4351, Slp Dst 238.9000, CK TO 100
HI / HR :Inst H 5.4900, Rod H 9.2600
Side Shot: 105-625, Ang-Rt 0.0000, Zenith 88.4349, Slp Dst 238.8000, CK TO 100
HI / HR :Inst H 5.4900, Rod H 9.0000
Side Shot:105-626, Ang-Rt 64.4352, Zenith 89.0651, Slp Dst 269.1600, BLD; CNR METAL
Side Shot:105-627, Ang-Rt 70.0203, Zenith 88.5814, Slp Dst 262.9600, BLD; CNR METAL
HI / HR :Inst H 5.4900, Rod H 12.4000
Side Shot:105-628, Ang-Rt 76.3540, Zenith 89.0741, Slp Dst 609.1000, BLD; CNR METAL
Off Center Shot:Ang-Rt 73.2739, Zenith 89.2542, Slp Dst 320.0400
Off Center Shot:Offset len 3.0000
HI / HR :Inst H 5.4900, Rod H 5.2500
Side Shot: 105-629, Ang-Rt 73.5952, Zenith 89.2542, Slp Dst 320.0541, CD/CL-107
HI / HR :Inst H 5.4900, Rod H 9.0000
Side Shot:105-630, Ang-Rt 283.4550, Zenith 89.1101, Slp Dst 344.9400, BLD; CNR BRIC
Side Shot:105-631, Ang-Rt 289.2021, Zenith 89.0603, Slp Dst 280.2400, BLD; CNR BRIC
HI / HR :Inst H 5.4900, Rod H 8.0000
Side Shot:105-632, Ang-Rt 291.3926, Zenith 89.1533, Slp Dst 286.6800, BLD; CNR BRIC
Occupy: Occ 110, N 1032638.1171, E 1077021.1689, Elv 582.9000, PI-110
Backsight: Occ 110, BS Pt 100, BS azm 74.4032, Back circle 0.0000
HI / HR :Inst H 5.4600, Rod H 5.2800
Side Shot:110-635, Ang-Rt 0.0000, Zenith 90.0137, Slp Dst 472.9000, CK TO 100
HI / HR :Inst H 5.4600, Rod H 5.2500
Side Shot:110-636, Ang-Rt 96.1555, Zenith 89.2642, Slp Dst 328.4400, CK TO 120
Side Shot:110-637,Ang-Rt 30.0956,Zenith 90.0637,Slp Dst 180.8600,BLD;BB
Side Shot:110-638, Ang-Rt 37.1645, Zenith 90.1452, Slp Dst 152.4000, BLD; CC
Side Shot:110-639, Ang-Rt 38.0547, Zenith 90.1942, Slp Dst 149.4800, 0
Side Shot:110-640, Ang-Rt 38.0547, Zenith 90.1942, Slp Dst 149.4800, BLD; DD Side Shot:110-641, Ang-Rt 77.3835, Zenith 90.1755, Slp Dst 98.1000, BLD; EE
Side Shot:110-642, Ang-Rt 80.0002, Zenith 90.0837, Slp Dst 121.5200, BLD; FF
Side Shot:110-643, Ang-Rt 119.1657, Zenith 89.2920, Slp Dst 64.2000, 0
Side Shot:110-644, Ang-Rt 119.1657, Zenith 89.2916, Slp Dst 64.2400, BLD; HH
HI / HR :Inst H 5.4600, Rod H 8.5000
Side Shot:110-645, Ang-Rt 167.4110, Zenith 89.3033, Slp Dst 300.8200, BLD; II
HI / HR :Inst H 5.4600, Rod H 5.2500
Side Shot:110-646, Ang-Rt 176.2353, Zenith 90.0531, Slp Dst 223.9800, MW-106
Side Shot:110-647, Ang-Rt 179.2106, Zenith 90.2237, Slp Dst 183.2400, SS-110
Side Shot:110-648,Ang-Rt 195.2126,Zenith 91.0344,Slp Dst 51.5800,SS-111
Side Shot:110-649, Ang-Rt 358.0700, Zenith 91.0550, Slp Dst 24.4000, SS-112
Side Shot: 110-650, Ang-Rt 346.5011, Zenith 90.2626, Slp Dst 104.9600, SS-113
Side Shot:110-651, Ang-Rt 357.1535, Zenith 90.0534, Slp Dst 190.6200, SS-114
Side Shot:110-652, Ang-Rt 345.3332, Zenith 89.5253, Slp Dst 315.7000, WT-102
Side Shot:110-653, Ang-Rt 348.1808, Zenith 89.4449, Slp Dst 216.0000, WT-101
Side Shot:110-654,Ang-Rt 283.4110,Zenith 91.2649,Slp Dst 137.0800,MW-107
Side Shot:110-655, Ang-Rt 237.5442, Zenith 90.2332, Slp Dst 454.5200, SW/SD-105
HI / HR :Inst H 5.4600, Rod H 12.4000
Side Shot:110-656,Ang-Rt 103.3857,Zenith 86.5109,Slp Dst 125.9800,BLD;GG
HI / HR :Inst H 5.4600, Rod H 5.2500
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Side Shot:110-657, Ang-Rt 96.1551, Zenith 89.2638, Slp Dst 328.2400, CK TO 120
Occupy: Occ 120,N 1032317.4665,E 1077091.1195,Elv 586.2700,PI-120
Backsight: Occ 120, BS Pt 130, BS azm 264.2203, Back circle 0.0000
HI / HR :Inst H 2.7800, Rod H 5.2500
Side Shot: 120-658, Ang-Rt 83.2004, Zenith 90.0905, Slp Dst 328.2000, CK TO 110
Side Shot:120-659, Ang-Rt 137.1750, Zenith 90.1559, Slp Dst 409.6000, DRV; CL 15'GR
Side Shot:120-660, Ang-Rt 128.4721, Zenith 90.1639, Slp Dst 322.2800, DRV; CL 15'GR
Side Shot:120-661, Ang-Rt 115.0917, Zenith 90.1746, Slp Dst 250.0200, DRV; CL 15'GR
Side Shot:120-662, Ang-Rt 92.5210, Zenith 90.1901, Slp Dst 202.8200, DRV; CL 15'GRV
Side Shot:120-663, Ang-Rt 61.3140, Zenith 90.2813, Slp Dst 194.2800, DRV; CL 15'GRV
Side Shot: 120-664, Ang-Rt 36.5434, Zenith 90.2611, Slp Dst 238.9000, DRV; CL 15'GRV
Side Shot:120-665, Ang-Rt 19.4952, Zenith 90.1649, S1p Dst 302.5800, DRV; CL 15'GRV
Side Shot:120-666, Ang-Rt 9.0858, Zenith 90.1428, Slp Dst 387.8200, DRV; CL 15'GRVL
Side Shot:120-667,Ang-Rt 3.2938,Zenith 90.0945,Slp Dst 481.2200,DRV;CL 15'GRVL
Side Shot:120-668,Ang-Rt 359.3855,Zenith 90.0708,Slp Dst 589.3000,DRV;CL 15'GR
Side Shot:120-669, Ang-Rt 0.3823, Zenith 90.1800, Slp Dst 463.2200, CD/CL-104
Side Shot: 120-670, Ang-Rt 14.0414, Zenith 90.2015, Slp Dst 313.5200, CD/CL-101
Side Shot:120-671, Ang-Rt 23.2642, Zenith 90.1703, Slp Dst 319.5200, CD/CL-105
Side Shot:120-672, Ang-Rt 353.0820, Zenith 90.3548, S1p Dst 171.8400, SS-109
Side Shot:120-673, Ang-Rt 115.5531, Zenith 90.5501, Slp Dst 150.0600, CD/CL-108
Side Shot:120-674, Ang-Rt 333.3243, Zenith 86.1833, Slp Dst 3.8800, MW-105
HI / HR :Inst H 2.7800, Rod H 9.0000
Side Shot:120-675, Ang-Rt 256.4814, Zenith 89.0633, S1p Dst 279.4800, MW-104
Side Shot:120-676,Ang-Rt 244.5808,Zenith 89.0608,S1p Dst 345.9000,CLF;BEGIN
Side Shot: 120-677, Ang-Rt 272.4151, Zenith 89.0340, Slp Dst 296.4600, CLF; 4'
Side Shot: 120-678, Ang-Rt 303.1053, Zenith 88.5745, Slp Dst 329.4000, CLF; 4'
Side Shot:120-679, Ang-Rt 320.2259, Zenith 89.2943, Slp Dst 404.0200, CLF; 4'
Side Shot:120-680, Ang-Rt 332.0843, Zenith 89.3837, Slp Dst 522.4600, CLF; 4'
Side Shot: 120-681, Ang-Rt 337.2856, Zenith 89.3248, Slp Dst 610.6800, CLF; 4'
Side Shot: 120-682, Ang-Rt 342.3048, Zenith 89.4537, Slp Dst 728.3000, CLF; 4'
Side Shot: 120-683, Ang-Rt 346.1818, Zenith 89.4556, Slp Dst 854.7400, CLF; 4'
Side Shot: 120-684, Ang-Rt 348.0232, Zenith 89.4557, Slp Dst 937.2200, CLF; 4'END
HI / HR :Inst H 2.7800, Rod H 5.2400
Side Shot:120-685, Ang-Rt 0.0000, Zenith 90.0647, S1p Dst 942.8000, CK TO 130
Occupy: Occ 130,N 1032224.9422,E 1076152.9537,Elv 581.8700,PI-130
Backsight:Occ 130,BS Pt 120,BS azm 84.2203,Back circle 0.0000
HI / HR : Inst H 5.3800, Rod H 2.6300
Side Shot:130-686, Ang-Rt 0.0000, Zenith 89.5400, Slp Dst 942.8000, CK TO 120
HI / HR :Inst H 5.3800, Rod H 11.9000
Side Shot:130-687, Ang-Rt 349.4730, Zenith 89.3314, Slp Dst 333.6200, CD/CL-103
HI / HR :Inst H 5.3800, Rod H 5.2500
Side Shot:130-688,Ang-Rt 0.4441,Zenith 89.5543,Slp Dst 351.5400,DRV;CL 15'GRVL
Side Shot:130-689, Ang-Rt 7.4735, Zenith 89.5220, S1p Dst 265.2200, DRV; CL 15'GRVL
Side Shot:130-690, Ang-Rt 11.0404, Zenith 89.4853, Slp Dst 211.9000, DRV; CL 15'GRV
Side Shot:130-691,Ang-Rt 14.0142,Zenith 89.4654,Slp Dst 149.9600,DRV;CL 15'END
Side Shot:130-692, Ang-Rt 9.5838, Zenith 89.4809, S1p Dst 145.0800, EP
Side Shot:130-693,Ang-Rt 12.1532,Zenith 89.4913,S1p Dst 71.3000,EP
Side Shot:130-694,Ang-Rt 204.3945,Zenith 90.1744,Slp Dst 23.8200,EP
Side Shot:130-695, Ang-Rt 200.3855, Zenith 90.1006, Slp Dst 90.2600, EP; CNR
Side Shot:130-696, Ang-Rt 156.5059, Zenith 90.3340, Slp Dst 78.2800, EP; CNR
Side Shot: 130-697, Ang-Rt 81.1733, Zenith 90.3307, Slp Dst 54.3000, EP
Side Shot:130-698,Ang-Rt 43.2749,Zenith 89.5154,S1p Dst 106.5000,BLD;CNR BRICK
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JOB: HFHSBL11

TIME: 09:51 DATE: 12-30-1994

Side Shot:130-699, Ang-Rt 51.2120, Zenith 89.4343, Slp Dst 138.5200, BLD; CNR BRICK Side Shot:130-700, Ang-Rt 20.2205, Zenith 89.5420, Slp Dst 157.1200, BLD; CNR BRICK Side Shot:130-701, Ang-Rt 238.3418, Zenith 90.2913, Slp Dst 330.4800, ELB; CL 30'PA Side Shot:130-702, Ang-Rt 230.3059, Zenith 90.3418, Slp Dst 242.6400, ELB; CL 30'PA Side Shot:130-703, Ang-Rt 214.0458, Zenith 90.4229, Slp Dst 163.9400, ELB; CL 30'PA Side Shot:130-704, Ang-Rt 177.5242, Zenith 90.4207, Slp Dst 117.3600, ELB; CL 30'PA Side Shot:130-705, Ang-Rt 134.0106, Zenith 90.2336, Slp Dst 141.7200, ELB; CL 30'PA Side Shot:130-706, Ang-Rt 111.5850, Zenith 90.0707, Slp Dst 213.9000, ELB; CL 30'PA

## ATTACHMENT E FIELD NOTES

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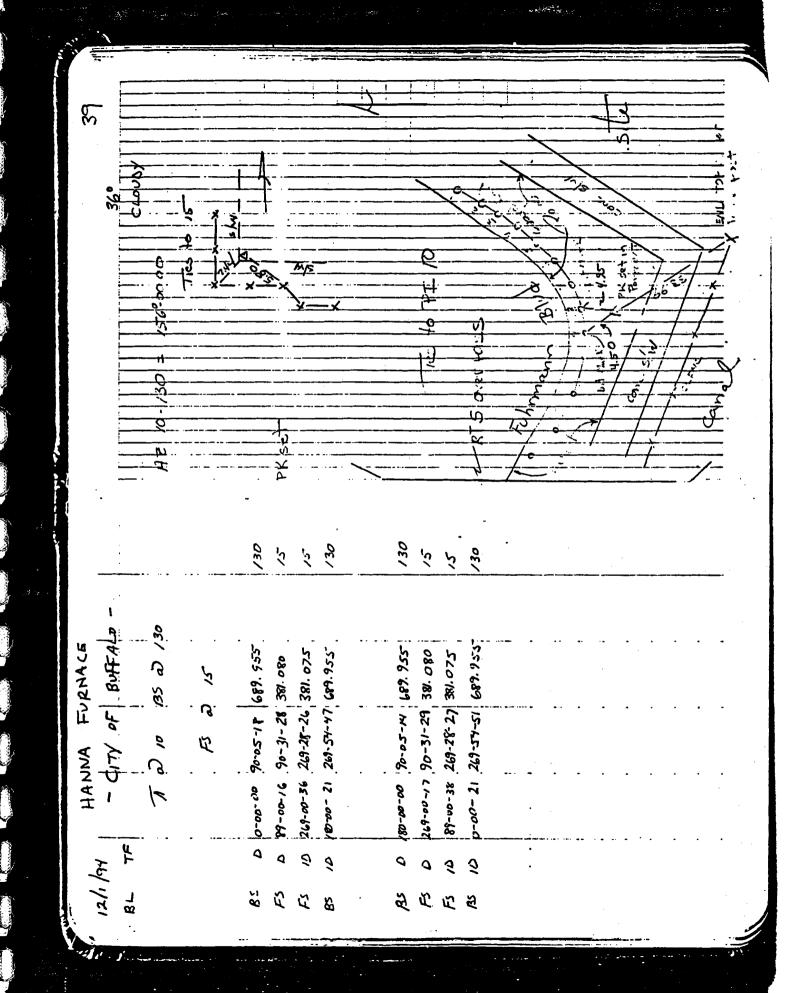
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